

Board of Directors

Meeting Date

January 26, 2024



Board of Directors

Lonnie Reed	Hank Webster
Chair	Vice Chair
	Connecticut Department of Energy and
	Environmental Protection (DEEP)
Matthew Ranelli	Bettina Bronisz
Secretary	State Treasurers Office
Partner Shipman & Goodwin	State of Connecticut
Thomas Flynn	Robert Hotaling
Managing Member	Deputy Director
Coral Drive Partners	DECD
Adrienne Farrar Houel	Dominick Grant
President and CEO	Director of Investments
Greater Bridgeport Community	Dirt Capital Partners
Enterprises, Inc.	
John Harrity	Brenda Watson
Chair	Executive Director
CT Roundtable on Climate and Jobs	North Hartford Partnership
Joanne Wozniak-Brown	TBD
Office of Policy and Management	
(OPM)	

75 Charter Oak Avenue, Suite 1 - 103, Hartford, CT 06106 T 860.563.0015 ctgreenbank.com



January 19, 2024

Dear Connecticut Green Bank Board of Directors:

Happy New Years – we hope that everyone had a great holiday season!

We have our first <u>regular meeting</u> of the Board of Directors for 2024 scheduled for <u>Friday, January 26,</u> 2024 from 9:00-11:30 a.m.

Please take note, for those of you that want to be at the meeting in-person, we will have space at our offices for you to join. Otherwise, this will be an online meeting.

For the agenda, we have the following:

- <u>Consent Agenda</u> we have several items on the consent agenda, including:
 - Meeting Minutes of December 15, 2023
 - C-PACE Project Approvals Extensions (i.e., Danbury and Milford)
 - Under \$500,000 and No More in Aggregate than \$1,000,000 staff approved transaction
 1 C-PACE transaction in Stamford

In addition to items requiring resolution, there are also documents that you might be interested in perusing that are report outs or updates, including:

- Under \$100,000 and No More in Aggregate than \$500,000 staff approved transaction restructurings or write-offs – no transactions
- Progress to Targets through Q2 of FY24
- FY23 Annual Report
- <u>Committee Updates and Recommendations</u> we have updates and recommendations from several committees, including:
 - Audit, Compliance, and Governance Committee quick report out on the Auditor's Report for FY20 and FY21 from the Auditors of Public Account;
 - Budget, Operations, and Compensation Committee recommendation by the committee to review and approve the proposed revisions to the FY24 targets and budget, including contingencies around additional positions should we win federal resources through the Greenhouse Gas Reduction Fund competitions; and

- <u>Deployment Committee</u> recommendation by the committee to review and approve revisions to the "Under \$500,000 and No More in Aggregate than \$1,000,000" staff transaction approval process.
- <u>Incentive Programs Updates and Recommendations</u> we have a non-residential Energy Storage Solutions incentive for Wesleyan University.
- **Financing Programs Updates and Recommendations** we have several recommendations for the following:
 - <u>Cheshire</u> C-PACE project; and
 - <u>C-PACE Resiliency</u> recommendation to seek public comment on revised program guidelines incorporating resilience.
- <u>Investment Updates and Recommendations</u> we have several investment recommendations for the following transactions:
 - <u>PosiGen</u> recommendation for investment approval and update on engagement with the U.S. Department of Energy's Loan Program Office's State Energy Financing Institution application;
 - FuelCell Energy Derby project;
 - Inclusive Prosperity Capital loan transaction; and
- <u>Legislative Review</u> update on our process for legislative review
- Other Business we extended the meeting by 30 minutes so that we can provide extensive updates on the following:
 - Affordable Housing Strategy update on the PURA annual review of the Residential Renewable Energy Solutions ("RRES") program, including efforts to finance solar + storage transactions for affordable housing properties
 - <u>Energy Storage Solutions</u> update on the PURA annual review of Energy Storage Solutions ("ESS")

Please note, those items <u>underlined, italicized, and highlighted</u> above, are materials coming by the close of business on Tuesday, January 23, 2024.

Have a great weekend ahead.

Appreciatively,

Bryan Garcia
President and CEO



AGENDA

Board of Directors of the Connecticut Green Bank 75 Charter Oak Avenue Hartford, CT 06106

Friday, January 26, 2024 9:00 – 11:30 a.m.

Dial in: +1 860-924-7736 Phone Conference ID: 292 735 831#

Staff Invited: Sergio Carrillo, Mackey Dykes, Brian Farnen, Bryan Garcia, Bert Hunter, Jane Murphy, Eric Shrago, Leigh Whelpton, James Desantos and Priyank Bhakta

- 1. Call to Order
- 2. Public Comments 5 minutes
- 3. Consent Agenda 5 minutes
- 4. Committee Updates and Recommendations 30 minutes
 - a. Audit, Compliance, and Governance Committee 5 minutes
 - i. Auditors of Public Account (Update)
 - b. Budget, Operations, and Compensation Committee 15 minutes
 - i. FY24 Targets and Budget including Greenhouse Gas Reduction Fund Contingent Option – Proposed Revisions
 - c. Deployment Committee 10 minutes
 - i. Under \$500,000 and No More in Aggregate than \$1,000,000 Staff Transaction Approval Process – Proposed Revision
- 5. Incentive Programs Updates and Recommendations 5 minutes
 - a. Energy Storage Solutions Wesleyan University
- 6. Financing Programs Updates and Recommendations 30 minutes

- a. C-PACE Project Cheshire
- b. C-PACE Resiliency
- 7. Investment Programs Updates and Recommendations 35 minutes
 - a. PosiGen Recommendation and DOE / LPO SEFI Update
 - b. FuelCell Energy Derby Transaction Approval
 - c. IPC Loan Expansion Transaction Approval
- 8. Legislative Process 10 minutes
- 9. Other Business 30 minutes
 - a. Residential Renewable Energy Solutions (Affordable Housing) Annual Review (Update)
 - b. Energy Storage Solutions Annual Review (Update)
- 10. Adjourn

Click here to join the meeting
Teams Meeting ID: 228 359 085 656
Passcode: 6KRcJH
Dial in: +1 860-924-7736

Phone Conference ID: 292 735 831#

Next Regular Meeting: Friday, March 15, 2024 from 9:00-11:00 a.m.
Colonel Albert Pope Room at the
Connecticut Green Bank, 75 Charter Oak Avenue, Hartford



RESOLUTIONS

Board of Directors of the Connecticut Green Bank 75 Charter Oak Avenue Hartford, CT 06106

Friday, January 26, 2024 9:00 – 11:30 a.m.

Dial in: +1 860-924-7736 Phone Conference ID: 292 735 831#

Staff Invited: Sergio Carrillo, Mackey Dykes, Brian Farnen, Bryan Garcia, Bert Hunter, Jane

Murphy, Eric Shrago, Leigh Whelpton, James Desantos and Priyank Bhakta

- 1. Call to Order
- 2. Public Comments 5 minutes
- 3. Consent Agenda 5 minutes

Resolution #1

Motion to approve the meeting minutes of the Board of Directors for December 15, 2023

Resolution #2

WHEREAS, pursuant to Conn. Gen. Stat. 16a-40g (the "Act") the Connecticut Green Bank ("Green Bank") is directed to, amongst other things, establish a commercial sustainable energy program for Connecticut, known as Commercial Property Assessed Clean Energy ("C-PACE");

WHEREAS, pursuant to the C-PACE program, the Connecticut Green Bank Board of Directors (the "Board") or the Connecticut Green Bank Deployment Committee ("DC"), as may be applicable, approved and authorized the President of the Green Bank to execute financing agreements for the C-PACE projects described in this Memo submitted to the Board on January 19, 2024 (the "Finance Agreements");

WHEREAS, the Finance Agreements were authorized to be consistent with the terms, conditions, and memorandums submitted to the Board or DC, as may be applicable, and executed no later than 120 days from the date of such Board or DC approval; and

WHEREAS, due to delays in fulfilling pre-closing requirements the Green Bank will need

more time to execute the Finance Agreements.

NOW, therefore be it:

RESOLVED, that the Board extends authorization of the Finance Agreements to no later than 120 days from January 19, 2024 and consistent in every other manner with the original Board or DC authorization for the Finance Agreement.

Resolution #3

WHEREAS, on January 18, 2013, the Connecticut Green Bank (the "Green Bank") Board of Directors (the "Board") authorized the Green Bank staff to evaluate and approve funding requests less than \$300,000 which are pursuant to an established formal approval process requiring the signature of a Green Bank officer, consistent with the Green Bank Comprehensive Plan, approved within Green Bank's fiscal budget and in an aggregate amount not to exceed \$500,000 from the date of the last Deployment Committee meeting, on July 18, 2014 the Board increased the aggregate not to exceed limit to \$1,000,000 ("Staff Approval Policy for Projects Under \$300,000"), on October 20, 2017 the Board increased the finding requests to less than \$500,000 ("Staff Approval Policy for Projects Under \$500,000"); and

WHEREAS, Green Bank staff seeks Board review and approval of the funding requests listed in the Memo to the Board dated January 26, 2024 which were approved by Green Bank staff since the last Deployment Committee meeting and which are consistent with the Staff Approval Policy for Projects Under \$500,000;

NOW, therefore be it:

RESOLVED, that the Board approves the funding requests listed in the Memo to the Board dated January 19, 2024 which were approved by Green Bank staff since the last Deployment Committee meeting. The Board authorizes Green Bank staff to approve funding requests in accordance with the Staff Approval Policy for Projects Under \$500,000 in an aggregate amount to exceed \$1,000,000 from the date of this Board meeting until the next Deployment Committee meeting.

- 4. Committee Updates and Recommendations 30 minutes
 - a. Audit, Compliance, and Governance Committee 5 minutes
 - i. Auditors of Public Account (Update)
 - b. Budget, Operations, and Compensation Committee 15 minutes
 - i. FY24 Targets and Budget including Greenhouse Gas Reduction Fund Contingent Option – Proposed Revisions

Resolution #4

WHEREAS, pursuant to Section 5.2.2 of the Bylaws, the Connecticut Green Bank's Budget, Operations, and Compensation Committee has reviewed and recommended to the Board of Directors to approve (1) the revised FY2024 Targets and Budget, (2) the update to the salary structure presented, and (3) extend the professional services agreements (PSAs) with the

aforementioned strategic partners for fiscal year 2024 with the amounts of each PSA not to exceed the applicable approved budget line item;

NOW, therefore be it:

RESOLVED, that Connecticut Green Bank Board of Directors approves of the: (1) the revised FY2024 Targets and Budget, (2) the update to the salary structure presented, (3) extend the professional services agreements (PSAs) with the aforementioned strategic partners for fiscal year 2024 with the amounts of each PSA not to exceed the applicable approved budget line item, and (4) approves of the two accompanying job descriptions.

- c. Deployment Committee 10 minutes
 - i. Under \$500,000 and No More in Aggregate than \$1,000,000 Staff Transaction Approval Process Proposed Revision

Resolution #5

WHEREAS, At the October 20, 2017 Board of Directors (Board) meeting of the Connecticut Green Bank (Green Bank) the Board approved a process for the Green Bank staff to evaluate and approve funding requests less than \$500,000 and in an aggregate amount not to exceed \$1,000,000 from the date of the last Deployment Committee meeting (Under \$500,000 Approval Process for Financing Programs).

WHEREAS, at its June 24, 2022 meeting, the Board approved a process for the Green Bank staff to evaluate and approve upfront incentives for projects participating in the ESS Program (ESS Approval Process). The approval process for ESS incentives below \$500,000 is identical and subject to the same aggregate limit as the Under \$500,000 Approval Process for Financing Programs.

WHEREAS, the Deployment Comment recommended at its December 15, 2023 Special Meeting a modification of the Under \$500,000 Approval Process for Financing Programs and ESS Approval Process as described in the memorandum to the Board dated January 19, 2024 (the "Memo").

NOW, therefore be it:

RESOLVED, that the Green Bank Board approves the modification of the Under \$500,000 Approval Process for Financing Programs and ESS Approval Process as more particularly described in the Memo.

- 5. Incentive Programs Updates and Recommendations 5 minutes
 - a. Energy Storage Solutions Wesleyan University

Resolution #6

WHEREAS, in its June 24, 2022 meeting, the Connecticut Green Bank Board of Directors ("Board") approved the implementation of Upfront Incentive Project Approval procedures ("Procedures") for non-residential projects under the Energy Storage Solutions Program ("Program") with an estimated upfront incentive payment greater than \$500,000 and procedures for less than \$500,000;

WHEREAS, as part of the Procedures, Green Bank staff shall present Program projects via the consent agenda utilizing a standard form Tear Sheet process described in the memorandum to the Board dated June 24, 2022;

WHEREAS, in its December 9, 2022 meeting, the Board approved updated Procedures to better align with the Program process; and

WHEREAS, Green Bank Staff reviewed funding requests for projects with incentives below \$500,000, and approved them via Project Approval Forms for a total amount of \$560,400 and intends to issue Reservation of Fund letters.

NOW, therefore be it:

RESOLVED, that the Green Bank Board hereby approves the estimated upfront incentives for one (1) non-residential project above \$500,000 totaling \$1,036,000, consistent with the approved Procedures and this memorandum dated January 19, 2024; and,

RESOLVED, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver any and all documents and regulatory filings as they shall deem necessary and desirable to affect the above-mentioned incentives consistent with the Procedures.

- 6. Financing Programs Updates and Recommendations 30 minutes
 - a. C-PACE Project Cheshire

Resolution #7

WHEREAS, pursuant to Connecticut General Statute Section 16a-40g (the "Statute"), the Connecticut Green Bank (Green Bank) has established a commercial sustainable energy program for Connecticut, known as Commercial Property Assessed Clean Energy ("C-PACE");

WHEREAS, the Green Bank Board of Directors (the "Board") has approved a \$40,000,000 C-PACE construction and term loan program;

WHEREAS, the Green Bank seeks to provide a \$750,833.85 construction and term loan under the C-PACE program to 30 Grandview Court, LLC, the building owner of 30 Grandview Court, Cheshire, Connecticut (the "Loan"), to finance the construction of specified clean energy measures in line with the State's Comprehensive Energy Strategy and the Green Bank's Strategic Plan as more particularly described in the memorandum submitted to the Green Bank Board of Directors dated January 19, 2024 (the "Memo"); and

NOW, therefore be it:

RESOLVED, that the President of the Green Bank and any other duly authorized officer of the Green Bank is authorized to execute and deliver the Loan in an amount not to be greater than one hundred ten percent of the Loan amount with terms and conditions consistent with the Memo, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 120 days from the date of authorization by this resolution;

RESOLVED, that before executing the Loan, the President of the Green Bank and any other duly authorized officer of the Green Bank shall receive confirmation that the C-PACE

transaction meets the statutory obligations of the Statute, including but not limited to the savings to investment ratio and lender consent requirements; and

RESOLVED, that the duly authorized Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents and instruments as they shall deem necessary and desirable to effect the above-mentioned legal instruments.

- b. C-PACE Resiliency
- 7. Investment Programs Updates and Recommendations 35 minutes
 - a. PosiGen Recommendation and DOE / LPO SEFI Update

Resolution #8

WHEREAS, the Connecticut Green Bank ("Green Bank") has an existing partnership with PosiGen, PBC (together with its affiliates and subsidiaries, "PosiGen") to support PosiGen in delivering a solar lease (including battery storage) and energy efficiency financing offering to LMI households in Connecticut;

WHEREAS, the Green Bank Board of Directors (the "Board") previously authorized approval for Green Bank's participation in a back leverage credit facility (the "BL Facility") collateralized by all of PosiGen's solar PV system and energy efficiency leases in the United States as part of PosiGen's strategic growth plan, as well as a facility to finance performance based incentives earned by PosiGen on its solar PV portfolio in Connecticut;

WHEREAS, PosiGen is now in the process of upsizing its BL Facility with Brookfield Asset Management ("Brookfield"), as explained in the memorandum to the Board dated January 23, 2024 (the "Board Memo");

WHEREAS, PosiGen's repayment performance on its existing obligations remains consistent and satisfactory:

NOW, therefore be it:

RESOLVED, that the Board authorizes the Green Bank to amend its existing 2nd lien facility as part of the BL Facility to allow for an upsized Green Bank position together with the first lien lender, Brookfield (itself upsizing its position and expanding its collateral base), as set forth in the Board Memo;

RESOLVED, that the Board authorizes the Green Bank to advance up to \$24 million in 2nd lien financing associated with the New BL Facility, inclusive of third-party participation, as set forth in the Board Memo; and

RESOLVED, that the proper Green Bank officers are authorized and empowered to do all other acts and negotiate and deliver all other documents and instruments as they shall deem necessary and desirable to effect the above-mentioned legal instruments.

b. FuelCell Energy Derby - Transaction Approval

Resolution #9

WHEREAS, in accordance with (1) the statutory mandate of the Connecticut Green Bank ("Green Bank") to foster the growth, development, and deployment of clean energy sources that serve end-use customers in the State of Connecticut, (2) the State's Comprehensive Energy Strategy ("CES") and Integrated Resources Plan ("IRP"), and (3) Green Bank's Comprehensive Plan in reference to the CES and IRP, Green Bank continuously aims to develop financing tools to further drive private capital investment into clean energy projects;

WHEREAS, FuelCell Energy, Inc., of Danbury, Connecticut ("FCE") has used previously committed funding (the "Bridgeport Loan") from Green Bank to successfully develop a 15 megawatt fuel cell facility in Bridgeport, Connecticut (the "Bridgeport Project"), and FCE has operated and maintained the Bridgeport Project without material incident, is current on payments under this loan;

WHEREAS, FCE has used previously committed funding (the "Master Refinance Loan Projects") from Green Bank to successfully refinance a portfolio of six fuel cell projects, with 68% of the nameplate capacity being Connecticut sited projects, and FCE has operated and maintained the Master Refinance Loan Projects without material incident, is current on payments under this loan;

WHEREAS, FCE has used previously committed funding (the "Groton Loan Project") from Green Bank to successfully develop a 7.4 megawatt fuel cell project in Groton, Connecticut located on the U.S. Navy submarine base and supported by a power purchase agreement ("PPA") with the Connecticut Municipal Electric Energy Cooperative ("CMEEC"), and FCE has operated and maintained the Groton Loan Project without material incident, is current on payments under this loan;

WHEREAS, FCE has requested financing in support of private capital from the Green Bank to develop a 2.8 megawatt fuel cell Shared Clean Energy Facility project (the "SCEF Project") and a 14 megawatt fuel cell Department of Energy and Environmental Protection solicitation project (the "DEEP" Project"), both in Derby, Connecticut (together the "Derby Projects");

WHEREAS, staff has considered the financing needs for the Derby Projects, collaboratively with the senior lender, Liberty Bank of Middletown Connecticut ("Liberty"), and have structured a term loan facility whereby the Green Bank would participate on an equivalent security basis with Liberty for a senior term loan (the "Senior Loan") and separately Green Bank would provide an additional loan (the "Subordinated Loan") subordinated to the Senior Loan;

WHEREAS, staff has considered the merits of the Derby Projects and the ability of FCE to construct, operate and maintain each facility, support the obligations under the Senior Loan and the Subordinated Loan (together being the "Credit Facility") throughout their respective terms, and as set forth in the due diligence memorandum dated January 23, 2024 (the "Board Memo"), has recommended this support be in the form of funding not to exceed \$3,000,000 in respect of the Senior Loan and funding not to exceed \$3,500,000 in respect of the Subordinated Loan, secured by all project assets, contracts and revenues as described in the Board Memo;

NOW, therefore be it:

RESOLVED, that the Green Bank Board of Directors (the "Board") hereby approves the Credit Facility in an amount not to exceed \$3,000,000 in respect of the Senior Loan and funding not to exceed \$3,500,000 in respect of the Subordinated Loan, as a <u>strategic selection and award</u> pursuant to Green Bank Operating Procedures Section XII; and

RESOLVED, that the President of the Green Bank and any other duly authorized officer is authorized to take appropriate actions to provide the Credit Facility to FCE (or a special purpose entity wholly-owned by FCE) in an amount not to exceed \$3,000,000 in respect of the Senior Loan and funding not to exceed \$3,500,000 in respect of the Subordinated Loan with terms and conditions consistent with the Board Memo, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 180 days from the date of authorization by the Board; and

RESOLVED, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents and instruments as they shall deem necessary and desirable to effect the above-mentioned Term Loan and participation.

c. IPC Loan Expansion – Transaction Approval

Resolution #10

WHEREAS, the Connecticut Green Bank ("Green Bank") Board of Directors approved at its meeting held on October 26, 2018 debt funding to finance third party ownership platforms like Inclusive Prosperity Capital ("IPC");

WHEREAS, CEFIA Holdings LLC subsequently entered into a \$5,000,000 term loan facility with Inclusive Solar Manager CT I, LLC and \$5,000,000 construction facility with Inclusive Solar Company II, LLC (both, "Existing Loan Facilities");

WHEREAS, given the rate of utilization of the Existing Loan Facilities and need to allow for flexibility to monetize the Investment Tax Credit ("ITC"), Green Bank staff proposes providing financing to new entities owned by IPC for the purpose of owning any solar projects it develops in the future:

NOW, therefore be it:

RESOLVED, that the Board approves staff's request to enter into either a new or amended construction and term facility in an amount not to exceed \$15,000,000 ("New Loan Facilities") with IPC entities, such amount being inclusive of amounts outstanding under the Existing Loan Facilities);

RESOLVED, that the President of the Green Bank; and any other duly authorized officer of the Green Bank, is authorized to execute and deliver, any contract or other legal instrument necessary to effect the modification of the Existing Loan transaction or to enter into additional documentation for the New Loan Facilities on such terms and conditions as are materially consistent with the Board Memo; and

RESOLVED, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents as they shall deem necessary and

desirable to effect the above-mentioned legal instrument.

d.

Resolution #11

WHEREAS, pursuant to Section 16a-40g of the Connecticut General Statutes (as amended, the "Act"), the Connecticut Green Bank ("Green Bank") established a commercial sustainable energy program for Connecticut, known as Commercial Property Assessed Clean Energy ("C-PACE");

WHEREAS, pursuant to the Act and its Bylaws, Green Bank entered into three certain Financing Agreement dated October 16, 2015, January 7, 2019 and April 24, 2019 ("Three Separate Contracts") with SBB Inc, the building owner of 115 Nod Road, Clinton CT, to finance the construction of certain clean energy measures through the Solar Lease and C-PACE programs.

WHEREAS, on June 13, 2018, the Green Bank Board of Directors ("Board") approved the Loan Loss Decision Framework and Process, set forth in that certain memo to the Board dated June 13, 2018 (the "Loss Process"), which established the process of dealing with provisional loss reserves, restructurings, and write-offs for assets on Green Bank's balance sheet; and

WHEREAS, in accordance with the Loss Process, Green Bank staff seeks the Green Bank Board approval to restructure the Three Separate Contracts by extending the duration, waiving late fees, waiving one Lease semi-annual payment and converting the Solar Lease into a Power Purchase Agreement, as more particularly described in the memorandum submitted to the Board of Directors dated January 19, 2024 (the "Memo").

NOW, therefore be it:

RESOLVED, that the President of the Green Bank and any other duly authorized officer of the Green Bank is authorized to execute and deliver the Three Restructured Contracts, with terms and conditions materially consistent with the Memo, as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 120 days from the date of this Deployment Committee meeting; and

RESOLVED, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents and instruments as they shall deem necessary and desirable to affect the above-mentioned legal instruments. Submitted by: Bryan Garcia, President and CEO, Bert Hunter, EVP and CIO, Mackey Dykes, Vice President, Commercial and Industrial Programs, Brian Farnen, General Counsel and CLO.

- 8. Legislative Process 10 minutes
- 9. Other Business 30 minutes
 - a. Residential Renewable Energy Solutions (Affordable Housing) Annual Review (Update)
 - b. Energy Storage Solutions Annual Review (Update)

10. Adjourn

Click here to join the meeting

Next Regular Meeting: Friday, March 15, 2024 from 9:00-11:00 a.m.
Colonel Albert Pope Room at the
Connecticut Green Bank, 75 Charter Oak Avenue, Hartford

ANNOUNCEMENTS

- In-Person Option if anyone wants to join future BOD or Committee meetings in person, we are inviting you to our offices in Hartford
- Mute Microphone in order to prevent background noise that disturbs the meeting, if you aren't talking, please mute your microphone or phone.
- Chat Box if you aren't being heard, please use the chat box to raise your hand and ask a question.
- Recording Meeting we continue to record and post the board meetings.
- State Your Name for those talking, please state your name for the record.



Board of Directors Meeting

January 26, 2024 Colonel Albert Pope Conference Room



Board of Directors Agenda Item #1 Call to Order



Board of Directors Agenda Item #2 Public Comments



Board of Directors Agenda Item #3 Consent Agenda

Consent Agenda



Resolutions #1 through #3

- Meeting Minutes approve meeting minutes of December 15,
 2023
- 2. C-PACE Project Extensions Danbury and Milford
- 3. <u>Under \$500,000 and No More in Aggregate than \$1,000,000</u> staff approved transaction (i.e., C-PACE Stamford \$490,000) consistent with Comprehensive Plan and Budget
- Under \$100,000 and No More in Aggregate than \$500,000 –
 staff approved restructurings or write-offs no transactions
- Progress to Targets update through Q2 of FY24
- Annual Report FY23 Annual Report



Board of Directors

Agenda Item #4ai
Committee Updates and Recommendations
Audit, Compliance, and Governance Committee
Auditors of Public Account

Auditors of Public Accounts (APA) CONNECTICUT GREEN BANK Report Out

FY2020 and FY2021 Audit issued December 21, 2023 Two findings identified:

1. Lack of Penalty for False Statement Language in Contracts and Agreements

- Green Bank contracts and loan agreements do not identify false statements as a violation of Section 53a-157b of the General Statutes and a class A misdemeanor.
- We agree with the finding and contracts executed February 2023 and later now include this provision.

Auditors of Public Accounts (APA) CONNECTICUT GREEN BANK Report Out

2. Agency Does Not Identify or Track Surplus Funds

- Operating procedures require CGB to withdraw or transfer surplus funds generated through the sale of debt securities to our operating account.
- CGB does not have a system or procedure to identify, track and account for surplus funds.
- We agree with the finding and will review Sources and Uses section of the Official Statement for any upcoming bond issuances to identify potential surplus funds.
- Two Green Liberty Bond issuances within the audit period did not yield any surplus funds using this method.



Board of Directors

Agenda Item #4bi
Committee Updates and Recommendations
Budget, Operations, and Compensation Committee
FY24 Targets and Budget – Proposed Revisions

Energy Storage Solutions Program CONNECTICUT GREEN BANK Barrers to Deployment

- Residential BESS Original Equipment Manufacturer (OEM)
 - Participation participating in ConnectedSolutions
 - Simplified application process
- 2. BESS Affordability
- 3. Commercial Project Completion Timelines
 - Review of Reservation of Funds letters expiration
- 4. Capacity Rights Ownership



	Program		Targets			
Cogmont			Number of	Total Canital	CCD Conitol	Capacity
Segment	·	Program	Number of Projects	Total Capital Deployed	CGB Capital Deployed	Installed/ Nameplate
						Capacity
	ESS (Residential)	Residential Storage Incentives Total	150	4,800,000	0	1
	ESS (C&I)	C&I Storage Incentives Total	15	30,441,176		20.7
Incentive Programs	ESS	Total Battery Storage	165	\$35,241,176		21.9
	Smart-E	Total Smart-E	1,204	\$22,423,925		0.9
Incentive I		Programs Total	1,359	\$57,345,102		22.8

To support 1,359 1,211 projects attracting investment of \$57,345,102 \$98,988,148 to deploy at least 22.8 MW 52 MW of clean energy.



			Targets				
Segment	Product	Channel	Number of Projects	Total Capital Deployed	CGB Capital Deployed	Capacity Installed	
	CPACE	Total CPACE	19	\$21,170,000	\$7,700,000	0.0	
	PPA/Roof Leases	Total PPA	10	\$10,650,000	\$6,510,000	4.7	
Financia a December	SBEA		480	\$11,728,000	\$2,345,600		
	Multi-Family Pre-Dev		0	\$0		0.0	
Financing Programs	Multi-Family Term	Total Multi-Family Term	3	\$300,000	\$300,000	0.3	
	Transportation	EVCC	0	0		0	
	Strategic Investments	Total Strategic Investments	0	\$10,000,000	\$10,000,000	0.0	
	Financing	g Programs Total	509	\$ 53,548,000	\$ 26,555,600	4.7	

To support 509 515 projects attracting investment of \$53,548,000 \$58,979,668 to deploy at least 4.7 8.2 MW of clean energy.



Budget - Revenue Changes

Fiscal Year Jun 30 2024

	Budget	FY24 Original Budget	Variance
Revenue			
Operating Income			
Utility Customer Assessments	24,269,579	24,197,900	71,679 {A}
RGGI Auction Proceeds-Renewables	5,200,000	5,200,000	0
CPACE Closing Fees	120,000	120,000	0
REC Sales	14,232,034	14,232,034	0
Grant Income-Federal Programs	40,000	40,000	0
Grant Income-Private Foundations	150,000	150,000	0
PPA Income	500,000	500,000	0
LREC/ZREC Income	450,000	450,000	0
Total Operating Income	44,961,613	44,889,934	71,679
Interest Income	7,885,255	7,885,255	0
Interest Income, Capitalized	60,000	60,000	0
Other Income	1,271,612	1,271,612	0
Total Revenue	\$ 54,178,480	\$ 54,106,801	71,679

Budget - Expense Changes



Operating Expenses			
Compensation and Benefits	0.570.000	0.000.005	007.400
Employee Compensation	8,579,823	8,292,695	287,128
Employee Benefits	7,746,960	7,485,674	261,286
Total Compensation and Benefits	16,326,783	15,778,369	548,414
Program Development & Administration	3,891,852	3,891,852	0
Program Administration-IPC Fee	1,024,665	1,024,665	0
Lease Origination Services	4,000	4,000	0
Marketing Expense	1,670,425	1,620,425	50,000
E M & V	1,030,004	1,030,004	0
Research and Development	458,000	358,000	100,000
Consulting and Professional Fees			
Consulting/Advisory Fees	1,756,365	1,526,365	230,000
Accounting and Auditing Fees	321,350	321,350	0
Legal Fees & Related Expenses	250,000	250,000	0
Total Consulting and Professional Fees	2,327,715	2,097,715	230,000
Rent and Location Related Expenses			
Rent/Utilities/Maintenance	362,848	362,848	0
Telephone/Communication	58,980	58,980	0
Depreciation & Amortization	685,314	685,314	0
Total-Rent and Location Related Expenses	1,107,142	1,107,142	0
Office, Computer & Other Expenses	2,267,056	2,267,056	0
Total Operating Expenses	\$ 30,107,642	\$ 29,179,228	928,414
Program Incentives and Grants			
Financial Incentives-CGB Grants	485,000	485,000	0
Program Expenditures-Federal Grants	40,000	40,000	0
EPBB/PBI/HOPBI Incentives	5,842,318	7,200,000	(1,357,682)
Battery Storage Incentives	1,834,093	1,834,093	0
Total Program Incentives and Grants	\$ 8,201,411	\$ 9,559,093	(1,357,682)
Operating Income/(Loss)	\$ 15,869,427	\$ 15,368,480	500,947
operating incomer(2000)	¥ 10,000,421	¥ 10,000,400	000,041
Non-Operating Expenses			
Interest Expense	1,918,737	1,918,737	0
Provision for Loan Loss	1,743,163	1,743,163	0
Interest Rate Buydowns-ARRA	250,000	250,000	0
Total Non-Operating Expenses	\$ 3,911,900	\$ 3,911,900	0
rotal non-operating Expenses	4 9,311,300	\$ J,311,300	
Net Revenues Over (Under) Expenses	\$ 11,957,527 \$	11,456,580	\$ 500,947

Compensation Structure Changes CONNECTICUT GREEN BANK



Creation of a new salary band separating our Executive Vice Presidents from the other Officers to differentiate those roles

Job Titles	Grade	Salary Ranges				
		Min	25th	Mid	75th	Max
President	22	214,912	247,149	279,385	311,622	343,859
Executive Vice President	21	197,003	226,553	256,103	285,654	315,204
Offficer	20	179,093	205,957	232,821	259,685	286,549
Managing Director, Vice President	19	149,244	171,631	194,018	216,404	238,791
Director	18	124,370	143,026	161,681	180,337	198,993
Associate Director, Sr. Manager Investments, Controller	17	118,689	136,492	154,295	172,099	189,902
Sr. Manager, Programs/Corporate, Senior Administrator	16	98,907	113,743	128,580	143,416	158,252
Manager, Administrator	15	82,423	94,786	107,150	119,513	131,876
Senior Associate/ Associate Manager, Senior Accountant	14	71,672	82,423	93,174	103,924	114,675
Associate, Executive Assistant, Office Manager	13	62,323	71,672	81,020	90,369	99,718
Senior Assistant, Staff Accountant	12	54,194	62,323	70,453	78,582	86,711
Assistant	11	47,125	54,194	61,263	68,332	75,401

No compensation increases due to this change Approval of moving two positions to the new band (i.e., Bert and Jane)

Resolution #4



NOW, therefore be it:

RESOLVED, that Connecticut Green Bank Board of Directors approves of the: (1) the revised FY2024 Targets and Budget, (2) the update to the salary structure presented, (3) extend the professional services agreements (PSAs) with the aforementioned strategic partners for fiscal year 2024 with the amounts of each PSA not to exceed the applicable approved budget line item, and (4) approves of the two accompanying job descriptions.



Board of Directors

Agenda Item #4ci
Committee Updates and Recommendations
Deployment Committee
Under \$500,000 and No More than \$1,000,000
Staff Transaction Approval Process –
Proposed Revisions

Transactions Under \$500,000 Staff Approval Process



Current Process:

Green Bank staff to evaluate and approve funding requests less than \$500,000 which are pursuant to an established formal approval process in an aggregate amount not to exceed \$1,000,000 from the date of the last Deployment Committee meeting (Under \$500,000 Approval Process). The approval process for ESS incentives below \$500,000 is identical and subject to the same aggregate limit as the Under \$500,000 Approval Process.

ISSUE: This has been a procedural constraint for both Financing and ESS programs and has the likely potential to delay approval of standard projects as the ESS program expands. CGB has reached the aggregate limit on a few occasions which led to delays in approving certain ESS projects.

Transactions Under \$500,000 Staff Approval Process



Queue	Project Code	Project Name	Project Amount	Total	Funds
Clear -		→	_	▼	Remaini
		Beginning Balance		\$0.00	\$1,000,000.00
11/16/2022	PT-102392	JCJ Associates, 2303-2315 Berlin Turnpike	\$59,355.00	\$59,355.00	
11/16/2022	PT-102393	44A Shelter Rock Road Danbury	\$325,557.00	\$325,557.00	
11/16/2022	ESS-00026		\$132,000.00	\$132,000.00	
11/16/2022	ESS-00028		\$176,000.00	\$176,000.00	
11/16/2022	ESS-00039		\$268,200.00	\$268,200.00	
11/16/2022	ESS-00155		\$331,800.00	\$331,800.00	
11/16/2022	ESS-00165		\$55,800.00	\$55,800.00	
			\$0.00	\$0.00	
		Total Queue Cleared	\$1,348,712.00	\$1,348,712.00	(\$348,712.00)
		Beginning Balance	\$0.00	\$0.00	\$1,000,000.00
12/16/2022	pt-102397	307 Pepe's Farm Road: A C-PACE Project in Milford, CT	\$470,978.00	\$470,978.00	
12/16/2022	ESS-00033		\$449,750.00	\$449,750.00	
12/16/2022	ESS-00158		\$256,800.00	\$256,800.00	
			\$0.00	\$0.00	
		Total Queue Cleared	\$1,177,528.00	\$1,177,528.00	(\$177,528.00)
		Beginning Balance	\$0.00	\$0.00	\$1,000,000.00
1/20/2023	ESS-00041		\$111,600.00	\$111,600.00	
1/20/2023	ESS-00177		\$331,800.00	\$331,800.00	
1/20/2023	ESS-00179		\$55,800.00	\$55,800.00	
1/20/2023	ESS-00193		\$456,902.00	\$456,902.00	
1/20/2023	ESS-00194		\$456,902.00	\$456,902.00	
1/20/2023	ESS-00195		\$456,902.00	\$456,902.00	
			\$0.00	\$0.00	
		Total Queue Cleared	\$1,869,906.00	\$1,869,906.00	(\$869,906.00)

Resolution #5



NOW, therefore be it:

RESOLVED, that the Green Bank Board approves the modification of the Under \$500,000 Approval Process for Financing Programs and ESS Approval Process as more particularly described in the Memo.



Board of Directors

Agenda Item #5a
Incentive Programs Updates and Recommendations
Energy Storage Solutions
Wesleyan University

ESS-00758

Wesleyan University

- Customer Name: Wesleyan University
- Address: 0 Vine St., Middletown, CT
- Building's Operation: Private liberal arts university with 3000 undergraduate and 200 graduate students. The proposed BESS will support an on-site solar and cogeneration microgrid
- Contractor: CPower
- **System Size:** 4,900 (kW). 10,360 (kWh)
- <u>Total Cost:</u> \$4,403,000.00
- Expected Upfront Incentive:





ESS-00758



Wesleyan University Incentive

	Upfront Incentive (\$/kWh)*		
Capacity Block	Small Commercial	Medium Commercial	Large Commercial
Tranche 2	\$200	\$175	\$100

Small Commercial is a C&I customer with annual peak demand <200 kW Medium Commercial is a C&I customer with annual peak demand 200 kW - 500 kW Large Commercial is a C&I customer with annual peak demand >500 kW

- Battery Energy Capacity = 10,360 kWh

Incentive = 10,360 kWh * \$100/kWh = \$1,036,000

ESS-00758

Wesleyan University



- Customer Name: Wesleyan University
- Address: 0 Vine St., Middletown, CT
- Building's Operation: Private liberal arts university with 3000 undergraduate and 200 graduate students. The proposed BESS will support an on-site solar and cogeneration microgrid
- Contractor: CPower
- **System Size:** 4,900 (kW). 10,360 (kWh)
- <u>Total Cost:</u> \$4,403,000.00
- **Expected Upfront Incentive:** \$1,036,000
- Expected 10-Year Performance Incentive: \$ 3,432,949



RIM – Ratepayer Impact Measure	1.79
PCT – Participant Cost Test	1.19
PACT – Program Administrator Cost Test	2.30
SCT – Societal Cost Test	1.73
TRC - Total Resource Cost Test	1.73

Resolution #6



NOW, therefore be it:

RESOLVED, that the Deployment Committee hereby approves the estimated upfront incentives for one (1) non-residential project above \$500,000 totaling \$1,036,000, consistent with the approved Procedures and this memorandum dated January 19, 2024; and,

RESOLVED, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver any and all documents and regulatory filings as they shall deem necessary and desirable to affect the above-mentioned incentives consistent with the Procedures.



Board of Directors

Agenda Item #6a

Financing Programs Updates and Recommendations

C-PACE Project

Cheshire

30 Grandview Court, Cheshire



Ratepayer Payback

- \$750,834 for a 349.2 kW (DC) Solar PV System.
- Projected savings are 29,073 MMBtu
 versus \$750,834 of ratepayer funds at risk.



- Ratepayer funds will be paid back in one of the following ways
 - □ (a) through a take-out by a private capital provider at the end of construction (project completion);
 - □ (b) subsequently, when the loan is sold down to a private capital provider; or
 - □ (c) repayment of the C-PACE benefit assessment by the property owner.



Terms and Conditions

- \$750,834 construction loan at 5% and term loan set at a fixed 5.0% over the 5-year term
- \$750,834 loan against the property
 - □ Property valued at I
 - & Lien-to-value ratio □ Loan-to-value ratio equals equals
 - □ DSCR
 - □ DSCR with coborrower



The Five W's

- **What?** Receive approval for a \$750,834 construction and term loans under the C-PACE program to 30 Grandview Court LLC and Best Postcards **Inc.** to finance the construction of specified energy upgrades.
- When? Project to commence 2024.
- Why? Allow Green Bank to finance this C-PACE transaction continue to build momentum in the market, and potentially provide term financing for this project until Green Bank sells it along with its other loan positions in C-PACE transactions.
- Who? 30 Grandview Court LLC, the owner of 30 Grandview Court , Cheshire, CT
- Where? 30 Grandview Court, Cheshire, CT



Project Tear Sheet

Property Information			
Property Address	30 Grandview Court		
Municipality	Chesire		
Property Owner	30 Grandview Court, LLC		
Type of Building	Industrial		
Building Size (sf)	29,600 sf		
Year of Build / Most Recent Renovation	1997		
Environmental Screening Report			
Project Information			
Proposed Project Description	349.2 kW DC rooftop sol	ar installation	
Energy Contractor			
Objective Function	38.72 kBTU / ratepayer d	lollar at risk	
	***************************************	Total	
D 15 0 / . DTIN	Per Year	1,234	
Projected Energy Savings (mmBTU)	Over EUL	29,073	
Estimated Cost Savings (incl.	Year One	\$513,199	
ZRECs/Tariff and tax benefits)	Over EUL	\$2,321,517	
Financial Metrics			
Proposed C-PACE Assessment	\$750,834		
Term Duration (years)	5		
Term Rate	5.0% annually		
Construction Rate	5.00% annually		
Annual C-PACE Assessment	\$171,579		
Average DSCR			
Savings-to-Investment Ratio	2.71x		
Lien-to-Value (<i>LiTV</i>)			
Loan-to-Value (LTV)			
Appraisal Value ¹			
Mortgage Lender Consent Pending			



Key Financial Metrics

NETTING TARIFF SUMMARY

Table 1. Financial Metrics over EUL	
Savings to Investment Ratio (SIR)	2.71
Project cost	\$730,082
Amount financed	\$750,834
Gross total cost savings over EUL	\$2,321,517
Total PACE + O&M payments over EUL	\$857,893
% financed	100%
Owner equity contribution	\$0
Interest rate	5.00%
Finance term, years	5

Table 2. Savings Summary	
Effective useful life – EUL (years)	30
Gross project cost	\$730,082
Closing cost	\$20,752
Financed amount (including closing costs)	\$750,834
First year electric energy generation (kWh/yr)	361,624
First year electric energy generation (MMBtu/yr)	1,234
Total electric generation over EUL (MMBtu)	29,073
Netting tariff REC revenue (total over 20 years) (\$)	\$226,702
Netting tariff electric revenue (total over 20 years) (\$)	\$1,658,591
Total revenue from generation (total over 20 years) (\$)	\$1,885,293
Federal ITC	219,025

Resolution #7



NOW, therefore be it:

RESOLVED, that the President of the Green Bank and any other duly authorized officer of the Green Bank is authorized to execute and deliver the Loan in an amount not to be greater than one hundred ten percent of the Loan amount with terms and conditions consistent with the memorandum submitted to the Green Bank Board of Directors (the "Board") dated January 19, 2024, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 120 days from the date of authorization by the Board;

RESOLVED, that before executing the Loan, the President of the Green Bank and any other duly authorized officer of the Green Bank shall receive confirmation that the C-PACE transaction meets the statutory obligations of the Statute, including but not limited to the savings to investment ratio and lender consent requirements; and

RESOLVED, that the proper the Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents and instruments as they shall deem necessary and desirable to effect the above-mentioned legal instruments.



Board of Directors

Agenda Item #6b

Financing Programs Updates and Recommendations

C-PACE for Resilience

Public Act 22-6

"Resilience" means the ability to prepare for and adapt to changing conditions and withstand and recover rapidly from deliberate attacks, accidents or naturally occurring threats or incidents, including, but not limited to, threats or incidents associated with the impacts of climate change.

The bank shall consult with the Department of Energy and Environmental Protection and the Connecticut Institute for Resilience and Climate Adaptation to develop program eligibility criteria for financing of resilience improvements, consistent with state environmental resource protection and community resilience goals.

Require performance of an energy audit, renewable energy system feasibility analysis, or resilience study on the qualifying commercial real property that assesses the expected energy or resilience cost savings of the energy or resilience improvements over the useful life of such improvements before approving such financing

Our Approach



The guidelines & appendices are designed to help us understand the need for resilience financing for commercial properties in CT by:

- Collecting intel & data from project leads to understand the market needs (Pre-study Worksheet)
- Identifying common Climate Change Adaptation
 & Nature-Based Solutions measures as examples
- Utilizing existing resilience standard programs to help streamline access to C-PACE (FORTIFIED)
- Indicating how other resilience measures can be submitted for review/acceptance
- Adapt the program/guidelines accordingly in the future

Eligibility & Requirements



- Applicable standard C-PACE eligibility requirements:
 - commercial property
 - participating municipality
 - lender consent
- Exemptions:
 - SIR>1 is not applicable
- New Requirement:
 - Resilience Study w/assessment of cost savings included

- Pre-Study Worksheet
- Resilience Study
 - Property overview
 - Identification of vulnerabilities
 - Adaptation proposal
 - Assessment of cost savings
 - Implementation timeline
- documentation, applicable forms and back-up documentation submitted to the project's evaluator for review and determination of compliance.

Examples



In the Resilience Appendix, we outline climate change adaptation & nature-based solution examples, as well as FORTIFIED & all other resilience improvements.

Climate Change Adaptation Examples

- Flood Management
- Storm events/Extreme Weather
- Wind
- Fire
- Sea Level Rise
- Extreme Heat (MFH)

Nature-Based Solution Examples

- Bioswales
- Rain gardens
- Pervious surfaces
- Tree planting
- Natural ecosystem restoration (i.e. wetlands)

FORTIFIED



The Insurance Institute for Business & Home Safety (IBHS) developed FORTIFIED™- a voluntary, resilient construction and re-roofing standard and designation/compliance program- in an effort to reduce damage to residential, commercial and multifamily structures and help businesses re-open more quickly following severe weather. FORTIFIED employs an incremental approach with three levels of designations available to help meet resilience goals.





FORTIFIED



The National Standard for Resilience	FORTIFIED Roof	FORTIFIED Silver	FORTIFIED Gold
Enhanced Roof Deck Attachment	✓	✓	✓
Sealed Roof Deck	✓	✓	✓
Locked Down Roof Edges	✓	✓	✓
Impact-resistant Shingles Rated by IBHS**	✓	✓	✓
Wind and Rain-Resistant Attic Vents	✓	✓	✓
Impact Protection for Windows & Doors*		✓	✓
Impact* & Pressure-Rated Garage Doors		✓	✓
Chimney Bracing		✓	✓
Reinforced Soffits*		✓	✓
Anchored Attached Structures		✓	✓
Gable End Bracing		✓	✓
Pressure-rated Windows & Doors*			✓
Stronger Exterior Sheathing*			✓
Engineered Roof-to-Wall Connections			✓
Engineered Story-to-Story Connections			✓
Engineered Wall-to-Foundation Connections			✓

^{*} Required in Hurricane Prone Areas Only

Find a Professional

^{**} Required for the optional Hail Supplement to a FORTIFIED designation.

Other Resilience Measures



- Because the resilience definition is so broad, we added an open option for all other resilience improvements (outside of climate change adaptation, nature-based solutions and FORTIFIED) to be considered for approval.
- A resilience study and assessment of cost savings is still required, regardless of the Resilience Improvements.

New Construction



Resilience Improvements can be incorporated into a C-PACE New Construction project in 2 ways and may or may not incorporate energy measures. (Can also apply as a stand-alone C-PACE project following the Resilience Technical Standards):

- Include Resilience Improvements as Bonus Measure(s) to increase eligible % of TECC available for financing
- Use FORTIFIED Commercial or Multifamily Programs



New Construction



Table 3- Resilience for New Construction Total Eligible C-PACE Financed Amount

		C-PACE	C-PACE Financed	C-PACE Financed	C-PACE
FORTIFIED	C-PACE Financed	Financed	Amt. after	Amt. after	Financed
Designation	Amt. Of TECC	Amt. Of	Addition of Min.	Addition of Min.	Amt.
Level	(High wind)	TECC	2 Bonus	4 Bonus	Designed for
		(Hurricane)	Measures	Measures	Net Zero
Roof	5%	5%	10%	15%	
Silver	10%	15%	20%	25%	35%
Gold	15%	20%	25%	30%	

^{*} The FORTIFIED Commercial & Multifamily standards have different requirements for Hurricane regions (locations where wind speed for Risk Category II buildings is greater than 115 mph in ASCE-7 wind maps) and High Wind regions (everywhere else).

*I worked with IBHS to confirm these % were reasonable for the anticipated additional costs associated with the standard designation level requirements

Questions & Discussion



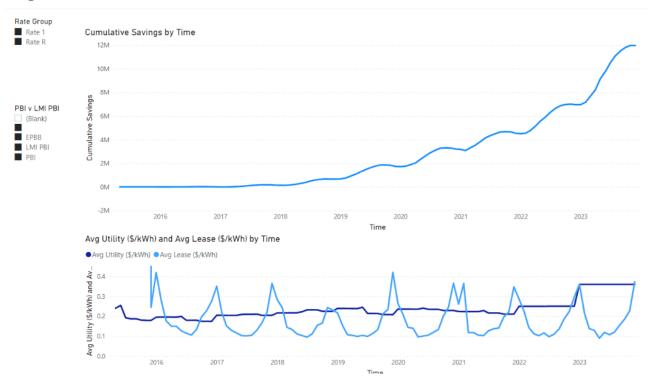
Board of Directors

Agenda Item #7a
Investment Programs Updates and
Recommendations
PosiGen Recommendation and
DOE / LPO SEFI Update



Solar for All Impact

- PosiGen/Green Bank "Solar for All" campaign under RSIP
- Considerable economic, environmental and customer savings impact was achieved
- Ongoing benefits under the residential renewable energy solutions (RRES) program
- PosiGen RSIP installed systems exceed 4,500
- Electric rates went up in 2023 (War in the Ukraine & CT reliance on natural gas for elec
- Solar became a hedge protecting low-income families against rising energy prices
- Savings \$5MM in 2023 or about \$1,100 / fam vs. \$2.5MM in 2022 or about \$560 / fam





Solar for All Impact





The Solar for All partnership between PosiGen and the Connecticut Green Bank resulted in over 4,400 families going solar, especially in vulnerable communities.

In 2022, the average Solar For All customer saved \$624.

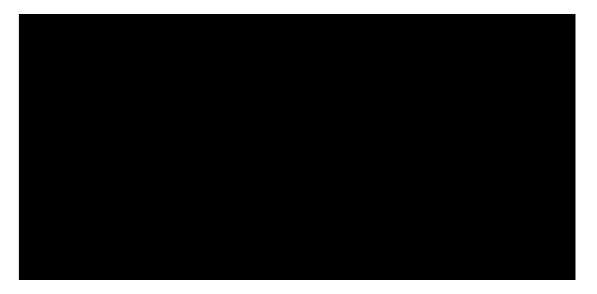
Learn more at www.ctgreenbank.com/solarforall





Limits Approved Dec 2022

- Brookfield Asset Management 1st Lien Facility (\$100 \$150mm increase)
 - Purpose is to increase 1st Lien Facility
 - Support PosiGen's growth LMI families in particular
 - Provide pathway to much larger DOE LPO "SEFI" Facility (closing mid 2024)
 - Refinance higher cost "work in process" (aka "WIP") facility (from another lender)
 - Lower interest cost and eliminates one additional lender (simplifies structure)
 - Improved cash available for Brookfield & Green Bank debt service
- Green Bank funding increases proportionately 2nd Lien facility
 - 2nd Lien <u>Participants</u> stay at \$6.75M





Risk Assessment

- PosiGen's portfolio performance remains strong and the lease structure aligns well with customers' benefits of electric bill savings which are only increasing with higher rates from Eversource & UI.
- High and stable collection rate from ProiGen's customers
- PosiGen's capital raising activities are strong as well.
 - Expansion of the Brookfield facility represents
 - PosiGen's investors have injected another capital in mid-2023
 - This is in addition to tax equity capital, where the company has secured tax equity from 2 major investors.



Risk Assessment with SEFI (SEFI not for approval today)



Resolution #8



NOW, therefore be it:

RESOLVED, that the Board authorizes the Green Bank to amend its existing 2nd lien facility as part of the BL Facility to allow for an upsized Green Bank position together with the first lien lender, Brookfield (itself upsizing its position and expanding its collateral base), as set forth in the Board Memo;

RESOLVED, that the Board authorizes the Green Bank to advance up to \$24 million in 2nd lien financing associated with the New BL Facility, inclusive of third-party participation, as set forth in the Board Memo; and

RESOLVED, that the proper Green Bank officers are authorized and empowered to do all other acts and negotiate and deliver all other documents and instruments as they shall deem necessary and desirable to effect the above-mentioned legal instruments.



Board of Directors

Agenda Item #7b
Investment Programs Updates and
Recommendations
FuelCell Energy Derby



Summary

- <u>Projects</u>: 2.8 megawatt Shared Clean Energy Facility project (the "SCEF Project") and 14 megawatt Department of Energy and Environmental Protection solicitation project (the "DEEP Project")
- Objective: Deliver energy, RECs, and capacity to the grid. Generate SCEF credits for electric customers in UI territory.
- **Project Cost**: \$99.0 million
- Project Cashflows: 20-year PPAs (and Tariff Agreement) with UI and CL&P (Eversource)
- <u>Tax Equity</u>: with Franklin Park \$ million
- <u>Senior Loan</u>: \$9.5 million: Liberty Bank (\$6.5M) + Green Bank (\$3M)
- Subordinate Loan: \$3.5 million Green Bank
- Green Bank Exposure: \$6.5 million: Senior Term Loan (\$3M) + Subordinate Term Loan (\$3.5M).
- Leverage: Private to Public 14:1



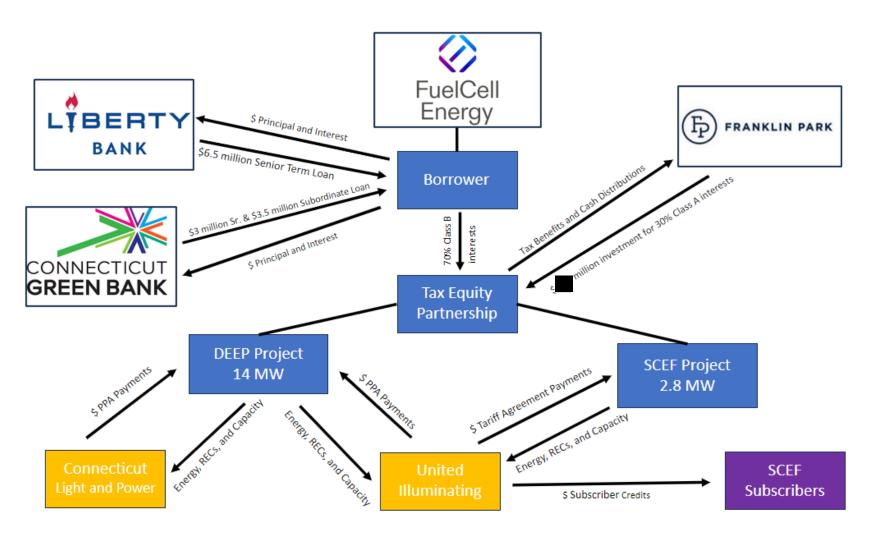
Term Financing Summary

- Senior Loan \$9.5 million
 - Liberty Bank (\$6.5M) + Green Bank (\$3M)
 - 7-year term

- Subordinate Loan \$3.5 million
 - 7-year interest only



Structure Diagram





Risk Mitigation (CGB)

- Construction completed
- Senior Loan fully amortized prior to module replacement
- Green Bank Debt Service Reserve, funded at prior to module replacement with a sweep of cashflows from the Projects and Master Refinance Facility
- Overall Debt Service Coverage Ratio
- First/Second priority security interest on all assets of Borrower, including pledge of the Class B Units owned by the Borrower in the Tax Equity partnership (and all revenues and distributions, other economic rights, and governance rights related thereto)
- RECs are included in PPAs and Tariff Agreement
- 20-year O&M agreement with FCE to maintain Projects
- Investment-grade Off-takers (UI and CLP) rated A- by Fitch
- Significant equity investment from FCE

SCEF Project



Subscriber Benefits

\$0.025/kwh credit to subscribers – estimated lifetime credits of ~\$11 million

Subscribers	Percentage of Credits	Estimated Lifetime Credits
Low-Income Customers ¹	20%	~\$2.2 million
LMI Customers ² , Affordable Housing, or LI Service organizations	40%	~\$4.4 million
Small Business Customers	20%	~\$2.2 million
Eligible Customers	20%	~\$2.2 million

¹60% or less of state median income

²100% or less of state median income

Resolution #9



NOW, therefore be it:

RESOLVED, that the Green Bank Board of Directors (the "Board") hereby approves the Credit Facility in an amount not to exceed \$3,000,000 in respect of the Senior Loan and funding not to exceed \$3,500,000 in respect of the Subordinated Loan, as a <u>strategic selection and award</u> pursuant to Green Bank Operating Procedures Section XII; and

RESOLVED, that the President of the Green Bank and any other duly authorized officer is authorized to take appropriate actions to provide the Credit Facility to FCE (or a special purpose entity wholly-owned by FCE) in an amount not to exceed \$3,000,000 in respect of the Senior Loan and funding not to exceed \$3,500,000 in respect of the Subordinated Loan with terms and conditions consistent with the Board Memo, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 180 days from the date of authorization by the Board; and

RESOLVED, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents and instruments as they shall deem necessary and desirable to effect the above-mentioned Term Loan. and participation.



Board of Directors

Agenda Item #7c
Investment Programs Updates and
Recommendations
IPC Loan Expansion

IPC Loan Facility

CONNECTICUT GREEN BANK

New/amended facility

- Current arrangement Two financing facilities to develop and finance solar power purchase agreement ("PPA") projects entered into in 2020: i) \$5M term loan facility (ability to draw as long as principal outstanding is less than \$5M; and ii) \$5M construction financing (revolving credit).
- <u>Deployed to date</u> Green Bank has deployed \$4.8M to an IPC SPV to finance 27 commercial solar projects in CT (4.2MW).
- What is being requested —enter into either a new or an amended construction and term facility in a total amount not to exceed \$15M
- What is changing main changes to Term loan: additional \$5M (max \$10M overall); interest rate; ability to draw on Investment Tax Credit (ITC) amount; allow for ITC to be monetized via tax equity partnership flip, sale or direct pay

Resolution #10



NOW, therefore be it:

RESOLVED, that the Board approves staff's request to enter into either a new or amended construction and term facility in an amount not to exceed \$15,000,000 ("New Loan Facilities") with IPC entities, such amount being inclusive of amounts outstanding under the Existing Loan Facilities);

RESOLVED, that the President of the Green Bank; and any other duly authorized officer of the Green Bank, is authorized to execute and deliver, any contract or other legal instrument necessary to effect the modification of the Existing Loan transaction or to enter into additional documentation for the New Loan Facilities on such terms and conditions as are materially consistent with the Board Memo; and

RESOLVED, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents as they shall deem necessary and desirable to effect the above-mentioned legal instrument.



Board of Directors

Agenda Item #7d Investment Programs Updates and Recommendations



Board of Directors Agenda Item #8 Legislative Process





Energy & Technology Committee:

Hydropower Task Force: Green Bank represented on Task Force to develop recommendations

NRES Expansion: (Moratorium on NRES to alian with Federal Funding Opportunities)

NRES Expansion: (Moratorium on NRES to align with Federal Funding Opportunities)

Uniform Solar Tax: NRES BASA clarification language – and/or - Uniform Capacity Tax (UCT)

Heat pump expansion: Green Bank currently negotiating concepts with DEEP, OPM, GOV

Office

Environment Committee:

Omnibus: NRES Expansion, UCT, SCEF Expansion, Heat Pump Deployment, Zero Carbon Schools

Other Sources:

Governor's Bill on Climate: Resiliency Improvement Districts, mandatory POCD Updates

DCP: Solar Bill of Rights



Board of Directors

Agenda Item #9a
Other Business

Residential Renewable Energy Solutions

(Affordable Housing) - Annual Review (Update)

Affordable Multifamily Clean Energy Generation In Statute



Definition of residential customer expanded to include:

a multifamily dwelling consisting of five or more units, provided in the case of a multifamily dwelling consisting of five or more units, (i) not less than sixty percent of the units of the multifamily dwelling are occupied by persons and families with income that is not more than sixty per cent of the area median income for the municipality in which it is located, as determined by the United States Department of Housing and Urban Development, or (ii) such multifamily dwelling is determined to be affordable housing by the Public Utilities Regulatory Authority in consultation with the Department of Energy and Environmental Protection, Department of Housing, Connecticut Green Bank, Connecticut Housing Finance Authority and United States Department of Housing and Urban Development.

How will the Tariff change impact multifamily properties?



- Affordable multifamily properties will be allowed to access the Residential Tariff
- Residential Tariff is higher than the alternative commercial tariff
- There is no cap on the number of Residential Tariff projects
- One project to benefit all tenants and common space

What is "Affordable"?



Statutory Definition

 not less than sixty percent of the units of the multifamily dwelling are occupied by persons and families with income that is not more than sixty per cent of the area median income

Tier One

- Property participates in the LIHTC Program
- Property contains a majority of households earning 80 percent or less of AMI
 - This encompasses many CHFA and DOH administered programs which participation in will make a property eligible

# of Units	# of Properties
500+	3
250 - 500	27
100 - 249	192
25 - 99	753
5 - 25	368

Tier Two

66% of residents have a household income at or below 60% of SMI

Tier Three

Agency group reviews and recommends eligibility of individual properties

Naturally Occurring Affordable Housing (NOAH)

Benefits & Distribution



- PURA required projects to use Buy-All tariff + Low-Income Customer Adder, making total compensation \$0.3739
- "(I) Each of the dwelling units receives an appropriate share of the benefits from the generation project, and (II) no greater than an appropriate share of the benefits from the generation project is used to offset common area usage."
- PURA determined appropriate share to be at least 20% for tenants in tenant metered properties and at least 25% in master metered properties
- Tenants receive on-bill credits in tenant metered properties. Proposal for tenant share to be used for building upgrades for master metered properties

Inflation Reduction Act Investment Tax Credit Adders



Domestic Content – 10%

Energy Community – 10%

- (i) a "brownfield site", (ii) an area which has (or at any time after December 31, 1999, had) significant employment related to the extraction, processing, transport, or storage of coal, oil, or natural gas (as determined by the Secretary), or (iii) a census tract in which (I) after December 31, 1999, a coal mine has closed, or after December 31, 2009, a coal-fired electric generating unit has been retired, or (II) which is directly adjoining to any census tract described in subclause (I).

Low-Income Bonus

- Low-income Community as defined by the New Markets Tax Credit 10%
- Qualified Low-Income Residential Building Project or Qualified Low-Income Economic Benefit Project – 20%





Less work. More benefits. Now even easier for property owners.

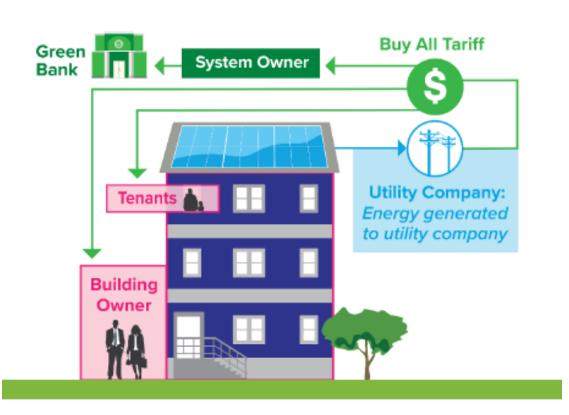
- No-cost technical support and project development support offered to affordable multifamily property owners.
- Makes it even easier for to access renewable energy and achieve energy savings using the Green Bank Solar Lease
- Provides technical assistance support that simplifies every step of the process



Multifamily Affordable Housing CONNECTICUT GREEN BANK



Green Bank Solar Lease



<u>Interagency Design</u> – PURA oversight with DEEP, DOH, CHFA, HUD, Green Bank, and EDCs working collaboratively to implement

- No capital requirement from property owner
- Tenants receive credits on their electric bill from production (i.e., RRES)
- Can include battery to provide resiliency (i.e., ESS)
- Green Bank owns and maintains asset, and bears risk
- Green Bank navigates state and federal incentives (i.e., ITC w/ adders) to ensure best deal for property owner and tenants (i.e., 20% savings)

Example – New Haven Housing Authority



					Year 1	١	ear 1 Per
		Υ	ear 1 Property	F	Residents		Tenant
Project Description	ITC	C	Owner Revenue	1	Revenue		Revenue
298kw Solar	30%	\$	12,588	\$	23,976	\$	235
298kw Solar	50%	\$	27,213	\$	27,213	\$	267
298kw Solar + Storage	30%	\$	7,505	\$	23,976	\$	235
298kw Solar + Storage	50%	\$	25,895	\$	25,895	\$	254







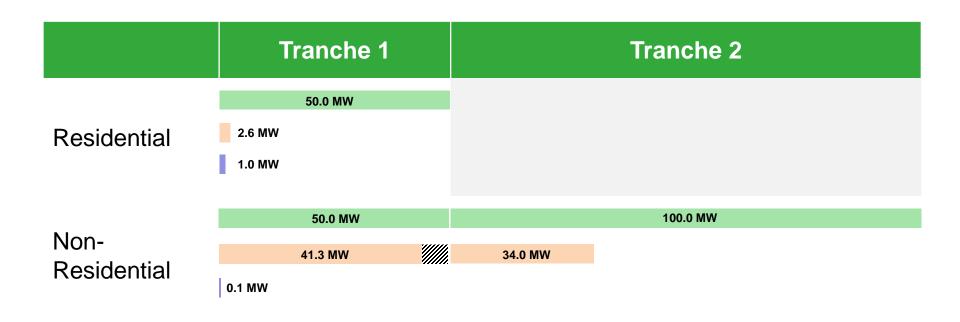
Board of Directors

Agenda Item #9b Other Business Energy Storage Solutions – Annual Review (Update)

Energy Storage Solutions



Program Progress as of 12/31/2023





Energy Storage Solutions



Year 3 Program Modifications

ISSUE		Year 2		Year 3			
Residential Upfront Incentives	Baseline (\$/kWh) \$200	Underserved Community (\$/kWh) \$300	Low- Income (\$/kWh) \$400	Baseline (\$/kWh) \$250	Underserved Community (\$/kWh) \$450	Low- Income (\$/kWh) \$600	
Residential Incentive Cap		\$7,500		\$16,000			
Multi-Family Affordable Housing	Unders	served Commu	nity	Low-Income			
Cost Recovery Mechanism	Based on	actual incurred	costs	reasonably w	known and meas ell-known expen red in the calend	ses likely	



Board of Directors Agenda Item #10 Adjourn



BOARD OF DIRECTORS OF THE CONNECTICUT GREEN BANK

Regular Meeting Minutes

Friday, December 15, 2023 9:00 a.m. – 11:00 a.m.

A regular meeting of the Board of Directors of the **Connecticut Green Bank** (the "Green Bank") was held on December 15, 2023.

Board Members Present: Bettina Bronisz, Dominick Grant, John Harrity, Robert Hotaling, Adrienne Houël, Matthew Ranelli, Lonnie Reed, Hank Webster, Joanna Wozniak-Brown

Board Members Absent: Thomas Flynn, Brenda Watson

Staff Attending: Emily Basham, David Beech, Priyank Bhakta, Larry Campana, Shawne Cartelli, Louise Della Pesca, James Desantos, Catherine Duncan, Mackey Dykes, Brian Farnen, Bryan Garcia, Bert Hunter, Alex Kovtunenko, Stephanie Layman, Alysse Lembo-Buzzelli, Cheryl Lumpkin, Desiree Miller, Ariel Schneider, Eric Shrago, Dan Smith, Mariana Trief, Leigh Whelpton

Others present:

1. Call to Order

Lonnie Reed called the meeting to order at 9:05 am.

Bryan Garcia summarized the proposed Agenda changes for today's meeting. Item 4a will be addressed after 4e and item 5a will be addressed after item 6d. Items 6a and 7a will be tabled until a future meeting.

2. Public Comments

No public comments.

3. Consent Agenda

a. Meeting Minutes of October 20, 2023

Resolution #1

Motion to approve the meeting minutes of the Board of Directors for October 20, 2023.

b. CY24 Regular Meeting Schedule

Resolution #2

Motion to approve the Regular Meeting Schedules for 2024 for the Board of Directors and Joint Committee revisions.

c. C-PACE Project Extension

Resolution #3

WHEREAS, pursuant to Conn. Gen. Stat. 16a-40g (the "Act") the Connecticut Green Bank ("Green Bank") is directed to, amongst other things, establish a commercial sustainable energy program for Connecticut, known as Commercial Property Assessed Clean Energy ("C-PACE");

WHEREAS, pursuant to the C-PACE program, the Connecticut Green Bank Board of Directors (the "Board") or the Connecticut Green Bank Deployment Committee ("DC"), as may be applicable, approved and authorized the President of the Green Bank to execute financing agreements for the C-PACE projects described in this Memo submitted to the Board on December 15, 2023 (the "Finance Agreements");

WHEREAS, the Finance Agreements were authorized to be consistent with the terms, conditions, and memorandums submitted to the Board or DC, as may be applicable, and executed no later than 120 days from the date of such Board or DC approval; and,

WHEREAS, due to delays in fulfilling pre-closing requirements the Green Bank will need more time to execute the Finance Agreements.

NOW, therefore be it:

RESOLVED, that the Board extends authorization of the Finance Agreements to no later than 120 days from December 15, 2023 and consistent in every other manner with the original Board or DC authorization for the Finance Agreement.

Upon a motion made by John Harrity and seconded by Bettina Bronisz, the Board of Directors voted to approve the Consent Agenda which consists of Resolutions 1-3. None opposed or abstained. Motion approved unanimously.

- 4. Investment Programs Updates and Recommendations
 - a. Commercial Solar Program Expansion

This item was presented after item 4e.

- Louise Della Pesca summarized the reason for the request to expand the Commercial Solar Program, its history, and what it encompasses.
 - O Robert Hotaling asked what the overall rate of return is and is there an expectation of an additional return due to the expansion. Louise Della Pesca responded that it is difficult to estimate what the rate of return would be and gave examples of the interest rate ranges for different kinds of transaction the funds have been used for in the

past. Bert Hunter added that with back leverage, the Green Bank varies the rate of return based on the end user in order to create the most stable transaction.

Resolution #4

WHEREAS, the Connecticut Green Bank ("Green Bank") Board of Directors (the "Board") passed resolutions at its March 25, 2020 meeting to approve funding, in a total not-to-exceed amount of \$30 million in new money, subject to budget constraints, for the continued development by Green Bank, and financing of development by 3rd parties, of commercial-scale solar PV projects, to be utilized for the following purposes pursuant to market conditions and opportunities:

- 1. Development capital;
- 2. Construction financing;
- 3. Financing one or more 3rd-party ownership platforms, in the form of sponsor equity and/or debt;
- 4. Sell solar power purchase agreement / lease projects developed by Green Bank to third parties; and
- 5. Offer loans to property owners that are unable to access financing, such as C-PACE, for installation of solar.

WHEREAS, there is continuing demonstrated need for flexible capital to expand access to financing for commercial-scale customers looking to access solar, including near term opportunities to deploy capital at a rate that would mean the \$30 million allocation would be consumed, as explained in a memorandum submitted to the Green Bank Board of Directors (the "Board") dated December 8, 2023 (the "Board Memo"); and

WHEREAS, the Green Bank is implementing a Sustainability Plan that invests in various clean energy projects and products to generate a return to support its sustainability in the coming years.

NOW, therefore be it:

RESOLVED, that the Board approves the increase of the allocation of \$30 million to the revised allocation of \$50 million, subject to budget constraints, use cases, and appropriate approval of investments as explained in the Board Memo;

RESOLVED, that the President of Green Bank; and any other duly authorized officer of Green Bank, is authorized to execute and deliver, any contract or other legal instrument necessary to continue to develop and finance commercial projects on such terms and conditions as are materially consistent with the Board Memo; and

RESOLVED, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents as they shall deem necessary and desirable to affect the above-mentioned legal instrument.

Upon a motion made by Adrienne Houël and seconded by John Harrity, the Board of Directors voted to approve Resolution 4. None opposed or abstained. Motion approved unanimously.

b. DownEast SPV's Project Pipeline

- Bert Hunter noted some of the transaction history regarding the Board approval needs.
- Larry Campana summarized the group of 35 projects, the borrower's structure, leadership, and the overall history for the transaction. He reviewed the debt facility terms which includes up to \$10 million, a DSRC of less than 1.35x, for a cumulative 10.1 MW.
- Desiree Miller reviewed the deal structure. Bert Hunter emphasized that this follows the pattern of other projects done such as Sunwealth and SkyView, and that there is a rigorous diligence process done.
 - Lonnie Reed asked for an example of what the project looks like compared to the storage unit rental facilities. Desiree Miller responded there is a church and Bert Hunter added there are five municipal structures.
 - Matthew Ranelli asked why DownEast was not getting the loan from a traditional lending source and what the Green Bank is providing that a private bank could not. Desiree Miller responded that they are extremely credit worthy but by giving them additional capital, they are incentivized to develop more solar projects and increasing their rate of return. Bert Hunter added that the reality is that while a regular financial institution could help them, this kind of smaller transaction creates a lot of deal friction and the diligence involved is not something that more regular financial institutions are interested in, because of the high costs involved. As well, in the event of a catastrophic default, the Green Bank is capable of taking the transactions over and the Green Bank is in a unique position to do that should it be necessary. Regular banks are not equipped to take on these tasks. He added that as the Green Bank is building its portfolio, this activity is not yet squeezing the Green Bank's resources but in the future there may be a point where transactions may need to be pooled to present to local lenders to participate and recapitalize, which would make it easier for them to become involved with. Matthew Ranelli appreciated the response as he did have concerns about the Green Bank having the financial capacity to undertake these transactions on an ongoing basis.

Resolution #5

WHEREAS, the Connecticut Green Bank ("Green Bank") Board of Directors ("Board") passed resolutions at its January 2023 meeting to approve funding for the continued development by third parties, of commercial-scale solar PV projects;

WHEREAS, MVCP LLC, a Connecticut-based investment company and direct owner of special purpose vehicles that are currently involved in the development of commercial solar projects and, in the future, may develop energy storage solutions projects in Connecticut; and,

WHEREAS, MVCP is seeking \$10 million of debt financing to fund the DownEast SPVs' Project Pipeline (the "Debt Facility").

NOW, therefore be it:

RESOLVED, that the President of Green Bank; and any other duly authorized officer of Green Bank, is authorized to execute and deliver the Debt Facility, and any associated legal instrument, with terms and conditions as are materially consistent with this Board Memorandum dated December 8, 2023; and,

RESOLVED, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents as they shall deem necessary and

desirable to affect the above-mentioned legal instrument.

Upon a motion made by John Harrity and seconded by Rob Hotaling, the Board of Directors voted to approve Resolution 5. None opposed or abstained. Motion approved unanimously.

c. US Bank Withdrawal from Solar Lease 3 Partnership

- Bert Hunter summarized the history of the transaction.
- Louise Della Pesca summarized the history of the establishments of Solar Lease 1, 2, and 3 and the situation that Solar Lease 3 is currently in, which is the point at which US Bank wants to withdraw. She noted the work done by Cohn Reznick and certain information to remain confidential within the Board's memorandum. Bert Hunter added that this would be in effect of December 31, 2023, which will make the books very clean and so it makes it very easy for the Accounting Department to pick up for 2024.
 - O John Harrity asked if the Green Bank owns a lot of assets, and if this is unusual or not. Bert Hunter responded that the Green Bank owns the assets for the two solar funds and there has been ownership interest in these projects ever since they were started.

Resolution #6

WHEREAS, the Board of Directors (the "Board") of Connecticut Green Bank ("Green Bank") approved the establishment on August 2, 2017 of a tax equity partnership ("CT Solar Lease 3, LLC") via its subsidiary CEFIA Solar Services, Inc., with Firstar Development, LLC, a subsidiary of U.S. Bancorp Community Development Corporation ("U.S. Bank") to enable financing for commercial solar PV projects in Connecticut under a program referred to as the "CT Solar Lease 3 Program"; and

WHEREAS, the CT Solar Lease 3 Program has concluded with ongoing activities limited to servicing a portfolio of commercial solar PV projects and U.S. Bank has expressed an interest to exit CT Solar Lease 3, LLC following the completion of an independent valuation exercise to arrive at a buy-out price for U.S. Bank's equity stake in CT Solar Lease 3, LLC.

NOW, therefore be it:

RESOLVED, that the Board approves staff's request to permit the Green Bank or an eligible subsidiary to purchase U.S. Bank's equity stake in CT Solar Lease 3, LLC consistent with the memorandum to the Board dated December 12, 2023 (the "Board Memo):

RESOLVED, that the President of the Green Bank; and any other duly authorized officer of the Green Bank, is authorized to execute and deliver, any contract or other legal instrument necessary to affect the transaction on such terms and conditions as are materially consistent with the Board Memo; and,

RESOLVED, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents as they shall deem necessary and desirable to affect the above-mentioned legal instrument.

Upon a motion made by Matthew Ranelli and seconded by Adrienne Houël, the Board of

Directors voted to approve Resolution 6. None opposed or abstained. Motion approved unanimously.

d. Cargill Falls - Loan Payment Deferral Request

- Marianna Trief reviewed the Cargills Falls project history and the current status, which the hydro is operating at 76%. She provided the real estate update due to the lead presence abatement, and more units require abatement after recent additional testing. Most of the lawsuits due to the lead presence have been dismissed however, and only 2 were settled. However, the property manager will not be renewing and a new one is being sought and so one additional year of C-PACE loan deferment is being asked for while a new property manager is being determined. As well, the Haynes Construction Company is also deferring. Bert Hunter noted the Green Bank has a very good relationship with the contractor and it has been very helpful.
 - o Lonnie Reed asked about the demand for the apartments and if there is still a demand. Mariana Trief responded there was and still is, but the current pause in demand is due to the lead abatement. Other non-affected units are being used to house the tenants who would be in the affected ones until they are made safe.
 - O Adrienne Houël asked due to the deferral, is there any opportunity to catch up, and will there be sufficient cash flow to reimburse. Bert Hunter responded that yes, everything is being pushed along and no interest is being written off, so over years there will be time to recover those funds.
 - o Matthew Ranelli noted that the project, though it's been extended several times, shows the diligence and creativity of the Green Bank, but stated that the continued issues has pushed it well beyond the scope. Although a lot has been learned, a lot has been put at risk too. He asked if there were a list of options to exit the project should more issues arise, if that's what it comes down to, and if there were any sculpted amortizations to review given all the changes. Bert Hunter responded that there is a cash flow sweep involved once Haynes Construction Company is repaid and that he believes the Green Bank will work out as expected due to the beneficial increases in rental market rates.
 - Lonnie Reed and Mariana Trief noted that despite the setbacks, there is still demand for the properties within the project and that it is a real statement project to show success.
 - o Bettina Bronisz asked if there had been any payments made so far and Mariana Trief responded yes, there was an interest payment made in January. Bert Hunter added that the cash levels were at a critical point earlier in the year which required the Green Bank, the project and Haynes Construction Company to work collaboratively to conserve cash needed to fix the lead issues, but Haynes had been very understanding during that time.

Resolution #7

WHEREAS, pursuant to Conn. Gen. Stat. 16a-40g, the Connecticut Green Bank ("Green Bank") has established a commercial sustainable energy program for Connecticut, known as Commercial Property Assessed Clean Energy ("C-PACE");

WHEREAS, the Board of Directors ("Board") of the Green Bank previously approved a construction and term financing, secured by a C-PACE benefit assessment lien, not-to-exceed amount of \$8,100,000 (the "Current Lien") to Historic Cargill Falls Mill, LLC ("HCFM"), the

property owner of 52 and 58 Pomfret Street, Putnam, Connecticut, to finance the construction of specified clean energy measures (the "Project") in line with the State's Comprehensive Energy Strategy and the Green Bank's Strategic Plan;

WHEREAS, the Project includes numerous energy conservation measures that align with the goals and priorities of the Green Bank's multifamily housing program; and,

WHEREAS, Green Bank staff now seeks approval to defer C-PACE loan payments from HCFM ("Loan Deferral") until December 31, 2024 as explained in the memorandum in respect of this matter submitted to the Board on December 8, 2023 (the "Board Memo").

NOW, therefore be it:

RESOLVED, that the President of the Green Bank and any other duly authorized officer of the Green Bank is authorized to execute and deliver the Loan Deferral consistent with the Board Memo and the Green Bank's Loan Loss Decision Process last updated on March 25, 2022; and,

RESOLVED, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents and instruments as they shall deem necessary and desirable to affect the above-mentioned legal instrument.

Upon a motion made by Rob Hotaling and seconded by John Harrity, the Board of Directors voted to approve Resolution 7. None opposed or abstained. Motion approved unanimously.

e. Environmental Market Assets - Staff Approval Process (Revision)

- Eric Shrago summarized the staff approval process for the 3 types of environmental asset markets that the Green Bank is currently active in. He noted the factors being considered and compared between them and the goals to standardize the processes. He stated the goal is to limit what is sold in advance to lock in pricing and sell the balance after the assets has been fully created to limit the risks around quantity.
 - O Dominick Grant asked if third party brokers are being used for spot sales. Eric Shrago responded yes, third party brokers are being used and there is the opportunity to enter a transaction with a direct purchaser as well, when favorable. Domonick Grant asked if those would be for long term offtake contracts directly and Eric Shrago responded that the Green Bank would stick by the forward rules that are proposed in the attachment memo.
 - o John Harrity asked how much of the analysis is done by AI. Eric Shrago responded that at the moment, none in terms of monetization portion, but there are opportunities to leverage AI in its lower form to do data review, though there isn't a time soon where a machine would make decisions.
 - O Joanna Wozniak-Brown asked what the process of understanding valuation in still-developing markets will be and the purchasing mechanisms evolving from that. Leigh Whelpton responded that it would really be dependent on the underlying market conditions of whatever the asset was that the Green Bank was looking to transact on, relative to the ecosystem service markets, as they are pretty particular relative to each protocol. Joanna Wozniak-Brown stated it is a conversation she would like to continue in the future. Bryan Garcia commented that the Green Bank is helping the Board and staff

understand ecosystem services through the environmental markets guide and that Leigh Whelpton will also be helpful to think about those things. As well, a lot of data is being collected to review and understand how those projects influence and perform.

Resolution #8

WHEREAS, CGS Sec. 16-245n (as amended by Public Act 21-2115) empowers the Connecticut Green Bank to leverage the carbon offset markets to monetize environmental attributes that accelerate the deployment of clean energy;

WHEREAS, CGS 16-245a established a Renewable Portfolio standard requiring Connecticut Electric Suppliers and Electric Distribution Company Wholesale Suppliers to obtain a minimum percentage of their retail load by using renewable energy;

WHEREAS, in November 2013, the Green Bank Board of Directors ("Board") approved Green Bank staff to execute and deliver any contract for immediate and/or long-term sale of RECs generated under the Residential Solar Incentive Program; and,

WHEREAS, in January 2023, the Green Bank Board approved Green Bank staff to sell credits generated as part of the Electric Vehicle Carbon Credit Pilot Program;

NOW, therefore be it:

RESOLVED, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents and instruments as they shall deem necessary and desirable to generate earned revenues from these assets while hedging portfolio risk over both the short and long term as specifically set forth in **Attachment C** of the memorandum to the Board dated December 8, 2023.

Upon a motion made by Matthew Ranelli and seconded by Rob Hotaling, the Board of Directors voted to approve Resolution 8. None opposed or abstained. Motion approved unanimously.

Bettina Bronisz left the meeting at 10:00 am.

5. Environmental Infrastructure Programs Updates and Recommendations a. Waste and Recycling – Primer Planning

This item was addressed after item 6d.

- Leigh Whelpton summarized the update to the strategic approach, the primary development process, and future direction. She reviewed the context for the Green Bank about how to approach waste and recycling and the challenges involved. She highlighted the magnitude of potential waste and the importance to address it now before it becomes a greater issue. She reviewed the three-prong strategy of collective responsibility, scale-up solutions, and to support the State.
 - Matthew Ranelli asked if anyone has reached out to Rob Klee, the industrial ecologist. Bryan Garcia answered that yes, he will be reached out.
 - Joanna Wozniak-Brown noted that she expects to reach out to the Green Bank

on OPM and DEEP fulfilling section 23 of Public Act 23-170, which requires us to establish the study on the governance structure regarding waste management. While she also expects to be requesting an extension based on what was originally proposed in the legislation, but coming back around to the Green Bank on that at a future date.

 John Harrity commented about his hope for the potential to mirror European efforts to put responsibility back on manufacturers for the products that they put out in terms of recycling at the end of use.

6. Financing Programs Updates and Recommendations

a. Residential Renewable Energy Solutions (Affordable Housing) – Annual Review (Update)

This item was tabled until the next meeting in January 2024.

b. Solar MAP for State Agencies Authority

- Mackey Dykes summarized the background of the Solar MAP program and proposed request to increase the capital needed for up to \$60 million and the reasons for the increase. He summarized the portfolio at current, plans for construction, relevant contingencies, and noted that it is unlikely the full amount would actually be disbursed. As well, the approval today is to grant authority to enter into the contracts to fulfill the obligations under the PPAs, and separate resolutions would be presented for debt or financing to cover those projects.
 - O John Harrity asked how much it would save the State in energy costs. Mackey Dykes responded for the first portfolio it would be about \$7.7 million over the term and could calculate the savings for the other portfolios and get John the information in the future. John Harrity noted this is a great opportunity for the State, especially to lead by example for green energy adoption.
 - o Adrienne Houël asked for clarification about the structure of the request. Mackey Dykes responded that from an oversight perspective, rather than having the authority replenish, the limit should be on the contracts we've entered into. So instead of having it revolve, it would just apply to the individual contracts.

Resolution #9

WHEREAS, Connecticut Green Bank ("Green Bank") staff has been working with State of Connecticut ("State") agencies to develop solar projects ("SAP Projects") as more particularly described in the Memorandums dated December 8, 2023 (the "Memo") and submitted to the Green Bank Board of Directors (the "Board");

WHEREAS, Green Bank has been providing assistance in site feasibility analysis, incentive procurement, and facilitating a procurement process for development and construction of SAP Projects; and

WHEREAS, Green Bank desires to expand the SAP Project authority to accommodate the expected pipeline of SAP Projects and their associated development and construction costs, which costs would later be recovered by either (1) selling SAP Project assets pursuant to an RFP process, or (2) the issuance of bonds, other obligations or other term financing to repay the temporary advances.

NOW, therefore be it:

RESOLVED, that the Board of Directors approves funding, in a total not-to-exceed amount of \$60,000,000 development and construction capital for the continued development of the SAP Projects;

RESOLVED, that the Board hereby declares the Green Bank's official intent that payment of SAP Project development and construction costs may be made from temporary advances of other available funds of the Green Bank, and that the Green Bank reasonably expects to reimburse such advances from the bonds or other obligations in an amount not to exceed \$60,000,000;

RESOLVED, that the President of Green Bank; and any other duly authorized officer of Green Bank, is authorized to execute and deliver, any contract or other legal instrument necessary to continue to develop and construct SAP Projects materially consistent with the Memo; and

RESOLVED, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents as they shall deem necessary and desirable to affect the above-mentioned legal instruments.

Upon a motion made by John Harrity and seconded by Adrienne Houël, the Board of Directors voted to approve Resolution 9. None opposed and Joanna Wozniak-Brown abstained. Motion approved.

c. C-PACE Transaction - Cheshire

solar PV sy term. The I	ystem for \$833,98 loan-to-value ratio	80. It is a 5% control is and li	nstruction loan a ien-to-value ratio	andview Court what a fixed 5.75% on is with a D	over the 2-year
• Priy	yank Bhakta sum	marized the proj	ject owner histor	у.	
	0				

Resolution #10

WHEREAS, the Connecticut Green Bank ("Green Bank") entered into a Smart-E Loan program financing agreement with Capital for Change ("C4C");

WHEREAS, C4C is the largest Smart-E lender on the Green Bank Smart-E platform;

WHEREAS, C4C, Amalgamated Bank and Green Bank have an existing medium term loan facility to C4C's CEEFCo subsidiary to fund C4C's Smart-E Loan and other residential energy efficiency loan portfolio growth and C4C's executive leadership has requested an increase in said facility as explained in the memorandum dated October 13, 2023 to the Connecticut Green Bank ("Green Bank") Board of Directors (the "Board") (the "Modification Memo"); and

WHEREAS, Green Bank staff recommends approval by the Board for an amended secured and subordinated medium term revolving loan facility for CEEFCo (the "Amended CEEFCo Revolving Loan") in order to fund CEEFCo's residential energy efficiency and Smart-E Loan portfolio in partnership with Amalgamated Bank.

NOW, therefore be it:

RESOLVED, that the Board approves the Amended CEEFCo Revolving Loan in an amount of up to \$15 million in capital from the Green Bank balance sheet in support of energy efficiency and Smart-E Loans in partnership with Amalgamated Bank generally consistent with the Modification Memo as a Strategic Selection and Award pursuant to the Green Bank Operating Procedures Section XII given the special capabilities, strategic importance, urgency and timeliness, and multi-phase characteristics of the Amended CEEFCo Revolving Loan transaction:

RESOLVED, that the President of the Green Bank; and any other duly authorized officer of the Green Bank, is authorized to execute and deliver, any contract or other legal instrument necessary to affect the CEEFCo Revolving Loan on such terms and conditions as are materially consistent with the Modification Memo; and

RESOLVED, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents as they shall deem necessary and desirable to affect the above-mentioned legal instrument.

Upon a motion made by Matthew Ranelli and seconded by Rob Hotaling, the Board of Directors voted to approve Resolution 10. None opposed or abstained. Motion approved unanimously.

d. C-PACE Transaction Amendment - East Hartford

• Catherine Duncan summarized the project history and need for a capital increase due to needing a significant service upgrade. She summarized the project terms of \$568,412 for a construction loan at 5%, a term loan set at a fixed 5.25% over the 20-year term, a loan-to-value ratio of , a lien-to-value ratio of , and a DSCR over

Resolution #11

WHEREAS, pursuant to Connecticut General Statute Section 16a-40g (the "Statute"), the Connecticut Green Bank (Green Bank) is directed to, amongst other things, establish a commercial sustainable energy program for Connecticut, known as Commercial Property Assessed Clean Energy ("C-PACE");

WHEREAS, the Green Bank Board of Directors (the "Board") has approved a \$40,000,000 C-PACE construction and term loan program; and,

WHEREAS, the Green Bank seeks to provide a \$572,250 construction and (potentially) term loan under the C-PACE program to 580 Tolland Street, LLC the building owner 580 Tolland Street East Hartford, CT (the "Loan"), to finance the construction of specified clean energy measures in line with the State's Comprehensive Energy Strategy and the Green Bank's Strategic Plan.

NOW, therefore be it:

RESOLVED, that the President of the Green Bank and any other duly authorized officer of the Green Bank is authorized to execute and deliver the Loan in an amount not to be greater than one hundred ten percent of the Loan amount with terms and conditions consistent with the memorandum submitted to the Committee dated December 8, 2023, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 120 days from the date of authorization by the Board of Directors;

RESOLVED, that before executing the Loan, the President of the Green Bank and any other duly authorized officer of the Green Bank shall receive confirmation that the C-PACE transaction meets the statutory obligations of the Statute, including but not limited to the savings to investment ratio and lender consent requirements; and,

RESOLVED, that the proper the Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents and instruments as they shall deem necessary and desirable to affect the above-mentioned legal instruments.

Upon a motion made by John Harrity and seconded by Rob Hotaling, the Board of Directors voted to approve Resolution 11. None opposed or abstained. Motion approved unanimously.

- 7. Incentive Updates and Recommendations
 - a. Energy Storage Solutions Annual Review (Update)

This item was tabled until the next meeting in January 2024.

8. Executive Session – Trade Secrets, Commercial Information Given in Confidence, and Personnel Related Matters

Upon a motion made by Matthew Ranelli and seconded by John Harrity, the Board of Directors voted to enter Executive Session at 10:40 am. None opposed or abstained. Motion approved unanimously.

Dominick Grant had to leave the meeting at 11:00 am.

The Board of Directors exited Executive Session at 11:20 am.

Resolution #12

WHEREAS, Section 3.1 of the Connecticut Green Bank (Green Bank) Bylaws provides that the Board of Directors (Board) shall be responsible for determining or approving compensation for the officers;

WHEREAS, on June 23, 2023, the Board approved a 5.0% merit pool in its FY 2024 budget for annual merit adjustments that can range from 0.0% to 8.0%;

WHEREAS, the Green Bank has completed its annual performance review process

Subject to Changes and Deletions

based on the Board approved annual goals and 360-degree performance reviews from the staff; and,

WHEREAS, the President and C.E.O. of the Green Bank recommends a 5.0% merit increase for the Officers other than himself and authorizing the Chair to determine the President and C.E.O.

NOW, therefore be it:

RESOLVED, that all Officers other than the President and C.E.O. shall receive a 5.0% merit increase for Fiscal Year 2023; and,

RESOLVED, that the Board authorizes the Chair of the Green Bank to determine the merit compensation adjustment for the President and C.E.O. for FY23 based on the (i) feedback of the Board members, (ii) performance towards meeting the Organizational and Team Goals for FY23 and (iii) his Individual Goals for FY23.

Upon a motion made Matt Ranelli by and seconded by Rob Hotaling, the Board of Directors voted to approve Resolution 12. None opposed or abstained. Motion approved unanimously.

9. Adjourn

Upon a motion made by John Harrity and seconded by Adriene Houël, the Board of Directors meeting adjourned at 11:21 am.

Respectfully submitted,
Lonnie Reed, Chairperson

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Memo

To: Connecticut Green Bank Board of Directors

From: Catherine Duncan, Associate Director, Financing Programs; Mackey Dykes, Vice President, Financing Programs;

Bryan Garcia, President & CEO; Alex Kovtunenko, Deputy General Counsel, Financing Programs; Brian Farnen, General Counsel and CLO

Date: January 19, 2024

Re: Extending timeline for closing certain C-PACE transactions

Summary

The Connecticut Green Bank Board of Directors (the "Board") or the Connecticut Green Bank Deployment Committee ("DC"), as may be applicable, has previously approved and authorized C-PACE financing for the following properties:

Project Address	Approved & Extended	Expiration	Project Amount
80 Wampus Lane, Milford, CT 06460	4/21/2023, 9/20/2023	1/18/2024	\$2,318,539
215-219 Main St, Danbury, CT 06810	4/21/2023	8/19/2023	\$ 565,028

The financing agreement(s) listed above (the "Financing Agreements") were authorized to be consistent with the terms, conditions, and memorandums submitted to the Board/DC and made no later than 120 days from the date of Board/DC approval.

Due to delays in fulfilling pre-closing requirements, including tariff awards, the C-PACE program staff requests more time from the Board or DC, as may be applicable, to close and execute the Financing Agreements. The staff requests an additional 120 days from the date of this meeting to execute the Financing Agreements for the transaction(s) listed above.

Resolutions

WHEREAS, pursuant to Conn. Gen. Stat. 16a-40g (the "Act") the Connecticut Green Bank ("Green Bank") is directed to, amongst other things, establish a commercial sustainable

energy program for Connecticut, known as Commercial Property Assessed Clean Energy ("C-PACE");

WHEREAS, pursuant to the C-PACE program, the Connecticut Green Bank Board of Directors (the "Board") or the Connecticut Green Bank Deployment Committee ("DC"), as may be applicable, approved and authorized the President of the Green Bank to execute financing agreements for the C-PACE projects described in this Memo submitted to the Board on January 19, 2024 (the "Finance Agreements");

WHEREAS, the Finance Agreements were authorized to be consistent with the terms, conditions, and memorandums submitted to the Board or DC, as may be applicable, and executed no later than 120 days from the date of such Board or DC approval; and

WHEREAS, due to delays in fulfilling pre-closing requirements the Green Bank will need more time to execute the Finance Agreements.

NOW, therefore be it:

RESOLVED, that the Board extends authorization of the Finance Agreements to no later than 120 days from January 19, 2024 and consistent in every other manner with the original Board or DC authorization for the Finance Agreement.

Submitted by: Bryan Garcia, President & CEO; Alex Kovtunenko, Deputy General Counsel, Financing Programs; Brian Farnen, General Counsel and CLO

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Memo

To: Board of Directors of the Connecticut Green Bank – Deployment Committee of the

Connecticut Green Bank

From: Bryan Garcia (President and CEO)

CC:

Date: January 19, 2024

Re: Approval of Funding Requests below \$500,000 and No More in Aggregate than

\$1,000,000 - Update

At the October 20, 2017 Board of Directors (BOD) meeting of the Connecticut Green Bank ("Green Bank") it was resolved that the BOD approves the authorization of Green Bank staff to evaluate and approve funding requests less than \$500,000 which are pursuant to an established formal approval process requiring the signature of a Green Bank officer, consistent with the Comprehensive Plan, approved within Green Bank's fiscal budget and in an aggregate amount not to exceed \$1,000,000 from the date of the last Deployment Committee meeting. This memo provides an update on funding requests below \$500,000 that were evaluated and approved. During this period, 1 project was evaluated and approved for funding in an aggregate amount of approximately \$489,250. If members of the board or committee would be interested in the internal documentation of the review and approval process Green Bank staff and officers go through, then please request it.

Property Information									
Property Address	432 Fairfield Avenue								
Municipality	Stamford								
Property Owner	Fairfield Avenue Storage LLC								
Type of Building	Other: Self Storage								
Building Size (sf)	82,528 sf	82,528 sf							
Year of Build / Most Recent Renovation	2018								
Environmental Screening Report									
Project Information									
Proposed Project Description	193.7 kW DC solar rooftop i	nstallation							
Energy Contractor									
Objective Function	14.44 kBTU / ratepayer dollar at risk								
		Total							
Paris de de Carine (aux PTU)	Per Year	844							
Projected Energy Savings (mmBTU)	Over EUL	16,105							
Estimated Cost Savings (incl. ZRECs/Tariff	Year 1	\$49,707							
and tax benefits)	Over EUL	\$1,175,591							
Financial Metrics									
Proposed C-PACE Assessment	\$489,250								
Term Duration (years)	20								
Term Rate	5.25%								
Construction Rate	5.00%								
Annual C-PACE Assessment	39,805								
Average DSCR									
Savings-to-Investment Ratio	1.46x								
Lien-to-Value (LiTV)									
Loan-to-Value (LTV)									
Appraisal Value ^[1]									
Mortgage Lender Consent	Received								

^[1] Appraised value per municipal appraisal of ______ + 50% of the project investment hard costs.

Resolution

WHEREAS, on January 18, 2013, the Connecticut Green Bank (the "Green Bank") Board of Directors (the "Board") authorized the Green Bank staff to evaluate and approve funding requests less than \$300,000 which are pursuant to an established formal approval process requiring the signature of a Green Bank officer, consistent with the Green Bank Comprehensive Plan, approved within Green Bank's fiscal budget and in an aggregate amount not to exceed \$500,000 from the date of the last Deployment Committee meeting, on July 18, 2014 the Board increased the aggregate not to exceed limit to \$1,000,000 ("Staff Approval Policy for Projects Under \$300,000"), on October 20, 2017 the Board increased the finding requests to less than \$500,000 ("Staff Approval Policy for Projects Under \$500,000"); and

WHEREAS, Green Bank staff seeks Board review and approval of the funding requests listed in the Memo to the Board dated January 26, 2024 which were approved by Green Bank staff since the last Deployment Committee meeting and which are consistent with the Staff Approval Policy for Projects Under \$500,000;

NOW, therefore be it:

RESOLVED, that the Board approves the funding requests listed in the Memo to the Board dated January 19, 2024 which were approved by Green Bank staff since the last Deployment Committee meeting. The Board authorizes Green Bank staff to approve funding requests in accordance with the Staff Approval Policy for Projects Under \$500,000 in an aggregate amount to exceed \$1,000,000 from the date of this Board meeting until the next Deployment Committee meeting.

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Memo

To: Board of Directors of the Connecticut Green Bank

From: Bryan Garcia (President and CEO)

CC:

Date: January 19, 2024

Re: Approval of Restructure/Write-Offs Requests below \$100,000 and No More in Aggregate

than \$500,000 - Update

At the June 13, 2018 Board of Directors (BOD) meeting of the Connecticut Green Bank ("Green Bank") it was resolved that the BOD approves the authorization of Green Bank staff to evaluate and approve loan loss restructurings or write-offs for transactions less than \$100,000 which are pursuant to an established formal approval process in an aggregate amount not to exceed \$500,000 from the date of the last Deployment Committee meeting. At the April 24, 2020 BOD meeting of the Green Bank, it was resolved that the BOD approves the authorization of Green Bank staff to evaluate and approve a semi-annual (or two quarterly periods) repayment modification of various transaction types in light of the COVID-19 pandemic.\(^1\) And at the June 26, 2020 BOD meeting of the Green Bank, it was resolved that the BOD approves of the framework applying to subsidiaries of the Green Bank.

During this period, there were no projects evaluated and approved for payment restructure/write-off.

¹ The Board also approved accommodation for one year for C-PACE transactions in certain towns where C-PACE assessments are collected annually.





Memo

To: Connecticut Green Bank Board of Directors

From: Eric Shrago

CC: Bryan Garcia, Sergio Carrillo, and Mackey Dykes

Date: January 19, 2024

Re: Fiscal Year 2024 Progress to Targets and Activity in Vulnerable Communities through Q2

The following memo outlines Connecticut Green Bank (CGB) progress to targets and capital deployed, including investments in vulnerable communities¹ for Fiscal Year (FY) 2024 as of December 31, 2024.

Table 1. CGB Totals Progress to Targets

Progress to Targets

YearFisca	rFiscal Project P		% of	Capital Deployed	Capital Deployed	% of Target	MW Actual	MW Target	% of Target
	Counter	Counter	Target	Actual	Target				
	Actual	Target •							
2024	4 1,165	1,726	67.5%	\$60,768,257	\$157,977,816	38.5%	29.8	60.5	49.2%

Table 2. CGB Totals Vulnerable Communities (excluding SBEA)

Vulnerable Community (excluding SBEA)

Vintage Not Vulnerable Vulnerable Total Vulnerable Community Capital Deployed % of Total # Projects % of YearFiscal Capital Deployed % of Total # Projects % of Capital Deployed % of Total # Projects % of Total Capital Total Capital Total Capital **Projects** Deployed Projects Deployed Projects Deployed 2024 \$44,239,857 80.73% 698 80.14% \$10,560,177 19.27% 173 19.86% \$54,800,033 100.00% 100.00%

¹ 1/18/2024 CGB Performance Metrics Power BI data source: https://app.powerbi.com/groups/289235dd-d77d-4043-8dae-d232a51a116a/reports/dcec3754-1e52-4c0c-b579-cfa7df20379c/ReportSection3a1e4346c50856c3c008

Table 3. Financing Programs Progress to Targets

Progress to Targets

ProgramSegment	Project Counter Actual	Project Counter Target	% of Target	Capital Deployed Actual	Capital Deployed Target	% of Target	MW Actual	MW Target	% of Target
Financing	305	515	59.2%	\$18,973,848	\$58,979,668	32.2%	2.1	8.2	25.2%

Progress to Targets

Program2	Project Counter Actual	Project Counter Target	% of Target	Capital Deployed Actual	Capital Deployed Target	% of Target	MW Actual	MW Target % of Target
Commercial Lease		16			\$16,081,668			8.2
CPACE	11	19	57.9%	\$13,005,624	\$21,170,000	61.4%	2.1	0.0
Multi-Family Term		3			\$300,000			0.3
SBEA	294	480	61.3%	\$5,968,224	\$11,728,000	50.9%	0.0	0.0

Table 4. Financing Programs Vulnerable Communities (excluding SBEA)

Vulnerable Community (excluding SBEA)

Vintage Vulnerable Community	Not Vulnerable				Vulnerable				Total			
ProgramSegment	Capital Deployed	% of Total Capital Deployed	# Projects	% of Total Projects	Capital Deployed	% of Total Capital Deployed	# Projects	% of Total Projects	Capital Deployed	% of Total Capital Deployed	# Projects	% of Total Projects
Financing	\$8,363,752	64.31%	7	63.64%	\$4.641.872	35.69%	4	36.36%	\$13 005 624	100.00%	11	100.00%

Vulnerable Community (excluding SBEA)

Vintage Vulnerable Community	Not Vulnerable				Vulnerable				Total			
ProgramName	Capital Deployed	% of Total Capital Deployed	# Projects	% of Total Projects	Capital Deployed	% of Total Capital Deployed	# Projects	% of Total Projects	Capital Deployed	% of Total Capital Deployed	# Projects	% of Total Projects
CPACE	\$8,363,752	64.31%	7	63.64%	\$4.641.872	35.69%	4	36.36%	\$13,005,624	100.00%	11	100.00%

Table 5. Incentive Programs Progress to Targets

P	roa	ress	to 1	Taro	ets
	ıou	1 633	LU	ıaı u	CLO

ProgramSegment	Project Counter Actual	C	Project Counter Target		Capital Deployed Actual	Capital Deployed Target	% of Target	MW Actual	MW Target	% of Target
Incentive	8	360	1,211	71.0%	\$41,794,410	\$98,998,148	42.2%	27.7	52.3	53.0%

Progress to Targets

Program2	Project Counter Actual	Project Counter Target	% of Target	Capital Deployed Actual	Capital Deployed Target	% of Target	MW Actual	MW Target	% of Target
Energy Storage Solutions - Commercial	6	29	20.7%	\$23,575,180	\$73,529,412	32.1%	26.6	50.0	53.1%
Energy Storage Solutions - Residential	51	250	20.4%	\$1,599,341	\$8,000,000	20.0%	0.2	2.0	11.2%
Smart-E	803	944	85.1%	\$16,619,889	\$17,852,737	93.1%	0.9	0.3	310.2%

Table 6. Incentive Programs Vulnerable Communities

Vulnerable Community

Vintage Vulnerable Community	Not Vulnerable				Vulnerable				Total			
ProgramSegment	Capital Deployed		# Projects		Capital Deployed		# Projects		Capital Deployed		# Projects	
		Capital Deployed		Projects		Capital Deployed		Total Projects		Capital Deployed		Total Projects
Incentive	\$35,876,105	85.84%	691	80.35%	\$5,918,305	14.16%	169	19.65%	\$41,794,410	100.00%	860	100.00%

Vulnerable Community

Vintage Vulnerable Community	Not Vulnerable				Vulnerable				Total			
ProgramName	Capital Deployed	% of Total Capital Deployed	# Projects	% of Total Projects	Capital Deployed	% of Total Capital Deployed	# Projects	% of Total Projects	Capital Deployed	% of Total Capital Deployed	# Projects	% of Total Projects
Energy Storage Solutions - Commercial	\$20,708,980	87.84%	4	0.47%	\$2,866,200	12.16%	2	0.23%	\$23,575,180	100.00%	6	0.70%
Energy Storage Solutions - Residential	\$1,520,917	95.10%	48	5.58%	\$78,424	4.90%	3	0.35%	\$1,599,341	100.00%	51	5.93%
Smart-E	\$13,646,208	82.11%	639	74.30%	\$2,973,681	17.89%	164	19.07%	\$16,619,889	100.00%	803	93.37%

Table 7. Current Reporting Periods for Smart-E Lenders

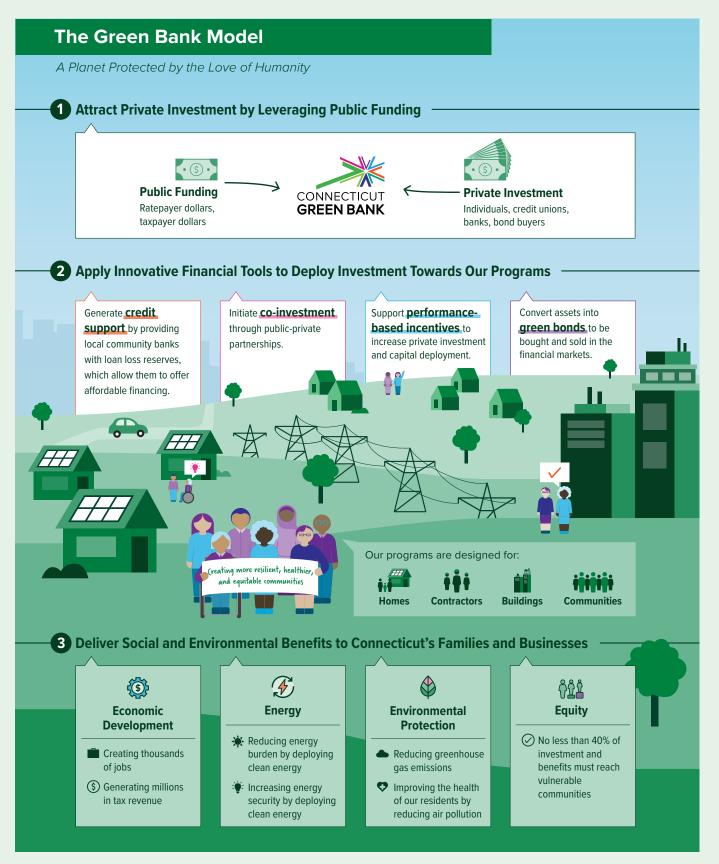
ProgramName	Latest Current Reporting Period
□ Smart-E	12/01/2023
Capital For Change	11/01/2023
CorePlus Federal Credit Union	12/01/2023
Eastern Connecticut Savings Bank	11/01/2023
First National Bank of Suffield	12/01/2023
Ion Bank	12/01/2023
Liberty Bank	12/01/2023
Mutual Security Credit Union	11/01/2023
Nutmeg State Financial Credit Union	11/01/2023
Patriot Bank	12/01/2023
Quinnipac Bank & Trust	
Thomaston Savings Bank	12/01/2023
Union Savings Bank	12/01/2023
Workers Federal Credit Union	11/01/2023
Total	12/01/2023





Milestones Reached. Building Momentum.





Our mission is to confront climate change by increasing and accelerating investment into Connecticut's green economy to create more resilient, healthier, and equitable communities. Established in 2011 as a quasi-public agency, the Green Bank uses limited public dollars to attract private capital investment and offers green solutions that help people, businesses and all of Connecticut thrive. Guiding this mission is **our vision** for "...a planet protected by the love of humanity."

our solutions

The Green Bank is helping Connecticut flourish by offering green solutions for homes and buildings, and by creating innovative ways to invest in the green economy.

home solutions

building solutions





investment solutions

community solutions





energy storage solutions

contractor solutions





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Milestones reached help build momentum for the future.

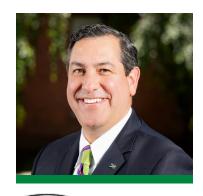
MESSAGE FROM THE PRESIDENT & CHIEF EXECUTIVE OFFICER

An annual report allows us a moment to simultaneously learn from the successes and challenges of the year passed while looking ahead at future opportunities.

In FY 2023, two of our flagship programs, C-PACE and the Smart-E Loan, reached their 10-year milestones. These programs embody much of how the Green Bank model works (see page 2) and the impact of this approach (see page 5). Smart-E is a loan for residents seeking to improve their home's energy efficiency, reduce energy costs, increase their family's comfort, or become more resilient in the face of climate change. This program is made possible through our partnerships with a vast network of skilled contractors and a pool of dedicated local lenders, all working together to build the green economy in Connecticut. More than 7,500 households have benefited from Smart-E.

C-PACE offers similar project financing support to building owners through an innovative structure that allows improvement costs to be spread out over time while the energy benefits are recognized on day one. Nearly 400 property owners have accessed this financing, and, as the program continues to expand and evolve, we anticipate that number will continue to grow. With new construction projects, EV charging infrastructure, and soon resiliency measures included under the growing umbrella of financeable improvements (in addition to renewables, battery storage, and energy efficiency), C-PACE is a tool well aligned with the State's climate goals and well suited to our commercial property owners.

The two-year-old Energy Storage Solutions incentive is facing barriers to adoption similar to those faced by solar PV a decade ago. While interest has been strong in the commercial sector, which can reap significant energy savings in addition to the resilience of storage, residential adoption has been slower. We believe that program changes recently determined by the Public Utilities Regulatory Authority (PURA) will help spur homeowners to consider this newer technology while the Green Bank continues to raise awareness with its partners (see page 12).



Bryan Garcia, President and CEO

Connecticut Green Bank

We are continuing to build upon our legislative expansion into the world of environmental infrastructure, learning how to incorporate the areas of agriculture, parks and recreation, water, waste and recycling, and land conservation into our vision for a planet protected by the love of humanity. Earlier this year, we began to build the team, including the hiring of a Manager of Community Engagement and Director of Infrastructure Programs. After an extensive search, we were excited to welcome our leader of environmental infrastructure programs to help chart a path towards implementing the green bank model in this new arena (see page 15).

As we look ahead into 2024 and beyond, we are focused on supporting and deploying the funds that are expected to flow from the Inflation Reduction Act. We have been preparing for a significant increase in activity stimulated by the Greenhouse Gas Reduction Fund (GGRF), which is modelled after the Connecticut Green Bank. The GGRF is focused on a dual mission of reducing GHG emissions and air pollution to confront climate change, while lifting up vulnerable communities by addressing environmental justice and a just transition. In the coming years, we expect new rebates, tax incentives, and GGRF dollars to catalyze state and federal green economies, jumpstarting the investment necessary to combat climate change with a focus on vulnerable communities.

There are now many green banks across the country from Maine to Hawaii and Michigan to Puerto Rico in cities, counties, and states across the country, and many of them are looking to Connecticut as a leader because of our track record of delivering social, economic, and environmental impact for all families and businesses, especially those in vulnerable communities.

This is a race to the top in America, our continued pursuit to become an ever-greater nation, and we couldn't be more excited to build upon what we've learned.

by the numbers

FY12 FY23

Since the Connecticut Green Bank's inception through the bipartisan legislation in July 2011, we have mobilized more than \$2.43 billion of investment into the State's green economy. To do this, we used \$362.7 million in Green Bank dollars to attract \$2.06 billion in private investment, a leverage ratio of \$6.70 for every \$1. The impact of our deployment of renewable energy and energy efficiency to families, businesses, and our communities is shown in terms of economic development, environmental protection, equity, and energy (data from FY 2012 through FY 2023).

ECONOMIC DEVELOPMENT

JOBS The Green Bank has supported the creation of more than 27,113 direct, indirect, and induced job-years.



TAX REVENUES

The Green Bank's activities have helped generate an estimated \$129.6 million in state tax revenues.



\$49.7 million

individual income tax

\$50.5 million corporate taxes

\$27.8 million sales taxes

\$1.5 million property taxes

ENERGY

ENERGY BURDEN

The Green Bank has reduced the energy costs on families, businesses, and our communities.





7,600+

DEPLOYMENT

The Green Bank has accelerated the growth of renewable energy to more than **571.8 MW** and lifetime savings of over **68.6 million MMBTUs** through energy efficiency projects.













ENVIRONMENTAL PROTECTION

POLLUTION The Green Bank has helped reduce air emissions that cause climate change and worsen public health, including **6.3** million pounds of SOx and **7.9** million pounds of NOx lifetime.



11.0 MILLION tons of CO₂: EQUALS







165 MILLION

tree seedlings grown for 10 years

2.2 MILLION

passenger vehicles driven for one year

PUBLIC HEALTH The Green Bank has improved the lives of families, helping them avoid sick days, hospital visits, and even death.

\$207.2 - \$468.5 million of lifetime public health value created

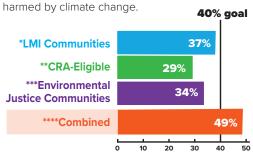


EQUITY

INVESTING in vulnerable communities, The Green Bank

has set goals to reach 40% investment

in communities that may be disproportionately



- * LMI Communities census tracts where households are at or below 100% Area Median Income.
- **Community Reinvestment Act (CRA) Eligible households at or below 80% of Area Median Income and all projects in programs designed to assist LMI customers.
- ***Environmental Justice Community means a municipality that has been designated as distressed by Connecticut Department of Economic and Community Development (DECD) or a census block group for which 30% or more of the population have an income below 200% of the federal poverty level.
- **** Combined Vulnerable Communities include LMI, CRA and EJC.

highlights & milestones

In FY 2023, our twelfth year of operation, the Green Bank experienced the waning influence from many of the same macroeconomic factors as the prior year (war in Ukraine, pandemic, rising interest rates and inflation) combined with the excitement generated by funds expected to flow from the Inflation Reduction Act.

Growth of commercial and residential battery storage —

With incentives provided through Energy Storage Solutions, family and business early adopters of solar plus storage are implementing battery technologies at their homes and buildings. In the first full year of the program, the initial block of commercial incentives were over-subscribed, leading to the opening of the second tranche of incentives. On the residential side, adoption has been slower as homeowners are learning about the technology. (See page 12)

Public interest in investing in the green economy helps Green Liberty Notes sell out — Through our subsidiary and our partnership with Raise Green, an award-winning online marketplace for impact investing, we continued to issue Green Liberty Notes with interest continuing to grow. In fact, three of our issuances were sold out and oversubscribed. We intend to continue to look for ways for the public to participate in our investments into the green energy economy, including, but not limited to, helping small businesses reduce their energy burden by becoming more energy efficient. (See page 7)

MAP leads the way for towns seeking solar — Three years ago, we began offering the Solar Marketplace Assistance Program (MAP) to municipalities looking for assistance navigating the process of going solar. In 2023, the first round of projects were energized in Manchester and Portland. These towns are shining examples of communities embracing the energy saving benefits of clean energy. (See page 14)



C-PACE and Smart-E celebrate 10 year milestones

Two of our flagship programs celebrated 10 year anniversaries in 2023. The Smart-E Loan experienced the second largest number of homeowners completing projects using this program (See page 10). For building owners, C-PACE continued to deploy financing while expanding to add new construction, electric vehicle charging, and more. (See page 8)

Building our Environmental Infrastructure team

— In addition to continued research into the areas covered by the scope expansion into environmental infrastructure, we identified and hired a Director of Environmental Infrastructure Programs and a manager of community engagement. We also started working to expand our Smart-E Loan and C-PACE programs to support environmental infrastructure. (See page 15)

Supporting green hydrogen — With an eye toward growing the green economy, per Special Act 22-8, the Green Bank chaired the task force to study hydrogen power. Building upon the unanimously supported recommendations generated by the Hydrogen Task Force, Connecticut passed bipartisan legislation in HB 6851 and adopted measures to support the deployment of hydrogen, including requiring community benefit agreements for all hydrogen projects.



investment solutions

The Green Bank helps Connecticut thrive by creating opportunities for in-state residents and beyond to participate in our green investment solutions, earning a return on investment that support climate goals or unlocking financing for projects.

Earn a return and support the green economy

We are dedicated to encouraging more people to invest in the green economy. Starting in 2020 with the launch of our Green Liberty Bonds that sold out, we knew there was demand for more investment opportunities, and have aimed to lower the minimum investment amount from \$1,000.

In January 2022, our subsidiary launched Green Liberty
Notes as a follow-on to the award-winning Green Liberty
Bonds. With a minimum investment of \$100, nearly anyone
can earn a competitive return on a one-year maturity note
and support small business energy efficiency in Connecticut.

The fifth offering, which closed in February 2023, exceeded its maximum raise of \$250,000 in less than one week and total demand surpassed \$368,000. The sixth offering in April-May was the fourth consecutive offering to exceed the maximum raise amount. Through the six offerings, more than \$1.25 million has been raised from investors across 35 states with more than half in Connecticut. Of these investments, 67% have been \$1,000 or less.



These offerings are made possible through a partnership with Raise Green, a climate tech marketplace for local impact investing based at ClimateHaven in New Haven.

We continued to see repeat investors and familiar names across our state, as well as a growing number of new investors with each offering.

Sign up for notifications at www.greenlibertynotes.com.

Supporting solar (plus storage) and energy efficiency for low-to-moderate income homeowners

Posigen has been a longstanding partner when it comes to providing the opportunity for homeowners with low-to-moderate income to become more energy efficient and go solar.

In 2023, the Green Bank increased its existing second lien credit facility with Posigen by \$2.9 million. This facility supports the development of new solar and energy efficiency installations for low-to-moderate homeowners in Connecticut. Additionally, the Green Bank closed a \$6 million tax equity bridge loan with Posigen further supporting their solar and energy efficiency deployment in the state.

To help LMI communities improve their resilience by offering energy storage systems alongside their solar product, the Green Bank also supported PosiGen's plan to evolve their business to include pairing solar with battery storage installation.



Hear PosiGen customers talk about their Solar for All experience at www.ctgreenbank.com/solar-for-all/



building solutions

More modern, sustainable buildings means more comfortable environments for workers and customers, and better bottom lines for building owners. As utility costs continue to grow and strain operating budgets, renewables and energy efficiency will remain top of mind.

10 years of success for C-PACE

Commercial Property Assessed Clean Energy (C-PACE) continues to be a unique source of financing for building owners making energy efficiency improvements or adding renewable energy sources. Since these upgrades can be made today and paid for over time, owners are seeing savings immediately. In fact, the lifetime cost savings to building owners is nearly \$400 million.

The total number of C-PACE projects has surpassed 384, including properties ranging from industrial facilities to retail and farms. These projects have a total investment of \$266.6 million with Green Bank investment of \$61.7 million, and private investment of \$204.9 million, a leverage ratio of \$4.3 to 1.



Industrial Building

Building with C-PACE

In addition to C-PACE, solar power purchase agreements (PPAs) are helping building owners realize significant energy savings. With 212 total PPAs in our portfolio, the energy cost savings produced is more than \$6.8 million annually. The majority of these solar installations are on schools, providing an educational opportunity for the future leaders of the green economy.

C-PACE charges up the driving experience

Encouraged by 10 successful years, C-PACE continues to evolve to meet the needs of building owners and their communities with also helping the state meet its aggressive goals. In 2023, C-PACE added a new financeable measure to its offering: electric vehicle (EV) charging infrastructure. This allows new construction or retrofit projects to add chargers for the growing number of EVs driven by employees, tenants, and customers. Between low-rate, long-term C-PACE financing, potential federal tax credits, and local utility incentives, the time to add charging infrastructure is now.

customer stories



Mystic Aquarium

A Connecticut tourism destination for 50 years, Mystic Aquarium enhanced its reputation as a leader in sustainability in 2023 with the completion of a comprehensive energy project, highlighted by a 272 kW solar system installed by Verogy. In total through energy usage and cost reductions, the Aquarium's estimated savings are \$1.8 million over the expected useful life of the improvements. On an annual basis, the project's arrays will offset the equivalent of about 209 metric tons of carbon dioxide, equivalent to the amount of emissions generated by an average passenger vehicle driven more than 537,000 miles every year.

Energy Upgrades: 272 kW roof mounted solar photovoltaic system, HVAC upgrades, lighting, and energymonitoring equipment

Projected Energy Savings:

\$1.8 million over the life of the upgrades



"This solar installation is a significant milestone in our continued commitment to environmental stewardship. We are deeply grateful to Verogy and the Connecticut Green Bank for their partnership and expertise. Together, we are making a tangible difference in our community and setting a precedent for future sustainable initiatives."

Susette Tibus, President and CEO of Mystic Aquarium

Photos of Mystic Aquarium provided by Verogy.

Photos of Enko and Barker taken by Red Skies Photography.



Enko Chem

In May 2023, Enko Chem, Inc. announced the start of a robust clean energy program at its facility in Mystic. The clean energy upgrades began with the installation of energy-efficient lighting on two floors of interior office, lab, and greenhouse space, and will continue with upgrades to the facilities' HVAC systems and the installation of solar.

The projected energy savings over 20 years are upwards of \$10 million including utility incentives, tax credits, and operational energy savings. Led by a team of proven scientists, entrepreneurs, and industry veterans, Enko's innovative science, agile design, and discovery of new modes of action is producing next-generation crop protection solutions that will overcome the critical challenges facing industry.

Energy Upgrade: lighting and HVAC upgrades (solar coming soon)

C-PACE Financing:

\$3.6 million over 10 years

Projected Energy Savings:

\$10 million over the life of the upgrades

"We are pleased with the package that the Connecticut Green Bank has helped us to implement. Clean energy and efficient energy are critical to environmental sustainability, something Enko is passionate about."

Jacqueline Heard, Ph.D., MBA, Enko Chem's Founder and CEO, pictured above with colleagues David Wurzer, CFO; Sonny Smith, Finance Director.; Peter Stchur, Ph.D. VP Operations, and Earthlight Technologies team members Daniel Kirk, Project Foreman, Germaine Givons (far right) and Amber Sudarsky, (background), both electricians



Barker Specialty

Barker Specialty is an innovative, family-owned promotional marketing agency with over 70 years of experience helping customers tell their brand stories. Inspired by their commitment to reducing their carbon footprint, Barker leveraged solar power to save energy at their 6,000-square-foot showroom and headquarters in Cheshire. They had such a positive experience working with the Green Bank and using C-PACE to finance their first rooftop solar photovoltaic system that they used it for a second solar project two years later. The projected total energy savings is more than \$1.5 million over the 25-year effective useful life of the panels.

Energy Upgrade: Two roof mounted solar photovoltaic systems (237.4 kW total)

C-PACE Financing:

\$209,101 over 5 years, and **\$447,026** over 12 years

Projected Energy Savings:

\$1.6 million over the life of the upgrades



"Sustainability is deeply important to our customers and aligns with our longstanding focus on high-quality products. Working with Green Bank on our solar projects has been a wonderful and rewarding experience that helps us achieve our goals for the community and the planet."

Gerry Barker, President, Barker Specialty



home solutions

The Green Bank empowers Connecticut families through accessible and affordable green solutions that provide comfort and security. The Smart-E Loan was designed to make it easy and affordable for homeowners to make energy efficiency and clean energy improvements to their homes with no out-of-pocket cash and at interest rates low enough and repayment terms long enough to make the improvements "cash flow positive."

Smart-E Loan

More than 1,240 homeowners took advantage of Smart-E Loans in FY 23, which is made available through a network of local lenders and contractors. This was the second most projects in a year for the program which celebrated its tenth year in 2023. In total, more than 7,500 home energy improvement projects have been completed using Smart-E. These upgrades are estimated to produce lifetime cost savings of more than \$93 million for the homeowners. The Smart-E Loan provides financing for more than 40 improvement measures, including heat pumps, insulation, windows, battery storage, and solar. The majority of projects completed have been HVAC or solar.

In 2024, the Smart-E Loan will begin to cover new environmental infrastructure measures, offering residents even more ways to protect their homes against climate change.

customer stories



"My home needed a complete replacement of its 20+ year old HVAC systems. I decided to replace my old A/C units and oil heating with a geothermal heating/cooling system and was able to afford it thanks to the SMART-E Loan

programs available from Connecticut Green Bank. They have great rates and made the process of getting a loan very simple. Now I am enjoying an oil free HVAC system that also saves money on my electricity bill. Thank you Connecticut Green Bank and the Smart-E Loan program!"

Yegor from Westbrook



"When I bought my house it had an old cast iron radiator system. Not only was this an eye sore but it was also very costly to run in the winter months. With the help of Smart-E Loan I was able to upgrade this system to an ultra high efficiency forced air system that saves me money and space in my house!

Being new to the area it is hard to find contractors you can trust. Through

the Smart-E Loan there is a list of contractors that are eligible to use this program. This provided me with some options to find a quality HVAC professional that I knew I could trust.

Overall, this was a great experience that improved the quality of my life and value of my home. I'm so grateful to have had this opportunity."

Nick from Fairfield



"We recently had the pleasure of participating in the Smart-E Loan program, and it has been an absolutely transformative experience for our new home. Thanks to the program's exceptionally favorable interest rates, we were able to undertake two significant energy-saving projects (solar and heat pumps) that have not only enhanced the comfort and efficiency of our home but also contributed to a greener, more sustainable environment.

The team behind the Smart-E Loan program was a joy to work with. Their friendly and attentive approach made the entire process smooth and hassle-free. The paperwork was surprisingly straightforward and easy to navigate, thanks to their guidance and support.

We wholeheartedly recommend the Smart-E Loan program to anyone looking to make their home more energy-efficient and eco-friendly."

Joe from Trumbull



"I used a Smart-E Loan to help upgrade my home heating system in 2022. The Connecticut Green Bank was a great partner throughout the process and met all of my expectations."

Ryan from Gales Ferry



"We used the Smart-E program to get our new furnace. The process was so easy and the payments fit into our budget. I am thrilled with the process from start to finish."

Cyril and Jennifer from West Haven



"We purchased a home with a 20-year-old central air conditioning system and we knew once it died, it would no longer be able to be repaired. When we called our HVAC vendor, they recommended a loan through the Green Bank to cover the large expense. Securing a Smart-E Loan from the Green Bank was simple and we were thrilled with the very low interest rates to fund the upgrade to our home. The partnership between our experienced HVAC vendor and the Green Bank allowed us to not only improve our home's comfort but also ensure a more energy-efficient and eco-friendly solution, all while saving on long-term operational costs. Our HVAC vendor's recommendation truly made this home improvement project a success. Now we simply pay the cost of the loan alongside our electric bill every month and we are happy to have an upgraded smart system!"

Katie and Billy from Danbury



energy storage

a market emerges with new storage technology

In its second year, Energy Storage Solutions is uncovering strong demand from commercial property owners and a growing interest from homeowners in this nascent battery technology.

In March 2023, PURA approved the opening of the second Commercial & Industrial (C&I) capacity tranche for the incentive program two years ahead of schedule due to overwhelming demand in the C&I sector. Once installed, interconnected, and operational, these battery systems will not only provide resilience for host customers, but will also pay on-going incentives for a period of 10 years as the batteries send energy to the grid on high demand days, resulting in lower electric rates for all Eversource and UI ratepayers.

In FY 23, 31 commercial projects were approved for incentives through Energy Storage Solutions for a total investment of \$71.3 million (\$20.3 million in incentives and \$50.9 in private investment). These projects are currently in various stages of development with the first ones anticipated to go online in 2024.

For residential customers, the adoption rate has been slower due to a number of factors, including inflation-related rising costs and the need to educate consumers on the relatively new technology. Despite these challenges, the program is showing steady growth year-over-year. In FY 22, residential projects approved for the incentive totaled 21. By the end of FY 23, another 329 projects have been approved.

To learn more, please visit www.energystoragect.com.

early adopters of residential solar plus storage

Through solar plus storage, Michael and Jaimee, who live in Hartland, are controlling their energy costs and going green. The couple's reasons for wanting to go solar were two-fold. First, despite some success in reducing their energy usage, the cost of electricity was quickly outpacing their income. Second, they had already replaced one vehicle with a fully electric car and solar was the next step toward getting their energy budget under control while also going green. Add in the benefit of backup power during the occasional outage due to severe weather, which eliminated the need for a fossil fuel generator, and they were ready.

"We chose to be among the early adopters of this technology because of the essential savings potential for our family. Over the past year, we have been very passionate in telling others about how well our system has performed and the savings realized, all while moving toward sustainable green energy production."



See more early adopters at https://energystoragect.com/homeowner-success-stories/



annual awards presented

In recognition of their contributions to the deployment of clean energy and demonstrated leadership in their industries in 2022, the Green Bank recognized key partners among the dedicated network of contractors, developers, lending partners, community leaders and home- and building-owners during our eighth annual awards. For 2022, awardees included the first contractors and homeowners in PURA's Energy Storage Solutions program. Award photos can be found at www.ctgreenbank.com/about-us/news/2022-awards/



C-PACE Outstanding Project

Recipient: Daughters of Mary of the Immaculate Conception

The Daughters of Mary of the Immaculate Conception in New Britain were honored for their collaboration with Citizens Energy, EcoSolar and Schneider Electric. Together, they leveraged C-PACE financing to establish a microgrid providing backup power that enables the critical care facility to operate even when the electric grid is down. Citizens Energy Corporation (a C-PACE capital provider) financed a microgrid that combines 1.4 megawatt hours of battery storage capacity with 1.2 megawatts of solar generation. This project is an outstanding example of the ability of C-PACE financing to support innovative green energy projects that positively impact our communities and improve resilience.



C-PACE and Solar PPA Outstanding Project

Recipient: Mystic Aquarium

Mystic Aquarium was recognized for its innovation and collaboration to accomplish its efficiency and sustainability goals. (More information about this project is featured on page 9 of this report).



Outstanding Partner for Solar MAP

Recipient: Greenskies Clean Focus

Greenskies Clean Focus is the installation partner for the inaugural round of municipalities participating in the Solar MAP for municipalities. Greenskies was competitively selected to install 11 projects in Branford, Manchester, Mansfield, and Portland, totaling 2.8 MW of solar using our Solar PPA. Greenskies was a key driver in getting these projects completed despite COVID-related supply chain delays.



Accelerating PACE

Recipient: Earthlight Technologies

The Green Bank recognized Earthlight Technologies, headquartered in Ellington, with an Accelerating PACE award for integrating C-PACE into its business model and continuing to demonstrate an innovative and forward-thinking approach to the market

Recipient: Greenleaf Energy Solutions

Greenleaf Energy Solutions, located in Oxford, was recognized for their significant participation within the C-PACE program and ability to drive business growth by integrating Green Bank programs within the sales process.



Energy Storage Solutions Early Adopters Contractors

Recipient: RWE Clean Energy Recipient: Sunbug

Recipient: CPower Recipient: Earthlight Technologies

Recipient: Green Power Energy Recipient: SAVKAT

These contractors were recognized for being early adopters in their participation and promotion of Energy Storage Solutions to commercial and residential customers.



Investment Solutions Outstanding Partners

We wouldn't be able to have such an impact in our communities without our Outstanding Partner financing partners. In particular, we recognized **Amalgamated Bank, Key Bank,** Liberty Bank, Mutual Security Credit Union, Nutmeg State Financial Credit





2022

OME SOLUTION

smart-e loan **〈** Top Performer

Smart-E Loan Top Performer

Recipients:

20/20 Air Mechanical (New Milford)*

Air Inc. (Branford)

Absolute Air Services LLC (Portland)*

Aiello Home Services (Windsor Locks)*

Benvenuti Oil Company (Waterford)*

Call The Bee (Burlington)*

Campbell Cooling LLC (Newington)*

Call The Bee (Burlington)*

Campbell Cooling LLC (Newington)*

Celco Heating and Air Conditioning (Bridgeport)*

Deitch Energy LLC (Hartford)*

Douglas Mechanical Services (Berlin)

Ductworks HVAC Services (Southington)*

East Coast Mechanical, Inc. (Cheshire)

Glasco Heating & Air Conditioning Inc. (South Windsor)*

HARP Home Services (Windsor Locks)

Homestead Comfort (Ellington)*

Link Mechanical Services Inc. (New Britain)*

Nutmeg Mechanical Services, Inc. (Manchester)*

Omni Mechanical Services (South Windsor)*

Onofreo Home Comfort Systems LLC (Milford)

R&W Heating Energy Solutions LLC (Salem)*

Service Stars (Danbury)*

State Line Oil and Propane (Granby)

Tyler Heating, Air Conditioning, Refrigeration LLC (Stratford)

Viglione Heating & Cooling Inc. (East Haven)*

The 2022 Top Performers listed in alphabetical order; * denotes 2021 Top Performer recognition





community solutions

Municipal and state buildings have options for going solar with no money down. The Green Bank Solar PPA (power purchase agreement) delivers immediate savings on electricity through a third-party owned and operated solar system, while the Solar Roof Lease allows property owners to generate income by leasing their roof space for the Green Bank and its partners to install solar.

providing a (Solar) MAP for municipalities

The first round of Solar Marketplace Assistance Program (MAP) municipal projects went online in 2023, as Manchester and Portland energized systems.

The Town of Manchester cut the ribbon on the installation of solar systems at seven municipal buildings, including six schools. These systems are projected to save the town more than \$100,000 annually in energy costs and more than \$2.1 million over the term of the PPA.

The Town of Portland also celebrated this year as the solar system at Brownstone Intermediate School went online. The 67 kW system is projected to save the Town more than \$10,000 annually in energy costs and more than \$206,000 over the term of the PPA.

Solar developer Greenskies Clean Focus was responsible for the installation of the Manchester and Portland systems, and Inclusive Prosperity Capital, a non-profit organization, partners with Green Bank to own and maintain these systems.

In 2020, the Green Bank introduced the Solar MAP to make it easier for municipalities to access renewable energy and achieve energy savings at their buildings. Solar MAP provides technical assistance through every step of the process so towns and cities can realize all the cost-saving benefits of going solar with fewer challenges and roadblocks. Through the PPA, the municipality purchases the electricity generated by the solar array, and locks in low electricity cost so the cash flow is positive in year one.



"I appreciate all the work and collaboration that it has taken to get this far and am excited that we are positioned to have lower energy costs for years ahead," said Matt Geary, Manchester's school superintendent. "But more important is how this benefits our students. Investing in clean, renewable energy is one more way we can ensure a better future for them."



"We are thrilled to have this new solar system installed and active in Portland. Being able to help the environment while at the same time saving on our energy costs is an enormous win-win for everyone." said Ryan Curley, First Selectman, pictured here cutting the ribbon during a school assembly honoring the project and those involved.

environmental infrastructure

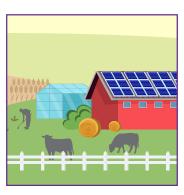
scope expansion

In July 2021, the signing of Governor Lamont's House Bill 6441, with bipartisan support, advanced the green bank model to include environmental infrastructure, which encompasses structures, facilities, systems, services, and improvement projects related to water, waste and recycling, climate adaptation and resiliency, agriculture, land conservation, parks and recreation, and environmental markets such as carbon offsets and ecosystem services.









Environmental Markets

Land Conservation

Parks and Recreation

Agriculture

Our expansion into environmental infrastructure has continued. In 2023, in addition to the primers on agriculture, land conservation, and parks and recreation, we published a guide on environmental markets and a primer on water. All of these documents can be found at www.ctgreenbank.com/strategy-impact/planning. A primer for waste and recycling is planned for 2024.

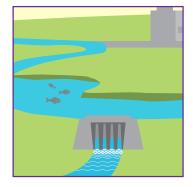


Leigh WhelptonDirector of Environmental
Infrastructure Programs

In addition, the nationwide search for the organization's first director of environmental infrastructure programs, which began in the summer of 2022, concluded with the announcement in April 2023, that Leigh Whelpton had been selected. Leigh will oversee the development and implementation of strategies that raise revenues and enable the investment and deployment of environmental infrastructure in the state with a focus on decarbonization, climate adaptation and resilience, and vulnerable communities.

Prior to the Green Bank, Leigh served as Executive Director of the Conservation Finance Network (CFN), having been with the

organization since its founding in 2012. CFN increases the pace and scale of social and ecological resilience efforts by expanding the capacity of practitioners to utilize innovative and effective funding and financing strategies. The Green Bank has engaged closely with CFN over the years as part of their nationally networked community of practice.



Water



Waste and Recycling

leadership for families facing rising energy costs







Brenda Watson *Board Member*

Energy is not cheap in Connecticut, a painful truth addressed in the article, "Study: Connecticut ranked fourth in the nation for most expensive energy costs overall." Since Connecticut households spend more on electricity and natural gas than they would in nearly any other state, there is a significant burden on our families. Home heating oil and transportation fuel also consume a significant amount of what Connecticut families spend on energy. And fluctuating energy prices have made it even more challenging for families to budget and plan for these expenses.

While rising energy costs have been difficult for everyone to handle, these costs disproportionately impact low-income and moderate-income families in Connecticut, whose energy costs make up a significant portion of their monthly expenses. That's why providing tools and resources to families feeling the strain of rising energy costs is so important.

One innovative step the State of Connecticut took to address this need was establishing the nation's first state-level green bank in 2011. Green banks can make energy-saving technology more accessible and affordable for families by offering innovative financing and generating new markets. These innovations can make a real difference.

Through the Solar for All program, a partnership between the Connecticut Green Bank and PosiGen Solar, more than 4,500 low-income families were able to access energy efficiency upgrades and go solar, saving more than \$2.8 million in electricity costs — on average more than \$600 per family. This includes nearly 840 projects in Bridgeport for a cost avoidance of \$500,000. This average savings

becomes even more significant when macroeconomic factors, such as the War in Ukraine, drive up electricity rates. The first half of 2023 saw electricity rates increase by roughly \$0.12/kWh, and the average Solar For All household is now seeing savings on their bills for that period of about \$800. Generally, going solar and improving the energy efficiency of one's home can help reduce the cost burden and ease inflationary pressures.

Along with Solar for All, there are several other ways that the Connecticut Green Bank is working with the state to help families shoulder this burden. *They include:*

- Determining how the state's Residential Renewable Energy Solutions program can be leveraged to support families living in affordable housing. Helping these low-income tenants realize the economic benefits of clean energy makes the impact of solar across our state more equitable.
- Managing Energy Storage Solutions, which enables homes and businesses to install battery backup systems, to also include special incentives for families in vulnerable communities.
- Supporting the state in its goals to expand electric vehicle infrastructure, which will help to alleviate the burden of transportation costs on families. The Green Bank finances electric vehicle charging equipment costs for businesses through the C-PACE program and homeowners through the Smart-E program.

The Green Bank's programs also support businesses and complement other state initiatives, resources, and organizations. Those include Operation Fuel, which provides energy assistance to families struggling to pay for their home heating fuel, and Energize Connecticut, which provides information on all the incentive and financing programs managed by the state's utilities and the Green Bank.

Additionally, the recently passed federal Inflation Reduction Act incentivizes the adoption of heat pumps and other efficient technologies that reduce energy usage. Reduced energy usage will help families reduce energy costs as prices increase.

The cost of energy in Connecticut may be lamentably high, but the state has been confronting this issue in proactive and creative ways that also protect our families, businesses, and communities.

officers & board

letter from the Governor

Officers

Bryan Garcia, President & CEO

Mackey Dykes, Vice President of Financing Programs

Brian Farnen, General Counsel and Chief Legal Counsel

Bert Hunter, Executive Vice President & Chief Investment Officer

Board of Directors*

Lonnie Reed, Board Chair,

Documentary Filmmaker & Former State Representative

Robert Hotaling, Deputy Director at DECD, as Ex Officio

Hank Webster, Deputy Commissioner at CT DEEP, as Ex Officio

Bettina Bronisz, Assistant Treasurer for Debt Management Office of the Treasurer, as Ex Officio

Dr. Joanna Wozniak-Brown, Climate & Infrastructure Policy Development Coordinator at OPM, as Ex Officio

Adrienne Farrar Houël, Founder, President & CEO of Greater Bridgeport Community Enterprises, Inc.

Dominic Grant, Director of Investment, Dirt Capital Partners

John Harrity, Former President, Connecticut State Council of Machinists

Matthew Ranelli, Board Secretary, Partner, Shipman & Goodwin, LLP

Thomas M. Flynn, Senior Director, Private Equity Services Operation Group, Alvarez & Marsal

Brenda Watson, Executive Director, Operation Fuel

*As of 07-11-2023

We are a state of creators, makers, innovators, and entrepreneurs — a powerful force for good in our country. This rings true for our state's energy industry, and the Connecticut Green Bank team is leading the way as a national example.

Since I've been in office, I have taken every opportunity to tout our first-in-the-nation Green Bank, which has and continues to serve as a model for the federal effort to establish a national green bank through the Greenhouse Gas Reduction Fund and its National Clean Investment Fund. The innovative, talented Green Bank team has proven time and time

again that not only does the model work, but it creates positive change for our communities, families, small businesses, and those disproportionately impacted by the effects of climate change and rising energy costs.

The wide range of projects and the many lives touched by the Green Bank never ceases to amaze me. Communities like Manchester added solar PV systems at seven municipal buildings, including six schools, saving the town more than \$100,000 annually in energy costs. Mystic's Enko Chem, Inc. will save upwards of \$10 million over 20 years through energy efficiency improvements and solar energy. The Solar for All program reached more than 4,500 lowincome families, helping them access energy efficiency upgrades and go solar while saving more than \$2.8 million in electricity costs – on average more than \$600 per family.

The numbers speak for themselves. Since its inception in 2011, the Green Bank has helped reduce energy costs for more than 60,000 Connecticut families and 7,000 businesses while supporting the creation of tens of thousands of jobs across our state, helping cut carbon emissions and improving public health.



Ned LamontConnecticut Governor

I'm excited to see what is in store for the Connecticut Green Bank over the next year. As we look to expand affordable housing options in Connecticut, we must make every effort to do so in a sustainable manner. Thanks to Connecticut's expansion of the definition of a residential customer related to solar energy generation in Public Act No. 21-48, the Green Bank is expanding its

Solar Marketplace Assistance Program to help fill the market gap and usher in more projects in the affordable housing sector.

Additionally, through bipartisan-supported legislation that I advanced in 2021, we will see the Green Bank advancing critical environmental infrastructure projects across Connecticut throughout the next year. Our state already plays a significant role in addressing the challenges of a changing climate, and with the Green Bank leading the charge in implementing projects that support climate adaptation and resilience, we will protect what we love about our home state, and continue to be a force for good in Connecticut and across the United States.

financial highlights

STATEMENT OF NET POSITION

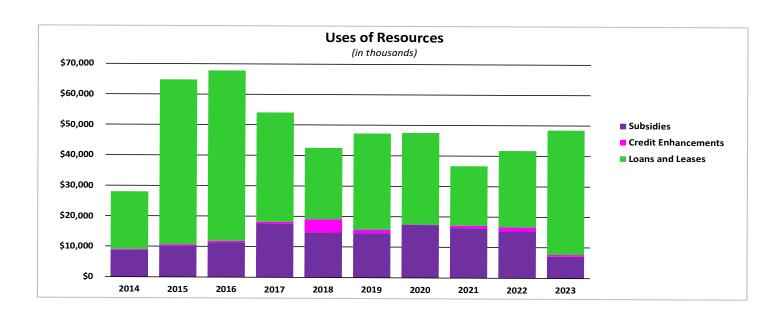
Cash and cash equivalents - unrestricted	\$ 41,785
Program loans & other long term assets	115,477
Capital assets, net	72,589
Cash and cash equivalents - restricted	22,364
Other assets	39,419
Total assets	\$ 291,634
Deferred amount for pensions	\$ 7,302
Deferred amount for OPEB	6,354
Deferred amount for asset retirement obligations	2,027
Total deferred outflows of resources	\$ 15,683
Current liabilities	\$ 20,956
Long term liabilities	75,945
Pension liability	17,633
OPEB liability	18,042
Total liabilities	\$ 132,576
Deferred amount for pensions	\$ 6,177
Deferred amount for OPEB	11,460
Deferred amount for leases	15,700
Total deferred inflows of resources	\$ 33,337
Net position, unadjusted	
Invested in capital assets	\$ 5,363
Restricted Net Position:	
Non-expendable	57,282
Restricted - energy programs	19,123
Unrestricted Net Position	59,636
Total net position, unadjusted	\$ 141,404
-	-
Net position, adjusted	
Unrestricted Net Position	\$ 59,636
Contingent liabilities - programs and projects ¹	(90,897)
Total net position, adjusted	\$ (31,261)
iotal net position, adjusted	7 (31,201)

 $^{^{1}}$ See Note III (B.) to Connecticut Green Bank's 2023 audited financial statements for further detail.

For the year ended June 30, 2023: (in thousands)

STATEMENT OF REVENUE, EXPENSE AND CHANGES IN NET POSITION

Revenues	\$ 63,947
Operating Expenses:	
Grants and incentive programs	\$ 7,738
Program administration expenses	14,658
Cost of goods sold - energy systems	1,328
General and administrative expense	3,503
Depreciation and amortization expense	3,475
Provision for loan losses	1,534
Total Operating Expenses	\$ 32,236
Operating Income	\$ 31,711
Non-operating revenue (expense)	(1,098)
Distributions	(348)
Total Non-Operating Revenue (Expenses)	\$ (1,446)
Net Change	\$ 30,265



For more details on the financial statements, including comparative results, please access the Annual Comprehensive Financial Report (June 30, 2023) at https://www.ctgreenbank.com/strategy-impact/reporting-and-transparency/#toggle-id-1





Hartford Office

75 Charter Oak Avenue Suite 1-103 Hartford, CT 06106

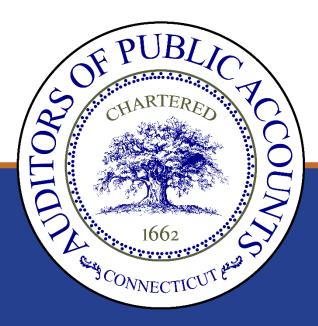
Stamford Office

700 Canal Street 5th Floor Stamford, CT 06902

AUDITORS' REPORT

Connecticut Green Bank

FISCAL YEARS ENDED JUNE 30, 2020 AND 2021



STATE OF CONNECTICUT

Auditors of Public Accounts

JOHN C. GERAGOSIAN
State Auditor



CLARK J. CHAPIN
State Auditor

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STATE OF CONNECTICUT



AUDITORS OF PUBLIC ACCOUNTS

JOHN C. GERAGOSIAN

STATE CAPITOL 210 CAPITOL AVENUE HARTFORD, CONNECTICUT 06106-1559

CLARK J. CHAPIN

December 21, 2023

INTRODUCTION

We are pleased to submit this audit of the Connecticut Green Bank (Green Bank) for the fiscal years ended June 30, 2020 and 2021 in accordance with the provisions of Section 2-90 of the Connecticut General Statutes. Our audit identified instances of noncompliance with laws, regulations, or policies and internal control deficiencies.

The Auditors of Public Accounts wish to express our appreciation for the courtesies and cooperation extended to our representatives by the personnel of the Connecticut Green Bank during the course of our examination.

The Auditors of Public Accounts also would like to acknowledge the auditors who contributed to this report:

Derik Muller

Derik Muller

Associate Auditor

Clark J Chapin

Peril J Miller

Approved:

John C. Geragosian State Auditor Clark J. Chapin State Auditor

STATE AUDITORS' FINDINGS AND RECOMMENDATIONS

Our examination of the records of the Connecticut Green Bank disclosed the following two recommendations, which were not repeated from the previous audit.

Finding 1

Lack of Penalty for False Statement Language in Contracts and Agreements

Criteria

Section 1-126 of the General Statutes states that any quasi-public agency shall require any application, agreement, financial statement, certificate or other writing submitted to it with respect to any loan, mortgage, guarantee, investment, grant, lease, tax relief, bond financing or other extension of credit or financial assistance, that provides information on which the decision of such quasi-public agency was based, to be signed under penalty of false statement as provided in Section 53a-157b.

Section 53a-157b of the General Statutes provides that a person is guilty of a false statement when making intentionally false written statements pursuant to a form bearing notice, authorized by law, to the effect that the false statements are punishable. A false statement is a class A misdemeanor.

Condition

Green Bank contracts and loan agreements do not identify false statements as a violation of Section 53a-157b of the General Statutes and a class A misdemeanor. Green Bank loan agreements only identify false statements as a situation that could constitute a default.

Context

The Connecticut Green Bank awarded 26 loans of approximately \$19 million, and four grants of approximately \$250,000, for clean energy projects during the audited period.

Effect

The Connecticut Green Bank could loan or grant funds to individuals or companies that willfully mislead the agency about the size, scope, and purpose of the project.

Cause

The Connecticut Green Bank was not aware of the requirements of Sections 1-126 or 53a-157b of the General Statutes.

Prior Audit Finding

This finding has not been previously reported.

Recommendation

The Connecticut Green Bank's contracts and agreements should identify false statements as a violation of Section 53a-157b of the General Statutes and a Class A misdemeanor to ensure compliance with Section 1-126 of the General Statutes.

Agency Response

"We agree with the finding.

Upon becoming aware of Section 1-126 of the General Statutes, the Connecticut Green Bank added the following provision to its loans, mortgages, guarantees, investments, grants, leases, tax relief, bond financings and other extensions of credit or financial assistance:

"Any warranty, representation or statement made or furnished by [Borrower] or on [Borrower]'s behalf under this [Agreement/application], or any related documents, are made or furnished under penalty of false statement as provided in Connecticut General Statutes § 53a-157b."

Contracts executed February 2023 and later now include this provision."

Finding 2

Agency Does Not Identify or Track Surplus Funds

Criteria

Chapter XIV of Connecticut Green Bank's Operating Procedures Manual requires it to withdraw or transfer surplus funds generated through the sale of bonds, bond anticipation notes, or other obligations to its operating account when it is permitted under applicable resolutions for the bonds, bond anticipation notes, or other obligations to be used for any of the bank's lawful purposes.

Condition

The Connecticut Green Bank does not have a system or procedure to identify, track, and account for these surplus funds.

Context

The Green Bank deposited receipts from bonds and notes, including potential surplus funds into its operating account, which is its only active bank account. However, we could not determine the amount of the Green Bank's surplus funds.

Effect Without a system to identify and track surplus funds, the Connecticut

Green Bank could inadvertently deposit or use the funds in a way

that violates requirements in its operating manual.

Cause The Connecticut Green Bank was not aware of the requirements

pertaining to the maintenance and use of surplus funds.

Prior Audit FindingThis finding has not been previously reported.

Recommendation The Connecticut Green Bank should design and implement a

system to identify and track any surplus funds generated by the sales of bonds and bond anticipation notes to ensure compliance with

Chapter XIV of its operating procedures manual.

Agency Response "We agree with the finding.

The Green Bank deposits all proceeds from debt issuances into its operating account. Upon becoming aware of this finding, the Green Bank reviewed the Sources and Uses section of the Official Statement for each of the two series of Green Liberty Bonds issued during the fiscal year 2020 and fiscal year 2021 audit period. We noted the Total sources and Total Uses of bond proceeds were equal for each issuance and, as such, did not yield any surplus funds. The Green Bank will use this procedure for future bond issuances to

identify and track any potential surplus funds."

STATUS OF PRIOR AUDIT RECOMMENDATIONS

Our <u>prior audit report</u> on the Connecticut Green Bank contained three recommendations, which have been implemented or otherwise resolved.

Prior Recommendation	Current Status
The Connecticut Green Bank should comply with the reporting requirements in the Connecticut General Statutes.	RESOLVED
The Connecticut Green Bank should offer its severance agreements closer to the employee's separation date. The Green Bank should confirm that the position is not needed before entering into a separation agreement.	RESOLVED
The Connecticut Green Bank supervisors should promptly approve employee timesheets each pay period. If a supervisor is not available, an appropriate designee with knowledge of the employee's attendance should approve the timesheet.	RESOLVED

OBJECTIVES, SCOPE, AND METHODOLOGY

We have audited certain operations of the Connecticut Green Bank in fulfillment of our duties under Sections 1-122 and 2-90 of the Connecticut General Statutes. The scope of our audit included, but was not necessarily limited to, the fiscal years ended June 30, 2020 and 2021. The objectives of our audit were to evaluate the:

- Agency's significant internal controls over compliance and its compliance with policies and procedures internal to the agency or promulgated by other state agencies, as well as certain legal provisions, including as applicable but not limited to, whether the agency has complied with its regulations concerning affirmative action, personnel practices, the purchase of goods and services, the use of surplus funds, and the distribution of loans, grants and other financial assistance;
- 2. Agency's internal controls over certain financial and management functions; and
- 3. Effectiveness, economy, efficiency, and equity of certain management practices and operations, including certain financial transactions.

Our methodology included reviewing written policies and procedures, financial records, minutes of meetings, and other pertinent documents; interviewing various personnel of the agency, as well as certain external parties; and testing selected transactions. Our testing was not designed to project to a population unless specifically stated. We obtained an understanding of internal controls that we deemed significant within the context of the audit objectives and assessed whether such controls have been properly designed and placed in operation. We tested certain of those controls to obtain evidence regarding the effectiveness of their design and operation. We also obtained an understanding of legal provisions that are significant within the context of the audit objectives, and we assessed the risk that illegal acts, including fraud, and violations of contracts, grant agreements, or other legal provisions could occur. Based on that risk assessment, we designed and performed procedures to provide reasonable assurance of detecting instances of noncompliance significant to those provisions.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

The accompanying Financial Information is presented for informational purposes. This information was obtained from various available sources including, but not limited to, the agency's management and the quasi-public's information systems and was not subjected to the procedures applied in our audit of the agency. For the areas audited, we identified:

- 1. Deficiencies in internal controls;
- 2. Apparent non-compliance with laws, regulations, contracts and grant agreements, policies, and procedures; and
- 3. A need for improvement in management practices and procedures that we deemed to be reportable.

The State Auditors' Findings and Recommendations section of this report presents findings arising from our audit of the Connecticut Green Bank.

ABOUT THE AGENCY

Overview

The Connecticut Green Bank (Green Bank) operates primarily under Chapter 283, Section 16-245n of the General Statutes. Subsection (d)(1)(A) of that section includes Green Bank as a public instrumentality and political subdivision of the state. Pursuant to Section 1-120 of the General Statutes, Green Bank is a quasipublic agency subject to the requirements in Chapter 12. As a quasi-public agency, Green Bank's financial information is included as a component unit in the State of Connecticut's Annual Comprehensive Financial Report (ACFR).

The Green Bank supports the Governor's and Legislature's energy strategy to achieve cleaner, cheaper, and more reliable sources of energy while creating jobs and supporting local economic development. Its mission is to confront climate change and provide all of society a healthier and more prosperous future by increasing and accelerating the flow of private capital into markets that energize the green economy. In accordance with Section 16-245n(d)(1)(B), Green Bank's purpose includes: (1) developing separate programs to finance and otherwise support clean energy investment in residential, municipal, small business, and larger commercial projects and such others as Green Bank may determine, (2) supporting financing or other expenditures that promote investment in clean energy sources in accordance with a comprehensive plan developed by it to foster the growth, development and commercialization of clean energy sources and related enterprises, and (3) stimulating demand for clean energy and the deployment of clean energy sources within the state that serve end use customers in the state.

The principal source of Green Bank's revenue is utility customer assessments made by the Public Utilities Regulatory Authority in accordance with Section 16-245n of the General Statutes. It is a charge per kilowatt-hour to each end-user of electrical services provided by utility companies in the State. Utility customer assessments can be used for Green Bank's general, administrative, and program expenses. During the audited period, the charge was 1 mill per kilowatt-hour. It is this assessment that provides the Green Bank's largest revenue source. The Green Bank also receives a portion of Connecticut's funds from the Regional Greenhouse Gas Initiative (RGGI) for the financing of energy efficiency and renewable energy projects. Funds from RGGI auctions are used to fund commercial property assessed clean energy program (C-PACE) loans. Other sources of revenue include renewable energy certificate (REC) sales, energy system sales, sale of Solar Renewable Energy Credits generated by facilities it has financed, and the federal government.

Since 2013, Green Bank transitioned to innovative, low-cost financing of clean energy deployment. This transition enabled Green Bank to invest its funds in activities that generate a return and create revenue that can be reinvested in solar energy for Connecticut. The Green Bank invests over 80 percent of its resources in loans, leases, and credit enhancements, and spends the other 20 percent on program and operating expenses.

Component Units

The Connecticut Green Bank manages ten for-profit entities that administer its clean energy program as follows:

CEFIA Holdings, LLC

CEFIA Holdings, LLC (CEFIA Holdings) is a Connecticut limited liability corporation, wholly owned by the Connecticut Green Bank. It was established to acquire and develop a portfolio of commercial and

residential solar photovoltaic equipment for the benefit of Connecticut homeowners, businesses, not-for-profits, and municipalities. CEFIA Holdings acquires the initial title to the solar assets and contracts with independent solar installers to complete the installation and arrange for the leasing of the solar assets (or sale of energy under power purchase agreements) to the end users. CEFIA Holdings is also responsible for procuring insurance, operation, maintenance, and warranty services for the ultimate owner of the solar assets, CT Solar Lease 2 LLC or CT Solar Lease 3 LLC. CEFIA Holdings sells the residential and commercial projects before the projects are placed in service. After acquiring the residential and commercial projects, CT Solar Lease 2 or CT Solar Lease 3 administers the portfolio of projects with the assistance of an outside corporation. CEFIA Holdings is presented in Green Bank's financial statements as a blended unit.

CT Solar Loan I, LLC

CT Solar Loan I is a limited liability corporation wholly owned by CEFIA Holdings and established to make loans to residential property owners for the purchase and installation of photovoltaic equipment. It is presented as a blended unit in Green Bank's financial statements.

CEFIA Solar Services, Inc.

CEFIA Solar Services is a Connecticut corporation, owned by CEFIA Holdings. It was established to share in the ownership risks and benefits derived from the leasing of solar photovoltaic equipment and the sale of energy, as it is the managing member of CT Solar Lease 2 and CT Solar Lease 3. CEFIA Solar Services has an ownership interest in CT Solar 2 and CT Solar Lease 3 (1%) and is the managing member of the entity responsible for performing all management and operational functions pursuant to the operating agreement of CT Solar Lease 2 and CT Solar Lease 3. CEFIA Solar Services is presented as a discrete unit in Green Bank's financial statements.

CT Solar Lease 2, LLC

CT Solar Lease 2 is a Connecticut limited liability corporation that acquires the title to residential and commercial solar projects from the developer, CEFIA Holdings, using capital from its members along with non-recourse funding from participating banks. Repayment to participating banks is predicated upon the property owners' repayment to CT Solar Lease 2 of their obligations under leases and power purchase agreements, as well as revenue from production-based incentives. CT Solar Lease 2 is owned by an outside-investor-member limited liability company (99%) and by CEFIA Solar Services (1%) as the managing member. This entity is presented as a discrete unit in Green Bank's financial statements.

CT Solar Lease 3, LLC

CT Solar Lease 3 is a Connecticut limited liability company. It was formed to acquire title to commercial solar projects from the developer, CEFIA Holding, using capital from its members. Its primary sources of revenue are from the sale of electricity generated by its solar photovoltaic (PV) facilities to property owners through power purchase agreements and the sale of renewable energy certificates generated from facility electrical production to third parties. It is owned by an outside-investor-member limited liability company (99%) and CEFIA Solar Services (1%) as the managing member. This entity is presented as a discrete unit in Green Bank's financial statements.

CGB Meriden Hydro, LLC

CBG Meriden Hydro, LLC is a single member limited liability corporation created for the purchase and leaseback of a hydroelectric facility. The hydroelectric facility was purchased from the facility's developer, Hanover Pond Hydro LLC (Hanover Pond), pursuant to a sale and leaseback agreement. Hanover Pond remits a monthly lease payment to CGB Meriden Hydro equal to the monthly payment made by the City of Meriden to Hanover Pond for the purchase of electricity generated by the hydroelectric facility. CGB Meriden also receives revenues from the sale of renewable energy credits generated by the facility and

sold to the local utility company under a sales and purchase contract. It is presented as a blended unit in Green Bank's financial statements.

CGB KCF LLC

CGB KCF LLC is a Connecticut corporation owned solely by Green Bank. It was established on November 7, 2017, to hold the loan liability resulting from draws made on a \$3,000,000 loan facility provided by the Kresge Foundation. CGB KCF LLC drew \$1,000,000 in funds held in a restricted Green Bank cash account until January 2020, when it was transferred to Inclusive Property Capital, Inc. (IPC), with the agreement of the Kresge Foundation. IPC has assumed full responsibility for the loan and reporting to Kresge as of January 21, 2020. It is presented as a blended unit in Green Bank's financial statements.

SHREC ABS 1 LLC

SHREC ABS 1 LLC, is a Delaware corporation that is owned solely by Green Bank. It was established on February 19, 2019, to issue \$38,600,000 of SHREC Collateralized Notes, Series 2019-1 (SHREC notes), \$36,800,000 Class A notes, and \$1,800,000 Class B notes, with Bank of New York Mellon acting as trustee. The SHREC notes were sold to a single investor on April 2, 2019. Green Bank used the proceeds to retire its short-term debt and support its investment and operational activities. Green Bank funds quarterly payments of scheduled principal and interest for 14 years by billings to two Connecticut utilities for SHREC revenues generated by approximately 14,000 solar PV systems on residential rooftops. It is presented as a blended unit in Green Bank's financial statements.

CT Solar Lease 1 LLC

CT Solar Lease I LLC is a Connecticut corporation, owned solely by Green Bank. It was established on April 23, 2019, to hold collateral that supports a \$3,500,000 guaranty on a line of credit with Amalgamated Bank. On May 21, 2019, Green Bank assigned its solar lease promissory note portfolio to CT Solar Lease 1. CT Solar Lease 1 receives note payments and maintains a loan loss reserve for the portfolio. It is presented as a blended unit in Green Bank's financial statements.

SHREC Warehouse 1 LLC

SHREC Warehouse 1 LLC is a Connecticut corporation, single member LLC 100% owned by Green Bank, established on April 23, 2019, to collect payments due from Eversource and United Illuminating (UI) pursuant to the Master Purchase Agreement dated July 30, 2018, as amended for the purchase and sale of Solar Home Renewable Energy Credits (SHRECs). SHREC Warehouse 1 LLC acts as the sole borrower under a revolving loan facility provided by Liberty Bank and Webster Bank. Payments due from Eversource and UI are pledged as security for the loans. Loans drawn by SHREC Warehouse 1 LLC are advanced to Green Bank to be used for investment and operational activities. It is presented as a blended unit in Green Bank's financial statements.

Board of Directors and Administrative Officials

Pursuant to Section 16-245n(e) of the General Statutes, the powers of Green Bank are vested in and exercised by a board of directors. The Green Bank board consists of eleven voting and one nonvoting member, each with knowledge and expertise in matters related to the purpose and activities of CGB, and includes four members appointed by the Governor, four members appointed by various legislative leaders, the State Treasurer, and commissioners of the Department of Energy and Environmental Protection (DEEP) and Economic and Community Development (DECD). In addition, the Green Bank president serves on the board in ex-officio, nonvoting capacity. The Governor appoints the chairperson of the board. The board adopts bylaws and procedures it deems necessary to carry out its functions.

In addition, the board set up several committees and subcommittees to assist it in making Green Bank decisions. During the audited period, the CGB board had four standing committees: Audit, Compliance and Governance; Budget and Operations; Deployment; and the Joint Committee of the CT Energy Efficiency Board and the CGB Board of Directors. Bryan Garcia served as president throughout the audited period and continues to serve in that capacity.

Financial Information

The financial position of Green Bank as of June 30, 2020 and 2021 is presented below. For comparative purposes, the amounts for the fiscal year ended June 30, 2019, are also presented. The financial position of Green Bank as of June 30, 2021, per its audited financial statements, is presented below.

			As	of June 30,		
		2021		2020		2019
Assets						
Current:						
Cash and Cash Equivalent	\$	44,136,194	\$	8,156,093	\$	18,947,214
Accounts Receivable		3,892,590		3,250,768		1,774,990
Utility Remittance Receivable		2,044,619		2,214,775		1,893,965
Other Receivables		4,445,946		2,298,035		3,004,780
Due from Component Unit		-		-		-
Prepaid Expenses and Other Assets		2,264,815		1,925,122		1,846,104
Current maturities of prepaid warranty		, ,		, ,		, ,
management		259,148		259,148		259,148
Current Portion of Solar Lease Notes		990,505		967,530		942,056
Current Portion of SBEA promissory notes		1,185,782		1,549,492		1,709,491
Current Portion of Program Loans		9,038,575		4,396,615		3,756,932
Total Current Assets		68,258,174	-	25,017,578	-	34,134,680
				==,=,=		
Non-Current:						
Portfolio Investments		245,000		1		1
Fair value of interest rate swap		-		-		-
Bonds Receivable		986,792		3,031,134		3,288,656
Prepaid Warranty management, less Current		,		, ,		, ,
Portion		3,466,587		3,725,735		3,984,883
Solar Lease Notes, less Current Portion		2,969,206		3,979,704		5,361,206
SBEA Promissory Notes, less Current Portion		690,752		968,608		1,799,007
Program Loans, less Current Portion		82,898,451		81,285,206		64,800,014
Renewable Energy Credits		348,716		407,360		468,736
Investment in Component Units		-		-		-
Capital Assets, Net of Depreciation and						
Amortization		77,148,329		79,971,996		80,523,040
Asset Retirement Obligation, Net		-		-		-
Restricted Assets:						
Cash and Cash Equivalents		20,625,148		14,909,508		16,667,797
Total Noncurrent Assets		189,378,981		188,279,252		176,893,340
Total Assets	25	57,637,15 <u>5</u>	2	13,296,830	2	<u>11,028,020</u>
Deferred Outflows of Resources						
Deferred Amount for Pensions		4,550,879		6,265,821		7,756,235
Deferred Amount for OPEB		5,238,343		5,189,388		1,732,147
Deferred Amount for Asset Retirement						
Obligations		2,487,824		2,658,143		2,828,461
Deferred Payments to State of Connecticut		_		<u>-</u>		
Total Deferred Outflow of Resources		12,277,046		14,113,352		12,316,843

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Liabilities			
Current Maturities of Long-Term Debt	6,264,686	4,470,704	4,598,103
Current Maturities of Warranty Management	1,358,476	1,669,539	1,669,539
Accounts Payable and Accrued Expenses	9,680,205	7,897,387	7,873,645
Due to Component Units	-	-	-
Line of Credit	100,000	6,100,000	-
Custodial Liability	1,626,346	1,676,674	2,695,326
Unearned Revenue	721,301	801,261	879,512
Total Current Liabilities	19,751,014	22,615,565	17,716,125
Asset Retirement Obligation	4,018,011	3,919,988	3,824,355
Long-Term Debt, Less Current Maturities	100,023,753	65,404,658	73,028,810
Warranty Management, less Current Maturities	-	187,934	187,934
Fair Value of Interest Rate Swap	699,023	1,164,356	523,224
Pension Liability	20,268,725	25,174,453	25,805,346
OPEB Liability	23,688,513	28,484,971	24,000,448
Payable to State of Connecticut			
Total Noncurrent Liabilities	148,698,025	124,336,360	127,370,117
Total Liabilities	168,449,039	146,951,925	145,086,242
Deferred Inflows of Resources			
Deferred Amount for Pension	5,071,624	1,380,337	80,906
Deferred Amount for OPEB	7,227,544	2,336,216	1,895,599
Total Deferred Inflows of Resources	12,299,168	3,716,553	1,976,505
Net Position			
Invested in Capital Assets	5,402,713	4,528,927	3,794,400
Restricted Net Position:			
Nonexpendable	62,273,018	64,388,085	66,901,619
Restricted for Energy Programs	16,881,312	10,585,153	11,537,185
Unrestricted (Deficit)	4,608,951	(2,760,461)	(5,951,088)
Total Net Position	<u>\$ 89,165,994</u>	\$ 76,741,704	\$ 76,282,116

During the fiscal year ended June 30, 2020, total current assets decreased by \$9.1 million. Cash decreased \$10.8 million compared to fiscal year 2019 due to normal operating activities, along with disbursements to contractors for construction of CSCU solar photovoltaic systems and the transfer of a \$1.0 million Kresge Loan to a strategic partner. Total current assets increased by \$43.2 million in fiscal year 2021 primarily from the closing of the 2020-1 and 2021-1 series Green Liberty Bonds during fiscal year 2021.

Current and noncurrent program loans increased by \$17.1 million in fiscal year 2020 due to additional low- and moderate-income lending of \$5.0 million, commercial solar photovoltaic asset sale financing of \$4.1 million, multifamily lending of \$2.7 million, fuel cell financing of \$2.3 million, C-PACE lending facilities of \$1.8 million, C-PACE benefit assessment financing of \$0.6 million, and hydropower financing of \$0.6 million.

Current liabilities increased by \$5.0 million in fiscal year 2020 mainly due to \$6.1 million in draws on the \$14.0 million SHREC Warehouse 1 LLC line of credit with Webster Bank and Liberty Bank. Total liabilities increased \$21.5 million in fiscal year 2021. Long-term debt increased \$34.6 million due to the issuance of the 2020-1 and 2021-1 series Green Liberty Bonds, totaling \$16.8 million and \$24.8 million, respectively.

A schedule of revenues, expenses, and changes in net assets for the fiscal years ended June 30, 2020 and 2021, follows. The financial position of Green Bank as of June 30, 2021, per its audited financial statements, is presented below.

	Fiscal Year Ended June 30,									
	2021	2020	2019							
Operating Revenues										
Utility Remittances	\$ 25,144,416	\$ 24,854,150	\$ 26,094,682							
Interest Income - Promissory Notes	6,844,741	6,105,613	3,909,495							
Grant Revenue	13,288	76,402	200,779							
RGGI Auction Proceeds	6,452,886	4,581,628	2,130,255							
Energy System Sales	746,515	4,006,395	2,795,336							
REC Sales	12,189,916	9,256,168	6,489,479							
Other Income	4,124,886	4,443,242	4,012,334							
Total Operating Revenue	55,516,648	53,323,598	45,632,360							
Operating Expenses										
Cost of Goods Sold - Energy Systems	746,515	4,006,394	2,877,040							
Provision for Loan Losses	238,942		2,908,974							
Grant and Incentive Programs	15,879,966	16,343,824	14,671,750							
Program Administration Expenses	17,522,836	16,460,756	17,505,206							
General and Administrative Expenses	4,003,987	6,936,125	5,722,397							
Total Operating Expenses	38,392,246	48,709,442	43,685,367							
Operating Income (Loss)	7,124,402	4,614,156	1,946,993							
operating modific (2003)		4,014,100	1,040,000							
Non-Operating Revenue (Expenses)										
Interest Income-Short Term Cash Deposits	18,861		416,258							
Interest Expense-Long Term Debt	(3,269,115)	(3,395,242)	(1,983,502)							
Interest Income - Component Units	-	-	-							
Interest Expense - Component Units	-	-	(429)							
Debt Issuance Costs	(1,001,139)	(18,800)	(1,738,746)							
Payments to State of Connecticut		-	(14,000,000)							
Distributions to Member	(526,754)	(597,404)	(588,663)							
Distribution to Former Member	-	-	(1,000)							
Realized and Unrealized Gain (Loss) on	/207 200	(120 112)	(4044//)							
Investments	(387,299)	1	(104,466)							
Unrealized Gain (Loss) on Interest Rate Swap	465,334	(641,133)	(694,702)							
Total Nonoperating Revenue (Expenses)	4,700,112)	(4,607,122)	(18,695,250)							
(Expenses)	4,700,112)	(4,007,122)	(10,093,230)							
Change in Net Position before Capital										
Contributions	12,424,290		(16,748,257)							
Capital Contributions		452,554	1,695,722							
Change in Net Position	12,424,290	459,588	(15,052,535)							
Net Position – Beginning of Year	76,741,704		91,334,651							
Net Position – End of Year	\$ 89,165,994	\$ 76,741,704	\$ 76,282,116							

Revenues

Total operating revenue increased by \$7.7 million in fiscal year 2020, mainly due to sales of Renewable Energy Credits (RECs), which grew by \$2.8 million due to the inclusion of sales of RECs for Tranche 3 systems to the two public utility companies in Connecticut, and also proceeds from quarterly Regional Greenhouse Gas Initiative (RGGI) auctions. RGGI auction proceeds increased \$2.5 million in fiscal year

2020 due to diversion of proceeds earmarked for the Green Bank into the state's General Fund to meet projected budget shortfalls during fiscal year 2019.

Total operating revenue increased by \$2.2 million in fiscal year 2021, mainly due to sales of RECs, which grew by \$2.6 million as a result of the inclusion of sales of RECs for Tranche 4 systems to the two public utility systems in Connecticut and proceeds from RGGI auctions, which increased \$1.9 million over the year. The growth in RGGI auction proceeds is primarily due to the price per allowance increasing substantially throughout fiscal year 2021 compared to fiscal year 2020. Sales of energy systems decreased \$3.3 million in fiscal year 2021 due to fewer sales of commercial Power Purchase Agreements (PPA) projects to third-party renewable energy companies compared to the prior year.

Expenses

Total operating expenses increased by \$5.0 million in fiscal year 2020. Provision for loan losses increased \$2.1 million in fiscal year 2020 due to higher reserves being provided for a larger program portfolio, as well as reserve growth due to anticipated loan payment deferrals due to COVID-19. Grant and incentive program expenses increased by \$1.7 million primarily due to higher Performance Based Incentive and Expected Performance-Based Buydown solar PV payments under the Residential Solar Investment Program (RSIP).

Total operating expenses decreased by \$10.3 million in fiscal year 2021. Provision for loan losses decreased \$4.8 million in fiscal year 2021 due to higher reserves being provided in the prior year due to anticipated loan payment deferrals as a result of COVID-19. General and administrative expenses decreased by \$2.9 million (42%). Included in general and administrative costs for 2021 and 2020 is \$0.6 million and \$3.6 million the state allocated to the Green Bank for the noncash GASB 68 pension and GASB 75 OPEB expenses, respectively.

Other Examinations

Independent public accountants audited the Connecticut Green Bank's financial statements for the years under review. Those audits provided assurance that the financial statements presented fairly, in all material respects, the financial position of the business-type activities and the discretely presented component units of Green Bank as of June 30, 2020 and 2021, and the respective changes in financial position and cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

As an integral part of their financial statement audits, the independent public accountants provided reports on compliance and internal control over financial reporting. The reports disclosed no instances of noncompliance that are required to be reported under Government Auditing Standards. The reports on internal control indicated that no material weaknesses in internal control over financial reporting were identified.

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Memo

To: Connecticut Green Bank Board of Directors

From: Bryan Garcia (President and CEO), Jane Murphy (Executive Vice President of Finance

and Administration), Eric Shrago (Vice President of Operations), & Dan Smith (Associate

Director of Finance and Administration)

Date: January 19, 2024

Re: Proposed updates to FY2024 Targets and Budget

As the Board of Directors is well aware, we typically review our budget and targets mid-way through our fiscal year and look to bring those in line with what we are seeing in the market and what we think we will need to achieve those targets. This year is unique as we are awaiting announcements on the awards coming from the Environmental Protection Agency's competition for monies coming from the Greenhouse Gas Reduction Fund (GGRF). While this capital will most certainly drive the next stage of transition to the Green Economy, we do not expect it to impact FY2024 targets. Within the below budget modifications, we are presenting a request that is contingent upon the Green Bank being part of a winning coalition for the GGRF funds.

On January 17, staff presented the changes in this memo to the Budget, Operations, and Compensation Committee and the committee has recommended that the Board approve (1) the revised FY2024 Targets and Budget, (2) the update to the salary structure presented, and (3) increase the not-to-exceed amounts for the professional services agreements (PSAs) with Strategic Environmental Associates and CTEC solar for fiscal year 2024 as described in this memo.

I. Targets

After two quarters of assessing program performance and market conditions, the Green Bank staff has proposed the following adjustments to targets for this fiscal year:

- Overall we are increasing the Incentive Programs target by 148 projects and decreasing our capital deployment target for the business line by \$41.6 million.
 Changes to the Incentive Programs targets include:
 - Based on the activity we see in the market, we are reducing the target for the residential portion of Energy Storage Solutions by 100 projects, \$3.2 million in

- capital Deployment, and 1MW of nameplate capacity. Program growth is still hampered by battery economics.
- Based on the activity we see in the market, we are reducing the targets for the target for the Commercial, Industrial, and Institutional portion of Energy Storage Solutions by 14 projects, \$43.1 million in capital deployment, and 29 MW of nameplate capacity.
- Performance of the Smart-E loan program remains strong. Despite recent losses of some lending partners, we remain positive on the program's overall performance for the year. We have launched the initial round of environmental infrastructure and resilience measures for the program and expect to see growth stimulated by Inflation Reduction Act Incentives this year. We are increasing our target by 260 loans, by \$4.6 million in capital deployment and .6MW of installed capacity.
- Targets for the Financing Programs will decrease by 6 projects, \$5.4 Million in capital deployment, and 3.5MW of installed capacity. Changes to the Financing Programs Targets include:
 - CPACE, Multifamily, and Small Business Energy Advantage (SBEA) targets will remain flat.
 - Our solar power purchase agreement (PPA) targets are where all of the changes are. The targets will now be 10 projects for \$10.65 Million in capital deployment (of which we intend to commit \$6.5 million of Green Bank Capital) and 4.7MW of installed capacity.

The targets are summarized in the following tables:

Table 1. Proposed FY 2023 Targets for the Incentive Programs Business Unit

			Targets						
						Capacity			
Segment		Program	Number of	Total Capital	CGB Capital	Installed/			
			Projects	Deployed	Deployed	Nameplate			
						Capacity			
	ESS (Residential)	SS (Residential) Residential Storage Incentives Total				1			
	ESS (C&I)	C&I Storage Incentives Total	15	30,441,176		20.7			
Incentive Programs	ESS	Total Battery Storage	165	\$35,241,176		21.9			
	Smart-E	Total Smart-E	1,204	\$22,423,925		0.9			
	Incentive	Programs Total	1,359	\$57,345,102		22.8			

Table 2. Proposed FY 2023 Targets for the Financing Programs Business Unit

				Tar	gets	
Segment	Product	Channel	Number of Projects	Total Capital Deployed	CGB Capital Deployed	Capacity Installed
	CPACE	Total CPACE	19	\$21,170,000	\$7,700,000	0.0
	PPA/Roof Leases	Total PPA	10	\$10,650,000	\$6,510,000	4.7
	SBEA		480	\$11,728,000	\$2,345,600	
Florencies Burnesses	Multi-Family Pre-Dev		0	\$0		0.0
Financing Programs	Multi-Family Term	Total Multi-Family Term	3	\$300,000	\$300,000	0.3
	Transportation	EVCC	0	0		0
	Strategic Investments	Total Strategic Investments	0	\$10,000,000	\$10,000,000	0.0
	Financing	Programs Total	509	\$ 53,548,000	\$ 26,555,600	4.7

II. Proposed Changes to the Green Bank Investment and Operating Budgets – Standard Revisions

The overall net proposed budget represents an increase in expenses of \$928,414 and an increase in revenue of \$71,679. Staff proposes a decrease in non-operating expenses of \$1,357,682, of which \$288,469 is contingent upon the Green Bank being a member of a winning coalition for GGRF funds. The proposed updated budget differs from the original, approved budget in the following ways:

Financing Programs

The Green Bank is proposing adjusting the Financing Programs revenue upward by \$71,679 based on Utility Customer Assessments income being higher than expected (Adjustment A in the attachment).

Staff also proposes additional expenses of \$618,469 the Financing Programs. \$288,469 of this increase is driven by the creation of four new positions to support the rollout of the GGRF (Adjustment B). These positions are contingent upon us being awarded the funds and the nature of these positions depend on in which competition(s) the Green Bank wins. in the investment team. Other proposed changes to the Financing Programs' Segment Budget include an increase of \$50K in marketing for dues that support the Coalition for Green Capital's implementation of the GGRF, \$100k in Research and Development to support battery and solar panel end of life, and the Bridgeport Community LEAP project (Adjustment D), and \$180K for consulting related to our EV Carbon Credit project and guidance from an accountant on tax implications related to the GGRF incentives (Adjustment E).

Incentive Programs

Staff proposes \$87,855 of additional expenses in the Incentive Programs. Of this, \$37,855 is for an additional position that will help with additional volume on Smart-E as we implement the new measures (Adjustment I). Staff propose increasing the consulting line item on this budget by \$50k to support automation in the NGEN tool for Smart-E workflow that will allow the program to scale (adjustment F).

Additionally, we are reducing the incentives we expect to pay this fiscal year by \$1,357,682 (Adjustment H).

Environmental Infrastructure

Staff are proposing changes to the budget to increase the Compensation and Benefits by 222,091 to support two new positions that will help implement the expanded mandate, one at the associate level and one at the associate director level.

III. Salary Bands Change

Upon some advice from the Green Bank's longtime Human Resources Consultant, we are proposing a small change to our salary bands structure. We are proposing the creation of a new band between the existing band 20 (EVP and Officers) and 21 (President). This will allow us to differentiate between our Executive Vice Presidents and our Officers. Further, this will allow room for growth for staff who are presently at the top of their range.

We are proposing the new salary structure in the attached. No salary increases will be granted due to this.

IV. Strategic Partners

As you recall, the board instructed staff to contract with 11 strategic partners in June 2023 with specific not-to-exceed thresholds. At this time we propose to increase the not-to-exceed amount for Strategic Environmental Associates to \$400,000 and the not-to-exceed amount for C-TEC Solar, LLC to \$1,400,000.

Resolution 2:

WHEREAS, pursuant to Section 5.2.2 of the Bylaws, the Connecticut Green Bank's Budget, Operations, and Compensation Committee has reviewed and recommended to the Board of Directors to approve (1) the revised FY2024 Targets and Budget, (2) the update to the salary structure presented, and (3) extend the professional services agreements (PSAs) with the aforementioned strategic partners for fiscal year 2024 with the amounts of each PSA not to exceed the applicable approved budget line item;

NOW, therefore be it:

RESOLVED, that Connecticut Green Bank Board of Directors approves of the: (1) the revised FY2024 Targets and Budget, (2) the update to the salary structure presented, (3) extend the professional services agreements (PSAs) with the aforementioned strategic partners for fiscal year 2024 with the amounts of each PSA not to exceed the applicable approved budget line item, and (4) approves of the two accompanying job descriptions.

Connecticut Green Bank

Fiscal Year Budget - Recast vs. Original

	Fiscal Year Jun 30 2024			Incentive Pr Fiscal Y Jun 30 2	/ear		Financing Pr Fiscal Y Jun 30 2	/ear		Environmental Fiscal Jun 30	Year	
	Budget	FY24 Original Budget	Variance	Budget	FY24 Original Budget	Variance	Budget	FY24 Original Budget	Variance	Budget	FY24 Original Budget	Variance
Revenue												
Operating Income												
Utility Customer Assessments	24.269.579	24,197,900	71,679 (A)	0	0	0	24.269.579	24.197.900	71.679	0	0	0
RGGI Auction Proceeds-Renewables	5,200,000	5,200,000	0	0	0	0	5.200.000	5,200,000	0	0	0	0
CPACE Closing Fees	120,000	120,000	0	0	0	0	120,000	120,000	0	0	0	0
REC Sales	14.232.034	14.232.034	0	12,321,284	12.321.284	0	1.910.750	1.910.750	0	0	0	0
Grant Income-Federal Programs	40,000	40,000	0	0	0	0	40,000	40,000	0	0	0	0
Grant Income-Private Foundations	150.000	150.000	0	0	0	0	150.000	150,000	0	0	0	0
PPA Income	500,000	500,000	0	0	0	0	500,000	500,000	0	0	0	0
LREC/ZREC Income	450,000	450,000	0	0	0	0	450,000	450,000	0	0	0	0
Total Operating Income	44,961,613	44,889,934	71,679	12,321,284	12,321,284	0	32,640,329	32,568,650	71,679	0	0	0
Interest Income	7.885.255	7.885.255	0	39,300	39.300	0	7.845.955	7,845,955	0	0	0	0
Interest Income, Capitalized	60,000	60,000	0	0	0	0	60,000	60,000	0	0	0	0
Other Income	1,271,612	1,271,612	0	767,112	767,112	0	504,500	504,500	0	0	0	0
Total Revenue	\$ 54,178,480	\$ 54,106,801	71,679	\$ 13,127,696	\$ 13,127,696	0	\$ 41,050,784	\$ 40,979,105	71,679	\$ 0	\$0	0
Operating Expenses												
Compensation and Benefits												
Employee Compensation	8,579,823	8,292,695	287,128	1,997,691	1,977,871	19,819	6,028,949	5,877,918	151,031	553,184	436,906	116,278
Employee Benefits	7,746,960	7,485,674	261,286	1,817,898	1,799,863	18,036	5,425,664	5,288,227	137,438	503,397	397,584	105,813
Total Compensation and Benefits	16,326,783	15,778,369	548,414	3,815,589	3,777,734	37,855 (I)	11,454,613	11,166,145	288,469 (B)	1,056,581	834,490	222,091 (G)
Program Development & Administration	3,891,852	3,891,852	0	2,303,800	2,303,800	0	1,308,052	1,308,052	0	280,000	280,000	0
Program Administration-IPC Fee	1,024,665	1,024,665	0	237,717	237,717	0	786,948	786,948	0	0	0	0
Lease Origination Services	4,000	4,000	0	0	0	0	4,000	4,000	0	0	0	0
Marketing Expense	1,670,425	1,620,425	50,000	472,600	472,600	0	1,197,825	1,147,825	50,000 (C)	0	0	0
E M & V	1,030,004	1,030,004	0	825,004	825,004	0	205,000	205,000	0	0	0	0
Research and Development	458,000	358,000	100,000	0	0	0	320,000	220,000	100,000 (D)	138,000	138,000	0
Consulting and Professional Fees												
Consulting/Advisory Fees	1,756,365	1,526,365	230,000	636,000	586,000	50,000	1,120,365	940,365	180,000	0	0	0
Accounting and Auditing Fees	321,350	321,350	0	0	0	0	321,350	321,350	0	0	0	0
Legal Fees & Related Expenses	250,000	250,000	0	25,000	25,000	0	175,000	175,000	0	50,000	50,000	0
Total Consulting and Professional Fees	2,327,715	2,097,715	230,000	661,000	611,000	50,000 F)	1,616,715	1,436,715	180,000 (E)	50,000	50,000	0
Rent and Location Related Expenses												
Rent/Utilities/Maintenance	362,848	362,848	0	86,542	86,542	0	257,189	257,189	0	19,117	19,117	0
Telephone/Communication	58,980	58,980	0	14,067	14,067	0	41,806	41,806	0	3,107	3,107	0
Depreciation & Amortization	685,314	685,314	0	44,042	44,042	0	631,543	631,543	0	9,729	9,729	0
Total-Rent and Location Related Expenses	1,107,142	1,107,142	0	144,651	144,651	0	930,538	930,538	0	31,953	31,953	0
Office, Computer & Other Expenses	2,267,056	2,267,056	0	602,904	602,904	0	1,605,856	1,605,856	0	58,296	58,296	0
Total Operating Expenses	\$ 30,107,642	\$ 29,179,228	928,414	\$ 9,063,265	\$ 8,975,410	87,855	\$ 19,429,548	\$ 18,811,079	618,469	\$ 1,614,829	\$ 1,392,739	222,091
Program Incentives and Grants												
Financial Incentives-CGB Grants	485,000	485,000	0	60,000	60,000	0	425,000	425,000	0	0	0	0
Program Expenditures-Federal Grants	40,000	40,000	0	0	0	0	40,000	40,000	0	0	0	0
EPBB/PBI/HOPBI Incentives	5,842,318	7,200,000	(1,357,682)	5,842,318	7,200,000	(1,357,682) H)	0	0	0	0	0	0
Battery Storage Incentives	1,834,093	1,834,093	0	1,834,093	1,834,093	0	0	0	0		0	0
Total Program Incentives and Grants	\$ 8,201,411	\$ 9,559,093	(1,357,682)	\$ 7,736,411	\$ 9,094,093	(1,357,682)	\$ 465,000	\$ 465,000	0	\$ 0	\$ 0	0
Operating Income/(Loss)	\$ 15,869,427	\$ 15,368,480	500,947	\$ (3,671,980)	\$ (4,941,807)	1,269,827	\$ 21,156,236	\$ 21,703,025	(546,789)	\$ (1,614,829)	\$ (1,392,739)	(222,091)
Non-Operating Expenses												
Interest Expense	1,918,737	1,918,737	0	1,763,280	1,763,280	0	155,457	155,457	0	0	0	0
Provision for Loan Loss	1,743,163	1,743,163	0	1,703,200	1,703,200	0	1,743,163	1,743,163	0	0	0	0
Interest Rate Buydowns-ARRA	250.000	250.000	0	250.000	250.000	0	1,745,105	1,745,105	0	0	0	0
Total Non-Operating Expenses	\$ 3,911,900	\$ 3,911,900	0	\$ 2,013,280	\$ 2,013,280	0	\$ 1,898,620	\$ 1,898,620	0	\$ 0	\$ 0	0
Not Bernard Complete Spring		44 450 500	* 500.047	* /F.00F.005' *	(0.0FF.00T)	4 000 007		40.004.402. 2	(540,700)	. (4.044.00=) =	(4 000 705) \$	(000,004)
Net Revenues Over (Under) Expenses	\$ 11,957,527 \$	11,456,580	\$ 500,947	\$ (5,685,260) \$	(6,955,087) \$	1,269,827	\$ 19,257,616 \$	19,804,406 \$	(546,789)	\$ (1,614,829) \$	(1,392,739) \$	(222,091)

Net Revenues Over (Under) Expenses

See budget memo for details of adjustments (A) through (F).

Adjustment Description

- (A) Utility Customer Assessments adjusted to actual for July through November, a net increase in budgeted revenues of \$72k.
- (B) Compensation and Benefits increase of \$548k is for 2 new Environmental Infrastructure employees, 1 new Smart-E employee and 4 contingent employees dependent on the potential award of GGRF funds in March 2024.

- (C) \$50k increase in marketing for an additional sponsorship for CGC in FY24.

 (D) \$100k increase in R&D for Bridgeport LEAP and Collective Recycling.

 (E) \$230k increase in additional expected consulting costs forwith \$140k for EV Carbon Credit Consulting, \$40k for an Accounting consultant related to IRA opportunities for taxpayers in the state and \$50k for Smart-E NGEN Enhancements.
- {F} Incentives decrease \$1.4M to adjust to actual for July through November 2023.

Job Titles	Grade	Salary Ranges				
		Min	25th	Mid	75th	Max
President	22	214,912	247,149	279,385	311,622	343,859
Executive Vice President	21	197,003	226,553	256,103	285,654	315,204
Offficer	20	179,093	205,957	232,821	259,685	286,549
Managing Director, Vice President	19	149,244	171,631	194,018	216,404	238,791
Director	18	124,370	143,026	161,681	180,337	198,993
Associate Director, Sr. Manager Investments, Controller	17	118,689	136,492	154,295	172,099	189,902
Sr. Manager, Programs/Corporate, Senior Administrator	16	98,907	113,743	128,580	143,416	158,252
Manager, Administrator	15	82,423	94,786	107,150	119,513	131,876
Senior Associate/ Associate Manager, Senior Accountant	14	71,672	82,423	93,174	103,924	114,675
Associate, Executive Assistant, Office Manager	13	62,323	71,672	81,020	90,369	99,718
Senior Assistant, Staff Accountant	12	54,194	62,323	70,453	78,582	86,711
Assistant	11	47,125	54,194	61,263	68,332	75,401

CONNECTICUT GREEN BANK

EXECUTIVE VICE PRESIDENT AND CHIEF INVESTMENT OFFICER

Position Grade: 21 Reports to: President & CEO Direct Reports: As assigned Wage Hour Class: Exempt

Salary Range: \$197,003 to \$315,204 **Hours Worked:** 40

Special: Serves as Officer **Effective Date**: January 26, 2024

SUMMARY:

The Executive Vice President and Chief Investment Officer (CIO) performs as the senior investment executive, leader of the Clean Energy Finance division of the Connecticut Green Bank (hereafter "Green Bank") and as a key member of the leadership of the Green Bank that will further its mission and reports directly to Green Bank's President and CEO. The CIO will provide leadership, vision and oversight for the management and strategic growth of the Green Bank's financings and investments. The CIO will provide the investment expertise and counsel to achieve the Green Bank's short, medium and long-term goals as identified in the annual planning and budgeting cycle and periodic comprehensive plans in the context of the sustainability of the Green Bank's capital resources and prudent risk-adjusted returns. The CIO will perform work under general direction of the President, the Deployment Committee and the Board of Directors with latitude for initiative and independent judgment within the operating procedures of the Green Bank. The CIO will be accountable for the general oversight and risk management of these loans and investments (with administrative management of these assets being accountable to the VP Finance and Administration), as well as the financing and investment process, rigorous reviews of existing and prospective loans and investments, and recommendations for new or revisited lending and investment strategies. In addition to portfolio review and discussion, the CIO will provide strategy and present specific financing and investment ideas to the President, the sector directors, the Deployment Committee and the Board of Directors. The CIO will collaborate in the development and recommendation of financing and investment policy, manage external relationships with existing and potential capital providers and other relevant advisors, and will have responsibility for the day-to-day administration of financing and investment activities.

The Green Bank, a quasi-public authority, is the nation's first state "Green Bank," leveraging public and private funds to drive investment and scale up clean energy deployment in Connecticut. Working at the Green Bank means being part of a dynamic team of talented people who are passionate about implementing the new green bank model, stimulating the growth of clean energy in Connecticut, strengthening our economy, and protecting our environment.

EXAMPLE OF DUTIES

- Acts as a senior advisor to the President and CEO on finance-related matters;
- Works with the Board of Directors, President, and Green Bank staff to lead the
 development of new and innovative financing programs to scale-up the state's clean
 energy investments in commercially viable technologies;
- Develops and manages a range of financial approaches to increase the state's investment in clean energy including bonding, debt financing, loan guarantees,

- insurance (i.e. performance guarantees improving warrantees and reducing cost of capital), tax equity financing, credit enhancement mechanisms, and other low-cost financing arrangements;
- Contributes to the development of Green Bank's comprehensive plan with a particular emphasis on strategy related to financing clean energy;
- Develops the investment standards that govern the administration of Green Bank through the preparation of rules, policies, and procedures that specify borrower eligibility, program standards, terms and conditions of support, and other relevant criteria, standards, or procedures and presents to the Board for approval;
- Leads outreach efforts to local, regional, national and international financial institutions and institutional investors to increase their interest in clean energy project financing by reducing risks, uncertainty, and the total cost of deployment;
- Attracts greater private capital investment in clean energy projects in the state from federal sources, charitable gifts, grants, contributions, as well as loans from individuals, corporations, university endowments, philanthropic foundations and pension funds;
- Raises capital from non-ratepayer sources (i.e. pension funds, endowments, bond funding, private investors, etc.)
- Maintains relationships with Green Bank's financial institution and institutional investor communities;
- Works with the President and General Counsel to develop state and federal policies that support an increase in capital investment in clean energy development and deployment in Connecticut:
- Integrates federal clean energy deployment and financing schemes for the Green Bank;
- Works with the General Counsel to draft and negotiate a wide range of legal documents with a focus on the standardization of contracts relating to clean energy market development and deployment projects and related initiatives;
- Structures and negotiates financing terms of Green Bank's debt, equity, and equity-like financing including Clean Energy Ventures;
- Provides comprehensive evaluation and risk analysis of investment opportunities;
- Assesses the need and process for qualifying as a Community Development Financial Institution for clean energy deployment in Connecticut; and
- Supports the development of technology performance metrics to ensure that energy production and consumption are achieving their expected outcomes.

MINIMUM QUALIFICATIONS REQUIRED KNOWLEDGE, SKILL AND ABILITY:

- Demonstrated experience in managing a diverse portfolio of investments in the energy sector, preferably clean energy and energy efficiency project finance;
- Demonstrated experience in innovative product development and management, and fiscal oversight;
- Demonstrated expertise in clean energy and energy efficiency, economic development and environmental protection;
- Ability to evaluate emerging clean energy markets and financing mechanisms;
- Exceptional negotiating and interpersonal skills involving the ability to work with management and a variety of other parties, at all levels, internally and externally.
- Exceptional writing skills and the ability to communicate effectively, tactfully, and courteously through oral and written communications.
- Exceptional communication skills with the financial community;

- Ability to attract capital for clean energy investment in Connecticut;
- Ability to lead and manage a team of finance and investment professionals.

EXPERIENCE AND TRAINING:

General Experience:

Masters of Business Administration plus at least seven (7) or more years of general experience in investment or commercial banking in positions of increasing responsibility. Experience in the clean energy and environment project finance sectors.

Special Experience:

Five (5) years of the general experience must have been in a supervisory capacity.

Physical Requirements:

- 1. Frequent communications, verbal and written
- 2. Frequent use of math/calculations
- 3. Visually or otherwise identify, observe and assess
- 4. Repetitive use of hands and fingers -typing and/or writing

<u>Physical Demands</u>: The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. While performing the duties of this job, the employee is frequently required to sit; use hands to finger, handle, or feel; reach with hands and arms and talk or hear. The employee is occasionally required to stand and walk. The employee must occasionally lift and/or move up to 20 pounds. Specific vision abilities required by this job include close vision.

<u>Work Environment</u>: The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. The noise level in the work environment is usually moderate.

CONNECTICUT GREEN BANK

EXECUTIVE VICE PRESIDENT, FINANCE & ACCOUNTING

Position Grade: 21 Reports to: President & CEO Direct Reports: As assigned Wage Hour Class: Exempt

Salary Range: \$197,003 to \$315,204 **Hours Worked:** 40

Effective Date: January 26, 2024

SUMMARY:

This position is accountable for acting as the Executive Vice President, Finance & Accounting reporting and for assisting the President in managing the financial operations of the Connecticut Green Bank. This position is accountable for managing the financial accounting, reporting (both internal and external), financial planning and analysis, as well as the day to day management of the accounting department. the Connecticut Green Bank.

The Green Bank, a quasi-public authority, is the nation's first state "Green Bank," leveraging public and private funds to drive investment and scale up clean energy deployment in Connecticut. Working at the Green Bank means being part of a dynamic team of talented people who are passionate about implementing the new green bank model, stimulating the growth of clean energy in Connecticut, strengthening our economy, and protecting our environment.

EXAMPLES OF DUTIES:

- Develops and implements improvements to internal controls and accounting procedures.
- Analyzes and interprets accounting records and reports;
- Supervises financial reporting (both internal and external) financial planning and analysis as well as the day-to-day management of the accounting department.
- Prepares estimates of projected revenue and expense items as needed.
- Recommends accounting related improvements to business practices such as accounting controls and financial reviews.
- Oversees the cash management function.
- Assists with the preparation of financial forecasts as needed.
- Oversees the annual financial reporting process and the external and internal audits.
- Acts as liaison to state auditors and public auditors.
- Performs other related duties as required.

MINIMUM QUALIFICATIONS REQUIRED KNOWLEDGE, SKILL AND ABILITY:

Ability to address managerial matters with attention to detail, as well as the facility to keep in mind the larger framework. The ability to analyze and interpret financial statements. Requires considerable knowledge of business operations and general management and the ability to apply relevant State and federal laws, statutes and regulations. Requires considerable ability and willingness to function constructively as a leader of or a participant in one or more teams. Must possess considerable knowledge of and have the ability to apply management principles and techniques. Requires the ability to respond flexibly and adapt to changing circumstances. Requires considerable knowledge of the principles, procedures and applications of information systems. Considerable interpersonal skills which include oral and written communications skills, negotiating skills, strong portfolio valuation skills, and fluency with computer financial spreadsheet applications.

EXPERIENCE AND TRAINING:

A Bachelor's degree in accounting and nine years' employment experience in a combination of fiscal/administrative functions (e.g. accounting, budget management, personnel, payroll, purchasing, or other relevant business or management disciplines).

Substitutions Allowed:

- **1.** A Masters Degree in accounting may be substituted for one (1) additional year of the General Experience.
- **2.** A certification as a Certified Public Accountant may be substituted for one (1) additional year of the General Experience.

Physical Requirements:

- 1. Frequent communications, verbal and written
- 2. Frequent use of math/calculations
- 3. Visually or otherwise identify, observe and assess
- 4. Repetitive use of hands and fingers -typing and/or writing

<u>Physical Demands</u>: The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. While performing the duties of this job, the employee is frequently required to sit; use hands to finger, handle, or feel; reach with hands and arms and talk or hear. The employee is occasionally required to stand and walk. The employee must occasionally lift and/or move up to 20 pounds. Specific vision abilities required by this job include close vision.

<u>Work Environment</u>: The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. The noise level in the work environment is usually moderate.

75 Charter Oak Avenue, Suite 1 - 103, Hartford, CT 06106 T 860.563.0015 ctgreenbank.com



Memo

To: Board of Directors of the Connecticut Green Bank

From: Mackey Dykes (Vice President, Financing Programs) and Sergio Carrillo (Managing Director, Incentive Programs)

Director, incomitte i regisame)

Brian Farnen (General Counsel and CLO), Bryan Garcia (President and CEO), Bert Hunter

(Executive Vice President and CIO), and Alex Kovtunenko (Deputy General Counsel)

Date: January 19, 2024

Re: Request for Adjustment in Officer Approvals – Funding Requests below \$500,000 and in

Aggregate less than \$1,000,000

At the October 20, 2017 Board of Directors (Board) meeting of the Connecticut Green Bank (Green Bank) it was resolved that the Board approves the authorization of Green Bank staff to evaluate and approve funding requests less than \$500,000 which are pursuant to an established formal approval process requiring the signature of a Green Bank officer, consistent with the Comprehensive Plan, approved within Green Bank's fiscal budget and in an aggregate amount not to exceed \$1,000,000 from the date of the last Deployment Committee meeting (Under \$500,000 Approval Process). Staff authorizations consisted of smaller C-PACE transactions as part of our Financing Programs.

The Energy Storage Solutions (ESS) Program was established by the Public Utilities Regulatory Authority (PURA) in Docket No. 17-12-03RE03. In PURA's final Decision in this docket, issued July 28, 2021, PURA appointed The Connecticut Light and Power Company d/b/a Eversource Energy (Eversource), The United Illuminating Company (UI), and Green Bank as co-administrators of the ESS Program.

The Green Bank's ESS Program responsibilities include customer enrollment, administration of the upfront incentive, marketing and promotion, and data aggregation and publication to support Program evaluation, measurement, and verification, among others.

At its December 16, 2022 meeting, the Board authorized a process for the approval of upfront incentives for projects participating in the ESS Program (ESS Approval Process). The approval process for multi-family affordable housing and nonresidential ESS incentives

¹ Incentives for residential ESS Program customers (maximum per project incentive of \$16,000, based on current ESS program rules) are administrated and issued by Green Bank staff similar to how Green Bank administrated the Residential Solar Investment Program (RSIP). Akin to RSIP, neither the

below \$500,000 is identical and subject to the same aggregate limit as the Under \$500,000 Approval Process for Financing Programs.

With the programmatic expansion of staff authorizations to include both Financing and ESS Programs, the aggregate \$1 million cap has been reached on at least one occasion and staff expects this to become more of an issue as the ESS Program expands. Please see the **attached** Staff Authorization spreadsheet, which sets forth historical data on approvals under \$500,000 and highlights when the cap has previously been reached.

The Green Bank Deployment Committee recommends that both the Under \$500,000 Approval Process and ESS Approval Process be modified as follows:

- (1) That the Financing Programs and Incentive Programs each have a separate aggregate limits, set forth below, which would be tracked and reported separately. Currently, both Financing Programs projects (e.g., C-PACE transaction) and Incentive Programs (e.g., ESS Program incentives) below \$500,000 are subject to the same aggregate limit. This has been a procedural constraint for both programs and has the likely potential to delay approval of standard projects as the ESS Program expands.
 - a. The Financing Program aggregate limit would be set at \$1,000,000; and
 - The ESS Program aggregate limit would be set at \$500,000 (the lower amount is warranted as the ESS Program is still a relatively new program) but not include residential ESS Program customers akin to the RSIP approval structure.)
- (2) That each aggregate amount (\$1,000,000 (Financing) and \$500,000 (ESS)) limit may be refreshed with a report out to either a Deployment Committee or Board meeting. Currently, refreshing the authorization limit at a Board meeting is done by consent agenda resolution, while at a Deployment Committee meeting such a resolution is not necessary pursuant to the Under \$500,000 Approval Process. This recommendation would simply result in one less consent agenda resolution at Board meetings and a more standardized process for reporting such staff approval at all Deployment Committee and Board meetings.

RESOLUTION

WHEREAS, At the October 20, 2017 Board of Directors (Board) meeting of the Connecticut Green Bank (Green Bank) the Board approved a process for the Green Bank staff to evaluate and approve funding requests less than \$500,000 and in an aggregate amount not to exceed \$1,000,000 from the date of the last Deployment Committee meeting (Under \$500,000 Approval Process for Financing Programs).

Deployment Committee or the Board approve of residential customer deployment nor do those allocations impact the staff authorization volume cap. Green Bank staff will periodically report out to the Board on the progress to targets and incentives issued to such residential customers.

WHEREAS, at its June 24, 2022 meeting, the Board approved a process for the Green Bank staff to evaluate and approve upfront incentives for projects participating in the ESS Program (ESS Approval Process). The approval process for ESS incentives below \$500,000 is identical and subject to the same aggregate limit as the Under \$500,000 Approval Process for Financing Programs.

WHEREAS, the Deployment Comment recommended at its December 15, 2023 Special Meeting a modification of the Under \$500,000 Approval Process for Financing Programs and ESS Approval Process as described in the memorandum to the Board dated January 19, 2024 (the "Memo").

NOW, therefore be it:

RESOLVED, that the Green Bank Board approves the modification of the Under \$500,000 Approval Process for Financing Programs and ESS Approval Process as more particularly described in the Memo.

Queue Cleared	Year	Ву	Counter	Approved Date Project Code	Project Name	MacArthur Loan Grant Amou (does not apply to threshold)	nt Loan Amount	Total	Funds Remaining Comp Plan
					Desired D.				¢500,000,00
2/15/2013 2/15/2013	2013 2013	DC DC	1 1	? ?	Beginning Balance Blackham Downtown	\$141,300.0 \$0.0		\$141,300.00 \$50,000.00	
			-		Bridgeport District	·			
2/15/2013 2/15/2013	2013 2013	DC DC	1	, , , , , , , , , , , , , , , , , , ,	542 Westport Chester Town Hall	\$0.\ \$32,000.	•	\$185,231.00 \$32,000.00	
2/13/2013	2013	DC	1	·	Total Queue			\$408,531.00	<u>.</u>
					Beginning Balance				\$500,000.00
4/30/2013 4/30/2013	2013 2013	DC DC	1	2/25/2013 11-CEF-BOC.012 2/26/2013 51300-13-1	Cesar A. Batella Brown's Family	\$288,300.0 \$4,500.0		\$288,300.00 \$4,500.00	
4/30/2013	2013	DC	1	3/1/2013 50500-WILTON-13-	•			\$2,000.00	
4/30/2013	2013	DC	1	3/1/2013 50500-WINDHAM-		\$5,000.0		\$5,000.00	•
4/30/2013 4/30/2013	2013 2013	DC DC	1 1	2/26/2013 50400-WESTHAVEI 4/2/2013 ?	N West Haven City Common Ground	\$24,234.0 \$155,200.0		\$24,234.00 \$155,200.00	
1, 30, 2013	2013		-	1,2,2013 .	High School and	Ψ133,230.	γο.σο	Ψ133,200.00	
					Total Queue	\$479,234.0	90.00	\$479,234.00	
7/2/2013	2013	DC	1	5/14/2013 50400-NEWTOWN	Beginning Balance -: Newtown Reed	\$25,000.0	00	\$25,000.00	\$500,000.00 50400 Clean Energy Communities
7/2/2013	2013	DC	1	5/16/2013 50400-SOUTHINGT	(Southington High	\$18,000.	00 \$0.00	\$18,000.00	50400 Clean Energy Communities
7/2/2013	2013	DC	1	6/23/2013 ?	41 Walnut Street, Hartford/Walnut	\$170,000.0	00	\$170,000.00	51800 CPACE
7/2/2013	2013	DC	1	6/23/2013 ?	1073 State Street,	\$107,556.	00	\$107,556.00	51800 CPACE
					Bridgeport/ID				
7/2/2013	2013	DC	1	6/23/2013 ?	12 Boughton Street,	\$87,938.0	00 \$0.00	\$87,938.00	51800 CPACE
					Street,	\$0.0	00 \$0.00	\$0.00	
					Total Queue	\$408,494.	00 \$0.00	\$408,494.00	
9/3/2013	2013	DC	1	7/12/2013 ?	Beginning Balance True Value	\$0.0	00 \$284,900.00	\$284,900.00	\$500,000.00 51800 CPACE
9/3/2013	2013	DC	1	8/26/2013 ?	Great Pond Urban	\$0.0	\$49,501.00	\$49,501.00	50600 Project Opportunities
9/3/2013	2013	DC	1	9/3/2013 ?	Larsen True Value	\$0.\ \$0.		\$153,300.00 \$0.00	
					Total Queue			\$487,701.00	
2/7/2014	2014	DC	1	3/6/2014 ?	Beginning Balance Northeast Tools	\$0.0	00 \$122,471.00	¢122 471 00	\$500,000.00 51800 CPACE
3/7/2014	2014	DC	1	3/0/2014 !	Northeast 100is	\$0.i		\$122,471.00 \$0.00	
					Total Queue	\$0.0	00 \$122,471.00	\$122,471.00	
4/25/2014	2014	BOD	1	3/18/2014 ?	Beginning Balance Air Temp	\$0.0	00 \$139,050.00	\$139,050.00	\$500,000.00 51800 CPACE
4/25/2014	2014	BOD	1	3/20/2014 ?	Eli Properties	\$0.0		\$266,932.00	
4/25/2014	2014	BOD	1	4/3/2014 ?	Calvary Temple	\$0.		\$51,116.00	
					Total Queue Beginning Balance	\$0.0	00 \$457,098.00	\$457,098.00	\$42,902.00 \$1,000,000.00
9/16/2014	2014	DC	1	5/20/2014 ?	40 Main Street,	\$0.0		\$126,194.00	51800 CPACE
9/16/2014 9/16/2014	2014 2014	DC DC	1	7/29/2014 ? 8/1/2014 ?	125 Granfield 11 Depot Road	\$0.\ \$0.\		\$30,358.00 \$53,560.00	
9/16/2014	2014	DC	1	8/5/2014 ?	OIC of New	\$0.i		\$124,998.00	
9/16/2014	2014	DC	1	9/9/2014 ?	Call on C-PACE Sell-	\$0.0		\$236,711.16	
9/16/2014	2014	DC	1	8/13/2014 ?	Terrace Heights Total Queue	\$0.0	\$89,000.00 00 \$660,821.16	\$89,000.00 \$660,821.16	·
					Beginning Balance				\$1,000,000.00
				9/15/2014	Carriage House Mercedes, 488	\$0. (\$0.00	\$0.00	51800 CPACE Feasibility Loan
				9/15/2014	5 Old Depot Hill	\$0. 1	\$0.00	\$0.00	51800 CPACE Feasibility Loan
				9/15/2014	245 New Britain	\$0. (\$0.00	•
11/14/2014 11/14/2014	2014 2014	DC DC	1	9/15/2014 ? 9/29/2014 CEFIA-CHP-002-00:	All Crate, 200	\$0.0 \$33,750.0		\$30,256.00 \$33,750.00	·
11, 14, 2014	2014	50	-	372372014 CENT CENT 002 00.	Western	<i>433,730</i> .	,o	<i>\$33,730.00</i>	31300 CITI T HOU
11/14/2014	2014	DC	1	10/2/2014 ?	Jesus Saves	\$0.0		\$29,636.00	
11/14/2014 11/14/2014	2014 2014	DC DC	1	10/10/2014 ? 10/14/2014 ?	Merritt Graphics, Bridgeport	\$0.\ \$0.\		\$230,078.00 \$98,202.00	
11/14/2014	2014	DC	1	10/14/2014 ?	Eddie's Auto Body,			\$235,763.00	
11/14/2014	2014	DC	1	10/24/2014	245 New Britain	\$0. (\$0.00	
11/14/2014	2014	DC	1	11/7/2014 ?	WILLIAM M. SULLIVAN REALTY,		\$30,256.00		51800 CPACE Feasibility Loan
					LLC 452 Broad				
11/14/2014	2014	DC	1	11/7/2014 ?	WILLIAM M. SULLIVAN REALTY,		\$30,000.00		51800 CPACE Feasibility Loan
					LLC 452 Broad				
					Total Overs	\$0.0 \$33,750.0		\$0.00	
					Total Queue Beginning Balance	\$33,750.0	00 \$684,191.00	\$657,685.00	\$342,315.00 \$1,000,000.00
12/19/2014	2014	BOD	1	11/20/2014 ?	C & S	\$0.0	\$3,003.00	\$3,003.00	
12/19/2014	2014	BOD	1	12/16/2014 ?	INVESTMENTS, Valenti Auto	\$0.0	00 \$194,986.00	\$194,986.00	51800 CPACE
12/19/2014	2014	BOD	1	12/16/2014 ?	T & C	\$0.0		\$153,797.00	
12/19/2014	2014	BOD	1	12/16/2014 ?	Auto Corner LLC -	\$0.0	\$200,768.00	\$200,768.00	51800 CPACE
					Euro Performance	\$0.	00 \$0.00	\$0.00	
					Total Queue	\$0.0	00 \$552,554.00	\$552,554.00	\$447,446.00
1/23/2015	2015	BOD	1	? ?	Beginning Balance Meadows	\$0.0	00 \$0.00 \$228,427.00	\$0.00 \$228,427.00	
1/23/2013	2013	טטט	1	; f	Autopark, LLC – 99		۶۷۷۰٬4۷۲٬UU	7220,421.UU	JIOUU CFACL
		BOD	1	? ?	RGR Realty		\$167,924.00	\$167,924.00	51800 CPACE
1/23/2015	2015	ВОО	-	·	•				
1/23/2015	2015	ВОД	•		(Connecticut Tire, Total Queue	\$0.0		\$396,351.00	

2/10/2015 2/10/2015										
2/10/2015	2015	DC	1	? ?	Messiah Baptist	\$0.00	\$0.00	\$167,924.00		51800 CPACE
2/10/2015					Church - 210					
2/10/2013	2015	DC	1	? ?	Copperwood Grille	\$0.00	\$0.00	\$231,916.00		51800 CPACE
					– 118 State Street,	4	40.00			
					Total Queue	\$0.00	\$0.00	\$399,840.00	\$600,160.00	
- / - / - /			_	0.40=400.4=0	Beginning Balance	\$0.00	\$0.00	\$0.00	\$1,000,000.00	
5/14/2015	2015	DC	1	3/25/2015 ?	GSMC, LLC 171	\$0.00	\$27,500.00	\$27,500.00		51800 CPACE
5/14/2015	2015	DC	1	4/17/2015 ?	Niantic Community	\$0.00	\$60,038.00	\$60,038.00		51800 CPACE
- / - /				. / /	Church, Inc., 170	40.00				
5/14/2015	2015	DC	1	4/20/2015 ?	Deep River	\$0.00	\$20,225.00	\$20,225.00		51800 CPACE
- / /			_	. /	Historical Society -	40.00	4			
5/14/2015	2015	DC	1	4/22/2015 ?	E.S.T. Irrevocable	\$0.00	\$126,645.00	\$126,645.00		51800 CPACE
- 1 - 1 - 1				. 100 100 100	Trust ("E.S.T.") - 85	40.00				
5/14/2015	2015	DC	1	4/23/2015 ?	Calvin United	\$0.00	\$20,500.00	\$20,500.00		51800 CPACE
					Church of Christ -					
5/14/2015	2015	DC	1	4/20/2015 PT-100572	Bridgeport	\$0.00	\$120,098.00	\$120,098.00		51800 CPACE
					Gardens (K	40.00				
					Total Queue	\$0.00	\$375,006.00	\$375,006.00	\$624,994.00	
					Beginning Balance	\$0.00	\$0.00	\$0.00	\$1,000,000.00	
7/14/2015	2015	DC	1	6/18/2015 PT- 100348	Earthplace, The	\$0.00	\$178,757.00	\$178,757.00		51800 CPACE
-1					Nature Discovery	40.00	4	4		
7/14/2015	2015	DC	1	6/18/2015 PT-100351	Sheffield	\$0.00	\$160,718.00	\$160,718.00		51800 CPACE
					Pharmaceuticals					
					Total Queue	\$0.00	\$339,475.00	\$339,475.00	\$660,525.00	
					Beginning Balance	\$0.00	\$0.00	\$0.00	\$1,000,000.00	
8/17/2015	2015	DC	1	7/22/2015 ?	Cozy Home Loan	\$10,729.17	\$0.00	\$10,729.17		52220 Cozy Loans
					Support - Housing					
					Total Queue	\$10,729.17	\$0.00	\$10,729.17	\$989,270.83	
					Beginning Balance	\$0.00	\$0.00	\$0.00	\$1,000,000.00	
12/15/2015	2015	BOD	1	11/4/2015 ?	Fonte Enterprise,	\$0.00	\$39,985.00	\$39,985.00		51800 CPACE
					LLC - 1431 Bank	•	-			
12/15/2015	2015	BOD	1	10/29/2015 ?	Shiloh Baptist	\$0.00	\$72,685.80	\$72,685.80		51800 CPACE
12/15/2015	2015	BOD	1	11/23/2015 ?	Martin Holdings,	\$0.00	\$204,303.00	\$204,303.00		51800 CPACE
, -, 	_0.10	- - -	_	, _ _ , _ _ - ·	LLC - 141 North	-	,,,,,,,,,,,	, = 3 1,000.00		
12/15/2015	2015	BOD	1	12/10/2015 ?	D & R Real Estate	\$0.00	\$119,840.60	\$119,840.60		51800 CPACE
12/13/2013	2015	505	-	12/10/2013 .	LLC - 237 South	\$0.00	7113,040.00	ψ113,040.00		31000 01 7(01
					Total Queue	\$0.00	\$436,814.40	\$436,814.40	\$563,185.60	
					Beginning Balance	\$0.00	\$0.00	\$0.00	\$1,000,000.00	
2/9/2016	2016	DC	1	12/15/2015 PT-100730	Ice Cube Building	\$0.00	\$197,978.00	\$197,978.00	\$1,000,000.00	51800 CPACE
2/9/2010	2010	DC	1	12/13/2013 F1-100/30	_	\$0.00	\$197,976.00	\$197,976.00		31800 CPACE
2/0/2016	2016	DC	1	12/17/2015 DT 100711	LLC - 541 Eastern	¢0.00	¢72.60F.90	ć72 COF OO		F22F0, Multifamily Dragrams
2/9/2016	2016	DC	1	12/17/2015 PT-100711	Shiloh Baptist	\$0.00	\$72,685.80	\$72,685.80		52250: Multifamily Programs
2/0/2016	2016	DC	4	2/4/2046 NAFIL 47FF /NAFIL	Church of	¢0.00	ć7F 000 00	ć7F 000 00		
2/9/2016	2016	DC	1	2/1/2016 MFH 1755/MFH	Bridgeport	\$0.00	\$75,000.00	\$75,000.00		
				000001	Neighborhood	¢0.00	¢245 CC2 00	ć24F CC2 00	¢CE 4 22C 20	
					Total Queue	\$0.00	\$345,663.80	\$345,663.80	\$654,336.20	
0/00/00/0	2015			0/5/00/00 75 / 005 05	Beginning Balance	\$0.00	\$0.00	\$0.00	\$1,000,000.00	
2/26/2016	2016	BOD	1	2/5/2016 PT-100565	Valenti Cadillac	\$0.00	\$283,435.00	\$283,435.00		51800 CPACE
					(Meadows					
2/26/2016	2016	BOD	1	2/8/2016 PT-100539	33 Mitchell Drive	\$0.00	\$201,072.00	\$201,072.00		51800 CPACE
- 1 1	2016	BOD	1	2/5/2016 MFH 000031	Bridgeport	\$0.00	\$75,000.00	\$75,000.00		52250: Multifamily Programs
2/26/2016	2016	БОБ	-	• •		φσ.σσ				
2/26/2016	2016	505	-	· ·	Neighborhood					
2/26/2016	2016	505	-		Neighborhood Total Queue	\$0.00	\$559,507.00	\$559,507.00	\$440,493.00	
			-		Neighborhood	\$0.00 \$0.00	\$559,507.00 \$0.00	\$0.00	\$440,493.00 \$1,000,000.00	
2/26/2016 4/22/2016	2016	BOD	1	3/2/2016 MFH 000126	Neighborhood Total Queue	\$0.00				
			1		Neighborhood Total Queue Beginning Balance	\$0.00 \$0.00	\$0.00	\$0.00		
			1 1		Neighborhood Total Queue Beginning Balance MFH Navigator	\$0.00 \$0.00	\$0.00	\$0.00		
4/22/2016	2016	BOD	1 1	3/2/2016 MFH 000126	Neighborhood Total Queue Beginning Balance MFH Navigator Loan - Holinko	\$0.00 \$0.00 \$0.00	\$0.00 \$27,150.00	\$0.00 \$27,150.00		Multi Family
4/22/2016	2016	BOD	1 1	3/2/2016 MFH 000126	Neighborhood Total Queue Beginning Balance MFH Navigator Loan - Holinko Botticello Henry L	\$0.00 \$0.00 \$0.00	\$0.00 \$27,150.00	\$0.00 \$27,150.00		Multi Family
4/22/2016	2016	BOD	1	3/2/2016 MFH 000126	Neighborhood Total Queue Beginning Balance MFH Navigator Loan - Holinko Botticello Henry L	\$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$27,150.00 \$199,719.00	\$0.00 \$27,150.00 \$199,719.00		Multi Family CPACE
4/22/2016	2016	BOD	1 1	3/2/2016 MFH 000126	Total Queue Beginning Balance MFH Navigator Loan - Holinko Botticello Henry L Etals - 224	\$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00	\$1,000,000.00	Multi Family CPACE
4/22/2016	2016	BOD	1 1 1	3/2/2016 MFH 000126	Total Queue Beginning Balance MFH Navigator Loan - Holinko Botticello Henry L Etals - 224 Total Queue	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00	\$1,000,000.00 \$773,131.00	Multi Family CPACE
4/22/2016 4/22/2016	2016 2016	BOD BOD	1 1	3/2/2016 MFH 000126 4/4/2016 PT#100693	Neighborhood Total Queue Beginning Balance MFH Navigator Loan - Holinko Botticello Henry L Etals - 224 Total Queue Beginning Balance St. John's Episcopal	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00	\$1,000,000.00 \$773,131.00	Multi Family CPACE
4/22/2016 4/22/2016	2016 2016	BOD BOD	1 1 1	3/2/2016 MFH 000126 4/4/2016 PT#100693	Neighborhood Total Queue Beginning Balance MFH Navigator Loan - Holinko Botticello Henry L Etals - 224 Total Queue Beginning Balance	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00	\$1,000,000.00 \$773,131.00	Multi Family CPACE
4/22/2016 4/22/2016 6/17/2016 6/17/2016	2016 2016 2016	BOD BOD	1 1 1 1	3/2/2016 MFH 000126 4/4/2016 PT#100693 4/25/2016 PT-100707	Neighborhood Total Queue Beginning Balance MFH Navigator Loan - Holinko Botticello Henry L Etals - 224 Total Queue Beginning Balance St. John's Episcopal Church, Bridgeport	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70	\$1,000,000.00 \$773,131.00	Multi Family CPACE
4/22/2016 4/22/2016 6/17/2016	2016 2016 2016 2016	BOD BOD BOD	1 1 1 1 1	3/2/2016 MFH 000126 4/4/2016 PT#100693 4/25/2016 PT-100707 5/4/2016 PT-100759	Neighborhood Total Queue Beginning Balance MFH Navigator Loan - Holinko Botticello Henry L Etals - 224 Total Queue Beginning Balance St. John's Episcopal Church, Bridgeport Sand Road Animal	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56	\$1,000,000.00 \$773,131.00	Multi Family CPACE CPACE
4/22/2016 4/22/2016 6/17/2016 6/17/2016 6/17/2016	2016 2016 2016 2016 2016	BOD BOD BOD BOD	1 1 1 1 1	3/2/2016 MFH 000126 4/4/2016 PT#100693 4/25/2016 PT-100707 5/4/2016 PT-100759 5/18/2016 PT-100721	Total Queue Beginning Balance MFH Navigator Loan - Holinko Botticello Henry L Etals - 224 Total Queue Beginning Balance St. John's Episcopal Church, Bridgeport Sand Road Animal Fonte Enterprise, LLC - 1431 Bank	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70 \$55,033.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70 \$55,033.00	\$1,000,000.00 \$773,131.00	Multi Family CPACE CPACE CPACE CPACE CPACE
4/22/2016 4/22/2016 6/17/2016 6/17/2016	2016 2016 2016 2016	BOD BOD BOD	1 1 1 1 1	3/2/2016 MFH 000126 4/4/2016 PT#100693 4/25/2016 PT-100707 5/4/2016 PT-100759	Neighborhood Total Queue Beginning Balance MFH Navigator Loan - Holinko Botticello Henry L Etals - 224 Total Queue Beginning Balance St. John's Episcopal Church, Bridgeport Sand Road Animal Fonte Enterprise, LLC - 1431 Bank 7 DFC-ERG CT, LLC	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70 \$55,033.00 \$0.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70 \$55,033.00 \$10.00	\$1,000,000.00 \$773,131.00 \$1,000,000.00	Multi Family CPACE CPACE CPACE CPACE CPACE S&I: 50800: Grid-Tied Loan Program
4/22/2016 4/22/2016 6/17/2016 6/17/2016 6/17/2016	2016 2016 2016 2016 2016	BOD BOD BOD BOD	1 1 1 1 1	3/2/2016 MFH 000126 4/4/2016 PT#100693 4/25/2016 PT-100707 5/4/2016 PT-100759 5/18/2016 PT-100721	Neighborhood Total Queue Beginning Balance MFH Navigator Loan - Holinko Botticello Henry L Etals - 224 Total Queue Beginning Balance St. John's Episcopal Church, Bridgeport Sand Road Animal Fonte Enterprise, LLC - 1431 Bank Total Queue	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$10.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70 \$55,033.00 \$0.00 \$115,108.26	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70 \$55,033.00 \$10.00 \$115,118.26	\$1,000,000.00 \$773,131.00 \$1,000,000.00 \$884,881.74	Multi Family CPACE CPACE CPACE CPACE CPACE CPACE CPACE CPACE
4/22/2016 4/22/2016 6/17/2016 6/17/2016 6/17/2016 6/17/2016	2016 2016 2016 2016 2016 2016	BOD BOD BOD BOD BOD	1 1 1 1 1 1	3/2/2016 MFH 000126 4/4/2016 PT#100693 4/25/2016 PT-100707 5/4/2016 PT-100759 5/18/2016 PT-100721 5/26/2016 P150-RFP-001-00	Total Queue Beginning Balance MFH Navigator Loan - Holinko Botticello Henry L Etals - 224 Total Queue Beginning Balance St. John's Episcopal Church, Bridgeport Sand Road Animal Fonte Enterprise, LLC - 1431 Bank Total Queue Beginning Balance Beginning Balance	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$10.00 \$10.00 \$0.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70 \$55,033.00 \$0.00 \$115,108.26 \$0.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70 \$55,033.00 \$10.00 \$115,118.26 \$0.00	\$1,000,000.00 \$773,131.00 \$1,000,000.00	Multi Family CPACE CPACE CPACE CPACE CPACE S&I: 50800: Grid-Tied Loan Program
4/22/2016 4/22/2016 6/17/2016 6/17/2016 6/17/2016 6/17/2016 7/22/2016	2016 2016 2016 2016 2016 2016	BOD BOD BOD BOD BOD	1 1 1 1 1 1	3/2/2016 MFH 000126 4/4/2016 PT#100693 4/25/2016 PT-100707 5/4/2016 PT-100759 5/18/2016 PT-100721 5/26/2016 P150-RFP-001-00	Total Queue Beginning Balance MFH Navigator Loan - Holinko Botticello Henry L Etals - 224 Total Queue Beginning Balance St. John's Episcopal Church, Bridgeport Sand Road Animal Fonte Enterprise, LLC - 1431 Bank 7 DFC-ERG CT, LLC Total Queue Beginning Balance St. John's Episcopal	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$10.00 \$0.00 \$0.00 \$0.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70 \$55,033.00 \$0.00 \$115,108.26 \$0.00 \$159,296.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70 \$55,033.00 \$10.00 \$115,118.26 \$0.00 \$159,296.00	\$1,000,000.00 \$773,131.00 \$1,000,000.00 \$884,881.74	Multi Family CPACE CPACE CPACE CPACE CPACE CPACE CPACE CPACE CPACE S&I: 50800: Grid-Tied Loan Program
4/22/2016 4/22/2016 6/17/2016 6/17/2016 6/17/2016 6/17/2016 7/22/2016 7/22/2016	2016 2016 2016 2016 2016 2016 2016 2016	BOD BOD BOD BOD BOD BOD	1 1 1 1 1 1 1 1 1 1	3/2/2016 MFH 000126 4/4/2016 PT#100693 4/25/2016 PT-100707 5/4/2016 PT-100759 5/18/2016 PT-100721 5/26/2016 P150-RFP-001-00 6/21/2016 PT-100625	Total Queue Beginning Balance MFH Navigator Loan - Holinko Botticello Henry L Etals - 224 Total Queue Beginning Balance St. John's Episcopal Church, Bridgeport Sand Road Animal Fonte Enterprise, LLC - 1431 Bank Total Queue Beginning Balance St. John's Episcopal Church Street, LLC - 1431 Bank	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$10.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70 \$55,033.00 \$0.00 \$115,108.26 \$0.00 \$159,296.00 \$36,029.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70 \$55,033.00 \$10.00 \$115,118.26 \$0.00 \$159,296.00 \$36,029.00	\$1,000,000.00 \$773,131.00 \$1,000,000.00 \$884,881.74	Multi Family CPACE CPACE CPACE CPACE CPACE CPACE CPACE CPACE CPACE
4/22/2016 4/22/2016 6/17/2016 6/17/2016 6/17/2016 6/17/2016 7/22/2016	2016 2016 2016 2016 2016 2016	BOD BOD BOD BOD BOD	1 1 1 1 1 1 1 1 1 1 1 1 1	3/2/2016 MFH 000126 4/4/2016 PT#100693 4/25/2016 PT-100707 5/4/2016 PT-100759 5/18/2016 PT-100721 5/26/2016 P150-RFP-001-00	Total Queue Beginning Balance MFH Navigator Loan - Holinko Botticello Henry L Etals - 224 Total Queue Beginning Balance St. John's Episcopal Church, Bridgeport Sand Road Animal Fonte Enterprise, LLC - 1431 Bank 7 DFC-ERG CT, LLC Total Queue Beginning Balance St. John's Episcopal 245 Main Street, Ellington - Snipsic	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$10.00 \$10.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70 \$55,033.00 \$0.00 \$115,108.26 \$0.00 \$159,296.00 \$36,029.00 \$12,450.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70 \$55,033.00 \$10.00 \$115,118.26 \$0.00 \$159,296.00 \$36,029.00 \$12,450.00	\$1,000,000.00 \$773,131.00 \$1,000,000.00 \$884,881.74 \$1,000,000.00	Multi Family CPACE CPACE CPACE CPACE S&I: 50800: Grid-Tied Loan Program CPACE CPACE Multi Family
4/22/2016 4/22/2016 6/17/2016 6/17/2016 6/17/2016 6/17/2016 7/22/2016 7/22/2016	2016 2016 2016 2016 2016 2016 2016 2016	BOD BOD BOD BOD BOD BOD	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3/2/2016 MFH 000126 4/4/2016 PT#100693 4/25/2016 PT-100707 5/4/2016 PT-100759 5/18/2016 PT-100721 5/26/2016 P150-RFP-001-00 6/21/2016 PT-100625	Total Queue Beginning Balance MFH Navigator Loan - Holinko Botticello Henry L Etals - 224 Total Queue Beginning Balance St. John's Episcopal Church, Bridgeport Sand Road Animal Fonte Enterprise, LLC - 1431 Bank 7 DFC-ERG CT, LLC Total Queue Beginning Balance St. John's Episcopal 245 Main Street, Ellington - Snipsic Total Queue	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$10.00 \$10.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70 \$55,033.00 \$0.00 \$115,108.26 \$0.00 \$159,296.00 \$36,029.00 \$12,450.00 \$207,775.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70 \$55,033.00 \$10.00 \$115,118.26 \$0.00 \$159,296.00 \$36,029.00 \$12,450.00 \$207,775.00	\$1,000,000.00 \$773,131.00 \$1,000,000.00 \$884,881.74 \$1,000,000.00 \$792,225.00	Multi Family CPACE CPACE CPACE CPACE CPACE CPACE Multi Family
4/22/2016 4/22/2016 6/17/2016 6/17/2016 6/17/2016 7/22/2016 7/22/2016 7/22/2016	2016 2016 2016 2016 2016 2016 2016 2016	BOD BOD BOD BOD BOD BOD BOD BOD BOD	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3/2/2016 MFH 000126 4/4/2016 PT#100693 4/25/2016 PT-100707 5/4/2016 PT-100759 5/18/2016 PT-100721 5/26/2016 P150-RFP-001-00 6/21/2016 PT-100625 6/24/2016 MFH 000156	Total Queue Beginning Balance MFH Navigator Loan - Holinko Botticello Henry L Etals - 224 Total Queue Beginning Balance St. John's Episcopal Church, Bridgeport Sand Road Animal Fonte Enterprise, LLC - 1431 Bank 7 DFC-ERG CT, LLC Total Queue Beginning Balance St. John's Episcopal 245 Main Street, Ellington - Snipsic Total Queue Beginning Balance	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$10.00 \$10.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70 \$55,033.00 \$0.00 \$115,108.26 \$0.00 \$159,296.00 \$36,029.00 \$12,450.00 \$207,775.00 \$0.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70 \$55,033.00 \$10.00 \$115,118.26 \$0.00 \$159,296.00 \$36,029.00 \$12,450.00 \$0.00	\$1,000,000.00 \$773,131.00 \$1,000,000.00 \$884,881.74 \$1,000,000.00	Multi Family CPACE CPACE CPACE CPACE S&I: 50800: Grid-Tied Loan Program CPACE CPACE Multi Family
4/22/2016 4/22/2016 6/17/2016 6/17/2016 6/17/2016 6/17/2016 7/22/2016 7/22/2016	2016 2016 2016 2016 2016 2016 2016 2016	BOD BOD BOD BOD BOD BOD	1 1 1 1 1 1 1 1 1 1 1 1 1	3/2/2016 MFH 000126 4/4/2016 PT#100693 4/25/2016 PT-100707 5/4/2016 PT-100759 5/18/2016 PT-100721 5/26/2016 P150-RFP-001-00 6/21/2016 PT-100625	Total Queue Beginning Balance MFH Navigator Loan - Holinko Botticello Henry L Etals - 224 Total Queue Beginning Balance St. John's Episcopal Church, Bridgeport Sand Road Animal Fonte Enterprise, LLC - 1431 Bank Total Queue Beginning Balance St. John's Episcopal 245 Main Street, Ellington - Snipsic Total Queue Beginning Balance Lewis R. and	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$10.00 \$10.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70 \$55,033.00 \$0.00 \$115,108.26 \$0.00 \$159,296.00 \$36,029.00 \$12,450.00 \$207,775.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70 \$55,033.00 \$10.00 \$115,118.26 \$0.00 \$159,296.00 \$36,029.00 \$12,450.00 \$207,775.00	\$1,000,000.00 \$773,131.00 \$1,000,000.00 \$884,881.74 \$1,000,000.00 \$792,225.00	Multi Family CPACE CPACE CPACE CPACE CPACE CPACE Multi Family
4/22/2016 4/22/2016 6/17/2016 6/17/2016 6/17/2016 6/17/2016 7/22/2016 7/22/2016 7/22/2016 7/22/2016	2016 2016 2016 2016 2016 2016 2016 2016	BOD	1 1 1 1 1 1 1 1 1 1 1	3/2/2016 MFH 000126 4/4/2016 PT#100693 4/25/2016 PT-100707 5/4/2016 PT-100759 5/18/2016 PT-100721 5/26/2016 PT-00707 6/21/2016 PT-100625 6/24/2016 MFH 000156 7/15/2016 PT-100844	Total Queue Beginning Balance MFH Navigator Loan - Holinko Botticello Henry L Etals - 224 Total Queue Beginning Balance St. John's Episcopal Church, Bridgeport Sand Road Animal Fonte Enterprise, LLC - 1431 Bank 7 DFC-ERG CT, LLC Total Queue Beginning Balance St. John's Episcopal 245 Main Street, Ellington - Snipsic Total Queue Beginning Balance Lewis R. and Maureen C.	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$10.00 \$10.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70 \$55,033.00 \$0.00 \$115,108.26 \$0.00 \$159,296.00 \$36,029.00 \$12,450.00 \$207,775.00 \$0.00 \$67,571.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70 \$55,033.00 \$10.00 \$115,118.26 \$0.00 \$159,296.00 \$36,029.00 \$12,450.00 \$207,775.00 \$0.00 \$67,571.00	\$1,000,000.00 \$773,131.00 \$1,000,000.00 \$884,881.74 \$1,000,000.00 \$792,225.00	Multi Family CPACE CPACE CPACE CPACE S&I: 50800: Grid-Tied Loan Program CPACE CPACE Multi Family CPACE
4/22/2016 4/22/2016 6/17/2016 6/17/2016 6/17/2016 7/22/2016 7/22/2016 7/22/2016	2016 2016 2016 2016 2016 2016 2016 2016	BOD BOD BOD BOD BOD BOD BOD BOD BOD	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3/2/2016 MFH 000126 4/4/2016 PT#100693 4/25/2016 PT-100707 5/4/2016 PT-100759 5/18/2016 PT-100721 5/26/2016 P150-RFP-001-00 6/21/2016 PT-100625 6/24/2016 MFH 000156	Total Queue Beginning Balance MFH Navigator Loan - Holinko Botticello Henry L Etals - 224 Total Queue Beginning Balance St. John's Episcopal Church, Bridgeport Sand Road Animal Fonte Enterprise, LLC - 1431 Bank Total Queue Beginning Balance St. John's Episcopal 245 Main Street, Ellington - Snipsic Total Queue Beginning Balance Lewis R. and Maureen C. JCC of Greater	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$10.00 \$10.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70 \$55,033.00 \$0.00 \$115,108.26 \$0.00 \$159,296.00 \$36,029.00 \$12,450.00 \$207,775.00 \$0.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70 \$55,033.00 \$10.00 \$115,118.26 \$0.00 \$159,296.00 \$36,029.00 \$12,450.00 \$0.00	\$1,000,000.00 \$773,131.00 \$1,000,000.00 \$884,881.74 \$1,000,000.00 \$792,225.00	Multi Family CPACE CPACE CPACE CPACE S&I: 50800: Grid-Tied Loan Program CPACE CPACE Multi Family
4/22/2016 4/22/2016 6/17/2016 6/17/2016 6/17/2016 6/17/2016 7/22/2016 7/22/2016 7/22/2016 7/22/2016 9/26/2016 9/26/2016	2016 2016 2016 2016 2016 2016 2016 2016	BOD	1 1 1 1 1 1 1 1 1 1 1	3/2/2016 MFH 000126 4/4/2016 PT#100693 4/25/2016 PT-100707 5/4/2016 PT-100759 5/18/2016 PT-100721 5/26/2016 PT50-RFP-001-00 6/21/2016 PT-100625 6/24/2016 MFH 000156 7/15/2016 PT-100844 7/20/2016 PT-100855	Total Queue Beginning Balance MFH Navigator Loan - Holinko Botticello Henry L Etals - 224 Total Queue Beginning Balance St. John's Episcopal Church, Bridgeport Sand Road Animal Fonte Enterprise, LLC - 1431 Bank DFC-ERG CT, LLC Total Queue Beginning Balance St. John's Episcopal 245 Main Street, Ellington - Snipsic Total Queue Beginning Balance Lewis R. and Maureen C. JCC of Greater New Haven - 360	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$10.00 \$10.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70 \$55,033.00 \$0.00 \$115,108.26 \$0.00 \$159,296.00 \$36,029.00 \$12,450.00 \$207,775.00 \$0.00 \$67,571.00 \$316,505.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70 \$55,033.00 \$10.00 \$115,118.26 \$0.00 \$159,296.00 \$36,029.00 \$12,450.00 \$207,775.00 \$0.00 \$67,571.00 \$316,505.00	\$1,000,000.00 \$773,131.00 \$1,000,000.00 \$884,881.74 \$1,000,000.00 \$792,225.00	Multi Family CPACE CPACE CPACE CPACE S&I: 50800: Grid-Tied Loan Program CPACE CPACE Multi Family CPACE CPACE
4/22/2016 4/22/2016 6/17/2016 6/17/2016 6/17/2016 6/17/2016 7/22/2016 7/22/2016 7/22/2016 7/22/2016	2016 2016 2016 2016 2016 2016 2016 2016	BOD	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3/2/2016 MFH 000126 4/4/2016 PT#100693 4/25/2016 PT-100707 5/4/2016 PT-100759 5/18/2016 PT-100721 5/26/2016 PT-00707 6/21/2016 PT-100625 6/24/2016 MFH 000156 7/15/2016 PT-100844	Total Queue Beginning Balance MFH Navigator Loan - Holinko Botticello Henry L Etals - 224 Total Queue Beginning Balance St. John's Episcopal Church, Bridgeport Sand Road Animal Fonte Enterprise, LLC - 1431 Bank 7 DFC-ERG CT, LLC Total Queue Beginning Balance St. John's Episcopal 245 Main Street, Ellington - Snipsic Total Queue Beginning Balance Lewis R. and Maureen C. JCC of Greater New Haven - 360 Miller Brothers	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$10.00 \$10.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70 \$55,033.00 \$0.00 \$115,108.26 \$0.00 \$159,296.00 \$36,029.00 \$12,450.00 \$207,775.00 \$0.00 \$67,571.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70 \$55,033.00 \$10.00 \$115,118.26 \$0.00 \$159,296.00 \$36,029.00 \$12,450.00 \$207,775.00 \$0.00 \$67,571.00	\$1,000,000.00 \$773,131.00 \$1,000,000.00 \$884,881.74 \$1,000,000.00 \$792,225.00	Multi Family CPACE CPACE CPACE CPACE S&I: 50800: Grid-Tied Loan Program CPACE CPACE Multi Family CPACE
4/22/2016 4/22/2016 6/17/2016 6/17/2016 6/17/2016 7/22/2016 7/22/2016 7/22/2016 7/22/2016 9/26/2016 9/26/2016 9/26/2016	2016 2016 2016 2016 2016 2016 2016 2016	BOD BOD BOD BOD BOD BOD BOD C DC DC	1 1 1 1 1 1 1 1 1 1 1 1 1 1	3/2/2016 MFH 000126 4/4/2016 PT#100693 4/25/2016 PT-100707 5/4/2016 PT-100759 5/18/2016 PT-100721 5/26/2016 PT50-RFP-001-00 6/21/2016 PT-100625 6/24/2016 MFH 000156 7/15/2016 PT-100844 7/20/2016 PT-100855 7/20/2016 PT-100858	Total Queue Beginning Balance MFH Navigator Loan - Holinko Botticello Henry L Etals - 224 Total Queue Beginning Balance St. John's Episcopal Church, Bridgeport Sand Road Animal Fonte Enterprise, LLC - 1431 Bank 7 DFC-ERG CT, LLC Total Queue Beginning Balance St. John's Episcopal 245 Main Street, Ellington - Snipsic Total Queue Beginning Balance Lewis R. and Maureen C. JCC of Greater New Haven - 360 Miller Brothers Moving - 801	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$10.00 \$10.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70 \$55,033.00 \$0.00 \$115,108.26 \$0.00 \$159,296.00 \$36,029.00 \$12,450.00 \$207,775.00 \$0.00 \$67,571.00 \$316,505.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70 \$55,033.00 \$10.00 \$115,118.26 \$0.00 \$159,296.00 \$36,029.00 \$12,450.00 \$207,775.00 \$0.00 \$67,571.00 \$316,505.00 \$111,758.00	\$1,000,000.00 \$773,131.00 \$1,000,000.00 \$884,881.74 \$1,000,000.00 \$792,225.00	Multi Family CPACE CPACE CPACE S&I: 50800: Grid-Tied Loan Program CPACE CPACE Multi Family CPACE CPACE CPACE
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4/22/2016 4/22/2016 6/17/2016 6/17/2016 6/17/2016 7/22/2016 7/22/2016 7/22/2016 9/26/2016 9/26/2016 9/26/2016 9/26/2016 9/26/2016	2016 2016 2016 2016 2016 2016 2016 2016	BOD BOD BOD BOD BOD BOD BOD DC DC DC DC DC	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3/2/2016 MFH 000126 4/4/2016 PT#100693 4/25/2016 PT-100707 5/4/2016 PT-100759 5/18/2016 PT-100721 5/26/2016 P150-RFP-001-00 6/21/2016 PT-100625 6/21/2016 PT-100625 6/24/2016 MFH 000156 7/15/2016 PT-100855 7/20/2016 PT-100858 8/10/2016 PT-100880 8/23/2016 PT-100351	Total Queue Beginning Balance MFH Navigator Loan - Holinko Botticello Henry L Etals - 224 Total Queue Beginning Balance St. John's Episcopal Church, Bridgeport Sand Road Animal Fonte Enterprise, LLC - 1431 Bank Total Queue Beginning Balance St. John's Episcopal 245 Main Street, Ellington - Snipsic Total Queue Beginning Balance Lewis R. and Maureen C. JCC of Greater New Haven - 360 Miller Brothers Moving - 801 The Nguyen and Cai Group LLC 477 Sheffield Pharmaceuticals Total Queue Beginning Balance Gale McNair LLC - McCuda - 4-6 New	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$10.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70 \$55,033.00 \$0.00 \$115,108.26 \$0.00 \$159,296.00 \$36,029.00 \$12,450.00 \$207,775.00 \$0.00 \$67,571.00 \$111,758.00 \$111,758.00 \$111,758.00 \$39,135.00 \$49,050.40	\$0.00 \$27,150.00 \$199,719.00 \$0.00 \$226,869.00 \$0.00 \$17,522.56 \$42,552.70 \$55,033.00 \$10.00 \$115,118.26 \$0.00 \$159,296.00 \$36,029.00 \$12,450.00 \$207,775.00 \$0.00 \$67,571.00 \$316,505.00 \$111,758.00 \$111,758.00 \$291,018.00 \$189,989.80 \$39,135.00 \$49,050.40	\$1,000,000.00 \$773,131.00 \$1,000,000.00 \$884,881.74 \$1,000,000.00 \$792,225.00 \$1,000,000.00 \$1,000,000.00	Multi Family CPACE CPACE CPACE S&I: 50800: Grid-Tied Loan Program CPACE CPACE Multi Family CPACE

5/30/2017	2017	DC	1	5/23/2017 PT-100904	234 Middle Street,		\$0.00	\$289,193.00	\$289,193.00		HA project
5/30/2017	2017	DC	1	4/7/2017 ?	Twin Oaks Condominium		\$0.00	\$15,000.00	\$15,000.00		MFH Navigator Loan, Market Rate (actual amount is \$6,450)
5/30/2017	2017	DC	1	4/11/2017 ?	Wishcamper	\$50,000.00	\$0.00	\$0.00	\$0.00		MFH/MacArthur Navigator Loan (actual amount is \$10,875)
5/30/2017	2017	DC	1	4/11/2017 ?	Companies - Seabury ?		\$0.00	\$0.00	\$0.00		MFH/MacArthur Navigator Loan
5/30/2017	2017	DC	1	4/11/2017 ?	Taymil Partners -	\$3,700.00	\$0.00	\$0.00	\$0.00		MFH/MacArthur Sherpa Loan
5/30/2017	2017	DC	1	4/27/2017 ?	The Rochdale	\$5,032.50	\$0.00	\$0.00	\$0.00		MFH/MacArthur Sherpa Loan
5/30/2017	2017	DC	1	5/2/2017 ?	Ellington - Snipsic	\$15,125.00	\$0.00	\$0.00	\$0.00		MFH/MacArthur Navigator Loan
5/30/2017	2017	DC	1	5/23/2017 ?	Seabury Total Queue		\$0.00 \$0.00	\$228,300.00 \$566,314.00	\$228,300.00 \$566,314.00	\$433,686.00	MFH/Non-MacArthur Navigator Loan
					Beginning Balance		\$0.00	\$0.00	\$0.00	\$1,000,000.00	
7/21/2017	2017	BOD	1	6/16/2017 ?	St Paul's Flax Hill		\$0.00	\$35,000.00	\$35,000.00		MFH Navigator Loan
7/21/2017	2017	BOD	1	7/7/2017 ?	Mutual Housing of		\$0.00	\$6,476.00	\$6,476.00		MFH Navigator Loan
					Total Queue Beginning Balance		\$0.00 \$0.00	\$41,476.00 \$0.00	\$41,476.00 \$0.00	\$958,524.00 \$1,000,000.00	
9/5/2017	2017	DC	1	8/11/2017 PT-100937	Bethany Library		\$0.00	\$81,926.00	\$81,926.00		CPACE
0/5/2017	2017	DC	1	0/20/2017 PT 10000C	Association, Inc. –		¢0.00	¢100 C04 00	¢100 C04 00		CDACE
9/5/2017	2017	DC	1	8/28/2017 PT-100906	Bausch Advanced Technologies, - 115		\$0.00	\$180,684.00	\$180,684.00		CPACE
					Total Queue		\$0.00	\$262,610.00	\$262,610.00	\$737,390.00	
42/45/2047	2017	202	_	0/44/0047 DT 404440	Beginning Balance		\$0.00	\$0.00	\$0.00	\$1,000,000.00	
12/15/2017	2017	BOD	1	9/14/2017 PT-101449	CT Boiler - 694 Oakwood Ave,		\$0.00	\$75,089.00	\$75,089.00		CPACE - EOTL
12/15/2017	2017	BOD	1	12/1/2017 PT-101440	287 Main Street,		\$0.00	\$255,683.00	\$255,683.00		CPACE
12/15/2017	2017	BOD	1	10/26/2017 PT-101433	Piage		\$0.00	\$223,716.00	\$223,716.00		CPACE
12/15/2017	2017	BOD	1	11/28/2017 PT-101445	CL Realty Partners,	\$250,000,00	\$0.00 \$0.00	\$132,647.00	\$132,647.00		CPACE MEH/MacArthur Navigator Loan
12/15/2017	2017	BOD	1	12/12/2017 MFH-000050	Success Village Total Queue	\$250,000.00	\$0.00 \$0.00	\$0.00 \$687,135.00	\$0.00 \$687,135.00	\$312,865.00	MFH/MacArthur - Navigator Loan
					Beginning Balance		7 0.00	, ,	\$0.00	\$1,000,000.00	
4/3/2018	2018	BOD	1	2/8/2018 PT-101562	Horse & Buggy LLC	4	\$0.00	\$227,738.00	\$227,738.00		CPACE
4/3/2018 4/3/2018	2018 2018	BOD BOD	1	2/20/2018 ? PT-101508	Hillside Elderly Granite Property	\$4,290.00	\$0.00 \$0.00	\$0.00 \$98,859.00	\$0.00 \$98,859.00		MFH/MacArthur - Sherpa Loan CPACE
4/ 3/ 2010	2010	ВОВ	1	11 101300	Holdings, LLC - 55		70.00	750,055.00	730,033.00		CI ACE
4/3/2018	2018	BOD	1	2/7/2018 PT-101501	United Church on		\$0.00	\$53,879.00	\$53,879.00		CPACE
4/3/2018	2018	BOD	1	2/20/2018 PT-101504	the Green - 270 Locust Holdings		\$0.00	\$406,527.00	\$406,527.00		CPACE
4/3/2018	2018	ВОД	1	2/20/2018 71-101304	LLC (Plastonics,		Ş0.00	3400,327.00	3400,327.00		CFACL
					Total Queue		\$0.00	\$787,003.00	\$787,003.00	\$212,997.00	
E /20 /2019	2019	DC	1	4/25/2019 DT 101545	Beginning Balance		¢0.00	\$206 142 00	\$0.00	\$1,000,000.00	CDACE
5/29/2018	2018	DC	1	4/25/2018 PT-101545	Powerhouse Partners, LLC, 15		\$0.00	\$306,142.00	\$306,142.00		CPACE
5/29/2018	2018	DC	1	4/26/2018 MFH-000690	EnergizeCT Health		\$50,000.00	\$0.00	\$50,000.00		MFH
					& Safety Revolving						
5/29/2018	2018	DC	1	4/26/2018 MFH-000687	Loan Fund - Grove EnergizeCT Health		\$130,000.00	\$0.00	\$130,000.00		MFH
3/23/2010	2010	50	-	1, 20, 2010 11111 000007	& Safety Revolving		\$130,000.00	φο.σσ	Ψ130,000.00		
					Loan Fund - Mt.						
					Total Queue Beginning Balance		\$180,000.00	\$306,142.00	\$486,142.00 \$0.00	\$513,858.00 \$1,000,000.00	
9/18/2018	2018	DC	1	5/29/2018 PT-100921	36 Spring Lane in		\$0.00	\$376,500.00	\$376,500.00		CPACE
					Farmington (New						
9/18/2018	2018	DC	1	5/26/2018 PT-101611	345 Ely Avenue (345 Ely LLC &		\$0.00	\$351,170.00	\$351,170.00		CPACE
9/18/2018	2018	DC	1	8/9/2018 PT-101666	Bulldog Rebel		\$0.00	\$74,227.00	\$74,227.00		CPACE
					Properties, LLC -						
9/18/2018	2018	DC	1	8/9/2018 ?	Mansfield Housing		\$0.00	\$0.00	\$0.00		MFH
9/18/2018	2018	DC	1	8/28/2018 ?	Authority - Seabury		\$0.00	\$0.00	\$0.00		MFH
, ,					Cooperative /						
9/18/2018	2018	DC	1	8/30/2018 MFH-000690	EnergizeCT Health		\$0.00	\$0.00	\$0.00		MFH
					& Safety Revolving Loan Fund - Grove						
					Total Queue		\$0.00	\$801,897.00	\$801,897.00	\$198,103.00	
					Beginning Balance		4		\$0.00	\$1,000,000.00	
11/13/2018	2018	DC	1	9/24/2018 ?	EnergizeCT Health & Safety Revolving		\$0.00	\$15,000.00	\$15,000.00		MFH
					Loan Fund - St.						
							\$0.00	\$0.00	\$0.00		
					Total Queue		\$0.00	\$15,000.00	\$15,000.00	\$985,000.00	
3/27/2019	2019	DC	1	11/21/2018 PT-101462	Beginning Balance 196 Woodlawn LLC		\$0.00	\$224,986.00	\$0.00 \$224,986.00	\$1,000,000.00	CPACE
3/27/2019	2019	DC	1	12/14/2018 PT-101682	MLG, LLC (Chuck's		\$0.00	\$79,537.00	\$79,537.00		CPACE
0/0-/			_	4 10 100 00 00 00 00	Automotive) - 653		4 - ~ -	A.	A		CDACE
3/27/2019	2019	DC	1	1/3/2019 PT-101704	A+ Technology (1027 Fairfield		\$0.00	\$133,900.00	\$133,900.00		CPACE
3/27/2019	2019	DC	1	1/8/2019 PT-101651	19 Bassett Street		\$0.00	\$42,809.00	\$42,809.00		CPACE
					(Nineteen Bassett						
3/27/2019 3/27/2019	2019 2019	DC DC	1	3/2/2019 ? 3/2/2019 ?	Winding River Silver Creek	\$4,125.00 \$175,725.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		MFH MFH
3/2//2013	7013	DC	1	3/2/2013 :	Apartments /	91/J,/ZJ.UU	ŞU.UU	ŞU.UU	ŞU.UU		TVII 11
							\$0.00	\$0.00	\$0.00		
					Total Queue		\$0.00	\$481,232.00	\$481,232.00	\$518,768.00	
9/12/2019	2019	BOD	1	6/27/2019 ?	Beginning Balance Davenport	\$13,615.00	\$0.00	\$0.00	\$0.00 \$0.00	\$1,000,000.00	MFH
-, ,			-	-, ,	Residences -	₊ _5,515.00	40.00	70.00	40.00		
9/12/2019	2019	BOD	1	7/2/2019 ?	Northeast Hartford	\$229,350.00	\$0.00	\$0.00	\$0.00		MFH
9/12/2019	2019	BOD	1	7/29/2019 PT-101772	Affordable Housing Reno Machine (50		\$0.00	\$410,146.00	\$410,146.00		CPACE
9/12/2019	2019	BOD	1	8/22/2019 PT-101802	510 Ledyard		\$0.00	\$253,545.00	\$253,545.00		CPACE

9/12/2019	2019	BOD	1	9	9/3/2019 PT-101825	Stencil Ease (Greenho		\$0.00	\$207,103.00	\$207,103.00		CPACE
						Total Queue		\$0.00 \$0.00	\$0.00 \$870,794.00	\$0.00 \$870,794.00	\$129,206.00	
42/20/2040	2010	200		0.1	122 /2040 PT 404767	Beginning Balance		40.00	600.462.00	\$0.00	\$1,000,000.00	CD A CE
12/20/2019	2019	BOD	1	9/	/22/2019 PT-101767	Amodex (Gemini X2, LLC) - 1354		\$0.00	\$80,163.00	\$80,163.00		CPACE
12/20/2019	2019	BOD	1	10	0/2/2019 PT-101811	200 Main Street Properties, LLC -		\$0.00	\$285,019.00	\$285,019.00		CPACE
12/20/2019	2019	BOD	1	10/	30/2019 PT-101842	Bausch Advanced Technologies (SBB,		\$0.00	\$316,761.00	\$316,761.00		CPACE
12/20/2019	2019	BOD	1	11/	21/2019 PT-101856	Cafolla-DiMare LLC (DiMare Pastry		\$0.00	\$246,129.00	\$246,129.00		CPACE
12/20/2019	2019	BOD	1	12/	11/2019 PT-101726	Celentano Funeral Home (Celentano,		\$0.00	\$39,140.00	\$39,140.00		CPACE
								\$0.00	\$0.00	\$0.00	400 700 00	
						Total Queue Beginning Balance		\$0.00	\$967,212.00	\$967,212.00 \$0.00	\$32,788.00 \$1,000,000.00	
5/27/2020	2020	DC	1	1	L/7/2020 PT-101916	Northeastern		\$0.00	\$117,420.00	\$117,420.00	¥1,000,000.00	CPACE
5/27/2020	2020	DC	1	1	L/7/2020 PT-101727	Conference Corp Celentano Funeral		\$0.00	\$36,050.00	\$36,050.00		CPACE
5/27/2020	2020	DC	1	2/	21/2020 MFH-000050	Home (Celentano, Success Village	\$250,000.00	\$0.00	\$0.00	\$0.00		MFH/MacArthur - Navigator Loan
5/27/2020	2020	DC	1	2/	24/2020 PT-101779	Rumsey Properties LLC, 22 Rumsey		\$0.00	\$268,599.00	\$268,599.00		CPACE
5/27/2020	2020	DC	1		1/8/2020 PT-101846	375 Lake Ave,		\$0.00	\$85,284.00	\$85,284.00		CPACE
5/27/2020	2020	DC	1	5	5/2/2020 PT-101793	Westville Seafood,		\$0.00	\$118,450.00	\$118,450.00		CPACE
5/27/2020	2020	DC	1	5/	14/2020 ?	Inc. (1514 Whalley Rockfall Business	\$102,000.00	\$0.00	\$0.00	\$0.00		MFH/MacArthur
				·		Park LLC & Maynard Road						·
						·		\$0.00	\$0.00	\$0.00		
						Total Queue Beginning Balance		\$0.00	\$625,803.00	\$625,803.00 \$0.00	\$374,197.00 \$1,000,000.00	
7/24/2020	2020	BOD	1	7/	17/2020 PT-101936	Meadow Street Realty LLC - 99		\$0.00	\$142,672.00	\$142,672.00	\$1,000,000.00	CPACE
						,		\$0.00	\$0.00	\$0.00		
						Total Queue Beginning Balance		\$0.00	\$142,672.00	\$142,672.00 \$0.00	\$857,328.00 \$1,000,000.00	
10/23/2020	2020	BOD	1	7/	31/2020 PT-101980	Thames River Properties LLC - 75		\$0.00	\$161,526.00	\$161,526.00	\$1,000,000.00	CPACE
10/23/2020	2020	BOD	1	9	9/3/2020 PT-101988	River Haven Cooperative (River		\$0.00	\$213,691.00	\$213,691.00		CPACE
10/23/2020	2020	BOD	1	10/	14/2020 PT-101995	Marcus Communications,		\$0.00	\$181,692.00	\$181,692.00		CPACE
								\$0.00	\$0.00	\$0.00		
						Total Queue Beginning Balance		\$0.00	\$556,909.00	\$556,909.00 \$0.00	\$443,091.00 \$1,000,000.00	
11/18/2020	2020	DC	1	10/	21/2020 PT-101951	West Lane Holdings LLC - 22		\$0.00	\$98,841.00	\$98,841.00	\$1,000,000.00	CPACE
								\$0.00	\$0.00	\$0.00	4	
						Total Queue Beginning Balance		\$0.00	\$98,841.00	\$98,841.00 \$0.00	\$901,159.00 \$1,000,000.00	
1/21/2021	2021	BOD	1	11/	25/2020 ?	Success Village -	\$150,000.00	\$0.00	\$0.00	\$0.00	, , , , , , , , , , , , , , , , , , , ,	MFH/MacArthur
						Total Queue		\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$1,000,000.00	
						Beginning Balance		\$0.00	Ş0.00	\$0.00	\$1,000,000.00	
2/24/2021	2021	DC	1	?	PT-102051	Papoosha Real Estate Investors,		\$0.00	\$98,841.00	\$98,841.00		CPACE
2/24/2021	2021	DC	1	?	PT-102175	Barker Specialty,		\$0.00	\$205,161.00	\$205,161.00		CPACE
						Total Queue		\$0.00 \$0.00	\$0.00 \$304,002.00	\$0.00 \$304,002.00	\$695,998.00	
						Beginning Balance				\$0.00	\$1,000,000.00	
5/26/2021	2021	DC	1	4	I/9/2021 PT-102188	360 New Haven Avenue (Diamond		\$0.00	\$136,877.00	\$136,877.00		CPACE
						·		\$0.00	\$0.00	\$0.00		
						Total Queue Beginning Balance		\$0.00	\$136,877.00	\$136,877.00 \$0.00	\$863,123.00 \$1,000,000.00	
3/18/2022	2022	BOD	1	3/	11/2022 PT-102317	BLACK PEARL REAL ESTATE HOLDING		\$0.00	\$115,593.48	\$115,593.48	41,000,000.00	CPACE
								\$0.00	\$0.00	\$0.00		
						Total Queue Beginning Balance		\$0.00	\$115,593.48	\$115,593.48 \$0.00	\$884,406.52 \$1,000,000.00	
4/22/2022	2022	BOD	1	3/	24/2022 PT-102229	Burmco, Inc. 80		\$0.00	\$153,844.22	\$153,844.22	\$1,000,000.00	CPACE
4/22/2022	2022	BOD	1	3/	31/2022 PT-102308	Republic Drive, Westport Tennis		\$0.00	\$190,301.77	\$190,301.77		CPACE
4/22/2022	2022	BOD	1	4	l/4/2022 PT-102272	Club inc - 1696 Traub Bros Inc -		\$0.00	\$115,593.48	\$115,593.48		CPACE
						922 New		\$0.00	\$0.00	\$0.00		
						Total Queue		\$0.00	\$459,739.47	\$459,739.47	\$540,260.53 \$1,000,000,00	
6/24/2022	2022	BOD	1	4/	'26/2022 PT-102268	Beginning Balance AGSA Realty LLC, 27 Realty Drive		\$0.00	\$423,613.50	\$0.00 \$423,613.50	\$1,000,000.00	CPACE
6/24/2022	2022	BOD	1	6/	13/2022 PT-102321	27 Realty Drive, Tabernacle Christian Church		\$0.00	\$49,316.00	\$49,316.00		CPACE
						Christian Church,		\$0.00	\$0.00	\$0.00		
						Total Queue		\$0.00	\$472,929.50	\$472,929.50	\$527,070.50	
11/16/2022	2022	DC	1	10/	/12/2022 PT-102392	Beginning Balance JCJ Associates,		\$0.00	\$59,355.00	\$0.00 \$59,355.00	\$1,000,000.00	CPACE
11/16/2022	2022	DC	1		12/2022 PT-102393	44A Shelter Rock		\$0.00	\$325,557.00	\$325,557.00		CPACE

11/16/2022	2022	DC	1		11/10/2022 ESS-00026		\$132,000.00		\$132,000.00	ESS
11/16/2022	2022	DC	1		11/10/2022 ESS-00028		\$176,000.00		\$176,000.00	ESS
11/16/2022	2022	DC	1		11/10/2022 ESS-00039		\$268,200.00		\$268,200.00	ESS
11/16/2022	2022	DC	1		11/10/2022 ESS-00155		\$331,800.00		\$331,800.00	ESS
11/16/2022	2022	DC	1		11/10/2022 ESS-00165		\$55,800.00		\$55,800.00	ESS
,,					,,		\$0.00	\$0.00	\$0.00	
						Total Queue	\$963,800.00	\$384,912.00	\$1,348,712.00	(\$348,712.00)
						Beginning Balance	\$0.00	\$0.00	\$0.00	\$1,000,000.00
12/16/2022	2022	BOD	1	Ş	pt-102397	307 Pepe's Farm	43.53	\$470,978.00	\$470,978.00	CPACE
,,			_		p. 22223	Road: A C-PACE		<i>+ 3,3 : 3 3</i>	<i>ϕ 5,5 5 5</i>	552
12/16/2022	2022	BOD	1	?	ESS-00033		\$449,750.00		\$449,750.00	ESS
12/16/2022	2022	BOD	1	?	ESS-00158		\$256,800.00		\$256,800.00	ESS
,,				-			\$0.00	\$0.00	\$0.00	
						Total Queue	\$706,550.00	\$470,978.00	\$1,177,528.00	(\$177,528.00)
						Beginning Balance	\$0.00	\$0.00	\$0.00	\$1,000,000.00
1/20/2023	2023	BOD	1	?	ESS-00041		\$111,600.00	,	\$111,600.00	ESS
1/20/2023	2023	BOD	1	?	ESS-00177		\$331,800.00		\$331,800.00	ESS
1/20/2023	2023	BOD	1	?	ESS-00179		\$55,800.00		\$55,800.00	ESS
1/20/2023	2023	BOD	1	?	ESS-00193		\$456,902.00		\$456,902.00	ESS
1/20/2023	2023	BOD	1	?	ESS-00194		\$456,902.00		\$456,902.00	ESS
1/20/2023	2023	BOD	1	?	ESS-00195		\$456,902.00		\$456,902.00	ESS
_,,				-			\$0.00	\$0.00	\$0.00	
						Total Queue	\$1,869,906.00	\$0.00	\$1,869,906.00	(\$869,906.00)
						Beginning Balance	\$0.00	\$0.00	\$0.00	\$1,000,000.00
5/24/2023	2023	DC	1		5/17/2023 ESS-00237	Hartford	\$175,000.00	·	\$175,000.00	ESS
-, ,					., ,	Healthcare - 540	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
5/24/2023	2023	DC	1		5/17/2023 ESS-00380	Trinity College -	\$385,400.00		\$385,400.00	ESS
-, ,					, ,	300 Summit St.,	, ,		, ,	
						,	\$0.00	\$0.00	\$0.00	
						Total Queue	\$560,400.00	\$0.00	\$560,400.00	\$439,600.00
						Beginning Balance	\$0.00	\$0.00	\$0.00	\$1,000,000.00
6/23/2023	2023	BOD	1		6/13/2023 PT-102471	Mystic Business	\$0.00	\$372,472.72	\$372,472.72	CPACE
• •					•	Park II LLC, 700	·		. ,	
6/23/2023	2023	BOD	1		6/13/2023 PT-102467	Aron 100 Sanford	\$0.00	\$167,561.43	\$167,561.43	CPACE
. ,					•	Street, LLC, 100	•			
						, ,	\$0.00	\$0.00	\$0.00	
						Total Queue	\$0.00	\$540,034.15	\$540,034.15	\$459,965.85
						Beginning Balance	\$0.00	\$0.00	\$0.00	\$1,000,000.00
7/21/2023	2023	BOD	1		6/16/2023 ESS-00239	Hartford	\$312,500.00	\$0.00	\$312,500.00	ESS
						Healthcare - 112				
7/21/2023	2023	BOD	1		6/16/2023 ESS-00240	Hartford	\$312,500.00	\$0.00	\$312,500.00	ESS
						Healthcare - 2800				
							\$0.00	\$0.00	\$0.00	
						Total Queue	\$625,000.00	\$0.00	\$625,000.00	\$375,000.00
						Beginning Balance	\$0.00	\$0.00	\$0.00	\$1,000,000.00
9/20/2023	2023	DC	1		PT-102511	E Properties LLC -	\$0.00	\$276,040.00	\$276,040.00	CPACE
						199 Elm Street,				
							\$0.00	\$0.00	\$0.00	
						Total Queue	\$0.00	\$276,040.00	\$276,040.00	\$723,960.00
						Beginning Balance	\$0.00	\$0.00	\$0.00	\$1,000,000.00
10/20/2023	2023	DC	1		9/26/2023 PT-102376	Gra-Mar, LLC -	\$0.00	\$109,180.00	\$109,180.00	CPACE
						1520 Highland Ave,				
							\$0.00	\$0.00	\$0.00	
						Total Queue	\$0.00	\$109,180.00	\$109,180.00	\$890,820.00

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Memo

To: Board of Directors of the Connecticut Green Bank

From: Sergio Carrillo, Managing Director, Incentive Programs; Ed Kranich, Senior Manager,

Incentive Programs; and Bryan Garcia, President and CEO

Cc Mackey Dykes, VP of Cl&I Programs and Office; Brian Farnen, General Counsel and

CLO; Bert Hunter, EVP and CIO; Jane J. Murphy, EVP of Finance and Administration;

and Eric N. Shrago, VP of Operations

Date: January 19, 2024

Re: Energy Storage Solution Program – Upfront Incentive Approvals

Background

The Energy Storage Solutions (ESS) Program was established by the Public Utilities Regulatory Authority (PURA) in Docket No. 17-12-03RE03, <u>PURA Investigation into Distribution System Planning of the Electric Distribution Companies – Electric Storage</u>. Pursuant to PURA's final Decision¹ issued in this matter on July 28, 2021, PURA appointed The Connecticut Light and Power Company d/b/a Eversource Energy (Eversource), The United Illuminating Company (UI), and the Connecticut Green Bank (Green Bank) as co-administrators of the ESS Program.²

The Green Bank's Program responsibilities include customer enrollment, administration of the upfront incentive, marketing and promotion, and data aggregation and publication to support Program evaluation, measurement, and verification, among others.

A. Upfront Incentive Approval Process

At its June 24, 2022 meeting, the Green Bank Board of Directors (Board) authorized a process for the approval of upfront incentives for projects participating in the ESS Program, under which projects with estimated upfront incentives greater than \$500,000 would follow a process similar to the approval process used for C-PACE program.

Within the existing Board and Deployment Committee regular meeting schedule, Green Bank staff shall obtain Board approval of estimated upfront incentive payments via consent agenda utilizing the Tear Sheet process described in the Memorandum to the Board dated June 24,

¹ PURA's final Decision in Docket 17-12-03RE03 may be found <u>here</u>.

² Additionally, with the passage of Public Act 21-53, "An Act Concerning Energy Storage," PURA shall solicit input from the Department of Energy and Environmental Protection (DEEP), the Office of Consumer Counsel (OCC), the Electric Distribution Companies (EDCs), and the Green Bank in developing energy storage system programs, and may select DEEP, EDCs, Green Bank, a third party, or any combination thereof to implement one or more programs for electric storage resources as directed by PURA.

2022. Only after securing Board approval will Green Bank staff issue Reservation of Funds (ROF) letters to project developers and/or owners.

After projects are fully operational, Green Bank staff will notify the Board of their intent to issue Confirmation of Funds (COF) letters, highlighting any differences between the Board-approved incentive and the final incentive amount, and the reason for the difference.

B. Request for Approval of New Upfront Incentives Above \$500,000

At this time, one (1) ESS project with an estimated upfront incentive above \$500,000 requires Board approval. Table 1 below shows the project which seeks approval of an estimated upfront incentive totaling \$1,036,000. Additionally, the project has a total capacity of 4.90 MW, which accounts for 4.9% of the 100 MW of capacity available for commercial and industrial (C&I) Tranche 2 of the ESS Program. Approval of this project would bring the total approved capacity in C&I Tranche 2 to 38.9 MW, and 80.15 MW of approved C&I capacity in ESS overall.

Project Name	Contractor Name	Battery Manufacturer	Battery Model	Host Customer City	Total System Power (kW)	Total System Energy Capacity (kWh)	Estimated Upfront Incentive	Total Battery Cost
ESS-00758	CPower	BYD	Cube	Middletown	4,900	10,360	\$1,036,000	\$4,403,000

Table 1. Summary of Estimated Upfront Incentives Above \$500,000

Project ESS-00758, shown in Table 1 above, is a large C&I project to be located at Wesleyan University in Middletown. The battery energy storage system (BESS) will be owned and operated by CPower and the project is not eligible for Forward Capacity Market (FCM) participation. Additionally, the project's battery model is a BYD Cube, which is Eligible Equipment for the Program.

The project will provide resiliency benefits to the University, in addition to grid-wide benefits via a flattening of the demand curve. The project is not expected to be completed until 2025, as it may need to pass interconnection studies with Eversource.

The attached Tear Sheet in **Appendix A** provides additional details pertaining to project ESS-00758.

Resolutions

WHEREAS, in its June 24, 2022 meeting, the Connecticut Green Bank Board of Directors ("Board") approved the implementation of Upfront Incentive Project Approval procedures ("Procedures") for non-residential projects under the Energy Storage Solutions Program ("Program") with an estimated upfront incentive payment greater than \$500,000 and procedures for less than \$500,000;

WHEREAS, as part of the Procedures, Green Bank staff shall present Program projects via the consent agenda utilizing a standard form Tear Sheet process described in the memorandum to the Board dated June 24, 2022;

WHEREAS, in its December 9, 2022 meeting, the Board approved updated Procedures to better align with the Program process; and,

WHEREAS, Green Bank Staff reviewed funding requests for projects with incentives below \$500,000, and approved them via Project Approval Forms for a total amount of \$560,400 and intends to issue Reservation of Fund letters.

NOW, therefore be it:

RESOLVED, that the Green Bank Board hereby approves the estimated upfront incentives for one (1) non-residential project above \$500,000 totaling \$1,036,000, consistent with the approved Procedures and this memorandum dated January 19, 2024; and,

RESOLVED, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver any and all documents and regulatory filings as they shall deem necessary and desirable to affect the above-mentioned incentives consistent with the Procedures.

Submitted by: Sergio Carrillo, Managing Director, Incentive Programs; Ed Kranich, Senior Manager, Incentive Programs; and Bryan Garcia, President and CEO

Appendix A: Project Tear Sheets

Energy Storage Solution Program Upfront Incentive Application

Project Description	CPower will be installing a BYD Cube battery storage system with 4,900 kW of power and 10,360 kWh of energy capacity to reduce electric bills and provide backup power to a university campus during power outages.
---------------------	---

Customer / Site information

Customer Name	Wesleyan University
Address	0 Vine St., Middletown, CT 06457
Business Purpose	Educational Services
Incentive Application No.	ESS-00758
Incentive Application Date	11/29/2023
Customer Peak Annual Demand (kW)	3,626
Customer Class (S / M / L)	Large
Project Developer / Installer	CPower

Program Eligibility

Critical Facility	No
Small Business	No
Onsite Fossil Fuel Generator	No
Grid Edge Customer	No
Participation in FCM Allowed	No
Participation in FCM Declared	No
Resiliency Plan on File (N/A if Grid Edge Customer)	No

Battery Energy Storage System (BESS) Characteristics

System Configuration	Standalone
Expected Program Participation	Passive and Active Dispatch
BESS Make / Model	BYD Cube
BESS Power Rating (kW)	4,900
BESS Energy Capacity (kWh)	10,360
BESS Technology Approval Status	Pre-Approved
Interconnection Application Filed	Yes
Interconnection Study Required	Distribution study needed
Estimated Project Cost	\$4,403,000.00

Benefit / Cost Ratios

RIM – Ratepayer Impact Measure	1.79
PCT – Participant Cost Test	1.19
PACT – Program Administrator Cost Test	2.30
SCT – Societal Cost Test	1.73
TRC – Total Resource Cost Test	1.73

Upfront Incentive Information

Incentive Application Status	 Application Submitted Approved Reservation of Funds Letter (ROF) Approved Confirmation of Funds Letter (COF)
Incentive Calculation Method	Tiered Rate using Peak Demand
Estimated Upfront Incentive	\$1,036,000.00

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Memo

To: Connecticut Green Bank Board of Directors

From: Mackey Dykes, Vice President, Financing Programs, Alex Kovtunenko, Deputy General

Counsel, Financing Programs and Alysse Lembo-Buzzelli, Associate Director, Financing

Programs

Date: January 26, 2024

Re: C-PACE Program Guidelines Update for Resilience

Overview

Conn. Gen. Stat. Section 16a-40g authorizes what has come to be known as the Commercial Property Assessed Clean Energy Program ("C-PACE"), designates the Connecticut Green Bank ("CGB") as the state-wide administrator of the program and charges CGB to "develop program guidelines governing the terms and conditions under which state and third-party financing may be made available to the commercial sustainable energy program." Since 2013, CGB has developed and maintained the "Program Guidelines" for the C-PACE program in accordance with this statutory requirement.

CGB Staff is seeking input from the Board on a draft update to the Program Guidelines, which include: 1) incorporating guidelines for defining and approving resilience improvements into the Program Guidelines, 2) amending the "New Construction Technical Standards", Appendix N to incorporate pathways to include resilience improvements to new construction projects, and 3) inclusion of a new "Resilience Technical Standards" appendix.

C-PACE Statute Changes

An amendment to the C-PACE Statute in Public Act 22-6 included the ability to finance zeroemission vehicle refueling infrastructure and resilience improvements with C-PACE. Both were exempt from the requirement that the cost savings of the improvements over the useful life of such improvements exceed the costs of such improvements (the Savings-to-Investment Ratio of >1). However, a resilience study and assessment of cost savings are required for any project applying for C-PACE financing for resilience improvements.

Approach

Staff's approach was to define resilience improvements, explain eligibility for C-PACE financing, outline the requirements to apply, and incorporate that information into the existing guidelines seamlessly. Staff identified climate change adaptation and nature-based solution examples to

encourage these solutions, but did not limit other possible resilience projects from being presented.

Property owners can utilize C-PACE to finance resilience improvements to adapt to the vulnerabilities that threaten their ability to keep their buildings operational and businesses functional. Given the broad definition of resilience, Staff designed the guidelines and appendices to accommodate all types of resilience improvements to help understand the market needs.

New Additions & Amendments

In order to give developers, capital providers, and borrowers a way to use C-PACE for financing for resilience improvements while still preserving the program's public policy aspects, Staff has made the following changes:

C-PACE Guidelines

- Amended sections throughout to incorporate resilience language
- Amended language throughout to indicate resilience improvements are exempt from the Savings-to-Investment ratio (SIR) requirement
- Added a subsection to "Defining the Scope of Work" section for resilience improvements
- o Added a section that defines the "Resilience Technical Review" process
- Added a defined term, "Resilience Improvements"

• Appendix N- New Construction Technical Standards

- Amended the "Overview" section to incorporate language for resilience improvements
- Amended the "Supporting Documentation" section to include 2 subsections for a) energy and b) resilience
- Added a new section for "Resilience Determination"
- Re-labeled the "Bonus Technologies" section to "Bonus Measures", and included 2 new points to allow applicant to add resilience improvements as a way to access additional percentages of the TECC in C-PACE financing
- Added a new section for "Resilience Determination" to outline the two ways to access C-PACE financing for resilience improvements in a New Construction Project:
 - Adding prescriptive resilience measures to an energy project as Bonus Measure(s), for a maximum of 10% additional of the TECC in C-PACE financing
 - Using the FORTIFIED program and designing for one of the 3 levels of building standards to qualify for up to 20% of the TECC in C-PACE financing. Projects choosing to meet one of the FORTIFIED standards may also incorporate additional Bonus Measures, for up to an additional 10% of the TECC in C-PACE financing. Lastly, Projects that are also designing for Net Zero may be eligible for up the maximum of 35% of the TECC in C-PACE financing.
- Added a new table (Table 3) to outline the "Resilience for New Construction Total Eligible C-PACE Financed Amounts"

• Appendix O- Resilience Technical Standards

- o A new appendix to the C-PACE Guidelines that outlines the following:
 - An overview of "Resilience Projects"
 - Examples of resilience improvements
 - Climate change adaptation examples

- Nature-based solution examples
- FORTIFIED designation
- Other resilience improvements
- Information regarding supporting documentation, including two Exhibits for the following:
 - "Pre-Study Worksheet" (Exhibit I)
 - "Resilience Study Requirements" (Exhibit II)

Public Comment

The draft of the amended Program Guidelines will be published and shared with C-PACE stakeholders during a thirty-day public comment period. After public comments are received, CGB staff will present the final draft guidelines to the Board for approval with any necessary changes resulting from the comments.



C-PACE PROGRAM GUIDELINES

Version Date: October 21, 2022 Connecticut Green Bank 75 Charter Oak Ave, Suite 1 – 103 Hartford, CT 06106

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Article I. INTRODUCTION

Capitalized terms used below which are not otherwise defined shall have the meaning ascribed to them in Article VI hereof.

The C-PACE Legislation (defined below) authorized the commercial sustainable energy program more commonly known as the Commercial & Industrial Property Assessed Clean Energy Program ("C-PACE"). C-PACE is a financing program that allows Connecticut building owners to access cleaner, cheaper, and more reliable energy, as well as financing for resiliency and Zero-Emission Vehicle Refueling Infrastructure. The C-PACE Legislation authorized Connecticut Green Bank, a Connecticut quasi-public agency ("Green Bank"), to administer C-PACE and establish program guidelines for the implementation of the program—NOTE: Guidelines specific to resiliency will be developed later this fiscal year.

C-PACE allows qualifying commercial real property owners to access financing to undertake eligible energy and resilience improvements on their buildings, or build greener, more resilient and more efficient new buildings and repay the investment through an additional charge/assessment, similar to a real property tax, sewer, or water bill. Like a sewer assessment, projects financed through C-PACE are secured by a benefit assessment lien on the improved real property, which lien is a non-accelerating, senior lien, and repaid over time. The repayment obligation transfers automatically to the next owner if the property is sold and in the event of default, only the payments in arrears come due. This arrangement spreads the cost of eligible energy improvements – such as energy efficient boilers, upgraded insulation, new windows, solar PV installations, resilience improvements, or EV chargers – over the expected life of the measure. Because the payment is secured by a senior lien, C-PACE projects are seen as less risky than typical financing leans, and low interest capital can be raised from the private sector with little or no government financing required.

Benefit assessments are a familiar tool that municipalities levy on real estate parcels to finance projects including street paving, water and sewer systems, and street lighting. C-PACE builds on a long history of using such benefit assessments and serves a public purpose through reducing energy costs, stimulating the economy, improving property valuation, reducing greenhouse gas emissions, improving resiliency and creating jobs. C-PACE is a proven and effective tool to attract private capital into the clean-energy and energy efficiency—market. The Connecticut Green Bank, as program administrator, bills and collects the scheduled payments for all benefit assessment liens in the manner of property taxes in the Participating Municipality.

This document sets forth the program guidelines established by Green Bank for the implementation of C-PACE (as may be updated, supplement, amended or otherwise modified by Green Bank, the "Program Guidelines"), which Program Guidelines govern all C-PACE participants.

All Appendixes attached hereto are supplemental program documents used by Green Bank in implementation of the Program Guidelines and may be modified or amended by Green Bank, in its sole

discretion, from time to time. Current versions of all Appendixes may be found at www.cpace.com/guidelines.

Article II. OUTLINE OF C-PACE BENEFITS

PACE offers multiple benefits to a broad range of stakeholders, including but not limited to building owners, municipalities, mortgage holders, lenders, and energy efficiency/renewable energy contractors.

Section 1. For Building Owners

C-PACE helps minimize the up-front investment, installation, and performance risk of energy upgrades, while helping owners lower their operating costs, improve the <u>resilience</u> value and market competitiveness of their asset, and comply with energy mandates. C-PACE does this in several ways:

- Many owners lack capital to implement energy and resilience improvements. C-PACE provides up to 100%, long-term financing to property owners for qualified energy and resilience upgrades. Audits, resilience studies, construction costs, commissioning and post-construction performance measurement and verification (M&V) can be wrapped into C-PACE financing.
- Owners often want to sell the building before thean energy or resilience upgrade improvement
 financingloan is repaid. The C-PACE assessment obligation is attached to the property and can
 transfer to the new owner. Payments do not accelerate in case of default.
- Many owners feel energy improvements do not yield an adequate return on investment. The C-PACE program requires that the estimated energy savings from an efficiency retrofit or renewable energy project exceed the investment and financing costs, leading the expected cash flow to be positive over the useful life of the equipment. Moreover, C-PACE requires an independent third-party technical review of the project energy savings estimates, thereby ensuring confidence in the projected energy savings. Deeper energy upgrades and savings are possible because assessments match the useful life of equipment, which for certain improvements can extend up to 25 years.
- Other owners are uncertain that energy savings will perform as advertised. C-PACE helps building
 owners understand their future energy savings by requiring that an energy audit and/or feasibility
 study be conducted to estimate energy savings and commissioning to ensure that equipment is
 installed correctly. An audit for a refueling installation assesses the impact of a charging station
 on a building's energy profile. Buildings owners should consider developing a measurement &
 verification plan to track energy consumption or production over time.
- Owners need tenants to share in the costs of energy upgrades. As a benefit assessment, C-PACE payments as well as energy savings may, if permitted by the lease agreement, be passed along to tenants.

Section 2. For Energy Auditors, and Contractors and Developers

The biggest barrier to converting leads to deals for energy or resilience improvements upgrades is the lack of access to acceptable finance terms from traditional lenders. C-PACE solves this by allowing a property owner to access up to 100% financing for up to 25 years, meaning affording deeper energy efficiency, and clean energy, and resilience improvements are now affordable. The Green Bank also provides energy

auditors_and contractors <u>and developers</u> access to training, support services, market research, and marketing materials.

Section 3. For Municipalities:

C-PACE is an economic development tool for municipalities. Energy and resilience upgrades improvements create a more competitive environment for retaining and attracting new businesses by lowering energy and/or operating costs. Energy and resilience upgrades improvements also create jobs, and reduce greenhouse gases and other pollutants, and help building owners adapt to vulnerabilities that could threaten daily business operations. The Green Bank coordinates with municipalities interested in entering into the Participation Agreement (as defined below) and facilitates municipal outreach to commercial property owners.

Section 4. For Capital Providers

C-PACE is a secure, clean energy financing product for Capital Providers The security comes from its position similar to a tax lien on a property. The lien, like other public benefit assessments, sits in a senior position to other encumbrances on the property, including mortgage debt and liens other than municipal real property tax liens. The Green Bank bills, collects, and remits funds in its role as program administrator.

The C-PACE Legislation requires C-PACE approved projects, other than zero-emission vehicle refueling infrastructure upgrades and resilience improvements, to have a "Savings to Investment Ratio" (SIR) greater than one, meaning that projected lifetime savings from the measures must exceed the total investment, inclusive of financing costs, over the lifetime of the measures. Connecticut streamlined the C-PACE program by establishing a single statewide C-PACE program administered by the Green Bank. Connecticut's C-PACE program maintains an open market approach, encouraging private capital to be the primary financier of these assessments and supporting building owners who wish to source their own C-PACE lender (see Article V below). Additionally, the Green Bank currently has dedicated capital to invest in C-PACE projects.

Section 5. For Mortgage Holders

The structure of C-PACE allows participating building owners to pay for improvements to their property out of the savings the project creates. With the exception of zero-emission vehicle refueling infrastructure and resilience improvement projects, Connecticut statutes require C-PACE approved projects to have an SIR greater than 1, meaning that projected lifetime savings from the energy measures must exceed the total investment, inclusive of financing costs, over the lifetime of the measures. The Green Bank has instituted technical underwriting standards for C-PACE that provides a robust framework for measuring the estimated SIR (Appendix D), which all efficiency and renewable energy C-PACE Projects must meet. Under the C-PACE financing structure, the building should experience increased net operating income, often an immediate return on investment, and therefore becomes more attractive to current and potential tenants and future buyers. Additionally, C-PACE Assessments do not accelerate. In the event of a foreclosure of the property for any reason, only the amount of the C-PACE assessment currently due and/or in arrears, a relatively small proportion of the entire C-PACE assessment, would come due. In the event of a property sale, C-PACE assessments automatically transfer to the new property owner unless the buyer or seller decides to prepay the assessment. Finally, the C-PACE Legislation requires that property owners receive the written consent of their existing mortgage holder before being eligible for C-PACE financing (Appendix C). Mortgage lenders will be at the table helping to determine whether a property can undertake this voluntary assessment.

Article III. C-PACE STATUTORY AND PROGRAMMATIC REQUIREMENTS

This section outlines certain requirements set forth in the C-PACE Legislation as well as additional programmatic requirements established by the Green Bank.

Section 1. Mortgage Lender Consent

- A. Pursuant to the C-PACE Legislation, Benefited Property Owners must:
 - a. Provide written notice to any existing mortgage holder of the Qualifying Property (as
 defined below), at least thirty days before the recording of a benefit assessment lien on
 such property, of the property owner's intent to finance a project through C-PACE, and
 - b. Obtain the written consent to the C-PACE financing from any existing mortgage holder of the Qualifying Property.
- B. Green Bank's model mortgage holder notice and consent is attached as Appendix C. C-PACE participants may elect to use a different agreement to evidencing mortgage holder notice and consent, however any other such agreement will be subject to review and approval by Green Bank in its sole discretion.
- C. In accordance with the U.S. Department of Housing and Urban Development ("HUD") Notice H2017-01 dated January 11, 2017, as may be modified, amended or superseded, in the event that the mortgage holder is HUD, the mortgage holder notice and consent as well as the Financing Agreement associated with such consent shall provide, in the event of a default on the associated Benefit Assessment Lien payment, for notice and a reasonable opportunity for the mortgage holder to cure any such non-payment.

Section 2. Real Property Eligibility

To be considered a "Qualifying Property" eligible for C-PACE Financing, a Qualifying Commercial Real Property (as defined below) must meet the following requirements:

- A. Must be located within a Participating Municipality (as defined below), or multiple abutting Participating Municipalities.
- B. Must be owned by a Benefited Property Owner (as defined below), who is not a state, municipality, or any political subdivision thereof.
- C. Must not be a Residential Dwelling (as defined bellow) of four units or less. Multifamily properties of five units or more are eligible. Mixed-use, not-for-profit, and agricultural properties may also be eligible. If the eligibility of a certain property is not clear, Green Bank may determine property eligibility in its reasonable discretion based on site specific considerations including, but not limited to, zoning designation and current/past/future land use. Multiple abutting parcels may be included in the legal description of one Benefit Assessment Lien (as defined below) if (1) each parcel, by itself, is a Qualifying Property (2) each parcel is owned by the same Benefited Property Owner, and (3) each parcel benefits from the same Qualifying Project.
- D. Must not be subject to any mortgage, deed of trust or other equivalent consensual security interest securing a loan primarily for personal, family or household use in a Residential Dwelling

of four units or less or on land on which a person intends to construct a Residential Dwelling of four units or less.

Section 3. Project Eligibility

To be considered a "Qualifying Project" eligible for C-PACE Financing, an Energy Improvement project must meet the following requirements:

- A. Contain at least one Energy Improvement (as defined below).
- B. All costs associated with the Energy Improvement and the financing thereof (e.g., closing/lender fees, consultant/development fees, soft costs, or other associated project costs, each being an "Associated Cost") may, subject to Green Bank approval, be included in the Financed Amount.
- C. Obtain an energy audit, or feasibility study, or resilience study for the proposed Energy Improvement(s).
- D. The term of the Benefit Assessment associated with the Qualifying Project may not exceed the weighted average effective useful life ("EUL") of the Energy Improvement(s), except in the context of Restructuring, in which case the term of the Benefit Assessment may be extended beyond the weighted average EUL of the Energy Improvement(s). EUL is determined through the energy audit or resilience study, based on industry best practice, and is subject to approval by (1) either the Technical Administrator or a Technical Reviewer, and/or (2) the Green Bank. Regardless of a Project's EUL, the term of the Benefit Assessment may not exceed 25 years unless approved by Green Bank, in its sole discretion.
- E. For all Energy Improvements that meet the following definition "A) participation in a district heating and cooling system by qualifying commercial real property, (B) participation in a microgrid, as defined in section 16-243y, including any related infrastructure for such microgrid, by qualifying commercial real property, provided such microgrid and any related infrastructure incorporate clean energy, as defined in section 16-245n, (C) any improvement, renovation or retrofitting of qualifying commercial real property to reduce energy consumption or improve energy efficiency, (D) installation of a renewable energy system to service qualifying commercial real property, (E) installation of a solar thermal or geothermal system to service qualifying commercial real property," other than Zero-emission Vehicle Refueling Infrastructure Projected Total Cost Savings must exceed the Projected Financing Cost. In other words, the savings-to investment ratio ("SIR") of the project must be greater than one. To demonstrate that the SIR requirement has been satisfied the project must be either (1) reviewed and approved by the Technical Administrator, (2) reviewed and approved by a Technical Reviewer, [99] be certified as Investor Ready Energy Efficiency bythe Investor Confidence Project (as defined by the Investor Confidence Project () or (4), for certain projects which include third party-owned renewable energy system(s), reviewed and approved by Green Bank, or certified by an Approved Capital Provider as applicable and more particularly described in Appendix L. For the avoidance of doubt, the SIR calculation for the project must meet the requirements set forth in Article IV below and shall not be applicable for Zero-emission Vehicle Refueling Infrastructure or Resilience Improvements.http://www.eeperformance.org) or (4), for certain projects which include third party-owned renewable energy system(s), reviewed and approved by Green Bank, or certified by an Approved Capital Provider as applicable and more particularly described in Appendix L. For the avoidance of doubt, the SIR calculation for the project must meet the requirements set forth in

- Article IV below and shall not be applicable for Zero-emission Vehicle Refueling Infrastructure or Resilience Improvements.
- E-F. For all Resilience Improvements, the requirement for the project to complete Standard SIR

 Technical Review process is not applicable. Instead, C-PACE financing eligibility for resilience
 projects will be based on an identification of Resilience Improvements and completion of an
 assessment of resilience cost savings through a resilience study. See Appendix O.
- F-G. All Projects require the written approval of the Green Bank, as the statewide administrator of the C-PACE Program.
- <u>H.</u> All Benefited Property Owner(s) associated with the project must sign a Disclosure of Risk Form.
- H.]. If the Energy Improvement(s) are wholly owned by any party or parties which is/are not the Benefited Property Owner(s), then such project must meet the requirements set forth in Appendix I.

Section 4. Restrictions on completed Qualifying Projects and consolidated Qualifying Projects

Qualifying Project improvements which have already been made to a Qualifying Property may be eligible for financing if such Qualifying Project was completed less than a calendar year prior to the complete submission of documents necessary for Green Bank approval (See Appendix F) of such Qualifying Project. Additionally, subsequent Energy Improvement(s) made to a Qualifying Property which has previously received C-PACE financing for a previous Qualifying Project, made within one calendar year from the close of C-PACE financing for the initial Qualifying Project, may be considered as one Qualifying Project for the purposes herein.

Section 5. Restrictions on Refinancing within the C-PACE Program

Qualifying Projects which closed on C-PACE financing are not eligible for Refinancing through the C-PACE Program. For the avoidance of doubt, nothing in the Program Guidelines is intended to prohibit Restructuring, at any time during the term of the applicable Benefit Assessment, through the C-PACE Program.

Section 6. Billing and Collection

Benefit Assessment Liens are billed in the same manner as real property taxes. As such, any payment schedule associated with any Benefit Assessment Liens will follow the billing cycle and due dates for real property taxes in the applicable Participating Municipality. Billing and collection of recorded Benefit Assessment Liens are conducted in accordance with the applicable Participation Agreement, as may be amended. If such Participation Agreement provides for Green Bank to conduct the billing and collection of Benefit Assessment Liens in such Participating Municipality then Green Bank will conduct such billing and collection in accordance with Appendix M.

Article IV. TECHNICAL STANDARDS OVERVIEW

The following provides a summary of the technical review process. Please refer to the Technical Standards (Appendices D & E & N & O) for a full description of audit and study requirements, technical review methodology and standards, and eligible and ineligible measures. For projects with Energy Improvements that require the SIR is greater than one, Ftechnical review may be completed by the Green Bank's selected Technical Administrator or an Approved Technical Reviewer, in accordance with the Technical Standards. As an alternative to this process, the Green Bank will also accept Investor Confidence Project-certified Investor Ready Energy Efficiency Projects (as defined by the Investor Confidence Project, see http://www.eeperformance.org)that demonstrate the SIR is greater than one. For Resilience Improvement and Zero-Emission Vehicle Refueling Infrastructure projects, the Green Bank will perform the technical review. Additionally, Green Bank may, in its sole discretion, perform technical review for projects which include third party-owned renewable energy system(s), as more particularly described in Appendix L.

Section 1. Defining a Scope of Work

Energy Improvements (excluding Resilience Improvements)

Benefited Property Owners should work with a qualified energy auditor and/or contractor with demonstrated experience to define a scope of work for their proposed project. This scope can range from installation of a single Energy Improvement, such as a new high efficiency boiler or a renewable energy system, to a whole building energy upgrade involving multiple, interactive Energy Improvements. A general list of eligible Energy Improvements and their typical energy saving characteristics can be found in the Technical Standards. The scope of work for the proposed project should be prepared and submitted by a Qualified Contractor or Registered Contractor. Projects require the applicant to conduct an energy audit or renewable energy feasibility study. For all projects involving the installation of Energy Improvements, depending on project type, size and complexity, the energy audit may range from a simple walkthrough of the building to an investment grade audit. The Qualified Contractor or Registered Contractor will determine the minimum required energy audit level consistent with the Technical Standards (Appendix D). The audit should identify the building's representative baseline energy use (except for in the case of zero-emission vehicle refueling), identify and recommend Energy Improvements, estimate the useful life of each Energy Improvement, determine total project capital cost and the projected energy savings that can be confidently achieved, and evaluate key financial metrics. All projects involving a renewable energy system are required to complete a feasibility study. Green Bank recommends that any feasible study follow the guidelines set forth in Technical Standards (Appendix <u>E₽</u>).

II) Resilience Improvements

Benefited Property Owners should work with a qualified professional and/or FORTIFIED evaluator to identify vulnerabilities to define a scope of work for their proposed resilience project. This scope can range from the installation of a single Resilience Improvement, such as switching from impervious-to-pervious surfaces to improve water filtration and reduce flooding, to a whole building/property

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¹ Connecticut utilities may provide what can be considered an ASHRAE Level I audit at no cost to applicants. The Green Bank can provide applicants referrals to qualified energy auditors to do higher level audits, the costs of which may be included in C-PACE financing.

approach involving multiple Resilience Improvements. A list of climate change adaptation and nature-based solution examples of resilience can be found in Appendix O. Projects that include Resilience Improvements require the applicant to conduct a resilience study that assesses the cost savings of the resilience project. The resilience study should include the identification of the vulnerabilities of the building/property, proposal on how to apply adaptation measures proposed to reduce risks, and an assessment of the cost savings of such adaptation measures. A resilience pre-study should also be completed, when applicable, as an aid to help identify possible Resilience Improvements. Pre-study Worksheet and resilience study requirements can be found as Exhibits (I & II) in Appendix O. FORTIFIED Designation can also be used as a means to access C-PACE financing for Resilience Improvements and must meet all requirements set forth by the FORTIFIED program. A summary of the FORTIFIED program, as well as further informational links, can be found in Appendix O,

Section 2. Standard SIR Technical Review

For projects with an SIR requirement, the Technical Administrator or Technical Reviewer will conduct a technical review, the purpose of which is to validate the reasonableness of project costs and energy savings projections. The Technical Administrator or Technical Reviewer will also confirm the projected SIR of the project is greater than one.

In addition, the methodology for tracking energy savings over an agreed upon term will be reviewed, thereby verifying for project stakeholders the extent to which projected energy savings are being achieved in an ongoing fashion.

Technical Review consists of three tasks:

- A. Verify that the building's baseline energy consumption is representative and reasonable, e.g., weather
- B. Validate the reasonableness of projected energy savings; and
- C. Confirm that an adequate commissioning plan exists.

The first two tasks are necessary to determine the SIR on the project and verify that it is greater than one. The third task ensures a property owner and the contractor have planned to confirm the correct installation and operational performance of the installed measures.

The Green Bank has developed a methodology for this technical review process, which relies upon two established industry protocols:

- A. Baseline Energy Use: ASTM E2797-15, Building Energy Performance Assessment (BEPA) Standard directed at data collection and baseline calculations for the energy audit
- B. Energy Improvement & Energy Savings: ASHRAE Level I, Level II and Level III Energy Audit Guidelines.

The Technical Administrator or a Technical Reviewer will qualify the proposed Energy Improvement(s) and validate the projected energy savings are consistent with these protocols and, in conjunction with the applicant, will confirm a baseline financing scenario that meets the SIR criteria.

Section 3. Resilience Technical Review

For Resilience Improvement projects without an SIR requirement, the Green Bank will conduct a technical review. The purpose of which is to confirm the eligibility of the improvements presented, as well as review the required resilience study and assessment of cost savings. In the case of a New Construction project that includes Resilience Improvement(s), the Technical Administrator will conduct the technical review.

Technical Review for Resilience Improvements consists of two tasks:

- A. Confirm the eligibility of the Resilience Improvement(s)
- B. Confirm a resilience study, complete with an assessment of cost savings, was completed according to the resilience study requirements found in Exhibit II of Appendix O

The Green Bank or the Technical Administrator will qualify the proposed Resilience Improvement(s) to validate the above criteria has been met, and, in conjunction with the applicant, will confirm a baseline financing scenario.

Section 43. Commissioning; Measurement and Verification

To verify that the project was installed according to the evaluated scope, projects are required to include a commissioning plan. A commissioning plan by a Qualified Contractor, Registered Contractor, Technical Reviewer, or—the Technical Administrator, or Green Bank can confirm the measures were properly installed and that the project is operating as intended.

Additionally, to (i) evaluate the energy savings effectiveness of the measures after they have been installed, and (ii) to collect energy consumption and/or clean energy production data, property owners are encouraged to work with their contractor(s) to implement an adequate measurement and verification plan. The International Performance Measurement and Verification Protocol (IPMVP) provides guidance for measurement and verification of the energy savings, for additional information see the Technical Standards.

The Green Bank may elect to facilitate M&V for projects submitted to the Green Bank for financing and may elect to offer the same services to third-party financed projects, at Green Bank's discretion and subject to additional costs/fees. M&V activities may be financed as an Associated Cost of any Qualifying Project.

Section 54. Alternative to Standard SIR Technical Review Process

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As an alternative to the Standard SIR Technical Review process (described in Section 2 and the Technical Standards), Green Bank will also consider projects that meet one of the following requirements as having met the technical review requirement of this Article:

- A. Projects that demonstrate a receipt of an Investor Ready Energy Efficiency certification from the Investor Confidence Project ("ICP") and provide a letter from the ICP Quality Assurance Provider stating that the SIR for the project is greater than one; or
- B. Certain projects which include third party-owned renewable energy system(s), reviewed, and approved by Green Bank, as more particularly described in Appendix L.

Section 65. New Construction, Repositioning, and Gut Rehabilitation

Given the lack of a pre-improvement energy baseline against which to measure energy savings and the difficulty of isolating and assigning portions of new construction, repositioning, and gut rehabilitation project costs to specific Energy Improvements, the Standard SIR Technical Review process (described in Section 2 and the Technical Standards) is not applicable. An alternate methodology will apply. For these Qualifying Projects, the allowable C-PACE financing is based on the design level of energy performance exceeding the applicable building energy code. See Appendix N.

C-PACE provides financing that allows new construction, repositioning and gut rehabilitation projects (each being a "New Construction Project") to be greener, more resilient, and more efficient.

Given the lack of a pre-improvement energy baseline against which to measure energy savings, and the difficulty of isolating and assigning portions of New Construction Project costs to particular Energy Improvements, the Standard SIR Technical Review process is not applicable. When seeking financing for energy-related measures, C-PACE eligibility for New Construction Projects will instead be determined by the overall energy performance of the property above the applicable building energy code. Energy-related New Construction Projects must demonstrate a minimum level of energy performance, above the applicable building energy code. See Appendix N.

<u>FFor energy-related measures</u>, the Green Bank's Technical Administrator will evaluate the base line and design levels of energy modeling submitted by Qualified Projects and determine the percentage by which the design exceeds the base line. The Green Bank will determine the Total Eligible Construction Costs (TECC) and identify the total C-PACE funding available. See Appendix F for costs and details.

When seeking C-PACE financing for Resilience Improvements (non-energy related), the Standard SIR Technical Review process is also not applicable. Instead, projects must assess cost savings through a resilience study. Based on the assessment of cost savings of Resilience Improvements by the Green Bank, a percentage of the project's TECC will be eligible for C-PACE financing. See Appendix O.

Section 76. Technical Review Auditing

Green Bank may select and retain a Technical Review Auditor or Technical Review Auditors to conduct periodic reviews of the technical review work performed by any Technical Reviewer, the Technical Administrator, or the Green Bank to evaluate compliance with the Program Guidelines and Technical Standards.

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Article V. C-PACE OPEN MARKET AND ELIGIBILITY CRITERIA FOR C-PACE CAPITAL PROVIDERS

Section 1. Concept of 'Open Market'

Connecticut maintains an "open market" approach to its C-PACE program, encouraging capital providers to be the primary financiers of Qualifying Projects and supporting Benefited Property Owners who wish to source theirown capital provider. For capital providers wishing to directly offer C-PACE financing, thereby becoming an "Approved Capital Provider" or "ACP", the Green Bank has created terms and conditions, attached hereto as Appendix F (the "Third-Party Capital Provider Terms and Conditions"), which outline the requirements and process for Approved Capital Provider to directly offer C-PACE financing to Benefited Property Owners and interact with Green Bank, as the program administrator.

Additionally, the Green Bank currently maintains dedicated capital to finance C-PACE projects. Benefited Property Owners looking to finance any Qualifying Project with Green Bank sourced capital may apply directly to Green Bank and follow the process outlined in Appendix F.

The 'open market' program offers multiple financing options to Benefited Property Owners, enabling the Green Bank to achieve its mission of making financing accessible and affordable.

Section 2. C-PACE Approved Third-Party Capital Providers

A Capital Provider must be approved by the C-PACE Program to offer financing directly to building owners in Connecticut. A Request for Qualifications (RFQ) can be found at https://www.cpace.com/Capital-Provider/Get-Started. The process for project origination, funding, and administration follows. Please review Appendix F, Third-Party Capital Provider Term Sheet for further details.

- A. The ACP or Benefited Property Owners may submit a completed C-PACE application and all associated documents necessary to demonstrate any project's compliance with the Program Guidelines and any other applicable requirements set forth in the Third-Party Capital Provider Terms and Conditions.
- B. Green Bank shall review such documents for compliance with the Program Guidelines and Third-Party Capital Provider Terms and Conditions, and, in its sole discretion, provide its approval of the Qualifying Project (thereby becoming an "Approved Project").
- C. The ACP may then enter into a Financing Agreement with Benefited Property Owner for such Approved Project (thereby becoming a "Closed Project").
- D. Concurrently or shortly thereafter, the ACP shall enter into an Administration Agreement with the Green Bank for such Closed Project.
- E. Green Bank will facilitate the filing and assignment to the ACP of a Benefit Assessment Lien, pursuant to the Administration Agreement.
- F. Green Bank will work with the ACP to collect any payments received pursuant the Benefit Assessment Lien and remit such payments to the ACP, pursuant to the Administration Agreement.

The ACP shall maintain its own financial underwriting criteria and financing terms and conditions for a C-PACE transaction, subject to the requirements set forth in the Program Guidelines.

Article VI. DEFINED TERMS

"Approved Capital Provider" or "ACP" shall mean a Third-party Capital Provider that (1) has been approved by Green Bank as a Capital Provider (and (2) is in good standing with the Green Bank.

"Associated Cost" shall have the meaning ascribed to it in Article III Section 3(B).

"Benefit Assessment" shall mean an assessment authorized by the C-PACE Legislation. In an event of a conflict between this definition and that which is ascribed in the C-PACE Legislation, the C-PACE Legislation shall govern.

"Benefit Assessment Lien" shall mean a lien which evidences a Benefit Assessment and is recorded by a Participating Municipality on the land records against a Qualifying Property at Green Bank's direction pursuant to the Participation Agreement. The form of such Benefit Assessment Lien is attached hereto as Appendix K, as may be modified or amended from time to time by Green Bank, in its sole discretion.

"Benefited Property Owner" shall mean an owner of Qualifying Commercial Real Property who desires to install Energy Improvements and provides free and willing consent to the Benefit Assessment against the Qualifying Commercial Real Property. In an event of a conflict between this definition and that which is ascribed in the C-PACE Legislation, the C-PACE Legislation shall govern.

"C-PACE" shall have the meaning ascribed to it in Article I.

"C-PACE Legislation" shall mean Section 16a-40g of the Connecticut General Statutes, as may be amended, attached hereto as Appendix A.

"Commercial or Industrial Property" shall mean any real property other than a Residential Dwelling containing less than five dwelling units. In an event of a conflict between this definition and that which is set forth in the C- PACE Legislation, the C-PACE Legislation shall govern.

"Disclosure of Risk Form" shall mean the disclosure of risk form associated with C-PACE, attached hereto as Appendix H, as may be modified or amended from time to time by Green Bank, in its sole discretion.

"District Heating and Cooling System" shall mean a local system consisting of a pipeline or network providing hot water, chilled water or steam from one or more sources to multiple buildings. In an event of a conflict between this definition and that which is ascribed in the C-PACE Legislation, the C-PACE Legislation shall govern.

"Energy Engineer" shall mean a professional or entity who/which meets one of the following: (1) holds a Certified Energy Manager or Certified Energy Auditor accreditation, (2) is a Professional Engineer with demonstrated relevant energy experience, or (3) a contractor with relevant demonstrated experience as determined by the Technical Administrator.

"Energy Improvement" shall mean (A) participation in a District Heating and Cooling System by Qualifying Commercial Real Property, (B) participation in a microgrid, as defined in Section 16-243y of the Connecticut General Statutes, including any related infrastructure for such microgrid, by Qualifying Commercial Real Property, provided such microgrid and any related infrastructure incorporate clean energy, as defined in Section 16-245n of the Connecticut General Statutes, (C) any improvement, renovation or retrofitting of Qualifying Commercial Real Property to reduce energy consumption or improve energy efficiency, (D) installation of a renewable energy system to service qualifying commercial real property, or (E) installation of a solar thermal or geothermal system to service qualifying commercial real property, or (F) installation of refueling infrastructure for zero-emission vehicles to a Qualifying Commercial Real Property, provided such renovation, retrofit or installation described in subparagraph (C) to (G), inclusive, is permanently fixed to such Qualifying Commercial Real Property. In an event of a conflict between this definition and that which is ascribed in the C-PACE Legislation, the C-PACE Legislation shall govern.

"EUL" shall have the meaning ascribed to it in Article III Section 3(D).

"Financed Amount" means the combined costs of the Energy Improvement(s) and Associated Cost(s) which has been or will be financed though C-PACE for any Qualifying Project.

"Financing Agreement" shall mean a written agreement between a Benefited Property Owner and either an Approved Capital Provider or the Green Bank, or any of its subsidiaries, for the financing, leasing, or purchasing power from, a Qualifying Project. Such financing agreement shall contain, among other things, a provision which allows the Benefited Property Owner to rescind the agreement not later than three business days from the date of such agreement.

"Green Bank" shall have the meaning ascribed to it in Article I.

"Participating Municipality" shall mean a municipality, as defined in Section 7-369 of the Connecticut General Statutes, that has entered into a Participation Agreement. In an event of a conflict between this definition and that which is ascribed in the C-PACE Legislation, the C-PACE Legislation shall govern.

"Participation Agreement" shall mean a written agreement between Green Bank and a Participating Municipality, as approved by its legislative body, pursuant to which the municipality has agreed to assess and assign, Benefit Assessments to Green Bank in return for Energy Improvements for Benefited Property Owners within such municipality and costs reasonably incurred in performing such duties. The template participation agreement is attached hereto as Appendix B, as may be modified or amended from time to time by Green Bank, in its sole discretion.

"Professional Engineer" shall mean an individual, or company which employees such individual, who is licensed as a professional engineer and in good standing with the relevant licensing authorities in the State of Connecticut.

"Program Guidelines" shall have the meaning ascribed to it in Article I.

"Projected Associated Savings" shall mean non-energy savings that have a close nexus to the Energy Improvement(s) that are part of a Project. Examples include, but are not limited to, federal tax credits,

depreciation, and revenues from the sale of environmental attributes. Green Bank, in its sole discretion, may determine which types of savings may be considered to fall under this definition.

"Projected Energy Savings" shall mean the estimated energy savings, calculated in accordance with the Technical Standards, from any Energy Improvement(s) over the EUL of such improvements.

"Projected Financing Cost" shall mean the total projected debt service associated with the Financed Amount for a Qualifying Project including, but not limited to, all principal, interest, and any fees over the term of the financing. This does not include any potential capitalized interest during constructions, late fees or penalties.

"Projected Total Cost Savings" shall mean the combined value of the Projected Energy Savings and the Projected Associated Savings for any Qualifying Project.

"Qualified Contractor" shall mean an individual or entity who/that meets one of the following: (1) holds a Certified Energy Manager or Certified Energy Auditor accreditation, (2) is a Professional Engineer with demonstrated relevant energy experience, or (3) a contractor with relevant demonstrated experience.

"Qualifying Commercial Real Property" shall mean any Commercial or Industrial Property, regardless of ownership, that meets the qualifications established for the C-PACE program. In an event of a conflict between this definition and that which is provided in the C-PACE Legislation shall govern.

"Qualifying Project" shall mean an energy improvement project which meets all the requirements set forth in Article III Section 3.

"Qualifying Property" shall mean a Qualifying Commercial Real Property which meets all the requirements set forth in Article III Section 2.

"Refinancing" means, in the context of any existing Financing Agreement, a Benefited Property Owner entering into a new Financing Agreement with any C-PACE ACP other than the capital provider (or its successors or assigns) who is a party to the applicable existing Financing Agreement for the purpose of repaying or refinancing the existing Financing Agreement and Benefit Assessment, including but not limited to, filing of a new Benefit Assessment associated with the same Qualifying Project.

"Registered Contractor" shall mean a contractor who has registered with Green Bank, via the contractor registration process (https://www.cpace.com/Contractor/Get-Started/Contractor-Sign-Up), and remains in good standing with Green Bank.

"Residential Dwelling" shall mean a structure used or occupied, or intended to be used or occupied, in whole or in part, as the home or residence of one or more persons. Residential dwelling shall not include any structure which is:

- A. A home or residence which is part of public or private institution, if such residence is incidental to provision of medical, geriatric, educational, counseling, religious, or similar services,
- B. A campground, hotel, motel, extended stay facility, vacation residential facility, boardinghouse, fraternal or social organization, or similar lodgings, and

C. 3. Primarily used for business, commercial, charitable, not-for-profit, or agricultural purposes.

"Resilience Improvement" shall mean and improvement made to a commercial propertyQualifying Commercial Real Property that improves the property's ability to prepare for and adapt to changing conditions and withstand and recover rapidly from deliberate attacks, accidents or naturally occurring threats or incidents, including, but not limited to, threats or incidents associated with the impacts of climate change.

"Restructuring" means, in the context of any existing Financing Agreement, a Benefited Property Owner entering into a new Financing Agreement or any modification of the existing Financing Agreement with the C-PACE ACP (or its successors or assigns) who is a party to the applicable existing Financing Agreement for the purpose of restructuring, amending, restating, or otherwise modifying the existing Financing Agreement and Benefit Assessment, including but not limited to, releasing the existing Benefit Assessment and entering into a new Financing Agreement and filing of a new Benefit Assessment associated with the same Qualifying Project, subject to all other applicable program requirements.

"SIR" shall have the meaning ascribed to it in Article III Section 3(G).

"Technical Administrator" shall mean the entity, selected by Green Bank pursuant to an RFP process, which may conduct technical review as well as provide Green Bank with guidance and consultation in the development and implementation of the Technical Standards and Program Guidelines. The Technical Administrator may also work with contractors to help them develop a building's baseline energy consumption and energy savings estimates for projects.

"Technical Reviewer" shall mean an entity which has been approved by and in good standing with Green Bank in accordance with the standard set forth in Appendix J. Technical reviewers may be proposed to Green Bank for approval by ACP. For a list of Technical Reviewers that are currently approved and in good standing with Green Bank, please visit www.cpace.com/technicalreviewers.

"Technical Review Auditor" shall mean an entity or entities, selected by Green Bank pursuant to an RFP process, which may conduct periodic reviews of the technical review work performed by any Technical Reviewer, the Technical Administrator or the Green Bank to evaluate compliance with the Program Guidelines and Technical Standards.

"Technical Standards" shall mean the complete description of energy audit requirements, technical review methodology and standards, and eligible and ineligible measures for C-PACE, attached hereto as Appendix D, as may be amended or modified from time to time by Green Bank in its sole discretion.

"Approved Capital Provider" means an entity, other than the Green Bank or any of its subsidiaries, that enters into one or more Financing Agreement(s). In an event of a conflict between this definition and that which is ascribed in the C-PACE Legislation, the C-PACE Legislation shall govern.

"Zero-emission Vehicle Refueling Infrastructure" means infrastructure used to refuel Zero-emission Vehicles.

"Zero-emission Vehicle" shall mean a battery electric vehicle, hybrid electric vehicle, range-extended electric vehicle and any vehicle that is certified by the executive officer of the California Air Resources

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Board to produce zero emissions of any criteria pollutant under all operational modes and conditions. In an event of a conflict between this definition and that which is ascribed in the C-PACE Legislation, the C-PACE Legislation shall govern.

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Appendix N: C-PACE NEW CONSTRUCTION, REPOSITIONING AND GUT REHABILITATION TECHNICAL STANDARDS AND APPROVAL PROCESS

- 1. Defined Terms
- 2. Overview
- 3. Supporting Documentation
 - a. Energy
 - a.b. Resilience
- 3.4. Total Eligible Construction Cost (TECC) Determination
- 4.5. Energy Performance Determination
 - a. Whole Building Energy Model Path
 - b. Home Energy Rating System (HERS) Index Multifamily Path
- 6. Resilience Determination
 - a. Bonus Measures
 - b. FORTIFIED
- 5.7. Bonus Technologies Measures & Net Zero Design Determination
 - a. Bonus Technologies Measures
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- 8. Total Eligible C-PACE Financed Amount Determination
- 6.9. Clean Energy Generation for New Construction
- 7-10. Project Examples

1. Defined Terms

This document is an appendix to the C-PACE program guidelines (the "Program Guidelines") published by the Connecticut Green Bank (the "Green Bank"). Pursuant to the Program Guidelines, this appendix may be modified or amended by Green Bank, in its sole discretion, from time to time. Capitalized terms used but not defined herein have the meaning ascribed to them in the Program Guidelines.

2. Overview

C-PACE provides financing that allows new construction, repositioning and gut rehabilitation projects (each being a "New Construction Project") to be greener, more resilient, and more efficient.

Given the lack of a pre-improvement energy baseline against which to measure energy savings, and the difficulty of isolating and assigning portions of New Construction Project new construction, repositioning and gut rehabilitation project (each being a "New Construction Project") costs to particular Energy Improvements, the Standard SIR Technical Review process (described in Article IV, Section 2 of the Program Guidelines) is not applicable... When seeking financing for energy-related measures, C-PACE eligibility for New Construction Projects will instead be determined by the overall energy performance of the property above the applicable building energy code. Energy-related New Construction Projects must demonstrate a minimum level of energy performance, above the applicable building energy code, using one of the two paths outlined below.

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When seeking C-PACE financing for Resilience Improvements (non-energy related), the Standard SIR Technical Review process (described in Article IV, Section 2 of the Program Guidelines) is also not applicable. Instead, projects must assess cost savings through a resilience study, using one of the two paths outlined below.

Based on the determination of energy performance and/or assessment of cost savings of Resilience Improvements, a percentage of the project's TECC will be eligible for C-PACE financing ("C-PACE Eligible Finance Amount"). Fees and interest associated with the C-PACE financing can be added to the C-PACE Eligible Finance Amount to determine the total C-PACE benefit assessment amount.

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3. Supporting Documentation

The applicant must submit the following documents to the Green Bank and the Technical Administrator, in a form acceptable to both in their discretion:

a. Energy

- Narrative describing the New Construction Project and scope (typically prepared by the modeler)
- · Energy modeling input and output files
- Supporting spreadsheet calculations, if any
- Design drawings
- · Equipment cutsheets and AHRI certificates
- · Detailed construction budget
- · Letter of agreement from utility programs, if applicable
- For projects opting to use the HERS Index Multifamily path (as described in Section 4(b) below):
 - HERS Index Rating analyses
 - Data collection sheets for non-residential spaces

•b. Resilience

- Pre-Study Worksheet (optional, but encouraged)
- Resilience Study, including an assessment of cost savings (see Resilience Study Requirements
 Exhibit II)
- If designing for FORTIFIED:
 - Assessment of cost savings
 - All applicable forms and back-up documentation submitted to the project's evaluator for review and determination of compliance. This could include, but is not limited to the following examples. See all requirements and how to get started with FORTIFIED here (ADD LINK):
 - Project summary
 - Site photographs
 - Architectural & structural drawings
 - Design & construction specifications
 - Roof system design

4. Total Eligible Construction Cost (TECC) Determination

For a New Construction Project, the sum of construction hard and soft costs directly related to a building's design and construction (the "Total Eligible Construction Cost" or "TECC"), shall be determined by the Green Bank and Technical Administrator pursuant to this Section. The applicant must submit a detailed construction budget that includes the itemized hard costs and soft costs in an .xls or .csv format. The Technical Administrator will review the budget and send comments and questions to the applicant regarding specific line items to determine eligibility. Based on the applicant's submitted materials and responses, the Technical Administrator will provide a final TECC determination.

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The following list contains examples of eligible costs that may be included in the TECC calculation. The Green Bank and Technical Administrator will ultimately determine the maximum TECC for each New Construction Project:

- Architectural, engineering, and design services
- Energy modeling services
- Construction hard costs
- Resilience study services/fees
- Evaluator services/fees for resilience
- <u>Certification/Designation fees</u>
- Environmental studies
- Plumbing
- Landscaping
- Energy consuming equipment and energy saving measures
- Permits
- Administrative fees and project management

- Developer fees
- Appraisal costs
- Lender inspection costs
- General liability Insurance
- Builder's risk insurance
- Building safety systems such as sprinklers and fire alarms
- · Utility connection and impact fees
- · Legal and accounting fees
- Construction period interest
- Financing fees
- Operating losses during construction
- Interest reserves
- Contingencies

The following costs are NOT eligible to be included in the TECC calculation. The Green Bank and Technical Administrator will ultimately determine the maximum TECC for each New Construction Project:

- Costs related to land acquisition
- Marketing expenses
- Plug-in equipment (appliances, bulbs, etc.)
- Furniture, fixtures, and equipment
- Interior decorations such as artwork
- Any items not affixed to the property

5. Energy Performance Determination

There are two paths that a New Construction Project can use to demonstrate it meets a required levels of energy performance:

- (a) Whole Building Energy Model Path, and
- (b) HERS Index Multifamily Path

Applicants are strongly encouraged to discuss and review their projects with the Green Bank and Technical Administrator before applying for project approval. This step will help the applicant determine which path may be best for a New Construction Project and answer any questions related to the requirements set forth below.

Technical review of a New Construction Project must be completed by the Technical Administrator.

a. Whole Building Energy Model Path

A New Construction Project using this path must use a whole building energy model to demonstrate that the proposed building's energy performance will exceed, to a minimum level, a baseline building energy performance. The baseline building energy performance is based on a building that is designed and built to meet Connecticut building and energy code requirements applicable at the time building permits are obtained (https://portal.ct.gov/DAS/Office-of-State-Building-Inspector/Connecticut-State-Building-Code). All C-PACE New Construction projects can use this path, including projects for commercial, industrial, multifamily, and other C-PACE eligible properties, as well as gut rehabilitation or repositioning to change the use of an existing facility at C-PACE eligible properties.

For projects using IECC 2021 as the baseline code, a minimum improvement in energy performance of 5% over the baseline building is required to be eligible for C-PACE financing. The C-PACE Eligible Finance Amount for such a building that demonstrates a 5% improvement over the baseline will be 20% of the TECC. Buildings that demonstrate an energy performance of 10% over the baseline will be eligible for 25% of the TECC (as summarized in Table 1 below).

For projects using a baseline of IECC 2018 or prior, a minimum improvement in energy performance of 10% over the baseline building is required to be eligible for C-PACE financing. The C-PACE Eligible Finance Amount for such a building that demonstrates a 10% improvement over the baseline will be 20% of the TECC. Buildings that demonstrate an energy performance of 20% over the baseline will be 25% of the TECC (as summarized in Table 1 below).

The following energy modeling software can be used to model the baseline and proposed buildings' energy performance. Software other than those outlined below can be utilized upon review and approval by the Technical Administrator:

- eQuest
- Energy Plus (Open Studio)
- Trane Trace or Trace 3D
- Design Builder

Submittals made to the Connecticut public utilities Energy Conscious Blueprint Program in support of energy efficiency program incentives would be acceptable documentation to provide in support of the C-PACE technical requirements. The Connecticut public utilities energy modeling guidelines can be found here (https://energizect.com/your-business/solutions-list/Energy-Conscious-Blueprint). These submittals will be subject to the review of the technical administrator to ensure conformity with the C-PACE program guidelines.

An example of a project using the Whole Building Energy Model Path can be found in Section 8 (Project Examples).

b. HERS Index Multifamily Path

C-PACE New Construction projects for multifamily properties, or eligible mixed-use properties which include multifamily, can use this path to demonstrate that the proposed building's energy performance will exceed, to a minimum level, a baseline building energy performance through the Home Energy Rating System ("HERS") Index.

The HERS index is a nationally recognized system for inspecting, calculating, and estimating residential and multifamily energy performance (https://www.hersindex.com/). The HERS index rating is determined by a certified Home Energy Rater, who assesses the energy efficiency of a residence or multifamily dwelling unit and assigns it a relative performance rating. Every point below 100 on the HERS index translates to roughly 1% energy savings compared to a IECC 2006 code-built residence or multifamily dwelling unit. The lower the rating, the more efficient the dwelling unit. For multifamily buildings, each unique dwelling unit type receives a HERS index rating. After a rating is determined for each dwelling unit type, a weighted average of the total units is calculated based on the quantity of each dwelling unit type. This weighted average is used as the overall HERS index rating. For example, if there 3 unit types (A with a HERS index rating of 40, B with a HERS index rating of 45, and C with a HERS index rating of 60) and there are 10 each of A and B, and 20 of C (for a total of 40 units), then the weighted average HERS index rating would be 51.25.

For the purposes of the HERS Index Multifamily Path, only corridors, stairwells, exterior lighting, and lobbies are considered to be common areas in multifamily buildings (collectively being "Common Areas"). All other spaces, including but not limited to, clubhouses, gymnasiums, enclosed parking areas, swimming pools, etc. will be considered commercial spaces (collectively being "Commercial Spaces").

For Common Areas and Commercial Spaces for mixed-use facilities, the Technical Administrator will provide data collection sheets for commonly applicable energy technologies/measures. These completed data collection sheets need to be provided by the applicant along with the other relevant project documentation, including the HERS index rating analyses. The data collection sheets will be used to compare the specifications of proposed equipment in non-residential spaces to code-compliant or industry standard practice baseline equipment.

For projects using IECC 2021 as the baseline code, a maximum weighted HERS index rating of 40 is required to be eligible for C-PACE financing. For projects where the weighted HERS index rating is 35 and under, the equipment serving the Common Areas and Commercial Spaces would need to meet IECC 2021 code requirements, at minimum. For projects where the weighted HERS index rating is between 36 and 40, the efficiencies of the equipment serving the Common Areas and Commercial Spaces would need to exceed IECC 2021 code requirements by at least 5%. For such projects, the C-PACE Eligible Finance amount is of 20% of the TECC. For projects where the weighted HERS index rating is 30 and under, the equipment serving the Common Areas and Commercial Spaces would need to meet IECC 2021 code requirements, at minimum. For projects where the weighted HERS index rating is between 31 and 35, the efficiencies of the equipment serving the Common Areas and Commercial Spaces would need to exceed IECC 2021 code requirements by at least 10%. For such projects, the C-PACE Eligible Finance amount is of 25% of the TECC.

For projects using a baseline of IECC 2018 or prior, please refer to Table 2 below for the weighted HERS index rating required to be eligible for C-PACE financing.

The following tools, accredited by the Residential Energy Services Network (RESNET), can be used to determine the HERS index rating including:

- REM/Rate
- EnergyGauge® USA
- Ekotrope

Energy efficiency incentive submittals made to the Connecticut utilities Residential New Construction Program would be acceptable documentation to provide in support of the C-PACE technical requirements (https://energizect.com/your-home/solutions-list/residential-new-construction-program). These submittals will be subject to the review of the technical administrator to ensure conformity with the C-PACE program guidelines.

The following multifamily properties are NOT eligible to use the HERS Index Multifamily Path. These properties would need to use the "Whole Building Energy Model Path" as outlined above in Section 4a. Please contact the Technical Administrator in situations that need further clarification:

- Multifamily facilities with dwelling units served by central plants (including geothermal)
- Mixed-use facilities with significant process loads such as refrigeration, compressed air, manufacturing processes, etc.
- Mixed-use facilities where the commercial space, as referenced earlier in this section, is greater than 20% of total occupied space
- Historic buildings as designated by the state of CT (https://portal.ct.gov/DECD/Content/Historic-Preservation/01 Programs Services/Historic-Designations/State-Registry-of-Historic-Places)

An example of a project using the HERS Index Multifamily Path can be found in Section 8 (Path Examples).

6. Resilience Determination

Resilience Improvements can be incorporated into a C-PACE New Construction project in one of two ways (outlined below), and may or may not incorporate energy measures. Please note that Resilience Improvements can also be financed as a stand-alone C-PACE project and can follow the Resilience Technical Standards as outlined in Appendix O:

a. Adding prescriptive Resilience Improvements as Bonus Measure(s)

Applicants can add prescriptive Resilience Improvements to an energy project as Bonus Measure(s), defined in the New Construction Appendix N, for a maximum of 10% additional of the TECC in C-PACE financing. The addition of Resilience Improvements as Bonus Measures will require an assessment of savings as part of a resilience study.

b. Using FORTIFIED Commercial or Multifamily program

In an effort to reduce damage to residential, commercial and multifamily structures and help businesses re-open more quickly following severe weather, the Insurance Institute for Business & Home Safety (IBHS) developed FORTIFIED™ Commercial, a voluntary, resilient construction and re-roofing standard and designation/compliance program. FORTIFIED employs an incremental approach with three levels of designations available so design professionals can work with building owners to choose a desired level of protection that best suits their budgets and resilience goals.

Projects using the FORTIFIED Commercial or Multifamily program and designing for one of the 3 designation levels (Roof, Silver or Gold) may qualify for up to 20% of the TECC in C-PACE financing. Projects designing for one of the 3 designation levels may also incorporate additional Bonus Measures, for up to an additional 10% of the TECC in C-PACE financing. Lastly, projects that are also designing for Net Zero may be eligible for up the maximum of 35% of the TECC in C-PACE financing.

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Refer to Table 3 found in this Appendix for a full overview of the different levels of available C-PACE financing for resilience improvements in New Construction projects.

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6.7. Bonus Technologies Measures & Net Zero Design Determination

a. Bonus Technologies Measures

In order to promote emerging clean energy technologies, resiliencey, state policy goals, and energy transition goals, if a New Construction Project design contains at least two of the technologies-measures listed below (each being a "Bonus TechnologyMeasure" and collectively being "Bonus TechnologiesMeasures"), an additional 5% of C-PACE financing is made available. If a New Construction Project design contains at least four of the technologies-measures listed below, an additional 10% of C-PACE financing is made available (as summarized in Table 1, & Table 2 & Table 3).

- Electric vehicle charging stations (Level 2 or better)
- Battery storage systems sized appropriately for the project (behind the meter)
- High-efficiency heat pumps (air, ground, or water source, better than code & facility-wide)
- Networked lighting controls (facility-wide)
- Hard wired smart plug load controls (facility-wide)
- Heat pump water heaters (facility-wide)
- Passive window shading system, sized appropriately for the project
- Non-energy related Resilience Improvement, such as impervious-to-pervious surface transitions, rain gardens, or natural ecosystem creation (i.e. wetlands or saltwater marshes), sized appropriately for the project
- Commercial organic recycling improvements such as more efficient food service and/or on-site
 compost management, sized appropriately for the project
- Fuel cell, sized appropriately for the project, in combined heat and power mode (please note
 that these systems can either be included as a Bonus Technology under the Whole Building
 Energy Model path OR as a clean energy electric generation measure as defined in Section 7)
- Solar PV, sized appropriately for the project (please note that these systems can either be included as a Bonus Technology under the Whole Building Energy Model path OR as a clean energy electric generation measure as defined in Section 7)

b. Net Zero Design

If a New Construction project is designed to be all-electric and to achieve net zero, as defined by the New Buildings Institute (NBI), the C-PACE Eligible Finance amount is 35% of the TECC (as summarized in Table 1, & Table 2 & Table 3 in this Appendix). Table 3 in the NBI document titled "Zero Energy Commercial Building Targets" (https://newbuildings.org/wp-

content/uploads/2019/09/ZeroEnergyCommercialBuildingTargets.pdf) specifies the energy use intensity (EUI) that needs to be achieved for various building types prior to the implementation of on-site renewables. Connecticut falls under climate zone 5A and should be referenced when determining the desired EUI. If a building type is not specified or clearly identified in the referenced NBI document, please reach out to the Green Bank and Technical Administrator for guidance on how to determine the appropriate target EUI. A detailed review of project documentation and proposed designs would be

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conducted by the Technical Administrator in order to approve a net zero design and eligibility to receive 35% of the TECC. Formatted: Normal, No bullets or numbering 9

7.8. Total Eligible C-PACE Financed Amount Determination

Based on determinations made by the Green Bank and Technical Administrator pursuant to the requirements above, the total eligible C-PACE financed amounts for New Construction Projects are set forth in tables $1_{\underline{r}}$ and $2_{\underline{r}}$ and $3_{\underline{r}}$.

Table 1- Whole Building Energy Model Path Eligible Financed Amount

	Table 2 Trible Danaing Energy model rath Englisher mandeavant					
IECC Code Year	Min. Energy Performance Above Code to be eligible for C-PACE Financing	C-PACE Financed Amt. of TECC	C-PACE Financed Amt. after Addition of Min. 2 Bonus Technologies	C-PACE Financed Amt. after Addition of Min. 4 Bonus Technologies	C-PACE Financed Amt. Designed for Net Zero	
2021	5%	20%	25%	30%		
2021	10%	25%	30%	35%	35%	
2018 or prior	10%	20%	25%	30%	33%	
2018 or prior	20%	25%	30%	35%		

Table 2- HERS Index Multifamily Path Eligible C-PACE Financed Amount

IECC Code Year	Weighted HERS Index Rating*	Min. Common Area and Commercial Space equip. efficiency requirement	C-PACE Financed Amt. of TECC	C-PACE Financed Amt. after Addition of Min. 2 Bonus Technologies	C-PACE Financed Amt. after Addition of Min. 4 Bonus Technologies	C-PACE Financed Amt. Designed for Net Zero
2021	35 and under	Meets code	20%	25%	30%	
2021	36-40	5% > code	20%	25%	30%	
2021	30 and under	Meets code	25%	30%	35%	
2021	31-35	10% > code	25%	30%	35%	
2018 &	46 and under	Meets code	20%	25%	30%	
2015	47-51	10% > code	20%	25%	30%	
2018 &	36 and under	Meets code	25%	30%	35%	
2015	37-41	20% > code	25%	30%	35%	
2012	55 and under	Meets code	20%	25%	30%	
2012	56-60	10% > code	20%	25%	30%	35%
2012	45 and under	Meets code	25%	30%	35%	33%
2012	46-50	20% > code	25%	30%	35%	
2009	70 and under	Meets code	20%	25%	30%	
2009	71-75	10% > code	20%	25%	30%	
2009	60 and under	Meets code	25%	30%	35%	
2009	61-65	20% > code	25%	30%	35%	
2006	85 and under	Meets code	20%	25%	30%	
	86-90	10% > code	20%	25%	30%	
2006	75 and under	Meets code	25%	30%	35%	
2006	76-80	20% > code	25%	30%	35%	

^{*}Please note: At this time, the values listed as the "Weighted HERS Index Rating" for 2021 in Table 2 above are an **estimate**.

Once IECC 2021 code has been finalized, we will finalize those values, if needed.

Table 3- Resilience for New Construction Total Eligible C-PACE Financed Amount

FORTIFIED Designation Level	C-PACE Financed Amt. Of TECC (High wind)	C-PACE Financed Amt. Of TECC (Hurricane)	C-PACE Financed Amt. after Addition of Min. 2 Bonus Measures	C-PACE Financed Amt. after Addition of Min. 4 Bonus Measures	C-PACE Financed Amt. Designed for Net Zero
Roof	<u>5%</u>	<u>5%</u>	<u>10%</u>	<u>15%</u>	
<u>Silver</u>	<u>10%</u>	<u>15%</u>	<u>20%</u>	<u>25%</u>	<u>35%</u>
Gold	<u>15%</u>	20%	<u>25%</u>	30%	

^{*} The FORTIFIED Commercial & Multifamily standards have different requirements for Hurricane regions (locations where wind speed for Risk Category II buildings is greater than 115 mph in ASCE-7 wind maps) and High Wind regions (everywhere else).

8.9. Clean Energy Electric Generation for New Construction

C-PACE financing for Class I Renewable Energy Sources (as defined in Conn. Gen. Stat. Sec. 16-1(a)) as part of a new construction project, can either be included as a Bonus Technology when using the Whole Building Energy Model Path OR as an Energy Improvement using standard SIR methodology. If included using the standard SIR methodology, these costs cannot be included in the TECC or in the energy model as an efficiency measure. The impact of the generation on the associated building's energy performance will not be included in the assessment of energy savings against the Baseline Building Energy Performance. If approved, the total eligible C-PACE-financed cost associated with the clean energy electric generation measure will be added to the C-PACE Eligible Finance Amount allowable under New Construction.

Geothermal systems must be included in a whole building energy model as part of the new construction analysis since they are not electric generation systems and not subject to treatment as clean energy electric generation as outlined in this section.

C-PACE New Construction clean energy electric generation measures shall be reviewed by the Technical Administrator.

9-10. Project Examples

Whole Building Energy Model Path Example

If a project has a TECC of \$10 million and is modeled to have an improvement in energy performance over the IECC 2021 energy code of 7%, it will be eligible for 20% of the TECC in C-PACE financing (\$2 million in this case). If that same project also includes four Bonus Technologies, it will be eligible for 30% of the TECC in C-PACE financing (\$3 million in this case). If the same project was permitted prior to the Connecticut adoption of IECC 2021, it would need to exceed the applicable IECC code by at least 10%. The percentage of TECC eligibility for C-PACE financing remains the same.

HERS Index Rating Path Example

A 200,000 square foot C-PACE eligible new construction multifamily building consisting of 175,000 square feet of residential space and 25,000 square feet of Common Areas and Commercial Space has a TECC of \$20 million. The applicable energy code for the project is IECC 2015. The facility is modeled by a HERS rater to have a weighted HERS index rating of 50. If the Common Area and Commercial Space equipment is at least 10% more efficient than the IECC 2015 code requirements, the project would be eligible for 20% of the TECC in C-PACE financing (\$4 million in this case). If the facility had a weighted HERS index rating of 46 or under, then the Common Area and Commercial Space equipment would only need to meet the IECC 2015 code to be eligible for 20% of the TECC in C-PACE financing. If that same project also includes two Bonus Technologies, it will be eligible for 25% of the TECC in C-PACE financing (\$5 million in this case).

Appendix O: C-PACE RESILIENCE TECHNICAL STANDARDS

- 1. Defined Terms
- 2. Overview
- 3. Examples of Resilience Improvements
 - a. Climate Change Adaptation Examples
 - b. Nature-based Solution Examples
 - c. FORTIFIED Designation
 - d. Other
- 4. Supporting Documentation
- 5. Resilience for New Construction

1. Defined Terms

This document is an appendix to the C-PACE Program Guidelines (the "Program Guidelines") published by the Connecticut Green Bank (the "Green Bank"). Pursuant to the Program Guidelines, this appendix may be modified or amended by Green Bank, in its sole discretion, from time to time. Capitalized terms used but not defined herein have the meaning ascribed to them in the Program Guidelines.

2. Overview

Due to Public Act 22-6, an amendment to the C-PACE Statute (

https://www.cga.ct.gov/current/pub/chap_298.htm#sec_16a-40g), the Standard SIR Technical Review process (described in Article IV, Section 2 of the Program Guidelines) for a project that improves the resilience of a property (each being a "Resilience Project") is not applicable. Instead, C-PACE eligibility for Resilience Projects will be determined by the completion of resilience study that assesses the expected resilience cost savings of the Resilience Improvements over the useful life of such improvements before approving financing. Resilience Projects should meet all current building codes, when applicable. Based on an identification of Resilience Improvements and completion of an assessment of resilience cost savings through a resilience study, the project will be eligible for C-PACE financing ("C-PACE Eligible Finance Amount"). Fees and interest associated with the C-PACE financing can be added to the C-PACE Eligible Finance Amount to determine the total C-PACE benefit assessment amount.

3. Examples of Resilience Improvements

Resilience Improvements help a building/property adapt to vulnerabilities that could interrupt business operations and impede the property owner's ability to stay open and functional. C-PACE financing for Resilience Projects is available to aid in these situations by providing the funding needed to adapt to such vulnerabilities. The following are examples of Resilience Improvements that can be assessed through a resilience study and considered for C-PACE financing:

- a. Climate change adaptation <u>examples</u>: The following are examples of events and/or conditions that can have negative effects on buildings and properties. Adapting to these challenges caused by climate change by reinforcing their structures through resilient building practices can help property and business owners stay open, functional, and operational.
 - a. Flood Management
 - b. Storm events/Extreme Weather
 - c. Wind
 - d. Fire
 - e. Sea Level Rise
 - f. Extreme Heat (MFH)
- b. Nature-based solutions: Infrastructure, including natural infrastructure, which promotes stormwater management, healthy vegetation, soils, and aquatic ecosystems to provide ecosystem services such as flood control and hazard risk reduction, e.g. bioswales, rain gardens, pervious surfaces, tree planting (native species and/or shade trees) and removal of dead trees, or natural ecosystem restoration (i.e. wetland, marshland, or other natural assets)
- c. FORTIFIED Designations: In an effort to reduce damage to residential, commercial and multifamily structures and help businesses re-open more quickly following severe weather, the Insurance Institute for Business & Home Safety (IBHS) developed FORTIFIED™ Commercial, a voluntary, resilient construction and re-roofing standard and designation/compliance program. FORTIFIED employs an incremental approach with three levels of designations available (listed below) so design professionals can work with building owners to choose a desired level of protection that best suits their budgets and resilience goals.
 - a. FORTIFIED Roof
 - b. FORTIFIED Silver
 - c. FORTIFIED Gold
- d. **Other:** Other vulnerabilities that could impede a building's ability to operate and are not listed above can also be reviewed for C-PACE financing. In order to be considered, a resilience study must still be completed, including an assessment of the cost savings associated with the proposed Resilience Improvement(s) and all other requirements listed in Section 4 b. and Exhibit II of this Appendix.

4. Supporting Documentation

The applicant must submit the following documents to the Green Bank, in a form acceptable in their discretion. All additional supporting documents, including but not limited to, calculations, analyses, photos, previous studies/reports, and design/construction documentation should also be submitted for review:

- a. Pre-Study Worksheet, if applicable (Exhibit I)
- b. Resilience Study that must include the following, as outlined in Exhibit II:
 - Property Overview
 - o Identification of Vulnerabilities
 - Adaptation Proposal
 - Assessment of Cost Savings Analysis
 - Implementation Timeline
- c. FORTIFIED supporting documentation, applicable forms and back-up documentation submitted to the project's evaluator for review and determination of compliance. See all requirements and how to get started with FORTIFIED here (ADD LINK). Only applicable if designing for a FORTIFIED Designation.

5. Resilience for New Construction

Resilience Improvements can be incorporated into a C-PACE New Construction project in one of two ways (outlined below), and may or may not incorporate energy measures:

- Adding prescriptive resilience measures to an energy project as Bonus Measure(s), defined in the New Construction Appendix N, for a maximum of 10% additional of the TECC in C-PACE financing
- Using the FORTIFIED program and designing for one of the 3 levels of building standards to
 qualify for up to 20% of the TECC in C-PACE financing. Projects choosing to meet one of the
 FORTIFIED standards may also incorporate additional Bonus Measures, for up to an additional
 10% of the TECC in C-PACE financing. Lastly, Projects that are also designing for Net Zero may be
 eligible for up the maximum of 35% of the TECC in C-PACE financing.

Refer to Table 3 found in Appendix N for a full overview of the different levels of available C-PACE financing for Resilience in New Construction projects.

Pre-Study Worksheet

To be completed prior to conducting a resilience study

Business Overview:	
Property Ownership Entity Name:	
Property Owner Contact Name & Title:	
Contact Phone Number: Contact Email:	
Property Address:	
Property Type: Non-Profit:	/ESNO
Property Overview:	
FEMA Flood Zone:YESNO (If YES, complete Box 1. If N	NO, complete Box 2)
FEMA Flood Zone of Structure:BFE; Adjacent Flood	Zone : BFE
FEMA Flood Zone of Additional Property:BFE; Adjace	ent Flood Zone: BFE
Do you have local site-specific flooding:YESNO If YES, please describe:	
Building Plans Available: YES NO Structure Age:	Historic: Y N Maybe
First Floor Elevation (FFE): Elevation of Lowest Horizont	al Beam <i>if on pilings</i> :
Structure:Wood FrameSteel FrameCement BlockM	asonry
Foundation:Slab-on-gradeCrawl SpaceBasementPil	ings/Pier
Number of Steps to First Floor: steps UP / DOWN	
First Floor Contains:	· · · · · · · · · · · · · · · · · · ·
Water Supply (check all that apply)	
WellPublic Water SystemWe are a regulated r	non-community water system
Sanitary Wastewater (check all that apply)	
Septic SystemSanitary Sewer System	_Treatment System
Regulated largeSubsurface sewage	e disposal
How long have you owned the building?	
Do you have any intention of selling this building? YES	_ NO If so, when?

Property Overview Continued: What building or site improvements have you already made, if any? What measures do you have in place to address potential hazards? What resources do you utilize, or what groups do you belong to, that may be able to provide support during an emergency?

Outbuildings

System	Description	Notes
	External Flood Control	SeawallBulkheadBern
External Features	External Wall Material	
	Grading Around Site	TowardsAwayNeither
	Floor Material	HardwoodCementCarpet
First Floor (FF)	Internal Wall Material	DrywallWoodCementMetal
	Major Appliances	
	Floor Material	HardwoodCementCarpet
Basement (if applicable)	Internal Wall Material	DrywallWoodCementMetal
	Major Appliances	
	Doorways	
Low Entry Points	Windows	
into Building	Utility Openings	
	Other	
	Contains	
Utility Room (U.R.)	Location	BasementFirst Floor Upper LevelOutdoors
	Notes	

Property Event History

	Coastal Flood Riverine F		Flood	d High Wind		Heavy Snow		Tropical Event		Extreme Heat		Other Event:		
	Date:		Date: Date		Date:	Date: Date:			Date:		Date:		Date:	
Impact	Site	Structure	Site	Structure	Site	Structure	Site	Structure	Site	Structure	Site	Structure	Site	Structure
Circle	Equipment	Inventory	Equipment	Inventory	Equipment	Inventory	Equipment	Inventory	Equipment	Inventory	Equipment	Inventory	Equipment	Inventory
selection	Human	Access	Human	Access	Human	Access	Human	Access	Human	Access	Human	Access	Human	Access
	Tech & Data	Business Closed	Tech & Data	Business Closed	Tech & Data	Business Closed	Tech & Data	Business Closed	Tech & Data	Business Closed	Tech & Data	Business Closed	Tech & Data	Business Closed
Event Name														
Description of Loss														
Remediation Implemented														
Loss Due to Event (A)														
Remediation Cost (B)														
Total Loss Incurred (A+B)														
Notes														

Power Outages:

Please complete below questions if your business **has** ever lost power

Were these outages during extreme weather events?YesNo
Was the business closed due to these outages?YesNo
How many days was your business closed? days
How many days were you without power? days
Did you use a generator to operate through the outage?YesNo
Was the generator already on-site or did you transport one to the property?
Was Heat available during the outage?YesNo
Was AC available during the outage?YesNo
Was potable water available from the faucet during the outage?YesNo
Could you dispose of sanitary wastewater during the outage?YesNo
Was anything lost due to the power outage? (i.e. equipment, food, supplies, IT, data)YesNo
What was lost?
What caused the loss? (i.e. lack of refrigeration)
Has an outage affected your customers?YesNo
Has an outage affected communications?YesNo
Is your business located in a microgrid?YesNo A microgrid is a system of buildings or properties connected to an independent power source.
Have you utilized any resources during an outage, such as Chamber of Commerce, to help speed up restorations?
If so, please elaborate:

Property Flooding:

Name of Flood Source (river name, coastal, etc):											
Scenario from Exposure Analysis:											
Distance from High Water Mark:											
Do you have an	Elevation Ce	rtificate?	YES NO								
Have you had d	ifficulty acces	sing your buil	ding due to	street flood	ding?						
• If y	es, how freque	ntly?									
Do you have sp	ace to store s	torm prepared	lness materia	als (Sandb	ags, plywood, et	c)? Y N					
Is the business located on the coastline?YESNO <i>If yes, please complete table</i>											
Type:	Wetland	Beach	Dune	Bluff	Notes	3					
Material: Sand Gravel Boulder Bedrock											
Environment: Erosive Depositional											
Stabilization:	Stabilization: Vegetation Rip – Rap Seawall / Bulkhead Groin / Breakwater Wood/Cement/Metal/Stone/Other										

Utility	Location				Relative	Notes
	U.R	Basement	FF	Outdoors	Elevation	
Elevator					ft	
HVAC: Condensers					ft	
A/C – window / wall					ft	
Water Heater					ft	
Furnace					ft	
Electrical Panel					ft	
Electrical into Building					ft	
Electrical Outlets					ft	
Plumbing: Potable					ft	
Fuel Tanks					ft	
Generator					ft	
Dumpster					ft	
Other					ft	

Property Flooding Cont.: Please complete below questions if your business **is** in a flood zone

	Secure	Other
Fuel tanks / Generators	Y/N ?	
Garage and Bay Doors	Y/N ?	
Chemical Storage	Y/N ?	
Moorings	Y/N ?	
Dock	Y/N ?	
Parked Vehicles / Boats	Y/N ?	
Septic Tank	Y/N ?	
Generator	Y/N ?	
Dumpster / Spent Oil	Y/N ?	
Material that could become debris	Y/N ?	
Buildings / Out Structure	Y/N ?	
Fence (non-seawall)	Y/N ?	
Equipment	Y/N ?	
Laydown or Storage Areas	Y/N ?	
Other	Y/N ?	
Other	Y/N ?	

Disaster Preparedness Questions:

What are the hazards that could impact your business?						
Which hazards do you perceive as the biggest threat?						
Are you concerned about your business' future hazard exposure? Yes No						
Do you feel you are financially prepared for a disaster?YesNo						
Do you have access to onsite/offsite storage for inventory, chemicals, equipment)YesNo						
Do you have electronic data backups for your business files?YesNo						
Do you have a formal plan in place for:						
Preparations for an event?YesNo						
Response during an event?YesNo						
Recovery from an event?YesNo						
Are your employees aware of the details of these plans?YesNo						
Have you created an Emergency Employee Contact List?YesNo						
How are employees notified in the event a natural disaster requires the business to close?						
What support is available for employees if the business is closed for an extended period?						
Do you communicate closures/schedule changes to customers?YesNo						
Do you communicate with suppliers/customers if your building is inaccessible?YesNo						
Have you experienced supply chain disruptions?YesNo						
How long would you be able to stay in business if you had to close for an extended period of time?						
Under what conditions would you relocate or take special storage precautions?						
Who would you contact for information/assistance during an extreme weather event? (i.e. state/local government, chamber, etc.)?						

<u>Insuran</u>	ce and Risk Reduction Questions
Do you l	have flood insurance for the building?YesNo
Do you l	have contents insurance?YesNo
Do you l	have other disaster insurance?YesNo
	are of you of the details of your insurance policy, such as what is covered under your Completely Unaware 1 2 3 4 5 Completely Aware
Is there	insurance information you feel would be helpful to receive?YesNo
W	/hat kind of information?
W	/hat would be the most effective method of delivery for this information (brochure, workshop,
W	/ebinar)
Are you	aware of risk reduction assistance programs?YesNo
Are you	aware of risk reduction options?YesNo
Δı	re these risk reduction options accessible to you? Yes No

Exhibit II

RESILIENCE STUDY REPORT REQUIREMENTS

The outline below is the required list of information to be included in a resilience study that will be presented to the Green Bank for consideration for approval of C-PACE financing. A Pre-Study Worksheet (Exhibit I) should be completed prior to a resilience study, but is not required in all cases. If designing for a FORTIFIED designation, all applicable forms and back-up documentation submitted to the project's evaluator for review and determination of compliance can be used as a resilience study. This could include, but is not limited to site photos, design & structural drawings, and/or construction specifications. Please note that an assessment of the cost savings is always required in order to be considered for approval of C-PACE financing.

- 1. **Property Overview**: a narrative describing the location (full address), age of structure(s), property's use history, ownership structure, etc. It should also include information about any outstanding property-secured debt (such as a mortgage), with details about term, outstanding balance, interest rate, etc. Lastly, it should include a description of any previous environmental remediation work and/or resilience measures completed.
- 2. **Identification of Vulnerabilities**: a detailed summary of the vulnerabilities to be addressed. Please include information about recent events that may have impacted the property, including any photo/written documentation of damage/losses, estimated costs of previous losses or impacts to your business, and previous actions taken to prevent losses, if any.
- 3. Adaptation Proposal: a proposal and narrative describing in detail the adaptation measures to be completed to address the above identified vulnerabilities. The proposal should also include a detailed breakdown of each cost that will be associated with the adaptation proposal. Drawings, plans, previous proposals, etc. should be included as attachments to the resilience study and referenced in the narrative.
- 4. Assessment of Cost Savings Analysis: calculations accompanied by a narrative describing the savings that will be associated with the proposed adaptation measures. Savings should be represented in a dollar value and can include such things as operational savings, lost capital avoided, insurance savings, etc. All backup documentation associated with the savings calculations (ie- insurance costs, previous maintenance bills, lost revenue due to business closure) should be included as attachments to the resilience study and referenced in the narrative.
- 5. **Implementation Timeline**: narrative describing the proposed timeline for implementing the adaptation measures described in the study, including anticipated start date, project duration, phases of completion, etc.

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PosiGen

Green Bank Term Loan Facility Modification Request January 23, 2024





Document Contents: This document contains background information and due diligence on modification of existing credit facilities for PosiGen, PBC ("PosiGen") collateralized by residential solar PV facilities located within and outside of Connecticut and by the future performance-based incentive ("PBI") payments PosiGen will earn from various residential solar PV projects in Connecticut. The information herein is provided to the Connecticut Green Bank Board of Directors for the purposes of reviewing and approving recommendations made by the staff of the Connecticut Green Bank.

In some cases, this package may contain, among other things, trade secrets and commercial or financial information given to the Connecticut Green Bank in confidence and should be excluded under C.G.S. §1-210(b) and §16-245n(D) from any public disclosure under the Connecticut Freedom of Information Act. If such information is included in this package, it will be noted as confidential.

Investment Modification Memo

To: Connecticut Green Bank Board of Directors

CC: Bryan Garcia, President and CEO; Jane Murphy, Executive Vice President Finance and

Administration; Brian Farnen, General Counsel and CLO; Eric Shrago, Vice President of

Operations; Sergio Carrillo, Managing Director of Incentive Programs

From: Bert Hunter, EVP and CIO

Date: January 23, 2024

Re: PosiGen Back Leverage Modification

Background

PosiGen, PBC¹ (together with its subsidiaries, "PosiGen") currently has a first lien asset-backed facility (the "FLCF") with Brookfield Asset Management ("Brookfield") with a total commitment of million. In turn, the Connecticut Green Bank ("Green Bank") – in order to continue to support PosiGen as our strategic partner for low to moderate income ("LMI") solar, battery storage, and energy efficiency – provides a "2nd Lien" facility subordinated to Brookfield (the "second lien credit facility", or "SLCF") with a total commitment of million, inclusive of million of participatory capital provided by a variety of mission aligned investors (i.e., net exposure to Green Bank being million). PosiGen's portfolio of solar leases, both in Connecticut and nationally, serve as the collateral for these two facilities, and the Green Bank Board of Directors (the "Board") has previously approved the SLCF in conjunction with the FLCF.

In addition to the SLCF, the Green Bank has a first lien commitment to PosiGen associated with the nowclosed Residential Solar Investment Program ("RSIP"), lending against the Performance Based Incentives ("PBI") that PosiGen systems earn as they generate clean energy and deliver Solar Home Renewable Energy Credits ("SHRECs") to the Green Bank. That is now a static pool of projects, with million in principal outstanding. (Note: from a risk perspective, this exposure is effectively defeased as the Green Bank pays the PBI to itself (as a sweep of this cash that otherwise would be payable to PosiGen.)) Further, in April 2022, the Green Bank Board approved an million facility (the "ESS facility") to support the rollout of battery storage systems under the Energy Storage Solutions (ESS) program for LMI families in the state. This million ESS facility consists of a (i) million revolver for purchasing the batteries and associated equipment from Generac (their strategic partner for the ESS program), and (ii) a million term loan facility that will be funded by payments from Eversource and UI as well as customer lease payments. At present under the ESS facility, only the million revolver is fully drawn with no advances under the term facility. Finally, and as noted above, in December 2022, the Board approved a million position in a million tax equity bridge loan facility to PosiGen under the Capital Solutions program associated with a variety of tax credit adders created under the Inflation Reduction Act at the Federal level. Specifically, the loan is tied to PosiGen's delivery of solar (including battery storage) to LMI communities in eligible census tracts (e.g., low-income communities, energy communities), as well as their use of domestically produced content in the systems they deploy (including in energy communities and for low-income families). Overall, the Green Bank's direct exposure to PosiGen (that is, total funded capital) is approximately million (million net of the defeased PBI loans), summarized as follows:

2

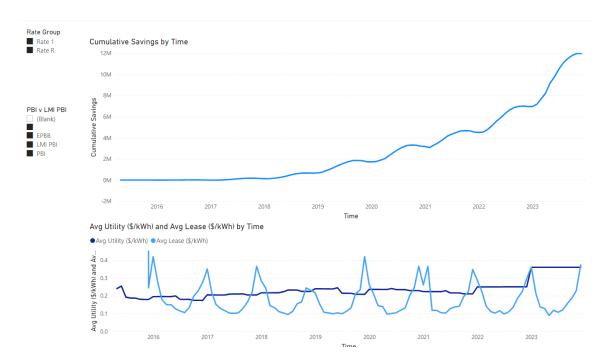
¹ Public Benefit Corporation



PosiGen is current on all obligations to the Green Bank, including making good and consistent progress in amortizing the PBI loan in line with the underlying documentation, and is continuing to both expand its presence in Connecticut (including beyond Bridgeport and Hartford, to recently opening a new office in Danbury) and deliver on its commitments to serving LMI customers across the state.

Connecticut Impact and Growth

During the PosiGen/Green Bank "Solar for All" campaign during the RSIP, considerable economic, environmental and customer savings impact was achieved which continues today under the residential renewable energy solutions (RRES) program administered by the EDCs. Under the RSIP installed systems, we track system performance which reduces energy burden for the 4,500+ systems we supported through RSIP and "Solar for All". We can see when electric rates went up in 2023 because of inflationary pressures caused by War in the Ukraine and over-reliance of Connecticut on natural gas power plants, that the savings increased nearly two-fold. Solar became a hedge protecting low-income families against rising energy prices. They saved \$5MM in 2023 – or about \$1,100 vs. \$2.5MM in 2022 – or about \$560 – shown here:



We push these accomplishments to the public via social media – captured at the following link: https://www.youtube.com/watch?v=TnOWjdczjfE



across the country.



Learn more at www.ctgreenbank.com/solarforall



Due to PosiGen's growth in Connecticut and other states, the company is preparing to upsize its facility with Brookfield and lower its cost of funding for work-in-progress systems through the same loan (thus changing the collateral makeup of the FLCF), as well as advancing rapidly towards a new term loan facility with the U.S. Department of Energy's Loan Programs Office ("LPO") under the Title 17 State Energy Financing Institutions ("SEFI") program. This transaction between PosiGen, LPO, and Green Bank (as a SEFI), would be the first-of-its-kind in the country demonstrating how federal resources, in partnership with SEFI's, can

expand investment in and deployment of solar, storage, and energy efficiency in vulnerable communities

This memo provides an overview of the key changes in the Brookfield facility, a status update with respect to PosiGen's work with the Green Bank on the LPO SEFI front, and a request for additional pro rata funding of the Green Bank's position in the SLCF.

Brookfield Facility Upsizing and Expansion of Collateral Base

For reference purposes, attached as **Exhibit A** are the full terms of the existing FLCF with Brookfield (adjusted subject to final documentation, of course, as closed in April 2023). PosiGen currently has an installed base of approximately 25,000 lease customers, of whom nearly 25% are in Connecticut. (This translates into approximately 6,000+ Connecticut customers with in nominal cash flow or more than on a present value basis, discounted at 6% which far exceeds the Green Bank's investment in the overall facility.) The company projects 2024 growth to add roughly to its deployed base, as it continues to grow through both its organically originated business as well as through mission-aligned channel partners who are now taking advantage of PosiGen's financing and support to serve previously excluded customers. Due to that rapid growth, PosiGen and Brookfield have negotiated two significant adjustments to their facility, with the goal of closing in February 2024 subject to Green Bank approval:



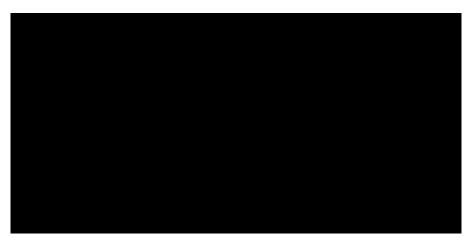
At the moment, the company pays a very high rate on the funds it accesses to bring sold systems through the project life cycle (i.e., across predevelopment to installation and completion/activation). The planned solution would bring that cost down by effectively melding a WIP and installed collateral base together in a single loan. Because this approach would change the nature of the collateral supporting the FLCF, the Green Bank needs to provide consent, but since the overall effect would be in the range of a decrease in PosiGen's WIP cost of capital, Green Bank staff sees this adjustment as credit accretive to the company's overall story. Importantly, collateral rights would continue to be respected – meaning that the FLCF and SLCF will fund against and be secured by a pool of cash-flowing and completed/activated projects shared between Brookfield as senior lender under the FLCF and Green Bank as subordinated lender (with participants) under the SLCF. For the WIP funding, Brookfield would look to the WIP security and possibly any residual benefit from the FLCF/SLCF after Brookfield and Green Bank advances against the cash-flowing and completed/activated projects have been repaid. This approach is similar to other loans to PosiGen (such as the battery loans and the tax equity bridge loans) which benefit from their own discrete pools of secured assets.

With respect to the Green Bank's own commitment to the SLCF, staff recommends the Board consider our exposure in light of (a) the consistent payment performance of the borrower to date, (b) ongoing good cash flow coverage of debt service obligations, (c) satisfactory credit performance of the underlying cash-flowing leases against 25,000 residential projects, and (d) the near-term projected takeout of the facility through the LPO. Accordingly, as will be substantiated in this memorandum, staff believes providing our pro rata match to Brookfield up to their first million is the appropriate increase at this point in time. For the Green Bank, that would mean a total SLCF cap (associated with the non-PBI, non-tax equity bridge and non-battery facility commitments) of million. This represents a projected increase in commitment of million but, given PosiGen's ongoing amortization of the PBI facility and expected repayment of the tax credit bridge loan by end-of-year, and without the DOE – LPO – SEFI transaction, should result in only a modest increase in net exposure by this same date in 2025.

By way of summary, the below chart lays out Green Bank funding facilities currently in place vs. as proposed herein:



In sum, then, and assuming no refinancing / restructuring via LPO (which would require separate approval by the Board – expected to be brought forward in the spring), anticipated Green Bank exposure to PosiGen (excluding the defeased PBI loan) at the end of 2024 would total approximately million, roughly million below present levels. Green Bank would also establish a hard cap of million (excluding the defeased PBI loan) in the case that repayment of the tax equity bridge loan slips into early 2025, meaning that PosiGen would need to manage the overall availability under this cap (i.e., Green Bank outstandings under the SLCF, the tax equity bridge and the ESS facility (working capital and term loan)). In summary, the following explains the borrowing base and advances from the Brookfield FLCF and Green Bank SLCF (including participants).



Below is a summary of security / repayment sources by facility:

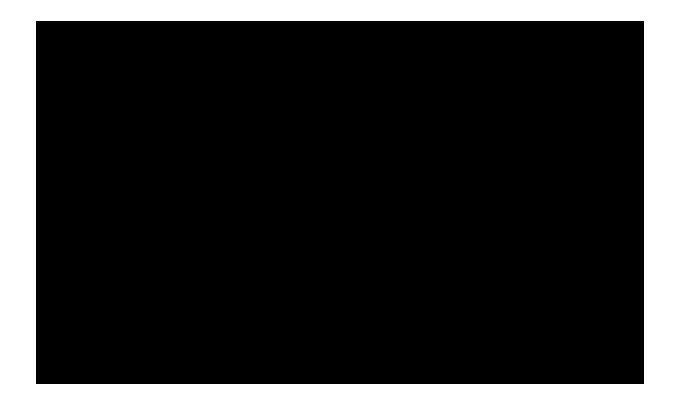


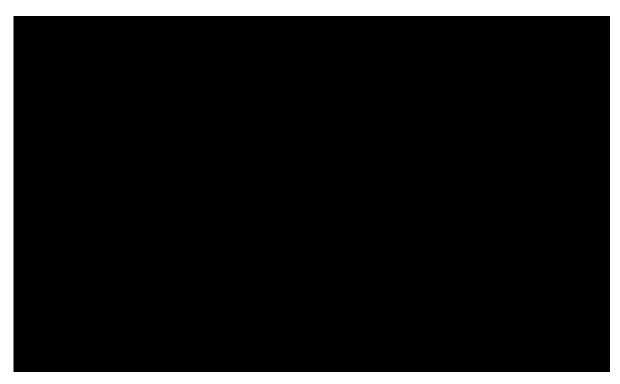
*ESS Term Facility to be reduced to with a sublimit of to be increased above dollar for dollar to a max of for each dollar of repayment under the tax equity bridge or the ESS Working Capital Facility. Staff with separate and subsequent Board approval may raise this limit depending upon ESS program performance and other PosiGen credit outstanding.

Risk Assessment

With the approval being sought today by staff, Green Bank's overall facility exposure would increase from million to a maximum cap of plus the defeased million PBI funding facility where Green Bank sweeps PBI funds to itself). At the same time, Green Bank's exposure is well diversified and structured. PosiGen's portfolio performance remained strong throughout 2023, and the company's lease offer aligns well with customers' benefits of electric bill savings, which are only increasing with higher rates from Eversource & UI. PosiGen's capital raising activities are strong as well. In addition to this upsizing through Brookfield, which represents a million capital raise of first lien capital (in addition to the increment of second lien capital requested herein) PosiGen's investor base injected another million of corporate capital into the company as of mid-2023. This is in addition to tax equity capital, as the company closed on an aggregate of million in commitments from both and the company and the company closed on an aggregate of million in commitments from both and the company 2024. Portfolio statistics reflect continued high rates of collection as well as adequate debt service coverage. For completeness, we attach in Exhibit C the financials for the PosiGen Development Company.

² https://www.youtube.com/watch?v=TPb7AHRWFhg&t=6300s





Recommendation

In partnership with the Green Bank, PosiGen has continued to make Connecticut a leader in the equitable deployment of clean energy. The company's model (based on underwriting to customer savings rather than FICO or income thresholds) is increasingly gaining acceptance in the market, but public-private investment partnerships continue to be critical to supporting growth and achieving scale. As such, Green Bank staff recommends approval of Brookfield's upsize and expanded collateral base, as well as the proposed million increase in Green Bank commitment to the SLCF, all in anticipation of a successful closing of the LPO facility later this year. At the same time, Green Bank will manage exposure by placing an overall "hard cap" of million, with limitations on the ESS battery facility linked to reduced exposure under the tax equity bridge facility described in this memo.

Resolutions

WHEREAS, the Connecticut Green Bank ("Green Bank") has an existing partnership with PosiGen, PBC (together with its affiliates and subsidiaries, "PosiGen") to support PosiGen in delivering a solar lease (including battery storage) and energy efficiency financing offering to LMI households in Connecticut;

WHEREAS, the Green Bank Board of Directors (the "Board") previously authorized approval for Green Bank's participation in a back leverage credit facility (the "BL Facility") collateralized by all of PosiGen's solar PV system and energy efficiency leases in the United States as part of PosiGen's strategic growth plan, as well as a facility to finance performance based incentives earned by PosiGen on its solar PV portfolio in Connecticut:

WHEREAS, PosiGen is now in the process of upsizing its BL Facility with Brookfield Asset Management ("Brookfield"), as explained in the memorandum to the Board dated January 23, 2024 (the "Board Memo");

WHEREAS, PosiGen's repayment performance on its existing obligations remains consistent and satisfactory;

NOW, therefore be it:

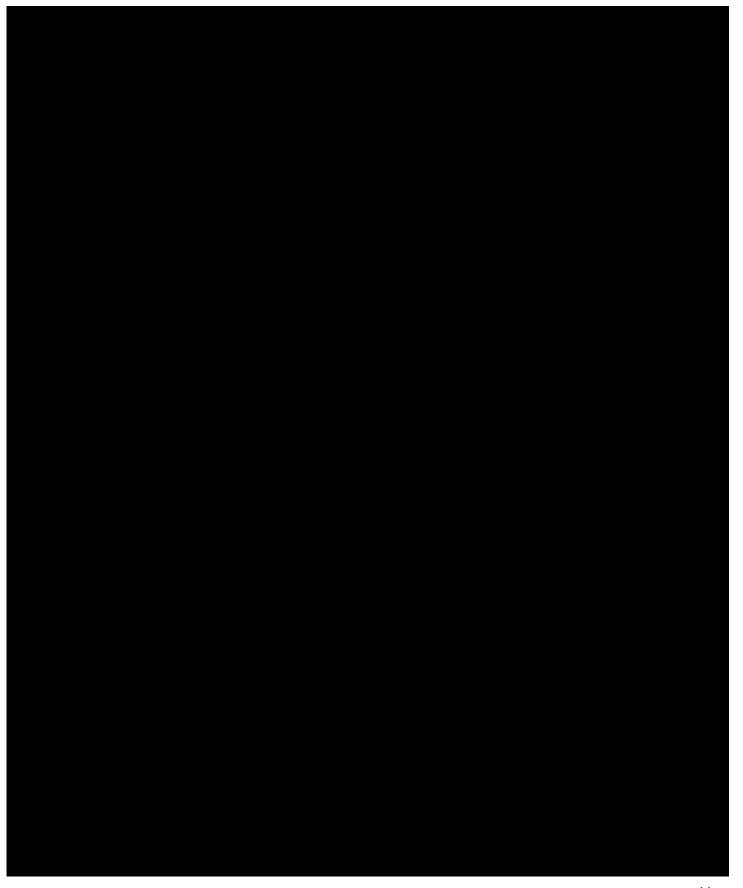
RESOLVED, that the Board authorizes the Green Bank to amend its existing 2nd lien facility as part of the BL Facility to allow for an upsized Green Bank position together with the first lien lender, Brookfield (itself upsizing its position and expanding its collateral base), as set forth in the Board Memo;

RESOLVED, that the Board authorizes the Green Bank to advance up to \$24 million in 2nd lien financing associated with the New BL Facility, inclusive of third-party participation, as set forth in the Board Memo; and

RESOLVED, that the proper Green Bank officers are authorized and empowered to do all other acts and negotiate and deliver all other documents and instruments as they shall deem necessary and desirable to effect the above-mentioned legal instruments.

Submitted by: Bert Hunter, EVP and CIO

Exhibit A Terms of the Existing Brookfield FLCF



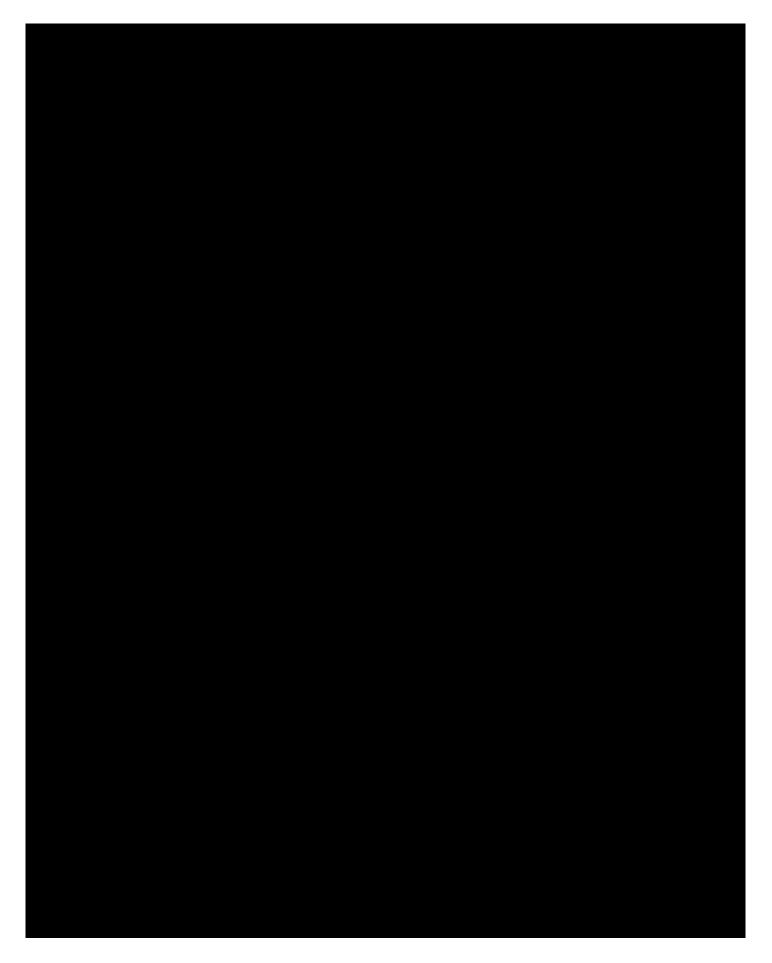
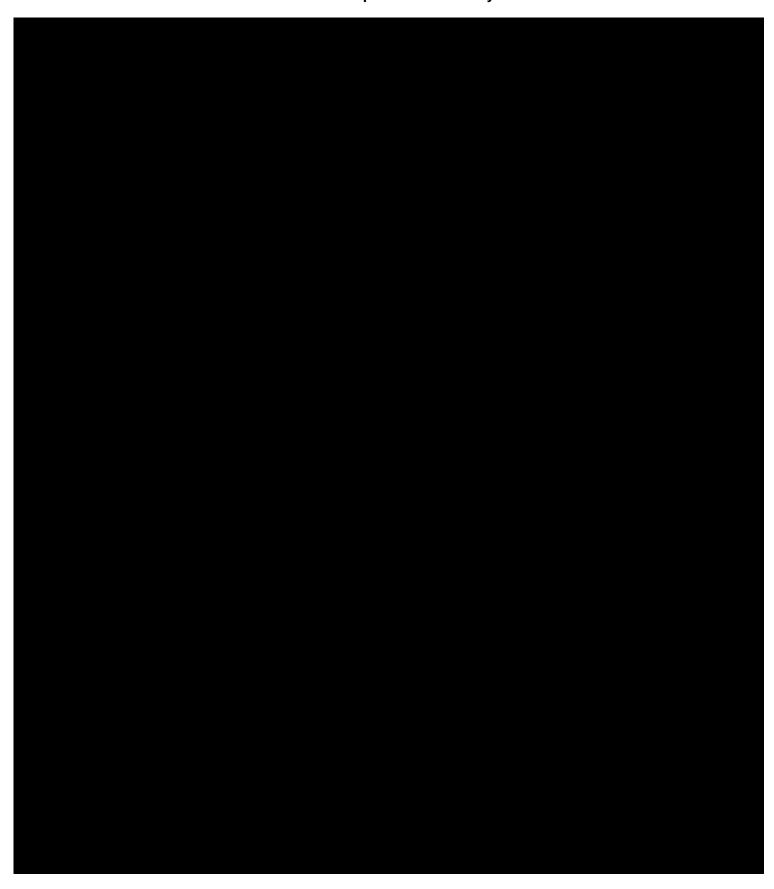




Exhibit B Terms of the Proposed LPO Facility



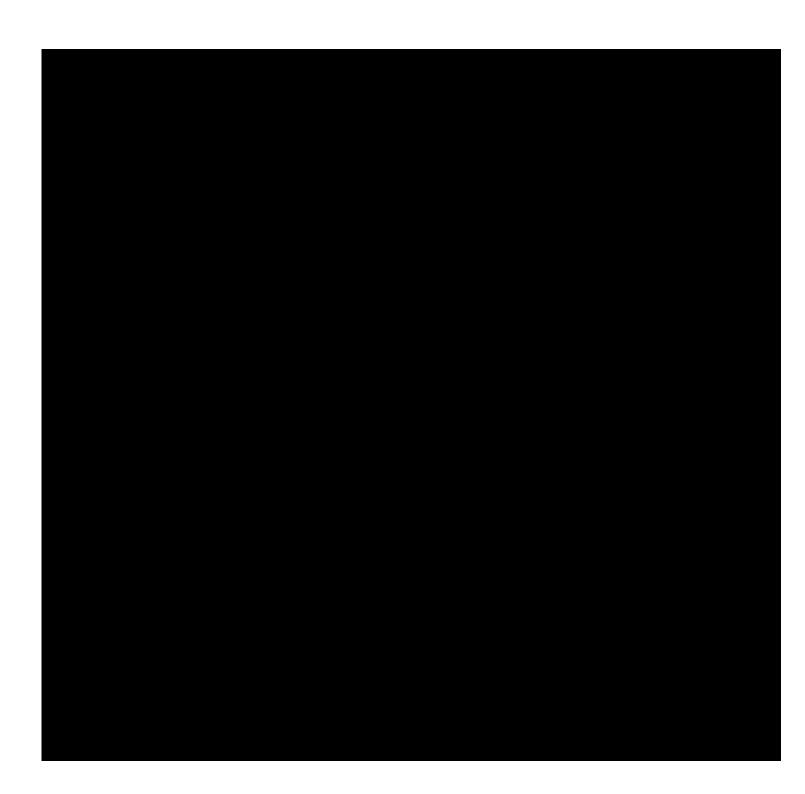
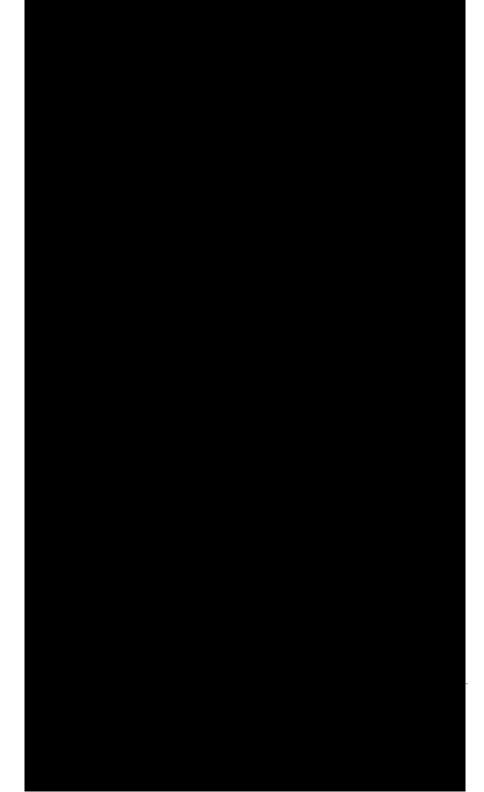


Exhibit C P&L of PosiGen Development Co & Balance Sheet of PosiGen Inc



PosiGen Inc. Balance Sheet







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Shared Clean Energy Facility (SCEF)

& Department of Energy and Environmental Protection (DEEP) – Derby, CT Fuel Cell Projects

A Fuel Cell Debt Financing Strategic Selection

Green Bank Term Loan Facility

January 23, 2024





Document Purpose: This document contains background information and due diligence on a proposed credit facility for two FuelCell Energy, Inc. ("FCE" and NASDAQ: FCEL) fuel cell projects located in Derby, CT. The information herein is provided to the Connecticut Green Bank Board of Directors for the purposes of reviewing and approving recommendations made by the staff of the Connecticut Green Bank.

In some cases, this package may contain, among other things, trade secrets and commercial or financial information given to the Connecticut Green Bank in confidence and should be excluded under C.G.S. §1-210(b) and §16-245n(D) from any public disclosure under the Connecticut Freedom of Information Act. If such information is included in this package, it will be noted as confidential.

Strategic Selection Financing Memo

To: Connecticut Green Bank Board of Directors

From: David Beech, Senior Manager, Investments; Mariana Trief, Associate Director, Investments;

Bert Hunter, EVP & CIO

Cc: Bryan Garcia, President & CEO; Brian Farnen, General Counsel & CLO; Sergio Carrillo, Managing

Director, Incentive Programs; Jane Murphy, EVP of Finance and Administration

Date: January 23, 2024

Re: FuelCell Energy / DEEP / SCEF / Derby Fuel Cell Project

Term Loan Facility

Purpose & Term Loan

The purpose of this memo is to request Connecticut Green Bank ("Green Bank") Board of Directors (the "Board") approval of: (1) Green Bank's participation, not to exceed \$3 million, in a \$9.5 million senior term loan facility (the "Senior Loan") with Liberty Bank (together with Green Bank, being the "Senior Lenders"), and (2) a Green Bank subordinated term loan facility for \$3.5 million (the "Subordinate Loan", and together with the Senior Loan being the "Term Loans") with respect to the 2.8 megawatt FuelCell Energy, Inc. ("FCE") fuel cell Shared Clean Energy Facility project (the "SCEF Project") and the 14 megawatt FCE fuel cell Department of Energy and Environmental Protection solicitation project (the "DEEP Project"), both in Derby, Connecticut (together the "Projects").

Summary

FCE has successfully financed 7 Connecticut fuel cell projects totaling approximately 40 megawatts with Green Bank, Liberty Bank and other lenders and tax equity investors. While private capital is supportive of these fuel cell projects, the participation by the Green Bank, particularly when the Green Bank's funding is subordinated to senior lenders, is credit accretive to these transactions, lowers the cost of capital, and improves chances for overall funding success. The proposal for these two fuel cell projects follows this model of private-public leverage and would combine support from the Green Bank with sponsor equity (FCE), investment from a tax equity investor – Franklin Park¹, and a senior term loan from Liberty Bank, which has established considerable proficiency in project finance within the state. The structure of the transaction follows the successful structure Green Bank developed for the 7.4 megawatt fuel cell project at the U.S. Navay Submarine Base in New London / Groton Connecticut. With FCE's funding long since invested, and with the tax equity investor secured, the last piece to fall in place for the SCEF Project and the DEEP Project is term debt financing which staff brings to the Board at this time. Closing of the financing is expected in late February, but commitments are expected by the end of January so that documentation for the loans can proceed.

¹ Franklin Park develops, owns and operates a diverse portfolio of infrastructure assets worldwide. Franklin Park is actively involved in all aspects of infrastructure including development, finance, M&A and operational management. They have a diverse \$2.5 billion portfolio of infrastructure assets including renewable and conventional energy assets, transportation infrastructure, municipal waste, energy storage, higher education and logistics.

DEEP Project Background – Highlights

Project and PPA Summary

On November 1, 2018, FCE announced the execution of power purchase agreements ("PPAs") with United Illuminating and the Connecticut Light and Power Company. The PPAs cover the 14MW project that was awarded in June 2018 in a competitive solicitation by the Connecticut Department of Energy and Environmental Protection ("DEEP"). The PPAs include the sale of renewable energy credits ("RECs"), power, and capacity payments to the benefit of the project. The power and REC payment rates escalate at 2.5% annually. The location in Derby was selected by the state, which held the competitive bidding process as part of its efforts to foster distributed utility scale clean energy solutions that can be deployed in high density areas throughout Connecticut.

The PPAs will be underpinned by the production from five FCE SureSource3000[™] power plants which combine for 14 MW of total electrical output and an expected annual production in the first full year of operation of over 110,000,000 kWh. The DEEP project will be constructed, owned, operated, and maintained by FCE – a process which aligns with FCE's vertically integrated business strategy and also makes the liquidity provided by the Term Loan facility important for FCE's continued growth and ability to execute on its project development pipeline.

SCEF Project Background – Highlights

Project and PPA Summary

FCE submitted an application into United Illuminating's ("UI") year 2 Shared Clean Energy Facility solicitation in 2020, winning an allocation of 2.8MWs at a tariff bid price of \$137/MWH. A Tariff Terms Agreement ("Tariff Agreement") was signed on January 22, 2021. The agreement requires UI to pay the SCEF Project the awarded \$137/MWH for electricity produced by the facility, that price includes payment for renewable energy credits and capacity. In addition, for every kilowatt hour of electricity delivered by the SCEF project, UI will provide a \$0.025/kwh (\$25/MWH) credit to subscriber electric accounts (further described below "Subscriber Benefits (SCEF Project)").

The Tariff Agreement will be underpinned by the production from one FCE SureSource3000[™] power plant which will produce 2.8 MW of total electrical output and an expected annual production in the first full year of operation of over 20,000,000 kWh. The SCEF project will be constructed, owned, operated, and maintained by FCE – a process which aligns with FCE's vertically integrated business strategy and also makes the liquidity provided by the Term Loans important for FCE's continued growth and ability to execute on its project development pipeline.

Green Bank views these Projects, and the goals of providing clean, resilient, and cost-effective energy to the grid, to be of local economic/development significance.

In addition to direct benefits to the grid and SCEF subscribers, FCE is a Connecticut-domiciled company and, with the inclusion of Liberty bank, a Connecticut-based lender injecting capital into Connecticut helps promote

further economic development and local direct investment. Liberty Bank is an active and substantial lending partner with Green Bank on other credit activities, including fuel cell project finance.

Projects – Mechanical Completion & Commercial Operation Date

In the fall of 2023, the Projects achieved mechanical completion, and in December they were placed in service following successful performance tests. The Project Companies have executed 20-year Operations and Maintenance Agreements with FCE. The Projects will be monitored around the clock at FCE's Global Monitoring and Control Center at their Danbury headquarters.

Projects – Tax Equity Closing & Debt Facility Progress

FCE closed a smillion tax equity facility with Franklin Park on December 19, 2023 using a partnership flip structure. After the tax credit recapture period ends (approximately 5.5 years from closing), Franklin Park will exit the tax equity partnership and their ownership will "flip" to the Borrower. To complete the capital stack for the Project, FCE has been working with Green Bank and Liberty Bank on the debt structure, per the terms discussed in this memo. Staff is bringing forward Green Bank's facility for approval from the Board which will enable the Liberty Bank and Green Bank to finalize the term sheet and have the Liberty Bank present its request for approval to its credit committee.

Projects – Projects Investment/Risk Profile

From both Tax Equity and the Lenders' perspective, the Projects carry key attributes that make them an attractive asset. As part of FCE's strategic goals to own as many of these projects on balance sheet as possible in order to build a stable and significant cash flow for FCE and build enterprise value, FCE seeks to be the ultimate owner of the Projects together with Tax Equity using a partnership flip structure (explained above). Below are key investment attributes, though an extensive list of risks and mitigants to the Green Bank's position are discussed further in the sections below:

- <u>Construction & Technology Risk</u>: Engineering, procurement, and construction ("EPC") is provided by FCE (fuel cell modules, balance of plant, interconnection) and ELM Electrical, Inc. ("ELM")(Utilities: water, natural gas, sewer, electric, and high-speed telecommunications) coupled with a 20-year service contract (provided by FCE) covering full maintenance and production requirements, including stack replacements after 7 and 14 years;
- <u>Development & Siting Risk</u>: DEEP Project site at 220 Roosevelt Drive, Derby CT, with construction having achieved a commercial operations in December. SCEF Project sited at 49 Coon Hollow Road, Derby CT, with construction having achieved a commercial operation in December.
- <u>Counterparty Risk</u>: Experienced fuel cell manufacturer and operator (over 220 MW of clean power generating plants in operation);
- <u>Credit/Repayment Risk: Approximately 120,000,000 130,000,000 kWh of annual electricity production, monetized by PPA and Tariff cashflows which include payments for RECs and capacity. The offtakers</u>

United Illuminating (rated A- by Fitch) and Connecticut Light and Power Company (dba "CL&P" A- by Fitch) are Investment Grade.

Projects – Use of Proceeds

The Term Loans will help finance FCE's Direct FuelCell ("DFC") fuel cell technology, which is the most efficient fuel cell installed by FCE, and the technology used in the Groton Navy Submarine Base Project previously reviewed by the Board.

The Projects will similarly utilize in-state developed, designed, and manufactured technology to create a new benchmark of product efficiency across the fuel cell industry, converting natural gas into electricity at an efficient fuel-to-electricity ratio while also reducing pollution by up to 99.99% in comparison to conventional power generating plants and with a lower carbon footprint than the NE-ISO average (See: Strategic Selection and Importance, Connecticut Impact — Benefits to the RPS & Environmental Benefits). The innovative technology achieves additional electrical output through a proprietary design developed by FCE, which has extensive experience deploying innovative fuel cell projects (as discussed in the section above).

Sources and Uses – Project Construction

Construction Sources (\$000)	s)	Construction Uses (\$000s)
		Project EPC
FCE Equity		Fuel Cell Modules
		Balance of Plant Equipment
		EPC Equipment and Materials
		Engineering
		Civil Construction Material
		Mechanical Construction Materia
		Electrical Construction Material
		Fencing 195
		Interconnection
		Interconnection 4,396
Total Installed Cost		Total Installed Cost
Term Sources (\$000s)		Term Uses (\$000s)
Liberty Senior Loan	6,500	Project Cost
Green Bank Senior Loan	3,000	Estimated Reserves 950
Green Bank Subordinated Loan	3,500	Estimated Closing Costs 400
Tax Equity		
FCE Equity		
Total Installed Cost		Total Installed Cost

Totals above include costs for both Projects.

Term Loan Facility – Liberty Bank & Green Bank

Summary Terms and Conditions

The Term Loan facility is comprised of a \$13,000,000 senior and subordinated term loan package whereby \$9.5

million is comprised of a jointly proposed senior secured term loan held by Liberty Bank (\$6.5 million) and the Green Bank (\$3 million), each being a Participation Share, and a \$3.5 million Green Bank Subordinate Loan. Green Bank's participation in the Senior Loan may be in the form of a participation agreement with Liberty Bank in a single loan or a separate loan to FCE for Green Bank's Participation Share, in either case Green Bank's collateral rights and loan obligations shall be pari passu with Liberty Bank.

The \$6.5 million (Liberty) and \$3 million (Green Bank) Senior Loan will be priced at approximately

. The Senior Loan are sized against PPA and

Tariff Agreement cashflows in accordance with a minimum DSCR of together with a debt service reserve account. As the Green Bank and FCE are currently in the process of finalizing the terms and conditions associated with the Senior Loan and the Subordinate Loan, variations to the structure may arise that are not expected to put any additional risks onto the Green Bank's position.

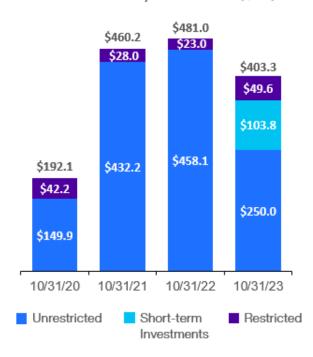
The Green Bank's position in the Senior Loan is as proposed: a senior secured interest in the Projects, pari passu with the Liberty Bank Senior loan, that is repaid with PPA and Tariff Agreement cashflows.

The Green Bank's position in the Subordinate Loan is as proposed: a subordinate, secured interest in the Projects, relative to the Senior Loan, that is repaid via (i) a combination of PPA and Tariff Agreement cashflows and (ii) a debt service reserve account. The Subordinate Loan is *interest only* during the term of the Senior Loan (7 years). A debt service reserve will be funded over time at a level by the maturity date of the Senior Term Loans, as further described in the Risks section below (the "Debt Service Reserve"). A module replacement reserve will not be a part of the credit facility; at the end of the Senior Loan term (7 years), if FCE is able to fund the module restacking, the Subordinate Loan will convert to a senior security position and fully amortize prior to the second module restacking. If FCE is unable or otherwise decides not to fund the module restacking, or another relevant condition is present, the Green Bank will use the fully funded Debt Service Reserve to retire the Subordinate Loan and exit the transaction. The Subordinate Loan carries an interest rate of to account for its subordinate position in the structure and longer term. The required DSCR is

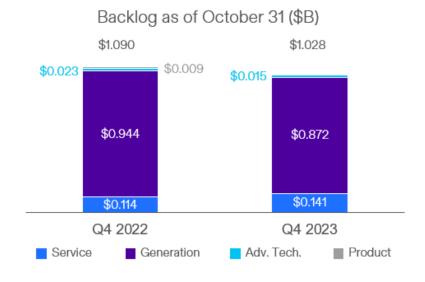
FuelCell Energy Corporate Update

In its most recent fiscal year (ended October 31, 2023), FCE had a strong balance sheet and relatively low leverage, providing a great platform for future project execution and growth. Their portfolio of generation assets has grown to over 60 MW, providing a solid base of predictable recurring revenues and contributing to EBITDA. During the year ended October 31, 2023, FCE raised approximately \$97.4 million using an open market sales agreement. Cash and cash equivalents, restricted cash and cash equivalents, and short-term investments totaled \$403.3 million total, unrestricted cash and cash equivalents totaled \$250 million and short-term investments totaled \$103.8 million.

Cash and Equivalents & Short-Term Treasury Securities (\$M)



FCE's balance sheet is in a strong position and poised to realize upon an extensive \$1.03 billion pipeline of commercial opportunities.



Green Bank Project Risk and Mitigants

The Green Bank faces risks by means of the Projects and the Green Bank's subordinated position (the \$3.5 million Subordinate Loan) in the term financing structure of the Projects. Green Bank staff believes it has identified and mitigated those risks as explained below.

Manufacturer Risk

A. Overview

Tax Equity and the Liberty Bank need to be comfortable with FCE's financial condition and prospects for continuing as a going concern. Considering the substantial cash position (\$250 million at the end of October 2023), and after extensive review of FCE's financial condition and interviews with its management, including its CFO, staff is comfortable that FCE is firmly on a path to long-term sustainable operations, confirming that Green Bank, the Senior lender and tax equity can have reasonable assurance that FCE can stand behind its obligations under the Term Loans.

B. Business Summary

FCE is engaged in designing, manufacturing, installing, operating and maintaining fuel cell power solutions. FCE also provides turnkey power generation solutions to the customers, including power plant installation, operations and maintenance. FCE offers its services to various sectors, including utility companies, municipalities, universities, government entities and a range of industrial and commercial enterprises. FCE, by utilizing its DFC plants, is commercializing a tri-generation distributed hydrogen configuration that generates electricity, heat and hydrogen for industrial and/or transportation uses, as well as a fuel cell carbon capture solution for coal or gas-fired power plants. In addition, FCE is developing with Exxon Mobil Research and Engineering a carbon capture system that utilizes FCE's carbonate fuel cell technology. Moreover, FCE is executing a hydrogen generation project with Toyota. Under the arrangements, Toyota will purchase the hydrogen through a long-term purchase agreement as well as a portion of the electricity generated, with enough hydrogen to meet the daily driving needs of 1,500 vehicles.

C. Financial Condition

An update of FCE's financial condition is presented above in the Fuel Cell Energy Corporate Update section.

D. Diversified Business Mix

In addition to FCE's Energy Supply Business, FCE is taking advantage of the ability of its technology to meet applications for various energy and storage-related purposes, including carbon capture, hydrogen for transportation, and energy storage, as explained by management in recent presentations below:

Our technology

Decarbonizes power:

Produce low-to-zero carbon power from a flexible array of inputs including biogas, natural gas, and hydrogen.

Capture carbon dioxide (for use or sequestration) while making power.

Produces hydrogen:

Supply hydrogen from power and water through electrolysis, or co-produce hydrogen, power, and water from fuel.

Store energy from intermittent renewables by converting excess power to hydrogen—then converting hydrogen back into power when it's needed.

A global leader in fuel cell technology innovation 1,2



Company highlights 2

HQ Danbury, Connecticut	>500 Employees	Platforms in Commercial Operation ³	3
FCEL Listing: NASDAQ	>220 MW Capacity in field	>13 Million MWhs generated with patented technology	Continents

¹ Patents are for FuelCell Energy, Inc., and our subsidiary Versa Power Systems, Inc.

E. Liquidity & Capital Resources

An update of FCE's liquidity and Capital Resources is presented above in the Fuel Cell Energy Corporate Update section.

F. Conclusion (Manufacturer Risk)

FCE has evolved successfully beyond its balance sheet and corporate liquidity challenges in 2019. Several successful equity raises reflect confidence of the capital markets in FCE's business model. The refinancing of several project assets resulted in considerable additional liquidity for the company (and Green Bank participated in this refinancing approved at the March 2023 Board of Directors meeting). These events have raised Green Bank staff's confidence in FCE's ability to continue to deliver on its solid pipeline of opportunities, many of these in Connecticut, including the Projects as well as FCE's success in other competitive power generation solicitations.

²As of the year ended October 31, 2022.

³Note that certain sites have multiple platforms. As an example, our 14.9 MW Bridgeport project site has five SureSource 3000 platforms. As of 10/31/22, there were 33 sites with the Company's carbonate fuel cell platforms.

Continuing successful implementation of FCE's strategy will allow FCE to better align its operations with current reality and diversify revenues to enhance FCE's path to sustained growth.

That said, FCE also needs to remain successful in continuing to develop its core business – and the existing fuel cells and its next generation high efficiency modules should position the company well to succeed competitively as the power generation marketplace progressively moves to cleaner, sustainable and higher availability sources.

General Risks & Mitigants:

For each specific type of risk outlined below in subsequent sections, there are specific structures, concepts, and mitigants that staff has designed to minimize Green Bank exposure to certain downside scenarios. There are, however, several overarching mitigants that will be put in place due to the overall concept of risk, and in effect, can be applied to almost all of the defined Projects' risks. Those overarching mitigants are identified below:

1. The Credit Facility will be secured by second priority (first priority for the Green Bank Senior Loan) security interest on all assets of the Borrower (a FuelCell Energy special purpose vehicle to be established), including a pledge of the Class B Units owned by the Borrower in the Tax Equity partnership (and all revenues and distributions, other economic rights, and governance rights related thereto) (the "Collateral"). Upon exit by the Tax Equity investor from the Tax Equity partnership, a perfected security interest in and lien, subordinate only to the Senior Term Loans (subordination here refers to the Subordinate Loan only) in addition to the Collateral of: i) all assets of the Borrower, including the fuel cells and all other personal property located at the Facilities; (ii) PPAs and Tariff Agreement; (iii) all leases, contracts and agreements of the Borrower, including leases, contracts and agreements relating to the Facilities; (iv) all rights as beneficiary under any warranty policies and under other required insurance policies; (v) all membership interests of Borrower held by FCE or any of its affiliates; (vi) all deposit accounts of Borrower (including the reserve accounts required hereunder); (vii) an assignment of the sublease and/or a leasehold mortgage of the sublease.

See "Capital Flow Diagram – Term Financing" later in the memo for a description of these relationships.

2. A Debt Service Reserve will be funded at a level of by the maturity date of the Senior Term Loans. The Reserve will be initially funded with and and will be funded up to from (i) a sweep of all net cashflow due to FCE from the Projects after all debt service is paid in 2029 and 2030 (ii) a sweep of cash distributions owed to FCE from the Master Refinancing Facility in 2030. The projected funds from these sources total million and do not include cashflows from the Bridgeport Fuel Cell project past the current PPA expiration date in 2028. That project is the largest contributor of cashflows to the Master Refinancing Facility and FCE has expressed confidence that the agreement will be extended and has commenced conversations with the city of Bridgeport to do so. Staff is confident that the Debt Service Reserve will be fully funded by the maturity date of the Senior Term Loans, providing the Green Bank the ability to retire the Subordinate Loan if necessary.

Technology Risk

The Projects represent the latest configuration of FCE's DFC fuel cell technology, which is capable of achieving up to 60% electric power generation efficiency compared with up to 47% in previous configurations. An

independent engineering review of each Project was conducted and confirmed the Projects' ability to generate 14 MW and 2.8 MW.

Technology Risk Mitigants:

- 1.) The Projects have completed construction and have been signed off on by an independent Engineer who has confirmed the production forecast, commissioning and performance test reports, suitability for the intended application, site drawings and plans, among others.
- 2.) FCE has developed and operated a small-scale version of the technology on its corporate location providing valuable operating data and experience with the high-efficiency unit.
- 3.) FCE has significant experience and expertise in developing and operating innovative fuel cells, such as the Bridgeport Project, which remains the largest standalone fuel cell in the United States.
- 4.) Independent engineering firm DAI reviewed FCE's fleet-wide SureSource MW data through May of 2023. At the fleet-wide level, FCE's average historical fleet performance is at an availability factor of % and a capacity factor of %, and with technology improvements FCE expects that capacity factor to increase. The average capacity factor of plants placed-in-service within the last 5 years is %.

Production Risk

Aside from performance risk associated with any relatively new technology (which, as explained above, staff believes are reasonable under the circumstances as the technology is derivative of existing successful technology), Project cash flows available for debt service can fluctuate due to a range of unexpected operational issues, ranging from unexpected outages from fuel line disruptions to disturbance from the surrounding urban environment.

Production Risk Mitigants:

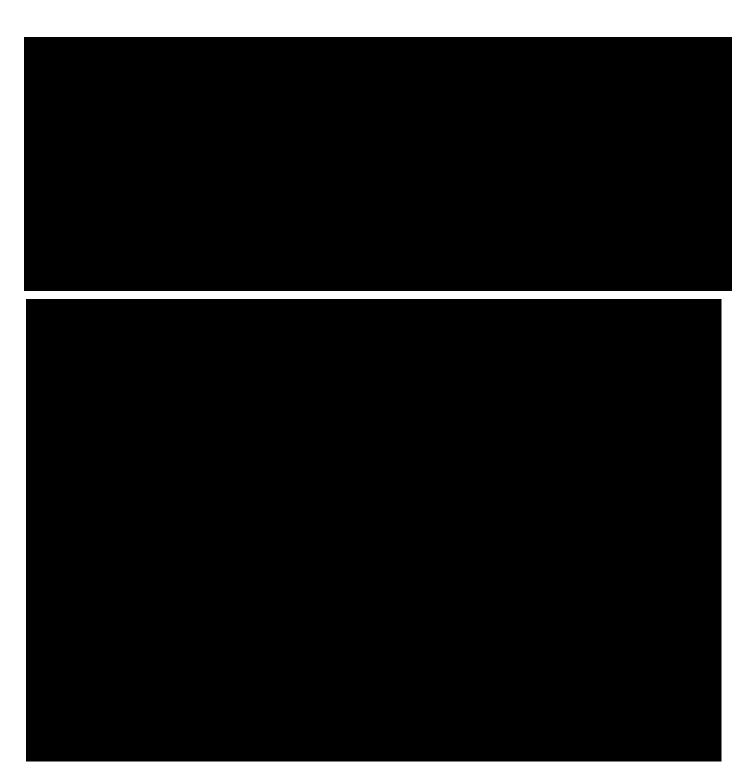
- 1.) Modeled Debt Service Coverage for the Senior Loans exceeds
- 2.) The Projects are operational and, once the Term Loans are completed, FCE will have sourced the capital needs of the projects through an investment from tax equity, the Senior Lender and Green Bank.

Credit Risk

As off-takers of the PPA and Tariff Agreement, Project cashflows are dependent on United Illuminating and Connecticut Light and Power's ability to pay for electric energy produced by the Projects.

Credit risk mitigants:

- 1.) Both Companies are investment-grade rated entities (United Illuminating rated A- and Connecticut Light and Power Company A- by Fitch)
- 2.) United Illuminating has been operating for over 100 years and provides electricity to 325,000 customers within Connecticut. Connecticut Light and Power has also been operating for over 100 years and provides electricity to more than 1.2 million customers in Connecticut.



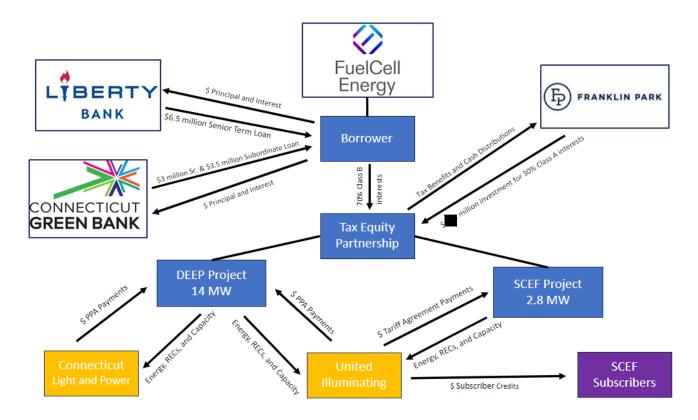
Proforma Projection Model for Debt Service

Staff has worked with FCE to develop reasonable projection model estimates for the Projects. Based on these estimates, staff anticipates that over the 14 -year term the Projects will generate sufficient cash flow to service the Loan and effectively amortize the balance over a 14-year period if the fuel cell is restacked and our subordinated loan converts to a senior loan (after the repayment of the Liberty-Green Bank senior loans).

Capital Flow Diagram and Tables

Capital Flow Diagram - Term Financing

The Term Loans are structured as a "back-leverage" credit facility, meaning the Borrower is an FCE subsidiary that owns Class B equity interests in the tax equity partnership: Franklin Park 2023 FCE Tax Equity Fund, LLC. Below, the capital flow diagram is included to demonstrate the structure of a back-leverage facility.



Strategic Selection and Importance

Connecticut Impact

Support for the Connecticut Grid Reliability & Resiliency

Fuel cells, as an electrical power generating technology, convert hydrogen fuel sources (e.g. natural gas) into electricity via a chemical process without the combustion cycle typically found in traditional generation technologies, and thus without the associated pollution². Fuel cells are defined as a Class I renewable energy source as per CGS §16-1(a)(20), and operate at an effective annual capacity factor of ~90%, providing clean, consistent, and reliable power to associated off-takers, whether grid-tied or behind-the-meter. In aggregate, the fuel cell industry is of strategic importance to Connecticut as it relates to economic development, job creation and retention, and clean energy deployment.

Green Bank staff believes that by providing key pieces of the capital stack and financing structures for strategic fuel cell assets in Connecticut, such as the Term Loans, Green Bank can help promote the foundation for a viable transition from subsidizing to financing models for a key clean energy technology that promotes environmental,

² FuelCell Energy, "How a Fuel Cell Works," http://www.fuelcellenergy.com/?page_id=15806, (February 26, 2017).

energy, and economic benefits for the state. This approach and its progress towards the intended goal of leveraging private capital towards project finance investment continues to show promise, as evidenced by the results of the \$6.5 million Credit Facility leveraging a \$6.5 million Liberty Bank Senior Term Loan, a \$ million tax equity investment and \$ million of sponsor (FCE) investment for the Projects, achieves an overall leverage ratio of \$16 in private capital to \$1 of Green Bank investment.

From a power generation perspective, fuel cells benefit the existing electric distribution system as distributed baseload plants that stabilize loads (versus intermittent renewable energy technologies such as solar and wind), provide voltage support, and mitigate system upgrade requirements³, resulting in enhanced system stability and cost-savings.

Benefits to the RPS and Environmental Benefits

From a clean energy power generation perspective, fuel cells provide Connecticut with a viable means of achieving its current Renewable Portfolio Standard ("RPS") policy of 30% of energy generation from Class I renewable energy sources by 2025⁴, and provide potential off-takers with clean and reliable power that can be used in standalone and aggregated (e.g. microgrid) applications. Fuel cells have enabled Connecticut to meet its Class I RPS with more in-state deployment of clean renewable energy as opposed to out-of-state generation.

Looking at the Projects from their pollution reduction potential, accordingly to an EPA report published on March 9, 2020, the average non-baseload output emissions rate across the New England eGRID subregion is 931 lbs of CO₂ per MWh of power produced⁵. In contrast, the technology underpinning the Projects has a CO₂ emissions rate ranging between 520 – 680 lbs per MWh. Comparing the midpoint of the Projects's emissions rate with the average regional non-baseload production rate, the Projects saves, on average, 331 lbs of CO₂ per MWh (36%) of power produced. The Projects are expected to produce 132,308 MWh of electricity during its first year of operation, offsetting 43,793,948 lbs of CO₂, or the equivalent of 21,900 tons of CO₂ in that first year of operation. Across the 20-year financing term, the Projects are expected to produce up to 2,527,355 MWh of electricity, offsetting approximately 418,000 tons of CO₂.

Economic Impact

From an economic perspective, Connecticut is home to over 600 companies that take part in the fuel cell industry supply chain, which account for over 2,600 direct and indirect jobs⁶, and which in 2015 contributed

³Connecticut Department of Energy & Environmental Protection, "Testimony Submitted by DEEP Commissioner Robert J. Klee, and Katie Dykes, Chair, Public Utility Regulatory Authority," *Public Hearing – February 21, 2017 – Energy and Technology Committee*, https://www.cga.ct.gov/2017/ETdata/Tmy/2017HB-07036-R000221-Klee,%20Robert,%20Commissioner-DEEP-TMY.PDF, (February 26, 2017).

⁴ "Renewable Portfolio Standards Overview." CT.Gov, Nov. 2023, portal.ct.gov/PURA/RPS/Renewable-Portfolio-Standards-Overview.

⁵United States Environmental Protection Agency, "eGRID2018 Summary Tables," https://www.epa.gov/sites/production/files/2020-01/documents/egrid2018 summary tables.pdf

⁶Department of Economic and Community Development, "Testimony Before the Energy and Technology Committee 2/21/17 – RE: HB7036: An Act of Promoting the Use of Fuel Cells for Electric Distribution System Benefits and Reliability," *Public Hearing – February 21, 2017 – Energy and Technology Committee*, https://www.cga.ct.gov/2017/ETdata/Tmy/2017HB-07036-R000221-Smith,%20Catherine,%20Commissioner-Department%20of%20Economic%20and%20Community%20Development-TMY.PDF, (February 26, 2017).

\$726 million in total revenue and investment and roughly \$40 million in state and local tax revenue⁷, which is a material portion of commercial tax revenues for the state. Support of the Projects will directly lead to not only the creation and retention of jobs associated with the Projects, but also to FCE's ability to ultimately grow its workforce as other projects in its pipeline come on line and as it implements its long-term growth strategy.

Subscriber Benefits (SCEF project)

As part of Connecticut's Shared Clean Energy Facility program, the SCEF project will sell electricity to UI. For every kilowatt hour of electricity sold, UI will provide a \$0.025/kwh credit to subscriber accounts. In compliance with Connecticut statue, 20% of these credits must be subscribed by Low-Income customers (defined as 60% or less of area median income "AMI") with an additional 40% subscribed by one or multiple of low and moderate income customers, customers who serve as landlords to affordable housing facilities, and customers who qualify as low-income service organizations. Lastly, 20% of credits must be subscribed by small business customers, with the remaining 20% available for voluntary enrollment by eligible customers. Projected payments to subscribers in the first year is \$549,712 with total projected payments to subscribers totaling \$10,994,238. These subscriber benefits align with the Green Bank's goal to ensure that no less than 40% of the investment and benefits of our incentive and financing programs will reach our state's vulnerable communities.

Green Bank Strategic Alignment

With the goal of creating a viable market for the transition from subsidy-based to financing-based models of development for fuel cells in Connecticut, financing the Projects is also of strategic importance to Green Bank, as the Projects exhibit the following criteria, which are required of all Green Bank strategic selection and award investments:

- Special Capabilities FCE has significant experience in manufacturing and developing fuel cells and is a
 locally-domiciled market leader in the industry. FCE can spearhead the pivot away from tax incentives
 and state procurement subsidies via cost reductions derived from technological innovation and market
 penetration.
- **Uniqueness** The Projects are of strategic state importance, supporting the state's clean energy goals and providing subscriber benefits (SCEF Project only) to low and moderate income households.
- Strategic Importance The Projects are aligned with Green Bank goals, including the creation and retention of local jobs associated with FCE, the deployment of an innovative technology that will play an integral role in the economic transformation of the fuel cell industry, the provision of economic benefits to low and moderate income electric customers, and the development of a clean energy generating asset that, both on an individual basis and as similar projects are deployed at scale, will continue to provide a combination of cleaner, cheaper, and more reliable energy, while creating jobs and supporting local economic development.

⁷Connecticut Center for Advanced Technology, Inc., "Testimony of Joel M. Rinebold, Director of Energy Initiatives, Connecticut Center for Advanced Technology, Inc., Before the Energy and Technology Committee February 21, 2017, Regarding Governor's Bill No. 7036 – An Act Promoting the Use of Fuel Cells for Electric Distribution System Benefits and Reliability," *Public Hearing – February 21, 2017 – Energy and Technology Committee*, https://www.cga.ct.gov/2017/ETdata/Tmy/2017HB-07036-R000221-Rinebold,%20Joel,%20Director%20of%20Energy%20Initiatives-CT%20Center%20for%20Advanced%20Technology-TMY.PDF, (February 26, 2017).

- **Urgency and Timeliness** There is an urgent need to act on the opportunity as the Projects are already in commercial operation, with Tax Equity closed (in December 2023) and with Liberty Bank submitting to its credit committee soon.
- Multiphase Project Successful execution of the Credit Facility will set the stage for the Green Bank to support the development of similarly strategic projects both for FCE and for the greater fuel cell industry within Connecticut.

Strategic Plan

Is the program proposed, consistent with the Board approved Comprehensive Plan and Budget for the fiscal year?

As confirmed in the Bridgeport Fuel Cell Project Qualification Memo approved by the Board and Deployment Committee on November 30, 2012, pursuant to the Green Bank's mandate to foster the growth, development, and commercialization of renewable energy sources and related enterprises, and to stimulate demand for renewable energy and the deployment of renewable energy sources that serve end use customers in Connecticut, the Board has determined that is in keeping with Conn. Gen. Stat. Section 16-245n for Green Bank to fund certain commercial activities that support projects involving the use of fuel cell technology for distributed generation ("DG") power production.

Staff recommends that these same criteria be applied to fuel cell facilities, such as the Projects, for the reasons included throughout this Memo, and in particular as laid out in the **Strategic Selection and Importance** section of this Memo.

Ratepayer Payback

How much clean energy is being produced (i.e. kWh over the projects lifetime) from the program versus the dollars of ratepayer funds at risk?

The Projects are expected to produce a combined 132,308MWh during the first year of operation, and up to 2,527,355MWh during their 20-year revenue contract term. Compared with the maximum \$6,500,000 of ratepayer funds at risk, the Projects are expected to yield up to 389 kWh per \$1 of ratepayer funds over a 20-year term.

Terms and Conditions

What are the terms and conditions of ratepayer payback, if any?

The Senior Term Loan will carry an approximate interest rate of over a 7-year, fully amortizing term. The Subordinate Loan carries an interest rate of over a 14-year, fully amortizing term with an initial 7-year interest only period. The Projects having been completed, the Green Bank loans will be advanced upon closing, within the next few months. The Senior Loans will be secured by a senior secured lien on all assets of the Borrower. The Subordinate Loan will be secured by a subordinated lien and position on all assets of the Borrower. In addition, the Subordinate Loan will benefit from a Debt Service Reserve to be fully funded by the maturity date of the Senior Loans.

Capital Expended

How much of the ratepayer and other capital that Green Bank manages is being expended on the project?

\$6,500,000 (\$3,000,000 Senior Term Loan and \$3,500,000 Subordinate Loan)

Risk

What is the maximum risk exposure of ratepayer funds for the program?

\$6,500,000

Financial Statements

How is the program investment accounted for on the balance sheet and profit and loss statements?

The loans would result in a \$6,500,000 reduction of cash and a \$6,500,000 increase in promissory notes (Statutory & Infrastructure program).

Target Market

Who are the end-users of the engagement?

United Illuminating, Connecticut Light and Power, and Shared Clean Energy Facility subscribers as selected by United Illuminating.

Green Bank Role, Financial Assistance & Selection/Award Process

Lender via Strategic Selection process pursuant to the Green Bank Operating Procedures (see **Strategic Selection** and **Importance** section of this Memo).

Program Partners

FuelCell Energy, Inc.

Risks and Mitigation Strategies

Lending risks and mitigation strategies have been addressed in the **Project Risks and Mitigants** section of this Memo.

Staff Recommendation

The Green Bank has financed seven projects by FuelCell Energy (FCE) together with substantial private capital in the form of sponsor equity (FCE), tax equity and various loans from the banking community. FCE's projects in Derby follow the patter of demonstrated technology with excellent offtaker characteristics (i.e., public utilities). Every project finance transaction entails various risks. Green Bank staff believes it has identified and mitigated those risks as explained in this memorandum. Staff recommends Board approval of the Credit Facility on the basis that Project risks have been reasonably mitigated, are well-balanced and contained, and that the strategic importance of the Projects, to both the state and Green Bank, also support the investment.

Appendix I, Financial Model and DSCR

Year			0	1	2	3	4	5	6	7	8	9	10	11	12	13	
Back-Leve	erage	TOTAL	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	20
Revenue																	
	es ng Expenses, excl. Module Re																
		epiacement															
	s in Net Working Capital																
	s in Cash Reserves	-L TE Domest															
	stributions to Tax Equity, exc	ci. IE Buyout															
CFADS, ex	xcl. Module Replacement																
DSCR																	
DSCR																	
Debt Serv	dee																
Dept Serv	rice																
Internet F	Vancas																
Interest E	xpense																
Senior Lo	ane																
	ng Balance																
Repaym	-																
Ending E																	
Litaling	Balarice																
Subordina	ate Loan																
	ng Balance																
Interest	no salatice																
Repaym	nents																
Ending E																	
Litaling L	Dalatice																
DSCR																	

Resolutions

WHEREAS, in accordance with (1) the statutory mandate of the Connecticut Green Bank ("Green Bank") to foster the growth, development, and deployment of clean energy sources that serve end-use customers in the State of Connecticut, (2) the State's Comprehensive Energy Strategy ("CES") and Integrated Resources Plan ("IRP"), and (3) Green Bank's Comprehensive Plan in reference to the CES and IRP, Green Bank continuously aims to develop financing tools to further drive private capital investment into clean energy projects;

WHEREAS, FuelCell Energy, Inc., of Danbury, Connecticut ("FCE") has used previously committed funding (the "Bridgeport Loan") from Green Bank to successfully develop a 15 megawatt fuel cell facility in Bridgeport, Connecticut (the "Bridgeport Project"), and FCE has operated and maintained the Bridgeport Project without material incident, is current on payments under this loan;

WHEREAS, FCE has used previously committed funding (the "Master Refinance Loan Projects") from Green Bank to successfully refinance a portfolio of six fuel cell projects, with 68% of the nameplate capacity being Connecticut sited projects, and FCE has operated and maintained the Master Refinance Loan Projects without material incident, is current on payments under this loan;

WHEREAS, FCE has used previously committed funding (the "Groton Loan Project") from Green Bank to successfully develop a 7.4 megawatt fuel cell project in Groton, Connecticut located on the U.S. Navy submarine base and supported by a power purchase agreement ("PPA") with the Connecticut Municipal Electric Energy Cooperative ("CMEEC"), and FCE has operated and maintained the Groton Loan Project without material incident, is current on payments under this loan;

WHEREAS, FCE has requested financing in support of private capital from the Green Bank to develop a 2.8 megawatt fuel cell Shared Clean Energy Facility project (the "SCEF Project") and a 14 megawatt fuel cell Department of Energy and Environmental Protection solicitation project (the "DEEP" Project"), both in Derby, Connecticut (together the "Derby Projects");

WHEREAS, staff has considered the financing needs for the Derby Projects, collaboratively with the senior lender, Liberty Bank of Middletown Connecticut ("Liberty"), and have structured a term loan facility whereby the Green Bank would participate on an equivalent security basis with Liberty for a senior term loan (the "Senior Loan") and separately Green Bank would provide an additional loan (the "Subordinated Loan") subordinated to the Senior Loan;

WHEREAS, staff has considered the merits of the Derby Projects and the ability of FCE to construct, operate and maintain each facility, support the obligations under the Senior Loan and the Subordinated Loan (together being the "Credit Facility") throughout their respective terms, and as set forth in the due diligence memorandum dated January 23, 2024 (the "Board Memo"), has recommended this support be in the form of funding not to exceed \$3,000,000 in respect of the Senior Loan and funding not to exceed \$3,500,000 in respect of the Subordinated Loan, secured by all project assets, contracts and revenues as described in the Board Memo;

NOW, therefore be it:

RESOLVED, that the Green Bank Board of Directors (the "Board") hereby approves the Credit Facility in an amount not to exceed \$3,000,000 in respect of the Senior Loan and funding not to exceed \$3,500,000 in respect of the Subordinated Loan, as a <u>strategic selection and award</u> pursuant to Green Bank Operating Procedures Section XII; and

RESOLVED, that the President of the Green Bank and any other duly authorized officer is authorized to take appropriate actions to provide the Credit Facility to FCE (or a special purpose entity wholly-owned by FCE) in an

amount not to exceed \$3,000,000 in respect of the Senior Loan and funding not to exceed \$3,500,000 in respect of the Subordinated Loan with terms and conditions consistent with the Board Memo, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 180 days from the date of authorization by the Board; and

RESOLVED, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents and instruments as they shall deem necessary and desirable to effect the abovementioned Term Loan and participation.

Submitted by: Bryan Garcia, President and CEO; Bert Hunter, EVP and CIO; David Beech, Senior Manager; Mariana Trief, Associate Director.

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Memo

To: Board of Directors, Connecticut Green Bank

From: Mariana Trief, Associate Director, Investments; Fiona Stewart, Senior Manager,

Investments; and Bert Hunter, EVP & CIO

CC: Bryan Garcia, President and CEO: Brian Farnen, General Counsel and CLO: Jane

Murphy, EVP Finance and Administration

Date: January 19, 2024

Re: IPC Solar PV Debt Facility Extension / Expansion

Introduction

In 2020, Connecticut Green Bank ("Green Bank") entered into two financing facilities with Inclusive Prosperity Capital¹ ("IPC"): a \$5 million term loan facility ("Term Facility") and a \$5 million construction financing facility ("Construction Facility") (together, the "Existing Loan Facilities"). IPC uses the facilities to develop and finance solar power purchase agreement ("PPA") projects in the state of Connecticut. The Green Bank Board of Directors (the "Board") approved the arrangement of the Existing Loan Facilities at its meeting held October 26, 2018, and the applicable resolutions are included in **Appendix A**. The purpose of this memorandum is to provide a report to the Board on the deployment of capital under the Existing Loan Facilities and request approval to enter into either a new or an amended construction and term facility in a total amount not to exceed \$15M ("New Loan Facilities").

Background

Through 7 separate advances under the Term Facility, the Green Bank has deployed \$4.8M against 27 Solar Projects, representing a total of 4.2MW capacity. A list of projects that have been funded through the Term Loan facility is presented in **Appendix B**. As of December 31, 2023, approximately \$4.6M is outstanding under the Term Facility, i.e., ~\$200k has already been repaid. Three (3) projects have been supported through the Construction Facility with a total of ~\$400k deployed; all of which have been fully repaid through funding from the Term Facility. Initially, it was envisioned IPC would sign all agreements for solar PPA projects developed by Green Bank in Connecticut and would draw on the Construction Loan to fund milestones associated with the installation. However, as we have seen in practice, it has been more effective for Green Bank to sign and sell the projects to IPC at or around

¹ Inclusive Prosperity Capital was formed in 2018 by spinning out certain staff of the Green Bank.

mechanical completion, when IPC can draw on the Term Facility without needing to draw on the Construction Facility.

Green Bank's debt has allowed PPA projects in Connecticut to remain competitive and offer material energy savings to municipalities, nonprofits, small businesses and other commercial customers. This arrangement has also allowed Green Bank to focus its energy on the development of solar PPA projects with municipal customers, which are then sold to IPC for long term ownership. IPC continues to be a solid partner to own solar PPA projects developed by Green Bank's ongoing work with municipal customers that have challenging properties, which are often overlooked by traditional solar developers.

New Loan Facility

The Existing Loan Facilities were intended to "sunset" in July 2023 (i.e., with no additional advances but with any outstanding term lending being repaid over time in accordance with the terms of our financing arrangements) to allow the team to review the performance and consider New Loan Facilities that would incorporate any adjustments. The most material adjustment to the New Loan Facility is to allow for IPC to monetize the investment tax credit ("ITC") through elective pay² or sale of the ITC, both of which are now allowed under the Investment Reduction Act ("IRA").

The table below summarizes the terms to the New Loan Facilities, compared to the Existing Loan Facilities. In addition, the term sheet is presented in **Appendix C** with the expected comprehensive terms of the loan facility. It shall be determined in the final documentation if the Term Facility and Construction Facility will be new facilities or will be amendments of the Existing Loan Facilities. In addition, any changes required to the financing documentation will be taken under the advice of external legal counsel and will be to account for the optionality to monetize through a traditional tax equity partnership, direct pay, ITC sale or transfer agreement.

² Elective pay allows tax-exempt and governmental entities that would otherwise be unable to claim the ITC because they do not owe federal income tax, to claim the credit and file a tax return to claim elective pay for the full value of the ITC.

	Existing Term Loan Facility	New Term Loan Facility	Construction Financing Facility	New Construction Facility
Borrower	Inclusive Solar Manager CT I, LLC (as Borrower) Inclusive Solar Holdings CT I, LLC (as Pledgor)	Option A – IPC Solar CT, LLC Option B – Inclusive Solar Manager CT I, LLC (DE)	Inclusive Solar Company II, LLC (as Borrower) Inclusive Solar Holdings CT I, LLC (as Pledgor)	Inclusive Solar Development, LLC or IPC Solar Development CT NT, LLC
ITC Monetization	Tax Equity Partnership Flip	Option A – ITC monetized by non-profit entity through direct Pay Option B – ITC monetized through tax equity partnership flip or sale to unrelated entity		N/A
Commitment	\$5 million	Incremental \$5 million (i.e., max \$10 million overall)	\$5 million	No change (i.e., max \$5 million)
	Dependent on PPA project off-taker, ranging from Redact	Dependent on PPA project off-taker, ranging from Redact	Redact 360 day basis	No change
	Dependent on underlying project revenue contracts that act as collateral, but not to exceed Redact		Principal and accrued interest due when project is transferred from IPC development company to IPC project owning company (i.e., late in construction timeline)	Monthly interest payments with principal to be repaid upon: - Project reaches Substantial Completion (as defined in the EPCA Agreement); - Project is sold or transferred to a third party; or - 18 months from the date of Project's first advance
Debt service coverage ratio	:1.00	Redact:1.00	n/a, interest accrues until one-time repayment	n/a, monthly interest payments
Security		Same + guaranty from parent payment of debt service if there is a shortfall associate with cash sweeps from an ITC recapture	Project assets (real assets and contracts)	No change

Ratepayer Payback

How much clean energy is being produced (i.e. kWh over the projects' lifetime) from the project versus the dollars of ratepayer funds at risk?

Based on the assumption that the full \$15M Loan Facility (term + construction) commitment could be used to finance Solar Projects, the forecast kWh over the projects' lifetime is 270,000,000.00 kWh of energy. The kWh / \$ ratepayer funds at risk are forecast to be 18.3.

Capital Extended

How much of the ratepayer and other capital that Green Bank manages is being expended on the project?

The Loan Facility will not exceed \$15M in outstanding principal as of the end of the availability period, however due to principal repayments during the availability period, actual advances may exceed \$15 million somewhat.

Recommendation

In conclusion, staff recommends that the Board approve entering into either a new or an amended construction and term facility with IPC in an amount not to exceed \$15M (i.e., an incremental \$5 million).

Resolutions

WHEREAS, the Connecticut Green Bank ("Green Bank") Board of Directors approved at its meeting held on October 26, 2018 debt funding to finance third party ownership platforms like Inclusive Prosperity Capital ("IPC");

WHEREAS, CEFIA Holdings LLC subsequently entered into a \$5,000,000 term loan facility with Inclusive Solar Manager CT I, LLC and \$5,000,000 construction facility with Inclusive Solar Company II, LLC (both, "Existing Loan Facilities");

WHEREAS, given the rate of utilization of the Existing Loan Facilities and need to allow for flexibility to monetize the Investment Tax Credit ("ITC"), Green Bank staff proposes providing financing to new entities owned by IPC for the purpose of owning any solar projects it develops in the future;

NOW, therefore be it:

RESOLVED, that the Board approves staff's request to enter into either a new or amended construction and term facility in an amount not to exceed \$15,000,000 ("New Loan Facilities") with IPC entities, such amount being inclusive of amounts outstanding under the Existing Loan Facilities);

RESOLVED, that the President of the Green Bank; and any other duly authorized officer of the Green Bank, is authorized to execute and deliver, any contract or other legal instrument necessary to effect the modification of the Existing Loan transaction or to enter into additional documentation for the New Loan Facilities on such terms and conditions as are materially consistent with the Board Memo; and

RESOLVED, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents as they shall deem necessary and desirable to effect the above-mentioned legal instrument.

Submitted by: Mariana Trief, Associate Director, Investments; Fiona Stewart, Senior Manager, Investments and Bert Hunter, EVP & CIO

Appendix A – Resolutions passed by the Board at its meeting held October 26, 2018

Resolution #8

WHEREAS, the Connecticut Green Bank ("Green Bank") is uniquely positioned to continue developing a commercial solar PPA pipeline through local contractors in response to continued demand from commercial-scale off-takers;

WHEREAS, the market for commercial solar PPA financing continues to evolve, as various financing providers are entering the small commercial solar financing space with the ability to provide long-term financing for projects originated by the Green Bank;

WHEREAS, there is still demonstrated need for flexible capital to continue expanding access to financing for commercial-scale customers looking to access solar via a PPA, while both bolstering project returns for investors and enhancing project savings profiles for customers; and

WHEREAS, the Green Bank is implementing a Sustainability Plan that invests in various clean energy projects and products to generate a return to support its sustainability in the coming years.

NOW, therefore be it:

RESOLVED, that the Board of Directors approves funding, in a total not-to-exceed amount of \$15 million in new money, subject to budget constraints, for the continued development of commercial-scale solar PV PPA projects, to be utilized for the following purposes pursuant to market conditions and opportunities:

- 1. Development capital;
- 2. Construction financing; and
- 3. Financing one or more 3rd-party ownership platforms, in the form of sponsor equity and/or debt.

RESOLVED, that the President of Green Bank; and any other duly authorized officer of Green Bank, is authorized to execute and deliver, any contract or other legal instrument necessary to continue to develop and finance commercial PPA projects on such terms and conditions as are materially consistent with the memorandum submitted to the Green Bank Board on October 19, 2018; and

RESOLVED, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents as they shall deem necessary and desirable to effect the above-mentioned legal instrument.

Appendix B: Projects Financed to Date using Loan Facility

Draw#	Project Name	Size (kW)	Installation Cost (S)	Green Bank Loan Amount
1				
1				
1				
1	В			
2				
2				
3				
3				
3				
3				
3				
4				
4				
5				
5				
6				
7				
7				
Total		4,256.37	\$7,736,825.56	\$4,840,688.02

Appendix C – Draft Term Sheet with IPC

Indicative Summary of Terms and Conditions [Inclusive Prosperity Capital Inc] Senior Secured Loan and Construction Facility – Solar PV Systems – Up to [\$10,000,000] [date]

For Discussion Purposes Only - Confidential - This is Not a Commitment

The following is a non-binding term sheet ("Term Sheet") of a proposed loan transaction. Except as set forth below, this Term Sheet is intended solely as a basis for further discussions and is not intended to be, and does not constitute, a legally binding obligation of any party. A legally binding obligation will be established only pursuant to mutually acceptable definitive written agreements executed by the parties, and only after satisfactory completion of due diligence, legal review, governance approval and other conditions to be set forth in such definitive written agreements. In the event of any inconsistency between this Term Sheet and such definitive written agreements, the written agreements will govern. This Term Sheet does not constitute either an offer to (i) sell securities, (ii) purchase securities, or (iii) provide a loan or any other type of financing.

The parties involved are already a party to the transactions as follows:

- A \$5,000,000 term loan ("Existing Term Facility") entered into on July 21, 2020 between CEFIA Holdings LLC (as Lender), Inclusive Solar Manager CT I, LLC (as Borrower) and Inclusive Solar Holdings CT I, LLC (as Pledgor). The principal amount outstanding of the Existing Term Facility is [\$4,731,842]
- A \$5,000,000 construction loan facility ("Existing Construction Facility") entered into on December 17, 2020 between CEFIA Holdings LLC (as Lender), Inclusive Solar Company II, LLC (as Borrower) and Inclusive Solar Holdings CT I, LLC (as Pledgor). The principal amount outstanding of the Existing Construction Facility is [\$0]

Option A: The financing scenario in which Borrower elects to monetize the solar investment tax credit (the "ITC") by having a non-profit entity that is a subsidiary of Guarantor claim the ITC through "Elective Pay" pursuant to Section 6417 of the Code, whereby an eligible tax-exempt or governmental entity is able to qualify for the ITC to be paid to such entity by the Internal Revenue Service (IRS).

Option B: The financing scenario in which Borrower elects to monetize the ITC through sale of the ITC by Borrower to an unrelated entity ("ITC Sale Agreement") or through a tax equity partnership flip.

Guarantor: [Inclusive Prosperity Capital Inc.]

Borrower: [IPC Solar CT, LLC] under Option A; [Inclusive Solar Manager CT I, LLC (DE)] under Option B; [Inclusive Solar Development, LLC or IPC Solar Development CT NT, LLC]³ under the Construction Facility (as defined below).

Lender: CEFIA Holdings, a wholly-owned direct subsidiary of Connecticut Green Bank ("Green Bank")

Loan Facility and Use of Proceeds: Facility of up to \$[10,000,000] (the "Commitment"). The Commitment will be available under multiple advances within a [24] month period, subject to extensions in the absolute discretion of Lender. Initially the Commitment amount will be available as follows unless otherwise agreed

³ Note – which entity will it be if there will only be one construction facility (as discussed).

upon in the absolute discretion of the Lender (with an amount between the facility not to exceed the Commitment):

- Up to \$[5,000,000] for term financing to be provided when a photovoltaic project located in the state of Connecticut (the "Project" or "Projects") has achieved Mechanical Completion (as defined in the Project's EPCA Agreement) and satisfied each other conditions for funding ("Term Facility")
- Up to \$[5,000,000] for progress payments associated with a Project financing during construction ("Construction Facility")

To be determined for final documentation if the Term Facility and Construction Facility will be new facilities or will be amendments of the Existing Construction Facility and Existing Term Facility.

Debt Sizing for Term Facility:

On a per Project basis, Borrower may request advances up to Redact of the Contract Sum (as defined in the EPCA Agreement) plus the expected compensation for the ITC ("Project First Advance"). However, within [18 months] of the Project First Advance, Borrower must prepay a portion of the Project First Advance ("Mandatory ITC Prepayment") so that the remainder of the outstanding loan ("Final Term Advance") complies with the following requirements on a per Project basis:

- Debt service coverage ratio ("DSCR") of Redact using Redact estimates for energy production as a basis for forecast revenue.
- Advances (collectively) will not exceed Redact of the Contract Sum.

Debt Sizing for Construction Facility: on a per Project Basis based on completed milestones per the EPCA Agreement ("Milestone Advances") with specific conditions precedent to each advance listed within the loan agreement to be negotiated between Lender and Borrower.

Term:

- Term Facility: the term will not exceed ____years from the date of the Project First Advance (the "Maturity Date")
- Construction Facility: Milestone Advances will all mature on the earlier of:
 - The date that the Project associated with the Milestone Advances reaches Substantial Completion (as defined in the EPCA Agreement);
 - The date that Borrower sells or transfers the Project to a third party; or
 - o [Eighteen months] from the date of Project First Advance.

Amortization:

- Term Facility: Quarterly principal and interest payments over the term. On the Maturity Date, the Borrower will repay all the then outstanding principal balance, all accrued and unpaid interest and any and all amounts due under the loan. Lender, in its sole discretion, may allow Borrower to make interest only payments for a period of up to twelve months from the date of the Project First Advance for such Loan (the "Interest Only Period").
- Construction Facility: monthly interest only payments with all payments of principal and interest due at maturity.

Security: All obligations to Lender will be secured by:

- 1. First priority perfected security interest in and lien on and collateral assignment of the equity interests in Borrower directly owned by Guarantor, and the proceeds thereof;
- 2. First priority perfected security interest in and lien on and collateral assignment of all of Borrower's existing and future assets, including Borrower's right, title and interest in all accounts (including the debt service reserve account) and contract rights and the equity interests in subsidiaries and project companies (if any) owned by Borrower, and all associated rights;
- 3. Guaranty from Guarantor guaranteeing to Lender (a) that it will perform or contract for performance of asset management and operations and maintenance obligations associated with the

Borrower, Project Company and Projects and (b) the payment of scheduled debt service under the Loan to the extent of any shortfall therein as a result of any indemnity cash sweeps under the ITC Sale Agreement reducing cash distributions to the Borrower.

4. Collateral to be further defined in the definitive documentation for the Loan Facility.

Interest Rate: calculated on a 30/360 day basis.

- Term Facility: dependent on counterparty to tariff agreement or revenue contract, indicatively:
 - State agency: Redact
 - Utilities that issue investment grade debt: Redact
 - Municipal: Redact for issuers of investment grade debt; between Redact and Redact otherwise, dependent on financial underwriting of municipality
 - Affordable housing: Redact
 - Other: Redact
- Construction Facility: \(\bigcirc \) % from the date Milestone Advances are made. Unpaid interest and principal will be payable at maturity.
- Lender reserves the right to increase the above rates for any advances by an equivalent amount by which the average weekly yield for the 10 year constant maturity US Treasury Note may increase from the weekly yield in effect as of the Effective Date of this Preliminary Term Sheet to the date of an advance under the Term or Construction Facility as determined by reference to Release H.15 ("Selected Interest Rates") issued from time to time by the Federal Reserve (https://www.federalreserve.gov/releases/h15/). The above rates may also be modified from time to time for the benefit of Borrower to take advantage of Lender promotional interest rate programs.

Conditions to Advance: Usual and customary for transactions of this nature, including, but not limited to, the following:

- 1. Satisfactory completion of business, financial, and legal due diligence;
- 2. Approval of the loan contemplated herein by the Lender's Board of Directors or committee thereof, and Guarantor;
- 3. Obtaining any consents or approvals necessary from third parties, such as the Borrower's and Guarantor's governing bodies, to consummate the loan contemplated herein, including the approval from all necessary governmental authorities of the Lender;
- 4. Advances for each Project shall be consistent with the Existing Term Facility and Existing Construction Facility and shall be further outlined in the Final Documentation;
- 5. No significant material litigation by any person (private or governmental) shall be pending or threatened with respect to the Borrower or Guarantor;
- 6. Absence of material adverse change in the financial condition, operations or business prospects of the Borrower and Guarantor;
- 7. UCC filing consistent with the Collateral/Security requirements of the Lender.
- 8. In the case of Option B, Lender has approved, in its reasonable discretion, if applicable, the ITC Sale Agreement.

Financial Covenants:

- 1. Term Facility:
 - For the Final Term Advance Borrower must maintain an annual DSCR of Redact]x tested quarterly for the prior rolling 12 months
 - Borrower to maintain a debt service reserve equal to 6 months of principal and interest payments.
- 2. **Construction Facility**: The aggregate value of Milestone Advances for the construction of any Project, including accrued interest thereon, will at no point exceed Redact of the construction cost of such Project (the "Advance Rate"). Borrower will repay accrued interest within ten (10) days if the Advance Rate is exceeded on any Project.

Reporting Covenants: To be defined within loan documentation but should expect: quarterly (unaudited) and annual (audited) financial statements of Borrower and Guarantor, annual payment performance history of Project Assets; annual operational performance reports of Project Assets including but not limited to actual vs expected production (kWh) for solar PV projects. If there are intervening companies between Borrower and Guarantor, Guarantor is to supply such financial statements of the intervening companies as specified above.

Other Terms and Conditions: To be defined within loan documentation, but should expect: representations, warranties and covenants, events of default, cross default, default interest rate and late charges, remedies, indemnities, operating performance and operations and maintenance provisions, distributions of cash flow, deposit accounts control matters, liability, property casualty and business interruption insurance, mandated use of an EPCA or other construction agreement approved by Lender.

The proposed structure in this Preliminary Term Sheet is subject to diligence in all respects. Collateral and other credit support will be updated based on Borrower's identity and any tax credit monetization within Borrower's group structure. For the avoidance of doubt, Lender will not agree to any limits on its rights and remedies, including in respect of its ability to foreclose, based on such tax credit monetization. Lender reserves the right to review and approve, in its sole discretion, any proposed transactions in respect of the tax credits related to the Projects. You will not, and will ensure your affiliates including Borrower do not, enter into any such transaction with the prior written consent of Lender.

Expiration: This Term Sheet expires on March 30, 2024.

Enabling Statute and State Contracting: The Green Bank is subject to the requirements outlined in Sections 16-245n of the Connecticut General Statutes and Borrower will be responsible for complying with applicable state contracting requirements.

Limitation of Debt / Permitted Indebtedness: Borrower may not assume or incur any debt, unless otherwise consented to by Lender.

Governing Law and Forum: Connecticut

The previous terms are all non-binding and subject to final legal documentation and previously listed Conditions to Close; provided, however, that the above provisions setting forth the Interest Rate and the Commitment shall be binding and included in the final legal documentation.

The following terms will be binding, regardless of whether the proposed transaction closes or not:

Expenses: The Guarantor or Borrower will pay all out of pocket and third party reasonable legal (including all costs associated with all UCC filings and searches), due diligence, background checks and other expenses incurred by the Lender in connection with the proposed transaction (whether or not the transaction closes), including third-party diligence. Lender will use commercial best efforts to minimize transaction expenses and notify the Borrower as it incurs any costs exceeding [\$pending]. Guarantor and Borrower shall not be obligated to pay Lender's outside counsel legal expenses in excess of [\$pending]. Lender shall begin to accrue reimbursable Expenses upon execution of this Term Sheet. This section shall survive any expiration of termination of the Term Sheet.

We look forward to working with you.

Accepted and Agreed to as of the date of the Term Sheet:

[INCLUSIVE PROSPERITY CAPITAL INC]
By:
Name:
Title:
CONNECTICUT GREEN BANK
By:
Name:
Title:

75 Charter Oak Avenue, Suite 1 - 103, Hartford, CT 06106 T 860.563.0015 ctgreenbank.com



Memo

To: Board of Directors, Connecticut Green Bank

From: Mariana Trief, Associate Director, Investments; Fiona Stewart, Senior Manager, Investments; and Bert Hunter, EVP & CIO

CC: Bryan Garcia, President and CEO; Brian Farnen, General Counsel and CLO; Jane Murphy, EVP Finance and Administration

Date: January 19, 2024

Re: IPC Solar PV Debt Facility Extension / Expansion

Introduction

In 2020, Connecticut Green Bank ("Green Bank") entered into two financing facilities with Inclusive Prosperity Capital¹ ("IPC"): a \$5 million term loan facility ("Term Facility") and a \$5 million construction financing facility ("Construction Facility") (together, the "Existing Loan Facilities"). IPC uses the facilities to develop and finance solar power purchase agreement ("PPA") projects ("Projects") in the state of Connecticut. The Green Bank Board of Directors (the "Board") approved the arrangement of the Existing Loan Facilities at its meeting held October 26, 2018, and the applicable resolutions are included in **Appendix A**. The purpose of this memorandum is to provide a report to the Board on the deployment of capital under the Existing Loan Facilities and request approval to enter into either a new or an amended construction and term facility in a total amount not to exceed \$15M ("New Loan Facilities").

Background

Through 7 separate advances under the Term Facility, the Green Bank has deployed \$4.8M against 27 Solar Projects, representing a total of 4.2MW capacity. A list of projects that have been funded through the Term Loan facility is presented in **Appendix B**. As of December 31, 2023, approximately \$4.6M is outstanding under the Term Facility, i.e., ~\$200k has already been repaid. Three (3) projects have been supported through the Construction Facility with a total of ~\$400k deployed; all of which have been fully repaid through funding from the Term Facility. Initially, it was envisioned IPC would sign all agreements for solar PPA projects developed by Green Bank in Connecticut and would draw on the Construction Loan to fund milestones associated with the installation. However, as we have seen in practice, it has been more effective for Green Bank to sign and sell the projects to IPC at or around

¹ Inclusive Prosperity Capital was formed in 2018 by spinning out certain staff of the Green Bank.

mechanical completion, when IPC can draw on the Term Facility without needing to draw on the Construction Facility.

Green Bank's debt has allowed PPA projects in Connecticut to remain competitive and offer material energy savings to municipalities, nonprofits, small businesses and other commercial customers. This arrangement has also allowed Green Bank to focus its energy on the development of solar PPA projects with municipal customers, which are then sold to IPC for long term ownership. IPC continues to be a solid partner to own solar PPA projects developed by Green Bank's ongoing work with municipal customers that have challenging properties, which are often overlooked by traditional solar developers.

New Loan Facility

The Existing Loan Facilities were intended to "sunset" in July 2023 (i.e., with no additional advances but with any outstanding term lending being repaid over time in accordance with the terms of our financing arrangements) to allow the team to review the performance and consider New Loan Facilities that would incorporate any adjustments. The most material adjustment to the New Loan Facility is to allow for IPC to monetize the investment tax credit ("ITC") through elective pay² or sale of the ITC, both of which are now allowed under the Investment Reduction Act ("IRA").

The table below summarizes the terms to the New Loan Facilities, compared to the Existing Loan Facilities. In addition, the term sheet is presented in **Appendix C** with the expected comprehensive terms of the loan facility. It shall be determined in the final documentation if the Term Facility and Construction Facility will be new facilities or will be amendments of the Existing Loan Facilities. In addition, any changes required to the financing documentation will be taken under the advice of external legal counsel and will be to account for the optionality to monetize through a traditional tax equity partnership, direct pay, ITC sale or transfer agreement.

² Elective pay allows tax-exempt and governmental entities that would otherwise be unable to claim the ITC because they do not owe federal income tax, to claim the credit and file a tax return to claim elective pay for the full value of the ITC.

	Existing Term Loan Facility	New Term Loan Facility	Construction Financing Facility	New Construction Facility
Borrower	Inclusive Solar Manager CT I, LLC (as Borrower) Inclusive Solar Holdings CT I, LLC (as Pledgor)	Option A – IPC Solar CT, LLC Option B – Inclusive Solar Manager CT I, LLC (DE)	Inclusive Solar Company II, LLC (as Borrower) Inclusive Solar Holdings CT I, LLC (as Pledgor)	Inclusive Solar Development, LLC or IPC Solar Development CT NT, LLC
ITC Monetization	Tax Equity Partnership Flip	Option A – ITC monetized by non-profit entity through direct Pay Option B – ITC monetized through tax equity partnership flip or sale to unrelated entity		N/A
<u>Advance</u>	Up to Redact f the Fair	Up to Redactof build costs +	Based on completed milestones	No change
	Market Value of the	expected compensation for	per the EPCA Agreement	
	<u>Project</u>	ITC; with mandatory		
		prepayment equivalent to ITC compensation.		
Commitment	Max \$5 million of principal outstanding; upon principal repayments (mandatory or optional), borrower may draw on loan again up to the \$5M max loan amount.	Incremental \$5 million (i.e., max \$10 million overall): upon principal repayments (mandatory or optional), borrower may draw on loan again up to the \$10M max loan amount.	\$5 million- <u>; Revolving credit</u> arrangement.	No change (i.e., max \$5 million <u>+</u> revolving credit arrangement)
Interest rate	Dependent on PPA project off-taker, ranging from Redact	Dependent on PPA project off-taker, ranging from 4Redad	galad <mark>%; 360 day basis</mark>	No change
Term	Dependent on underlying project revenue contracts that act as collateral, but not to exceed Redact	No change	Principal and accrued interest due when project is transferred from IPC development company to IPC project owning company (i.e., late in construction timeline)	Monthly interest payments with principal to be repaid upon: - Project reaches Substantial Completion (as defined in the EPCA Agreement); - Project is sold or transferred to a third party; or - 18 months from the date of Project's first advance

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Debt service coverage ratio	Redact .00	n/a, interest accrues until one-time repayment	n/a, monthly interest payments
	interests in project owning companies (this is a back leveraged facility) +	contracts)	No change

Ratepayer Payback

How much clean energy is being produced (i.e. kWh over the projects' lifetime) from the project versus the dollars of ratepayer funds at risk?

Based on the assumption that the full \$15M Loan Facility (term + construction) commitment could be used to finance Solar Projects, the forecast kWh over the projects' lifetime is 270,000,000.00 kWh of energy. The kWh / \$ ratepayer funds at risk are forecast to be 18.3.

Capital Extended

How much of the ratepayer and other capital that Green Bank manages is being expended on the project?

The Loan Facility will not exceed \$15M in outstanding principal as of the end of the availability period, however due to principal repayments during the availability period, actual advances may exceed \$15 million somewhat.

Recommendation

In conclusion, staff recommends that the Board approve entering into either a new or an amended construction and term facility with IPC in an amount not to exceed \$15M (i.e., an incremental \$5 million).

Resolutions

WHEREAS, the Connecticut Green Bank ("Green Bank") Board of Directors approved at its meeting held on October 26, 2018 debt funding to finance third party ownership platforms like Inclusive Prosperity Capital ("IPC");

WHEREAS, CEFIA Holdings LLC subsequently entered into a \$5,000,000 term loan facility with Inclusive Solar Manager CT I, LLC and \$5,000,000 construction facility with Inclusive Solar Company II, LLC (both, "Existing Loan Facilities");

WHEREAS, given the rate of utilization of the Existing Loan Facilities and need to allow for flexibility to monetize the Investment Tax Credit ("ITC"), Green Bank staff proposes providing financing to new entities owned by IPC for the purpose of owning any solar projects it develops in the future:

NOW, therefore be it:

RESOLVED, that the Board approves staff's request to enter into either a new or amended construction and term facility in an amount not to exceed \$15,000,000 ("New Loan Facilities") with IPC entities, such amount being inclusive of amounts outstanding under the Existing Loan Facilities);

RESOLVED, that the President of the Green Bank; and any other duly authorized officer of the Green Bank, is authorized to execute and deliver, any contract or other legal instrument necessary to effect the modification of the Existing Loan transaction or to enter into additional documentation for the New Loan Facilities on such terms and conditions as are materially consistent with the Board Memo; and

RESOLVED, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents as they shall deem necessary and desirable to effect the above-mentioned legal instrument.

Submitted by: Mariana Trief, Associate Director, Investments; Fiona Stewart, Senior Manager, Investments and Bert Hunter, EVP & CIO

Appendix A – Resolutions passed by the Board at its meeting held October 26, 2018

Resolution #8

WHEREAS, the Connecticut Green Bank ("Green Bank") is uniquely positioned to continue developing a commercial solar PPA pipeline through local contractors in response to continued demand from commercial-scale off-takers;

WHEREAS, the market for commercial solar PPA financing continues to evolve, as various financing providers are entering the small commercial solar financing space with the ability to provide long-term financing for projects originated by the Green Bank:

WHEREAS, there is still demonstrated need for flexible capital to continue expanding access to financing for commercial-scale customers looking to access solar via a PPA, while both bolstering project returns for investors and enhancing project savings profiles for customers; and

WHEREAS, the Green Bank is implementing a Sustainability Plan that invests in various clean energy projects and products to generate a return to support its sustainability in the coming years.

NOW, therefore be it:

RESOLVED, that the Board of Directors approves funding, in a total not-to-exceed amount of \$15 million in new money, subject to budget constraints, for the continued development of commercial-scale solar PV PPA projects, to be utilized for the following purposes pursuant to market conditions and opportunities:

- 1. Development capital;
- 2. Construction financing; and
- 3. Financing one or more 3^{rd} -party ownership platforms, in the form of sponsor equity and/or debt.

RESOLVED, that the President of Green Bank; and any other duly authorized officer of Green Bank, is authorized to execute and deliver, any contract or other legal instrument necessary to continue to develop and finance commercial PPA projects on such terms and conditions as are materially consistent with the memorandum submitted to the Green Bank Board on October 19, 2018; and

RESOLVED, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents as they shall deem necessary and desirable to effect the above-mentioned legal instrument.

Appendix B: Projects Financed to Date using Loan Facility

Draw#	Project Name	Size (kW)	Installation Cost (S)	Green Bank Loan Amount
1				
1				
1				
1				
2				
2				
3				
3				
3				
3				
3				
4				
4				
5				
5				
6				
7				
7	ivianden JCC	320.89	\$823,343.20	\$307,373.06
Total		4,256.37	\$7,736,825.56	\$4,840,688.02

Appendix C - Draft Term Sheet with IPC

Indicative Summary of Terms and Conditions [Inclusive Prosperity Capital Inc] Senior Secured Loan and Construction Facility – Solar PV Systems – Up to [\$10,000,000] [date]

For Discussion Purposes Only - Confidential - This is Not a Commitment

The following is a non-binding term sheet ("Term Sheet") of a proposed loan transaction. Except as set forth below, this Term Sheet is intended solely as a basis for further discussions and is not intended to be, and does not constitute, a legally binding obligation of any party. A legally binding obligation will be established only pursuant to mutually acceptable definitive written agreements executed by the parties, and only after satisfactory completion of due diligence, legal review, governance approval and other conditions to be set forth in such definitive written agreements. In the event of any inconsistency between this Term Sheet and such definitive written agreements, the written agreements will govern. This Term Sheet does not constitute either an offer to (i) sell securities, (ii) purchase securities, or (iii) provide a loan or any other type of financing.

The parties involved are already a party to the transactions as follows:

- A \$5,000,000 term loan ("Existing Term Facility") entered into on July 21, 2020 between CEFIA
 Holdings LLC (as Lender), Inclusive Solar Manager CT I, LLC (as Borrower) and Inclusive Solar
 Holdings CT I, LLC (as Pledgor). The principal amount outstanding of the Existing Term Facility
 is [\$4,731,842]
- A \$5,000,000 construction loan facility ("Existing Construction Facility") entered into on December 17, 2020 between CEFIA Holdings LLC (as Lender), Inclusive Solar Company II, LLC (as Borrower) and Inclusive Solar Holdings CT I, LLC (as Pledgor). The principal amount outstanding of the Existing Construction Facility is [\$0]

Option A: The financing scenario in which Borrower elects to monetize the solar investment tax credit (the "ITC") by having a non-profit entity that is a subsidiary of Guarantor claim the ITC through "Elective Pay" pursuant to Section 6417 of the Code, whereby an eligible tax-exempt or governmental entity is able to qualify for the ITC to be paid to such entity by the Internal Revenue Service (IRS).

Option B: The financing scenario in which Borrower elects to monetize the ITC through sale of the ITC by Borrower to an unrelated entity ("ITC Sale Agreement") or through a tax equity partnership flip.

Guarantor: [Inclusive Prosperity Capital Inc.]

Borrower: [IPC Solar CT, LLC] under Option A; [Inclusive Solar Manager CT I, LLC (DE)] under Option B; [Inclusive Solar Development, LLC or IPC Solar Development CT NT, LLC]³ under the Construction Facility (as defined below).

Lender: CEFIA Holdings, a wholly-owned direct subsidiary of Connecticut Green Bank ("Green Bank")

Loan Facility and Use of Proceeds: Facility of up to \$[10,000,000] (the "Commitment"). The Commitment will be available under multiple advances within a [24] month period, subject to extensions in the absolute discretion of Lender. Initially the Commitment amount will be available as follows unless otherwise agreed

³ Note – which entity will it be if there will only be one construction facility (as discussed).

upon in the absolute discretion of the Lender (with an amount between the facility not to exceed the Commitment):

- Up to \$[5,000,000] for term financing to be provided when a photovoltaic project located in the state of Connecticut (the "Project" or "Projects") has achieved Mechanical Completion (as defined in the Project's EPCA Agreement) and satisfied each other conditions for funding ("Term Facility")
- Up to \$[5,000,000] for progress payments associated with a Project financing during construction ("Construction Facility")

To be determined for final documentation if the Term Facility and Construction Facility will be new facilities or will be amendments of the Existing Construction Facility and Existing Term Facility.

Debt Sizing for Term Facility:

On a per Project basis, Borrower may request advances up to [Formal of the Contract Sum (as defined in the EPCA Agreement) plus the expected compensation for the ITC ("Project First Advance"). However, within [18 months] of the Project First Advance, Borrower must prepay a portion of the Project First Advance ("Mandatory ITC Prepayment") so that the remainder of the outstanding loan ("Final Term Advance") complies with the following requirements on a per Project basis:

- Debt service coverage ratio ("DSCR") of Redact limiting redact timates for energy production as a basis for forecast revenue.
- Advances (collectively) will not exceed [60%] of the Contract Sum.

Debt Sizing for Construction Facility: on a per Project Basis based on completed milestones per the EPCA Agreement ("Milestone Advances") with specific conditions precedent to each advance listed within the loan agreement to be negotiated between Lender and Borrower.

Term:

- Term Facility: the term will not exceed Redact on the date of the Project First Advance (the "Maturity Date")
- Construction Facility: Milestone Advances will all mature on the earlier of:
 - The date that the Project associated with the Millestone Advances reaches Substantial Completion (as defined in the EPCA Agreement);
 - The date that Borrower sells or transfers the Project to a third party; or
 - [Eighteen months] from the date of Project First Advance.

Amortization:

- Term Facility: Quarterly principal and interest payments over the term. On the Maturity Date, the Borrower will repay all the then outstanding principal balance, all accrued and unpaid interest and any and all amounts due under the loan. Lender, in its sole discretion, may allow Borrower to make interest only payments for a period of up to twelve months from the date of the Project First Advance for such Loan (the "Interest Only Period").
- Construction Facility: monthly interest only payments with all payments of principal and interest due at maturity.

Security: All obligations to Lender will be secured by:

- 1. First priority perfected security interest in and lien on and collateral assignment of the equity interests in Borrower directly owned by Guarantor, and the proceeds thereof;
- 2. First priority perfected security interest in and lien on and collateral assignment of all of Borrower's existing and future assets, including Borrower's right, title and interest in all accounts (including the debt service reserve account) and contract rights and the equity interests in subsidiaries and project companies (if any) owned by Borrower, and all associated rights;
- 3. Guaranty from Guarantor guaranteeing to Lender (a) that it will perform or contract for performance of asset management and operations and maintenance obligations associated with the

Borrower, Project Company and Projects and (b) the payment of scheduled debt service under the Loan to the extent of any shortfall therein as a result of any indemnity cash sweeps under the ITC Sale Agreement reducing cash distributions to the Borrower.

4. Collateral to be further defined in the definitive documentation for the Loan Facility.

Interest Rate: calculated on a 30/360 day basis.

- Term Facility: dependent on counterparty to tariff agreement or revenue contract, indicatively:
 - State agency: Redact
 - Utilities that issue investment grade debt: Redact
 - Municipal: Redact for issuers of investment grade debt; between Redact herwise dependent on financial underwriting of municipality
 - Affordable housing: Redact
 - Other: Redact
- Construction Facility: Research the date Milestone Advances are made. Unpaid interest and principal will be payable at maturity.
- Lender reserves the right to increase the above rates for any advances by an equivalent amount
 by which the average weekly yield for the 10 year constant maturity US Treasury Note may
 increase from the weekly yield in effect as of the Effective Date of this Preliminary Term Sheet to
 the date of an advance under the Term or Construction Facility as determined by reference to
 Release H.15 ("Selected Interest Rates") issued from time to time by the Federal Reserve (
 https://www.federalreserve.gov/releases/h15/). The above rates may also be modified from time
 to time for the benefit of Borrower to take advantage of Lender promotional interest rate
 programs.

Conditions to Advance: Usual and customary for transactions of this nature, including, but not limited to, the following:

- 1. Satisfactory completion of business, financial, and legal due diligence;
- Approval of the loan contemplated herein by the Lender's Board of Directors or committee thereof, and Guarantor;
- Obtaining any consents or approvals necessary from third parties, such as the Borrower's and Guarantor's governing bodies, to consummate the loan contemplated herein, including the approval from all necessary governmental authorities of the Lender;
- Advances for each Project shall be consistent with the Existing Term Facility and Existing Construction Facility and shall be further outlined in the Final Documentation;
- No significant material litigation by any person (private or governmental) shall be pending or threatened with respect to the Borrower or Guarantor;
- Absence of material adverse change in the financial condition, operations or business prospects of the Borrower and Guarantor;
- 7. UCC filing consistent with the Collateral/Security requirements of the Lender.
- 8. In the case of Option B, Lender has approved, in its reasonable discretion, if applicable, the ITC Sale Agreement.

Financial Covenants:

- 1. Term Facility:
 - For the Final Term Advance Borrower must maintain an annual DSCR of Redact tested quarterly for the prior rolling 12 months
 - Borrower to maintain a debt service reserve equal to 6 months of principal and interest payments.
- Construction Facility: The aggregate value of Milestone Advances for the construction of any Project, including accrued interest thereon, will at no point exceed eighty percent (80%) of the construction cost of such Project (the "Advance Rate"). Borrower will repay accrued interest within ten (10) days if the Advance Rate is exceeded on any Project.

Reporting Covenants: To be defined within loan documentation but should expect: quarterly (unaudited) and annual (audited) financial statements of Borrower and Guarantor, annual payment performance history of Project Assets; annual operational performance reports of Project Assets including but not limited to actual vs expected production (kWh) for solar PV projects. If there are intervening companies between Borrower and Guarantor, Guarantor is to supply such financial statements of the intervening companies as specified above.

Other Terms and Conditions: To be defined within loan documentation, but should expect: representations, warranties and covenants, events of default, cross default, default interest rate and late charges, remedies, indemnities, operating performance and operations and maintenance provisions, distributions of cash flow, deposit accounts control matters, liability, property casualty and business interruption insurance, mandated use of an EPCA or other construction agreement approved by Lender.

The proposed structure in this Preliminary Term Sheet is subject to diligence in all respects. Collateral and other credit support will be updated based on Borrower's identity and any tax credit monetization within Borrower's group structure. For the avoidance of doubt, Lender will not agree to any limits on its rights and remedies, including in respect of its ability to foreclose, based on such tax credit monetization. Lender reserves the right to review and approve, in its sole discretion, any proposed transactions in respect of the tax credits related to the Projects. You will not, and will ensure your affiliates including Borrower do not, enter into any such transaction with the prior written consent of Lender.

Expiration: This Term Sheet expires on March 30, 2024.

Enabling Statute and State Contracting: The Green Bank is subject to the requirements outlined in Sections 16-245n of the Connecticut General Statutes and Borrower will be responsible for complying with applicable state contracting requirements.

Limitation of Debt / Permitted Indebtedness: Borrower may not assume or incur any debt, unless otherwise consented to by Lender.

Governing Law and Forum: Connecticut

The previous terms are all non-binding and subject to final legal documentation and previously listed Conditions to Close; provided, however, that the above provisions setting forth the Interest Rate and the Commitment shall be binding and included in the final legal documentation.

The following terms will be binding, regardless of whether the proposed transaction closes or not:

Expenses: The Guarantor or Borrower will pay all out of pocket and third party reasonable legal (including all costs associated with all UCC filings and searches), due diligence, background checks and other expenses incurred by the Lender in connection with the proposed transaction (whether or not the transaction closes), including third-party diligence. Lender will use commercial best efforts to minimize transaction expenses and notify the Borrower as it incurs any costs exceeding [\$pending]. Guarantor and Borrower shall not be obligated to pay Lender's outside counsel legal expenses in excess of [\$pending]. Lender shall begin to accrue reimbursable Expenses upon execution of this Term Sheet. This section shall survive any expiration of termination of the Term Sheet.

[INCLUSIVE PROSPERITY CAPITAL INC]
Ву:
Name:
Title:
CONNECTICUT GREEN BANK
Ву:
Name:
Title:

We look forward to working with you.

Accepted and Agreed to as of the date of the Term Sheet:

STATE OF CONNECTICUT

PUBLIC UTILITIES REGULATORY AUTHORITY TEN FRANKLIN SQUARE NEW BRITAIN, CT 06051

DOCKET NO. 23-08-02

ANNUAL RESIDENTIAL RENEWABLE ENERGY SOLUTIONS PROGRAM REVIEW – YEAR 3

November 1, 2023

By the following Commissioners:

Marissa P. Gillett John W. Betkoski, III Michael A. Caron

DECISION

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DECISION

I. INTRODUCTION

A. SUMMARY

In this Decision, the Public Utilities Regulatory Authority (Authority or PURA) approves updates to the Residential Renewable Energy Solutions Program (RRES Program or Program), administered by The Connecticut Light and Power Company d/b/a Eversource Energy (Eversource) and The United Illuminating Company (UI; collectively, with Eversource, the electric distribution companies or EDCs). The approved changes are intended to better align the RRES Program with the program objectives. The Decision also sets the RRES Program Tariff rates for project applications received in calendar year 2024.

B. BACKGROUND OF THE PROCEEDING

On February 10, 2021, the Authority issued an Interim Decision in Docket No. 20-07-01, PURA Implementation of Section 3 of Public Act 19-35, Renewable Energy Tariffs and Procurement Plans (Residential Tariff Decision), establishing renewable energy tariffs for residential customers of each EDC effective January 1, 2022, through December 31, 2027, pursuant to § 16-244z subsections (b), (d), (e) and portions of subsection (c) of the General Statutes of Connecticut (Conn. Gen. Stat.). The approved tariff program was subsequently named the RRES Program. The Authority initiates a docket annually to review key RRES Program metrics, including deployed megawatts (MW) and low- and moderate-income customer participation, and to ensure the Program is "on track to at least maintain historical deployment levels and to deliver a carbon free grid by 2040." Residential Tariff Decision, p. 40.

Further, the Authority utilizes the annual proceeding to "set the [RRES Program] Tariff rates, any separate [renewable energy certificate (REC)] payments, and any fully, non-bypassable charges for Program applications received during the following calendar year." Id. The Authority additionally uses the docket to evaluate the key data inputs, in addition to MW deployed, necessary to establish the annual RRES Program Tariff rates. Id. Thus, the above-captioned proceeding was initiated pursuant to the Residential Tariff Decision and in order to ensure the continued successful implementation of the RRES Program.

The Authority conducted the first annual RRES Program review in Docket No. 21-08-02, <u>Annual Residential Renewable Energy Tariff Program Review and Rate Setting</u>, issuing Decisions on October 6, 2021 (Year 1 Decision), January 5, 2022, and June 8, 2022. The Decisions respectively finalized the Program Manual and set the RRES Program Tariff rates for project applications received in calendar year 2022, provided limited modification and clarifications of the RRES Program Manual, and established eligibility and participation guidance for affordable housing in the RRES Program.

The Authority conducted the second annual RRES Program review in Docket No. 22-08-02, <u>Annual Residential Renewable Energy Solutions Program Review – Year 2</u>, issuing Decisions on November 2, 2022 (Year 2 Decision) and February 8, 2023. The

Decisions respectively finalized the Year 2 Program Manual, established RRES Program tariff rates for project applications received in calendar year 2023, and authorized several changes to the application process to better align the Program with the Program Objectives.

C. CONDUCT OF THE PROCEEDING

On April 27, 2023, the Authority issued the Notice of Proceeding in the above-captioned proceeding.

On May 15, 2023, the Authority issued a Notice of Request for Written Comments on the following topics: rate setting; Distressed Municipality adder expansion and grace period allowance; low-income and Distressed Municipality adder values, form reduction, and incentive socialization; system oversizing allowance; an improved UI application; RRES data portals; and subsidizing roof repairs with investment tax credit (ITC) funds. On or before June 23, 2023, the Authority received seven sets of written comments from interested stakeholders.

On June 21, 2023, the Authority held a Technical Meeting to discuss the topics outlined in the May 15, 2023, Notice of Request for Written Comments.

On July 18, 2023, the Authority issued a second Notice of Request for Written Comments on the following topics: adder auto-enrollment; a minimum threshold for Income Eligible (IE) and Distressed Municipality (DM) deployment; income eligibility data; adder form reduction; increased solar plus storage deployment amongst underserved customers; a cancellation period and handling application discrepancies; electronic signatures; solar panel recycling; multifamily affordable housing meter sockets; multifamily affordable housing eligibility; a non-bypassable charge for Netting system expansions; the percentage of benefit to tenants; DC-coupling wiring options; proposed application fees; standardized data reporting; ensuring participant benefits; and proposed programmatic changes. On August 15, 2023, the Authority received ten sets of written comments from Program stakeholders.

On September 6, 2023, the Authority held a second Technical Meeting to discuss the topics outlined in the July 18, 2023 Notice of Request for Written Comments.

On September 8, 2023, the Authority issued a Notice of Request for Briefs with specific briefing prompts. The Authority received seven Briefs on September 20, 2023, in response.

The Authority issued a Proposed Final Decision on October 12, 2023, and provided an opportunity for Participants to file Written Exceptions.

D. PARTICIPANTS

A listing of all Participants to this proceeding is appended hereto as Appendix A.

II. LEGAL AUTHORITY

The RRES Program was established pursuant to subsections (b), (d), and (e) and portions of subsection (c) of section 3 of the Public Act 19-35, An Act Concerning a Green

Economy and Environmental Protection, now codified in Conn. Gen. Stat. § 16-244z. Conn. Gen. Stat. § 16-244z(b)(1) required the Authority to establish tariffs for each EDC to purchase from residential customers Class I renewable energy from projects located on a residential customer's own premises as well as rates for such tariffs. Additionally, Conn. Gen. Stat. § 16-244z(b)(1) permits the Authority to modify the tariff rates based on changed circumstances.

As previously stated, the Authority indicated in the Residential Tariff Decision that it will initiate an annual docket to review key RRES Program metrics, including, but not limited to, deployed MW and low- and moderate-income customer participation, and to ensure the Program is "on track to at least maintain historical deployment levels and to deliver a carbon free grid by 2040." Residential Tariff Decision, p. 40.

Herein, the Authority reviews the RRES Program design documents and Program Manual, relevant compliance filings, and current tariff rates to determine if and how the RRES Program can and should be modified to better align with the direction provided in the Residential Tariff Decision.

III. PROGRAM OBJECTIVES

In the Residential Tariff Decision, the Authority established the following five objectives to guide the development, implementation, and administration of the RRES Program (Program Objectives).

- 1. The sustained, orderly development of the state's solar industry, ensuring at a minimum that Connecticut's annual historical deployment of residential solar is maintained (i.e., approximately 50-60 MW per year);
- 2. <u>Achieve a 100% zero carbon electric grid by 2040</u>, including by promoting additional annual deployment of residential renewable energy as needed;
- 3. <u>Balance participant costs and benefits with non-participant costs and benefits and electric system costs and benefits</u>;
- 4. Ensure program accessibility for customers, by providing customer protections both explicitly through resources and disclosure forms, and also through simplified program and tariff designs;
- Encourage increased inclusivity overall, as well as program participation by low- and moderate-income (LMI) customers and customers in environmental justice communities.

Residential Tariff Decision, p. 7.

Accordingly, the Authority relied on the Program Objectives in evaluating the current RRES Program design and assessing any possible changes to be ordered in this proceeding and Decision with the objective of better aligning the RRES Program with the Program Objectives and the direction provided in the Residential Tariff Decision. Relatedly, the Authority reaffirms that the Program Objectives shall guide the Program Administrators in their administration of the RRES Program, particularly in instances (1) not explicitly addressed through the approved RRES Program documents or through Authority direction in prior Decisions or motion rulings and (2) where the EDCs are empowered to make administrative changes without PURA approval (See Section IV.N. of the Year 2 Decision). Finally, the Authority reaffirms that the fifth Program Objective, encourage increased inclusivity overall, shall be explicitly guided by a goal of 40% deployment amongst low-income populations or in Distressed Municipalities, in line with the Justice 40 goal set in the Residential Tariff Decision. Residential Tariff Decision, p. 40.

IV. AUTHORITY ANALYSIS

A. PROGRAM OVERVIEW

In the Residential Tariff Decision, the Authority established a statewide, six-year residential solar program to be administered by the EDCs in their respective service territories. Pursuant to Public Act 19-35, the RRES Program was created to ensure the continued growth of the residential renewable energy market upon the conclusion of the prior Residential Solar Investment Program (RSIP) and the sunsetting of traditional net metering on December 31, 2021.

The RRES Program gives residential customers the opportunity to sell energy and renewable energy certificates (RECs) from an eligible project, such as a solar photovoltaic (PV) system, for a 20-year term under one of two tariff rate structures: (1) Buy-All; or (2) Netting. Under the Buy-All tariff, the solar project is provided fixed compensation for all energy and RECs produced over the 20-year term. Alternatively, under the Netting tariff, the qualified project is currently compensated for the energy produced at the retail electric rate at the time of generation and for the RECs at a fixed rate over the 20-year term. Under the Buy-All tariff, compensation is provided to customers in the form of monetary on-bill credits, with the potential for an annual cash out of credits in excess of their utility bill. Under the Netting tariff, a customer's energy consumption, and monthly energy bill, is reduced by the energy produced and used on site. Further, under the Netting tariff, for any energy exported to the electric grid by the eligible project and not consumed on site, the EDCs provide customers with monetary on-bill credits. Last, under the Netting tariff, all REC payments are made on a quarterly basis.

Table 1, below, provides a summary of the RRES Program Tariff rates for project applications received in calendar year 2023.

Table	1. 2	023	RRES	Tariff	Rates
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2023 Residential Tariff Rates					
	Buy-All Rate (\$/kWh)	Netting REC Rate (\$/kWh)			
Eversource	0.2943	0.0318			
UI	0.2943	0.0000			
Low-Income Adder	0.030	0.025			
Distressed Municipality Adder	0.0175	0.0125			

See Year 2 Decision, p. 9.

Table 2 includes a summary of application data for Years 1 (2022) and 2 (2023) of the RRES Program provided in the EDCs' January and October 2023 monthly compliance filings in Docket No. 22-08-02. From January 2022 through September 2023, 234,846 kilowatts (kW), or roughly 235 MW, have been approved for the Program.

Table 2: RRES Program Applications to Date

RRES Application Data: January 2022-September 2023					
	Total Applications	Total Application kW	Approved Applications	Approved kW	
Eversource	25,289	200,924	25,433	202,699	
UI	4,949	34,739	4,608	32,147	

See Eversource Order No. 12 Compliance, Oct. 13, 2023;

Eversource Order No. 12 Compliance, Jan. 13, 2023;

UI Order No. 12 Compliance, Jan. 17, 2023;

UI Order No. 12 Compliance, Oct. 13, 2023.

Table 3 includes a summary of project deployment for Years 1 (2022) and 2 (2023) of the RRES Program provided in the EDCs' January and October 2023 monthly compliance filings. From January 2022 through September 2023, 152,710 kilowatts (kW), or roughly 153 MW, of approved projects have been deployed through the Program.

Table 3: RRES Program Deployments to Date

RRES Deployment: January 2022-September 2023				
	Total Deployment	Total Deployment kW		
Eversource	16,767	135,336		
UI	2,478	17,374		

See Eversource Order No. 12 Compliance, Oct. 13, 2023;

UI Order No. 12 Compliance, Jan. 17, 2023;

UI Order No. 12 Compliance, Oct. 16, 2023.

B. RATE SETTING

In setting tariff rates for future Program years, the Authority is guided by the three rate-setting objectives outlined in the Residential Tariff Decision. First, the Authority seeks to foster the sustained, orderly development of the state's solar industry. Residential Tariff Decision, p. 37. Second, the Authority seeks to deploy residential renewable energy systems through the RRES Program to help achieve a 100% zero carbon grid by 2040. Id. Third, the Authority seeks to balance RRES Program participant costs and benefits with the costs and benefits to non-participating ratepayers and the electric system as a whole. Id. Ultimately, the Authority weighs all three objectives in establishing RRES Program Tariff rates, but errs on the side of setting such rates no higher than necessary to achieve these objectives. Year 1 Decision, p. 5.

When authorizing the Program, the Authority relied on analysis from the CGB to determine the appropriate rate of return needed to meet the rate-setting objectives. Residential Tariff Decision, p. 38. Based on the CGB data and stakeholder testimony, the Authority subsequently determined that the rate of return that was necessary to achieve these objectives was 9 – 11%. <u>Id</u>. Finally, to calculate the ratepayer support necessary to achieve this rate of return, the Authority found the following values necessary to consider: "1) Average upfront installed system cost; 2) the federal Investment Tax Credit (ITC); 3) Ongoing operations and maintenance (O&M) costs; 4) System performance (e.g., capacity factor); 5) Retail electricity rates, including an assumed escalation factor; and 6) the unlevered [internal rate of return (IRR)] for each tariff (i.e., the buy-all and netting tariffs)." Year 1 Decision, p. 6.

1. Stakeholder Comments

The EDCs stated that average installed costs reported by installers have generally increased since the start of the program and exceed those reflected in the Residential Tariff Model. EDC Comments, June 1, 2023, p. 2. However, the EDCs noted that these costs likely reflect prices paid by retail customers and "may not exclusively reflect increases in labor or materials costs", as higher electricity supply costs and increased customer demand may have increased short-term system pricing. Id. Considering that current residential solar installations have substantially exceeded the historical rate of deployment despite higher reported costs, the EDCs suggested that the Authority "may reasonably elect to discount the application of reported pricing data when setting RRES rates for Year 3." Id. While the EDCs do not collect data on actual or estimated O&M costs, they do not believe O&M costs are a significant barrier to solar deployment and concur with the methodology used to estimate O&M costs, as well as the 13% residential PV capacity factor assumption, used in the Residential Tariff Model adopted in the Year 1 Decision. Id. In addition, the EDCs noted that the availability of a 30% ITC pursuant to the Inflation Reduction Act (IRA), as well as bonus credits for certain qualified systems, will likely increase rates of return for some solar system owners. Id. CGB also stated that the 30% credit is now available to more entities, including business taxpayers and not-for-profits. CGB Comments, June 1, 2023, p. 2.

PosiGen noted that installed costs increased by 8% nationally throughout 2022 but appear to be leveling off, which is consistent with price relief in the module market and slowing inflation. PosiGen Comments, June 1, 2023, p. 2. PosiGen also stated that although data provided by the EDCs indicates average system capacity factor ranges

between approximately 11.1% and 12.5%, the 13% capacity factor assumption used in the Residential Tariff Model "is a reasonable approximation of a well-performing system in Connecticut." <u>Id</u>. ConnSSA noted that national data indicates higher year-over-year installed costs, and that labor shortages and higher interest rates likely result in weaker economic value for residential solar ownership. ConnSSA Comments, June 1, 2023, p. 1.

2. Rate Setting Calculations

There are two steps to setting prospective RRES compensation rates to ensure achievement of the three rate-setting objectives listed above. The first step is to review and update, if and when necessary, the retrospective IRR analysis utilized to set RRES compensation rates. In other words, the first step entails reviewing the analysis used to determine that the rate of return that was necessary to achieve the rate-setting objectives was 9 – 11% based on any new information available to the Authority. This step is particularly important in this year's proceeding as it represents the first opportunity for the Authority to assess historical deployment within the RRES Program as the Authority had insufficient data to do so last year. The second step is to set the prospective compensation rates by utilizing and updating, if and when necessary, the Residential Tariff Model adopted in the Year 1 Decision. The Authority may also make out-of-model adjustments to the compensation rate based on known or knowable future changes (e.g., the January 1, 2024 implementation of a low-income discount rate) and other factors to ensure the Program Objectives are achieved. All out-of-model adjustments must be documented and explained to ensure transparency.

a. Step 1

The Authority previously stated that the rate-setting review in this Decision would be "guided by the Program application and deployment numbers from January 1, 2022, through June 30, 2023, as well as the six values surrounding project costs outlined ... in the Year 1 Decision." Year 2 Decision, p. 8. The Authority applied this guidance by developing a novel time-series model that predicts RRES deployment based on the following inputs: monthly historical solar kW deployment in Connecticut, aggregated by approval to energize date; the average annual project IRR; and historical electricity rates.

The deployment data utilized in the time-series model is from both the RSIP and RRES Programs and extends from 2012 through June 2023, consistent with the above-cited Year 2 Decision guidance. CGB Interrog. Resp. CAE-6; UI Interrog. Resp. CAE-14, Att. 4 Public; Eversource Interrog. Resp. CAE-14; Eversource Compliance, Aug. 22, 2023, Att. 1.²

¹ The "six values surrounding project costs" are incorporated by way of the IRR calculations.

² The data utilized in the time-series model is limited to the projects deployed through the RSIP and RRES Programs provided in this proceeding through the cited interrogatory responses. While the Authority recognizes that solar projects have been deployed outside of RSIP and RRES Programs, particularly in 2021, it is unclear that the addition of such projects would significantly change the results of the time-series model. Further, the Authority is not aware of any data source for the production or REC revenue data for such projects. The Authority will consider the incorporation of such data in setting RRES rates for future program years (i.e., Year 3 or later) if such data is provided in the record of the relevant proceeding.

The Authority calculated the historical IRR of the RRES and RSIP projects using production data provided by the CGB and EDCs, and using the same incentives and other relevant cash flow data utilized in the Residential Tariff Model – 2024 appended to this Decision as Appendix B. CGB Interrog. Resp. CAE-6; UI Interrog. Resp. CAE-14, Att. 4 Public; Eversource Interrog. Resp. CAE-14; Eversource Compliance, Aug. 22, 2023, Att. 1. Notably, the Authority applied accelerated depreciation in its calculations for historical IRR for third-party owned (TPO) systems, which represents a change from the prior analysis used to determine the target IRR.

The historical electricity rate data used in the model is an 80-20 split between Eversource and UI using Rate 1 and Rate R data, respectively. The model is fit with annual average delivery rate data that is lagged by one year. However, due to the impact of increased supply rates on solar deployment, the model uses the higher of the two supply rates, which is typically the rate effective January through June.³ The model also does not lag supply rates due to their volatility. However, as the supply rates for the first half of 2024 were not available at the time the modeling exercise was conducted this year, the Authority ran various scenarios for 2024 supply rates to project deployment, including escalating 2022 rates by the median annual percent supply rate increase squared (i.e., escalating based on the median annual increase for two years from 2022 to 2024) and averaging 2022 and 2023 winter supply rates.⁴ These scenarios showed that an IRR of 10% will, on average, result in annual deployment of 91 MW and 115 MW, respectively. Moreover, the Authority's analysis results in a confidence interval of 95% that deployment will be between 56 MW and 150 MW.

While deployment of 91 MW to 115 MW is significantly above the target range of 50-60 MW, 106 MW have been deployed through the RRES program from January 2023 through the end of September 2023, putting the program on pace to deploy roughly 140 MW in calendar year 2023. Eversource Order No. 12 Compliance, Oct. 13, 2023; UI Order No. 12 Compliance, Oct. 16, 2023.

b. Step 2

As noted above, an updated version of the Residential Tariff Model adopted in the Year 1 Decision is appended to this Decision as Appendix B, Residential Tariff Model – 2024. The Authority updated the following inputs in the model since it was last approved in the Year 1 Decision: (1) the retail electric rates and historical escalation factor; (2) the average installed cost, using a simple average of the 2022 and 2023 RRES project cost data based on stakeholder comments that 2023 cost data may be inflated, and that cost trends do not necessarily support the notion that costs have significantly risen from 2022 to 2023; and (3) the federal investment tax credit rates. The Authority also added functionality to apply accelerated depreciation in proportion to the market share of TPO

³ Since 2012, residential supply rates have always been higher in January through June for UI. UI Interrog. Resp. CAE-15. Over the same time, residential supply has been higher in the second half of a calendar year three times, in 2014, 2017, and 2022, with an average increase of only 4.95% for Eversource. Eversource Interrog. Resp. CAE-15.

⁴ The median annual rate increase was calculated using electricity rate data from 2012 through 2013. Eversource Interrog. Resp. CAE-15; UI Interrog. Resp. CAE-15.

systems and applied this approach in its compensation rate calculations, consistent with the approach taken this year in calculating the target IRR in step 1.5

Incorporating the above updates to the Residential Tariff Model – 2024 allows for the calculation of Buy-All tariff and Netting tariff REC or non-bypassable charge rates. Again, for reference, the Authority previously set an IRR target of 10% for the Buy-All tariff and an IRR range of 9-11% for the Netting tariffs the Residential Tariff Decision.

Applying an IRR of 10%, the Residential Tariff Model – 2024 returns a compensation rate of \$0.3189/kWh for the Buy-All tariff. \$0.3189/kWh represents an increase over the current rate of \$0.2943/kWh, which is driven by the underlying increase in the installed system costs in Connecticut. For the Netting tariff, the underlying retail rate provides the starting point for calculating RRES project compensation as all projects receive monetary credits equivalent to the retail rate for exported production (and, effectively, for on-site consumption as well). Accordingly, only the Netting REC and nonbypassable charge are being considered and set in this Decision; a Netting REC if the Residential Tariff Model – 2024 shows that the retail rate is insufficient to achieve the target IRR and a non-bypassable charge if the model shows the retail rate is more than sufficient to achieve the target IRR. Applying an IRR of 10%, the Residential Tariff Model - 2024 returns a non-bypassable charge of \$0.0256/kWh for Eversource and \$0.0476/kWh for UI. This would effectively be a decrease in the current compensation level of \$0.0574/kWh for Eversource and \$0.0476/kWh for UI (i.e., the current Netting REC of \$0.0318/kWh and \$0.0000/kWh for Eversource and UI, respectively, minus the calculated non-bypassable charges). Applying an IRR of 11%, the Residential Tariff Model - 2024 returns a non-bypassable charge of \$0.0018/kWh for Eversource and \$0.0236/kWh for UI. Notably, if the 2023 installed cost of \$4.40/W is substituted for the average installed costs for 2022 and 2023 of \$4.19/W, and an IRR of 11% is maintained, the Residential Tariff Model – 2024 returns a non-bypassable charge of \$0.0065/kWh for UI.

The principle of gradualism is vitally important in achieving Program Objective One to ensure the sustained and orderly deployment of the state's solar industry. Thus, while the Authority is confident in its time-series modeling that an IRR of 10% would result in RRES program deployment above the 50-60 MW target, all else being equal, and likely near 100 MW, the Authority finds that a decrease in the current compensation rates by approximately \$0.0476-0.0574/kWh does not achieve gradualism and could send a negative market signal regarding the long-term stability of the RRES Program. Thus, the Authority finds it appropriate to apply the necessary adjustments to move towards a 10% IRR over multiple years, starting by decreasing the current Netting REC rate in Eversource territory to \$0.00/kWh for systems that apply under the Netting tariff in 2024. As noted above, this Netting REC rate in Eversource territory is consistent with the Residential Tariff Model – 2024 output applying an IRR of 11%.

For UI, deployment under the RRES Program has historically lagged deployment in Eversource, with only 12% of the MW deployment under the RRES Program in 2023 through the end of August in UI's territory. UI's total annual load is roughly one-fourth

⁵ The Authority received Written Exceptions providing suggested areas of improvements for the Residential Tariff Model. See, e.g., Earthlight Exceptions, p. 2; PosiGen Exceptions, pp. 3-7; OCC Exceptions, pp. 1-2. The Authority has noted these comments and will take them under advisement for the next annual RRES review proceeding, Docket No. 24-08-02.

that of Eversource's, which indicates that deployment in UI's service territory should be closer to 20% of the Program total. Therefore, the Authority does not find it necessary or appropriate to change the Netting REC rate in UI territory at this time for systems that apply under the Netting tariff in 2024, which is consistent with the Residential Tariff Model – 2024 output for UI applying an IRR of 11% and 2023 average installed project costs.

The above-authorized Netting REC rates for both service territories of \$0.00/kWh is consistent with the original target IRR range of 9-11%. However, again, for clarity, the Authority is committed to moving towards, and potentially beyond, an IRR of 10% for all tariff offerings under the RRES Program in future years based on its time-series modeling, but in furtherance of the objective of gradualism will do so over multiple years. This will very likely necessitate the adoption of non-bypassable charges under the Netting tariff in both EDC service territories for 2025.

Last, the Authority finds that a compensation rate of \$0.3189/kWh, utilizing the Residential Tariff Model – 2024 updates and an IRR of 10%, is appropriate for systems that apply under the Buy-All tariff in both UI and Eversource service territory in 2024.

i. Adder Values

The Authority requested stakeholder input on the current Low-Income and Distressed Municipality adders in the RRES Program. Notice, May 15, 2023, pp. 3-4. In response, PosiGen flagged that the implementation of a Low-Income Discount Rate (LIDR), which will provide a tier 1 discount of 10% to all customer at or below 60% of State Median Income and a tier 2 discount of 50% for all customers at or below 160% of the Federal Poverty Guidelines,⁶ will make the RRES Program less attractive for low-income customers because the potential savings will decrease under the Netting tariff with the application of low-income bill discounts. PosiGen Comments, June 1, 2023, pp. 5-6. Consequently, PosiGen advocated for an increased low-income Netting tariff adder for customers enrolled in LIDR, approximated to current customer outcomes. Id. PosiGen noted that the Solar Massachusetts Renewable Target (SMART) Program offers a similar adder to LIDR customers. Id. Further, LIDR has the potential to increase low-income Program enrollment by making low-income customers more easily identifiable for installers earlier in the process. Id.

In its comments, the EDCs highlighted the relative deployment with low-income customers and in Distressed Municipalities in the RRES program. Specifically, the EDCs provided data showing that approximately 24% of all RRES systems receive one of the two adders. EDC Comments, June 1, 2023, p. 5. Further, the EDCs note that roughly 30% of RRES projects receive one of the two adders or are located in an environmental justice community. <u>Id</u>.

⁶ See Decision, Docket No. 17-12-03RE11, Oct. 19, 2022.

The RRES program has made good progress towards its Justice 40 targets to date. However, the above data indicates that the program has further to go to meet those goals, particularly amongst low-income customers who only represent 4.3% of RRES program participation. <u>Id</u>. Paired with the potential negative impact of the LIDR on low-income RRES Program deployment as highlighted by PosiGen, the Authority is concerned that the RRES Program may not meet its Justice 40 goals in 2024. Thus, the Authority determines that it is appropriate to raise adder values for both low-income and Distressed Municipalities. Specifically, the Authority determines that it is appropriate to raise the low-income adder for Netting tariff customers to \$0.035/kWh, which represents the decrease in the overall Netting tariff compensation in Eversource's territory authorized in this Decision (\$0.0318/kWh) plus an additional 10% to offset the tier 1 LIDR discount of 10%.

Moreover, the Buy-All tariff will become increasingly important to the deployment of RRES projects amongst low-income customers in the future as it is unimpacted by the LIDR, and thus will be the best financial option for customers receiving the tier 2 LIDR discount of 50% and is applicable to multifamily affordable housing for which little deployment has occurred to date. Accordingly, the Authority determines that it is appropriate to raise the low-income adder for the Buy-All tariff such that it is financially equivalent to the Netting tariff plus the adder authorized above. Utilizing the Residential Tariff Model – 2024, the Authority finds that the Buy-All tariff provides compensation roughly \$0.02/kWh lower than the Netting tariff on a levelized basis; thus, PURA authorizes a low-income adder for Buy-All systems of \$0.055/kWh (i.e., \$0.02/kWh above the low-income adder for the Netting tariff).

The Authority takes additional steps to bolster underserved participation in the RRES program throughout this Decision which, when paired with the increased incentives authorized above, PURA is confident will help ensure equitable outcomes. Ultimately, the Authority will continue to monitor underserved enrollment in the RRES Program and will adjust the low-income and/or Distressed Municipality adders as needed to support the Program's 40% underserved enrollment target in future annual review proceedings. The Authority will pay special attention to LIDR customer enrollment. Consequently, the Authority directs the EDCs to report the number and percentage of LIDR customers enrolled in the RRES Program, broken out by both LIDR tier and RRES tariff, by August 1 annually.

3. Summary – 2024 Compensation Rates

Retail electric rates have increased significantly since RRES compensation rates were last set in 2021 (i.e., approximately ~\$0.06-0.07/kWh between the date of this Decision and this time in 2021). That increase more than offsets the downward adjustments to Netting compensation rates authorized in this Decision. Moreover, the modeling conducted by the Authority shows that the IRRs that the approved compensation rates enable, i.e., 10-11%, are still more than sufficient to exceed the annual deployment goal of 50-60 MW, and will likely result in deployment closer to or above 90-115 MW. Further, as discussed in greater detail above, both the Buy-All tariff and the low-income and Distressed Municipality adders have been increased. The Authority is hopeful that the increase in the Buy-All tariff rate will aid the success of the RRES Program in meeting its Justice 40 goals, even with the implementation of a LIDR, and increase the current Buy-All Program share of 0.24% as of June 30, 2023. UI

Interrog. Resp. CAE-14, Att. 4; Eversource Compliance, Aug. 22, 2023, Att. 1. Additionally, as discussed in Section IV.E., State and Federal Incentive Eligibility, significant opportunities exist to increase project returns through the currently-available ITC adders of 10-30%. Thus, the Authority concludes that the authorized tariff compensation rates represent a measured adjustment that accomplishes Program Objective One to ensure the sustained, orderly development of the solar industry, while also achieving Program Objective Three, to balance participant costs and benefits with non-participant costs and benefits and electric system costs and benefits.

A summary of the RRES Year 3 compensation rates is available in Table 4 below.

2024 Residential Tariff Rates					
	Buy-All Rate (\$/kWh)	Netting REC Rate (\$/kWh)			
Eversource	0.3189	0.000			
UI	0.3189	0.000			
Low-Income Adder	0.055	0.035			
Distressed Municipality Adder	0.0275	0.0175			

Table 4: 2024 RRES Tariff Rates

C. OTHER LOW-INCOME AND DISTRESSED MUNICIPALITY ADDER TOPICS

1. Form Reduction and Simplification

In the Year 2 Decision, the Authority directed the EDCs to file an evaluation of the documents required for automatic enrollment in the low-income and Distressed Municipality adders, to determine whether the application process could be better streamlined, in support of the Program Objectives. Year 2 Decision, p. 30. In its document evaluation, the EDCs stated that payment beneficiaries who automatically qualify for either adder by participating in an income-eligible hardship program or by residing in a Distressed Municipality require no additional qualification documents. EDC Order No. 17 Compliance, June 1, 2023, Docket No. 22-08-02, p. 1. To receive direct adder payments, however, both EDCs require a W-9 form, in accordance with Internal Revenue Service (IRS) requirements. Id., pp. 1-2. If the adders were applied on-bill for the customer of record, the EDCs would not require a W-9 unless the customer cashed out excess on-bill credits in an amount greater than \$600. Id., p. 3. Moreover, UI has simplified the documents utilized for adder enrollment by requiring one single vendor certification form in lieu of several required forms (i.e., business classification form, ACH/wire authorization form, and voided check or bank information). Id., p. 2. When applicable, UI also provides a vendor certification form and a blank W-9 directly in PowerClerk, so that applicants can easily access the required forms for adder payment. ld. Additionally, both EDCs consolidated the payment beneficiary form with the tariff application by the end of July 2023. Id.: UI Exceptions, Oct. 24, 2023, p. 4.

The Authority requested written comments from stakeholders on the EDCs' evaluation of the documents required for automatic adder enrollment, including whether

additional improvements could be made to further streamline the adder enrollment process. Notice, July 18, 2023, p. 3. In response, PosiGen stated that it appreciates the enrollment improvements the EDCs made and does "not have any additional specific recommendations to further simplify the process and increase enrollment for the adders." PosiGen Comments, Aug. 15, 2023, pp. 7-8. OCC stated that it favors "a streamlined, simple, and accessible application process", but similarly did not identify any specific recommendations for changes at this time. OCC Comments, Aug. 15, 2023, p. 9.

The Authority appreciates the adder enrollment improvements made to date and does not require additional changes at this time. The Authority finds that the consolidation of application forms and requirements furthers the Program Objectives by increasing Program accessibility, aiding customer inclusivity, and reducing application completion timelines. The Authority therefore strongly encourages the EDCs to consider additional consolidation and simplification of required application documents wherever possible, so long as the Program Objectives are not adversely impacted.

2. Adder Definition Expansion

In support of the fifth Program Objective of increased inclusivity in the RRES Program, the Authority sought stakeholder feedback on a potential expansion of the Distressed Municipality adder to include projects located in environmental justice census block groups. Notice, May 15, 2023, p. 2. The Authority noted that Conn. Gen. Stat. § 22a-20a defines environmental justice communities as including both Distressed Municipalities and environmental justice census block groups where 30% or more of the population of both communities lives below 200% of the Federal poverty level. Id. Ultimately, the Authority stated that it was specifically interested in whether the benefits of the adder expansion outweigh potential customer confusion and increased programmatic costs. Id.

In written comments, the city of New Haven supported the proposed expansion because it would aid programmatic low- and moderate-income (LMI) targets while aligning the RRES Distressed Municipality adder with the statutory definition of environmental justice communities. New Haven Comments, May 31, 2023, pp. 2-3. Moreover, ConnSSA had no objection to the proposed expansion of the Distressed Municipality adder qualification. ConnSSA Comments, June 1, 2023, p. 1.

PosiGen noted that while it was not opposed to an expansion of the Distressed Municipality adder definition, the proposed change would add complexity for customers since it would provide an adder "at a more granular level than is typical for solar programs." PosiGen Comments, June 1, 2023, p. 4. Further, some environmental justice census block groups "are more isolated or not large enough on their own to warrant" the same level of attention by developers as an entire Distressed Municipality. <u>Id</u>. CGB also recommended an expansion of the eligibility for the Distressed Municipality adder to include not just environmental justice communities, but also Community Reinvestment Act communities. CGB Comments, June 1, 2023, pp. 3-5. Additionally, DEEP argued that the RRES low-income adder should be aligned with the definition used in the Inflation Reduction Act (i.e., less than 80% of Area Median Income). <u>Id</u>.

While OCC stated support for increased inclusivity in the RRES Program, OCC noted that it cannot weigh the benefits of the proposed change without understanding its

true costs. OCC Comments, June 1, 2023, pp. 1-2. Additionally, the EDCs agreed that the criteria for environmental justice communities is similar to the criteria for Distressed Municipalities. EDC Comments, June 1, 2023, p. 4. Nevertheless, the EDCs stated that the Authority should consider how an expansion of the Distressed Municipality adder would impact the costs of the RRES Program. <u>Id.</u>, p. 5. Additionally, the EDCs could not confirm that the proposed change would increase environmental justice participation beyond current enrollment levels, since over 700 customers in environmental justice census block groups are already participating in the RRES Program without an adder. <u>Id.</u>, p. 6.

a. Distressed Municipality Definition Determination

The Authority declines to expand customer eligibility for the Distressed Municipality adder in the RRES Program at this time. The inclusion of environmental justice census block groups in the Distressed Municipality adder could negatively impact the fourth Program Objective, accessibility for customers through simplified Program and tariff designs, by adding unneeded complexity to the Distressed Municipality adder. An expanded definition for the Distressed Municipality adder may also negatively impact the third Program Objective, balancing participant costs and benefits, by increasing programmatic costs through increased adder enrollment, including for projects in environmental justice census block groups that may be deployed without an adder.

Ultimately, 19.4% of RRES customers are currently enrolled in the Distressed Municipality adder, a figure that is significantly higher than the 4.3% customer enrollment in the low-income adder. EDC Comments, June 1, 2023, p. 5. Consequently, unlike low-income enrollment, Distressed Municipality customer enrollment appears to be better positioned to reach the Authority's 40% underserved enrollment target, especially when considering upward underserved enrollment trends in the RRES Program. See Year 2 Decision, p. 8.

However, as discussed further in Section IV.C.6, New EDC Underserved Reporting Requirements, below, the Authority will require the EDCs to track Program enrollment in environmental justice census block groups to enable the Authority and stakeholders to evaluate the relative deployment in EJ communities and Distressed Municipalities moving forward and to inform discussions on related programmatic changes in future RRES annual review proceedings.

Additionally, as discussed further in Section IV.E., State and Federal Incentive Eligibility, the Authority authorizes additional measures to ensure that developers have the necessary resources to determine the geography-based federal and state incentive eligibility of RRES projects. The resources identified in that section, paired with the statewide incentive eligibility tool being spearheaded by DEEP, which the Authority strongly supports, will ensure that the state optimizes the available federal funds.⁷

b. Low-Income Definition Determination

⁷ For more information on DEEP's incentive eligibility tool, <u>see</u> DEEP Corresp., Sept. 13, 2023, Docket No. 23-08-01. Additionally, the Authority's comments on DEEP's incentive eligibility tool may be found here: PURA Corresp., Sept. 21, 2023, Docket No. 23-08-01.

The Authority is not persuaded, at this time, that it is necessary to expand incentive eligibility to enable projects to take advantage of the ITC adders for two primary reasons. First, and most importantly, the Authority and other stakeholders have worked to consistently use 60% of State Median Income (SMI) as the low-income eligibility threshold for all of the programs under its purview for the last four years. The Authority has pursued the objective of standardizing income-eligibility for all programs using this 60% of SMI based on consistent feedback from low-income advocates that 60% of SMI is the most appropriate and accessible threshold for their constituents because it is the criteria that customers experience the most frequently as it is used in the Connecticut Energy Assistance Program, utility arrearage forgiveness programs, and now the LIDR.8

Second, the expansion of any eligibility must be carefully balanced with the pros and cons and costs and benefits of doing so. In this case, as noted in Section IV.E., State and Federal Incentive Eligibility, RRES projects are not eligible for the ITC adder that utilizes income-eligibility. Additionally, there is no data to suggest that an additional state incentive, either income or geography-based, is required to unlock federal funding from ITC adders, as a 10-30% tax credit represents a substantial financial incentive. Indeed, in the case that the ITC adders are sufficient to encourage deployment amongst eligible customers, any expansion to the state eligibility criteria represents an unnecessary additional cost that diminishes the net value of the federal incentives to Connecticut ratepayers (i.e., ideally, Connecticut would optimize the amount of federal funding received, while minimizing the amount of Connecticut ratepayer funding used). Further, as shown in Figure 1 below, all low-income eligible customers (i.e., customers with income at or below 60% of SMI) also meet the definition of 80% of Area Median Income for the relevant U.S. Department of Housing and Urban Development geographic areas. Thus, the existing eligibility criteria already allow for easy identification of eligibility with the ITC adders on an income basis (although, as noted above, ITC income-based adders are irrelevant to the RRES program). Moreover, comments have been provided in past annual reviews asserting that the collection of any additional income information represents a substantial barrier to deployment in underserved communities.9 As such, the Authority is not inclined to require such data collection for the RRES Program, particularly if existing information, such as LIDR eligibility, can be leveraged.

⁸ See, e.g., Docket No. 17-12-03RE01, Operation Fuel/CT Legal Services Comments, Dec. 4, 2019, p. 3; see also, Docket No. 17-12-03RE11, Operation Fuel Comments, June 15 and July 15, 2022; see also, Docket No. 17-12-03RE11, Center for Children's Advocacy Comments, July 21, 2022.

⁹ See, e.g., Tr. Docket No. 22-08-02, Hr'g Tr. Aug. 26, 2022, 130:21-131:22.

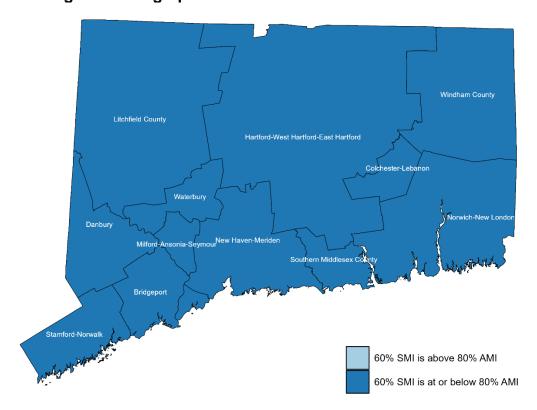


Figure 1: Geographic Areas Where 80% AMI Exceeds 60% SMI

Households eligible for state incentives are also eligible for federal ITC adders in all counties and for all household sizes.

Note: 80% AMI exceeds 200% Federal Poverty Guideline (FPG) in all cases, so 200% FPG comparison not shown.

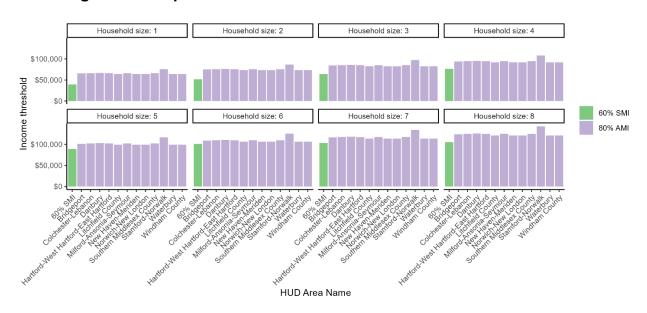


Figure 2: Comparison of 60% SMI and 80% AMI Income Thresholds

3. Distressed Municipality Adder Grace Period Allowance

In a Notice of Request for Written Comments, the Authority requested stakeholder feedback on solutions for circumstances where a RRES project eligible for the Distressed Municipality adder becomes ineligible after the Distressed Municipality list is updated, potentially making the project financially unviable. Notice, May 15, 2023, p. 2.

In response, DEEP asserted that the current statutory definition of Distressed Municipalities already has a five-year grace period:

Any municipality which, at any time subsequent to July 1, 1978, has met such thresholds but which at any time thereafter fails to meet such thresholds, according to said department, shall be deemed to be a distressed municipality for a period of five years subsequent to the date of the determination that such municipality fails to meet such thresholds, unless such municipality elects to terminate its designation.

Conn. Gen. Stat. § 32-9p(b); DEEP Comments, June 23, 2023, pp. 2-3.

Therefore, DEEP argued that the five-year grace period is appropriate for programs relying on the Distressed Municipality designation. Id., p. 3. Additionally, DEEP noted that a five-year grace period provides sufficient notice to developers and Distressed Municipalities of pending changes. Id. Similarly, the city of New Haven advocated in favor of the statutory definition for the NRES Program and noted that the Department of Economic and Community Development (DECD) currently uses the statutory definition. New Haven Comments, May 31, 2023, pp. 1-2. In written comments, PosiGen stated it was unaware of projects becoming unviable because of a change in Distressed Municipality status. PosiGen Comments, June 1, 2023, p. 4. PosiGen also advocated for consistency between the RRES definition of a Distressed Municipality and the latest list on DECD's website and noted that the most recent Program Manual excludes eight municipalities on the current DECD list. Id., p. 5. Ultimately, PosiGen believed that a five-year grace period was the simplest solution to the problem described in the Notice of Request for Written Comments and would ensure that municipalities receive sustained support from the RRES Program. Id. CGB, conversely, argued that "[f]or efficiency and simplicity's sake in program operation ... eligibility for the distressed municipality adder [should] apply to a system at the time of development with no changes in the adder in future years." CGB Comments, June 1, 2023, p. 5.

The Authority determines that the current statutory definition of a Distressed Municipality, with a five-year grace period, provides sufficient notice to solar developers of future changes to project eligibility for the Distressed Municipality adder, thereby supporting the first, fourth, and fifth Program Objectives. Notably, DECD follows the statutory definition when publishing the Distressed Municipality list on its website, which is then used by the EDCs to determine project eligibility for the Distressed Municipality adder. DC Compliance to Order No. 13, Dec. 15, 2023, Docket No. 22-08-05, Att. 2, p. 11. Finally, the Authority clarifies that a project will be eligible for the Distressed

The most recent DECD-published Distressed Municipality list may be found here: <u>Distressed Municipalities (ct.gov)</u>. For example, using the statutory definition of a Distressed Municipality, projects installed in Groton will remain eligible for the underserved adder until October 4, 2028.

Municipality adder provided the project's municipality is on the Distressed Municipality list when the project's application is approved by the EDCs.

4. Adder Awareness

The Authority is interested in ways to improve RRES applicant awareness of the underserved adders and the additional incentives they provide, including by "emphasizing and placing adder incentive and eligibility criteria in a prominent location on the application document." Notice, July 18, 2023, pp. 1-2. In response to the July 18, 2023 Notice of Request for Written Comments, CGB stated support for any action that would increase RRES adder awareness. CGB Comments, Aug. 15, 2023, p. 1. Further, CGB believes that the Authority should require developers to "inform participating customers of their eligibility for federal investment tax credit [ITC] adders," so that ITC benefits can flow directly to underserved communities and participating customers. Id., p. 2. Moreover, ConnSSA stated that installers have no objections to placing adder incentive criteria in the top half of the first application page. ConnSSA Comments, Aug. 15, 2023, p. 1. DEEP also noted that it strongly supports increased customer awareness of the RRES underserved adders, including a requirement that adder eligibility criteria be placed in a prominent location on the RRES application. DEEP Comments, Aug. 15, 2023, pp. 1-2.

While OCC supported a requirement to place adder eligibility requirements in a more prominent location on the RRES application, OCC also highlighted a need to "expand outreach to customers" eligible for the underserved adders. OCC Comments, Aug. 15, 2023, p. 2. PosiGen further noted a belief that increased customer education. when combined with the implementation of Low-Income Discount Rates, "will better assist installers in identifying qualifying customers as they review a customer's utility bill." PosiGen Comments, Aug. 15, 2023, p. 2. PosiGen ultimately noted support for the inclusion of RRES adder eligibility criteria in the RRES customer disclosure form, since this is likely the first RRES document encountered by customers. Id., pp. 2-3. Moreover, Trinity Solar noted "that applicants should be well-informed about benefits and additional incentives" and consequently stated support for the inclusion of such information in a prominent and visible location in the application process. Trinity Solar, Aug. 15, 2023, p. 1. Finally, the EDCs stated that they are "not opposed to making changes to the Program application to display information about RRES adders and eligibility criteria more prominently." EDC Comments, Aug. 15, 2023, p. 2. Nevertheless, the EDCs believe that such a change would not increase the number of customers who directly receive the underserved adder because the sales contract has often already been signed by the time the customer reviews the RRES application. Id. Consequently, the EDCs suggested additional trainings and webinars with solar contractors to help them better understand which customers may qualify for an underserved adder before a contract is developed by the installer. Id., pp. 2-3.

The Authority determines that changes are warranted to the RRES application and administration of the RRES Program to ensure that customers are adequately informed of the RRES underserved adders and their eligibility requirements. The Authority therefore directs the EDCs to amend the RRES customer disclosure form to include the following information: (1) definitions of each RRES adder; (2) adder amounts; (3) a list of programs whose participation would qualify a customer for the low-income adder (e.g., Home Energy Solutions – Income Eligible [HES-IE]); (4) a link to the Distressed

Municipality webpage of the Department of Economic and Community Department (DECD)¹¹; and (5) a link to a webpage with the latest guidance on state median income percentiles, broken out by family size. 12 Further, the above information shall be displayed in a prominent location and fashion on the customer disclosure form to ensure customers are aware of the RRES adders.¹³ Additionally, the Authority directs the EDCs to include such information on the RRES Program website by January 1, 2024. Finally, to help inform developers of the underserved adder eligibility criteria, in addition to other Program requirements and information, and in line with the recommendation provided by the EDCs, the Authority directs the EDCs to hold at least one webinar with solar developers by February 1 of each year. At least 30 days' notice shall be provided to Program stakeholders prior to the date of the webinar on the Program website, with a compliance filing made in the relevant RRES docket at least 21 days prior to the webinar with information on the date, time, and location of such webinar. Further, during the webinar to be held by February 1, 2024, the EDCs shall update Program installers on the implementation of LIDR and provide information and examples of how installers can identify LIDR-enrolled customers, to ensure that LIDR customers are receiving bill savings from participation in the RRES Program. The Authority concludes that these changes will increase underserved adder awareness among Program developers and customers, thereby supporting the fourth and fifth Program Objectives, to ensure program accessibility through increased customer protections and disclosures and encourage increased inclusivity overall, especially amongst underserved communities.

5. Minimum Threshold for Eligibility

The Authority requested stakeholder input on additional RRES Program requirements to increase underserved Program enrollment, including: "(1) establishing a minimum threshold of deployment to participants who are eligible for the IE or DM adders (e.g., 5%) for each developer; and (2) establishing an additional incentive for customers of developers who achieve a high percentage of deployment amongst customers who are eligible for either the IE or DM adders (e.g., 50%)." Notice, July 18, 2023, p. 2. In response, CGB stated support for requiring the EDCs to make publicly available the number of underserved projects for each developer enrolled in the Program. CGB Comments, Aug. 15, 2023, p. 2. Consequently, CGB advocated for "data collection and transparency" instead of a minimum underserved threshold for each Program developer. Id., pp. 2-3. Further, OCC stated that a 5% underserved deployment requirement for each developer would not support full underserved Program deployment. Comments, Aug. 15, 2023, p. 3. Moreover, OCC stated that of the 39% of Connecticut residents eligible for the underserved adders, only 50% reside in owner-occupied homes, thereby highlighting a need for developers to target renters for inclusion in the RRES Program. Id., pp. 3-5.

DECD's Distressed Municipality webpage https://portal.ct.gov/DECD/Content/About_DECD/Research-and-

<u>Publications/02 Review Publications/Distressed-Municipalities.</u>

For example, the latest Connecticut state median income numbers, broken out by percentile and family size, may be found here: https://uwc.211ct.org/connecticut-state-median-income-2013/.

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Eversource proposed conducting user research during 2024 to suggest modifications to the customer disclosure form in the next annual program review. Eversource Exceptions, Oct. 24, 2023, p. 4. If Eversource, or any other stakeholder, submits compelling, data-driven evidence outlining why further changes are needed to the customer disclosure form in comments submitted in the next annual review proceeding, the Authority may consider additional changes to the customer disclosure form.

Additionally, PosiGen argued that the new requirements proposed by the Authority would "add a new layer of significant complexity" to the RRES Program. PosiGen Comments, Aug. 15, 2023, p. 3. For example, customers may become confused by varying incentives between different installers, the EDCs may be unable to make differentiated installer payments, and threshold methodologies could become contentious. Id. Therefore, PosiGen does "not believe that a minimum or bonus threshold would be beneficial for the program." Id. Increasing adder amounts, PosiGen noted, may also increase underserved participation. Id., pp. 3-4. PosiGen further stated that it would be difficult to establish a minimum underserved deployment threshold and noted that specialized installers offering more complex systems (e.g., ground mount solar), and smaller installers marketing to specific geographic locations, would have a difficult time meeting any mandated underserved threshold. <u>Id.</u>, pp. 4, 6. While PosiGen noted that it does not recommend a bonus incentive for developers who exceed an underserved threshold established by the Authority, if such incentive were established, PosiGen recommends that it be set between \$0.005-\$0.0075/kWh if 30% underserved deployment was achieved by an installer in the prior Program year. Id., pp. 4-6.

While Trinity Solar noted support for the participation of underserved communities in the RRES Program, Trinity Solar opposed penalties for developers who do not reach a certain underserved enrollment threshold, because penalties would "significantly harm the industry." Trinity Solar Comments, Aug. 15, 2023, p. 1. Trinity Solar instead encouraged the state and the EDCs to develop outreach programs targeting underserved communities. Id. Similarly, ConnSSA opposed underserved deployment mandates because they could lead to "the wrong kind of sales tactics." ConnSSA Comments, Aug. 15, 2023, p. 2. ConnSSA noted that installers have difficulty working in Distressed Municipalities, because higher system costs make "jobs less desirable." Id. ConnSSA ultimately supported new outreach efforts as a way to increase underserved RRES enrollment. Id. Last, the EDCs stated that they do not support minimum underserved deployment requirements, because such requirements "could lead to bad actors in the market selling products that may have an adverse financial impact on vulnerable customers." EDC Comments, Aug. 15, 2023, p. 3. Further, the EDCs noted that a minimum underserved deployment mandate would "require strong oversight and consumer protection guardrails." Id.

The Authority declines to establish a minimum underserved enrollment threshold for RRES contractors for the coming Program year. The Authority concludes that an underserved enrollment mandate requires additional discussion, including on the required underserved enrollment percentage and potential exemptions for RRES contractors specializing in niche technologies or serving smaller geographic areas, to ensure that RRES deployment is not unnecessarily harmed. Nevertheless, the Authority remains committed to encouraging Program inclusivity and the achievement of the Program's 40% underserved enrollment target. The Authority will therefore require that the EDCs compile the following information on each RRES developer: (1) number and percentage of systems by type of housing (e.g., single family, 2-4 unit multifamily, or multifamily affordable housing); and (2) number and percentage of total approved RRES applications that are eligible for the low-income or Distressed Municipality adder(s). The EDCs shall file such information as compliance with the Authority by August 1 annually for every developer participating in the RRES Program. Should underserved RRES enrollment

continue to lag behind the goals of the Program, the Authority may institute an underserved enrollment minimum threshold in a future annual Program review.

6. New EDC Underserved Reporting Requirements

Finally, in order for the Authority and other stakeholders to better track underserved enrollment in the RRES Program, the Authority directs the EDCs to begin including breakouts for the total number of low-income customers and customers located in Distressed Municipalities, and associated project capacity, which do not receive either adder in the Order No. 12 data filings, in addition to the existing breakouts for customers enrolled in the low-income and Distressed Municipality adders. The Authority also directs the EDCs to include a breakout for the number of customers who reside in environmental justice communities as defined by Conn. Gen. Stat. § 22a-20a, and associated project capacity, in the Order No. 12 filings. Specifically, the EDCs shall track and report the number of customers and total capacity enrolled by environmental justice census block groups broken out by customers that qualify for the low-income and Distressed Municipality adders and those who do not. Further, the Authority also directs the EDCs to include the number of RRES customers who qualify for the federal Justice 40 disadvantaged communities definition in the Order No. 12 filings, and associated project capacity, so that the Authority and Program stakeholders may better understand how well the RRES Program is incentivizing deployment according to federal underserved definitions.14

Last, to ensure timely and actionable underserved deployment data, the Authority finds it necessary to extend RRES enrollment data reporting requirements through the entirety of the RRES Program on a quarterly basis. Consequently, the Authority extends the end date for Order No. 12 from January 1, 2024, to the termination of the RRES Program. The Program Administrators shall also include underserved enrollment percentages, broken out by both low-income¹⁵ and Distressed Municipality status, regardless of whether the customers are receiving adders or not, with the information published on the EDCs' respective RRES websites, in addition to any existing data reporting requirements, by April 1, 2024. The Authority acknowledges the low-income enrollment value will likely be an undercount, as income verification may not be performed for each customer in the RRES Program.

¹⁴ For more information see: https://www.energy.gov/sites/default/files/2023-07/DOE%20Justice40%20General%20Guidance%2072523.pdf.

¹⁵ The Authority acknowledges the low-income enrollment value will likely be an undercount, as income verification may not be performed for each customer in the RRES Program.

D. ENSURING PARTICIPANT BENEFITS

1. Introduction

The income-based and Distressed Municipality adders are meant to incentivize project deployment in underserved areas to ensure all residents, and LMI customers in particular, benefit from the RRES Program, thereby furthering the fifth Program Objective. The related topic of whether and how the adder values are passed onto eligible customers has been raised and discussed at various points in past RRES annual review proceedings. See Solar Energy and Storage Association, Inc. Exceptions, Dec. 24, 2021, Docket No. 21-08-02, p. 1. Accordingly, the Authority requested written comments from stakeholders to understand how the adder funds are utilized, including whether the adders are reflected in pricing offered to underserved customers, or whether the adders are socialized across all projects. Notice, May 15, 2023, p. 4. The Authority also expressed interested in programmatic requirements to ensure the adders were being reflected in the pricing information given to customers. Id.

Additionally, during the June 21, 2023 Technical Meeting, stakeholders stated that in Massachusetts, customers on discounted rates have signed long-term power purchase agreements after having been marketed solar installations, which assumed full retail rates, only to see their total energy costs go up. Hr'g Tr. June 21, 2023, 54:7-16. As a result, the Solar Massachusetts Renewable Target (SMART) Program issued warnings to some installers and suspended others who failed to meet minimum customer savings requirements. Tr., 54:17-24. Accordingly, the Authority requested written comments from stakeholders on "recommendations to improve verification and enforcement regarding passing savings to customers," including minimum savings thresholds to be passed on to customers. Notice, July 18, 2023, p. 7.

2. Stakeholder Comments

PosiGen advocated for a new Program requirement to ensure low-income customers "actually receive the value of an increased adder in the form of lower solar payments and the corresponding savings," by ensuring the adder is either paid directly to the customer, "or if paid to a third party that there is a corresponding reduction in the purchase price of the solar system" with a lease or Power Purchase Agreement (PPA) rate that is lower than the annual utility rate at the time of the sales contract's signing. Posigen Comments, June 1, 2023, pp. 5-6. PosiGen noted that the Authority's Office of Education, Outreach, and Enforcement (EOE) could enforce these new requirements "through an audit of a sample of [low-income discount rate (LIDR)] customers on a regular basis." Id.

PosiGen also supported ensuring participant savings for customers on discounted utility rates. PosiGen Comments, Aug. 15, 2023, p. 12. PosiGen noted that to enforce participant benefits, the RRES Program could adopt the SMART program requirement that the rate for power purchase agreements or leases be less than the average utility rate for discount rate customers. <u>Id.</u>, p. 13. Alternatively, PosiGen stated that the Authority could require a minimum 10% savings for RRES customers. <u>Id.</u> PosiGen cautioned, however, that this second approach could limit installations or product types. <u>Id.</u> Regardless of which approach is used, PosiGen conveyed its belief that any savings rate calculation methodology needs to have clear guidance and be replicable across

installers. <u>Id.</u>, p. 14. PosiGen stated that the EDCs or EOE could conduct regular audits of sales contracts for discount rate customers to verify compliance. <u>Id.</u> Last, PosiGen noted that participant savings should not be mandated for customers on standard utility rates to preserve consumer choice, including for solar systems that do not meet a minimum savings requirement, but instead provide additional environmental or resilience benefits. <u>Id.</u>, p. 12.

PosiGen further stated that the Distressed Municipality adder encourages Program inclusivity by lowering barriers to project deployment in Distressed Municipalities, including by encouraging third-party owners to focus on underserved customers. PosiGen Comments, June 1, 2023, p. 9. Additionally, PosiGen stated that while it costs more on average to deploy projects in Distressed Municipalities than other communities, PosiGen socializes these higher costs across all projects and does not charge Distressed PosiGen asserted that projects in Distressed Municipality customers more. ld. Municipalities are more costly for a variety of reasons, "including older housing stock, smaller system sizes, increased financing costs and risks, difficulty in reaching customers, higher cancellation rates, and challenging installations including more frequent electrical upgrades." Id., p. 10. PosiGen also provided data showing that customers in Distressed Municipalities had a lower average system size and FICO credit score and a higher delinquency percentage. PosiGen Comments, June 1, 2023, p. 10. Consequently, the Distressed Municipality adder helps PosiGen offset higher Distressed Municipality operating costs. <u>ld</u>., p. 11. PosiGen asserted that enforcement of "differentiated pricing for distressed municipalities would be challenging." Id. PosiGen therefore argued that programmatic changes regarding how the Distressed Municipality adder is reflected in customer pricing would disincentivize investment in those communities, while also forcing developers to pass on higher development costs to Distressed Municipality customers instead of socializing those higher costs across all customers. Id., p. 12.

The EDCs noted their support for Program inclusivity and their belief that the current underserved enrollment percentage does not accurately reflect total underserved enrollment in the Program because not all customers that qualify for the underserved adders necessarily receive them, particularly if the customers do not participate in the low-income programs considered for auto-enrollment in the low-income adder. EDC Comments, June 1, 2023, pp. 7-8. The EDCs also remarked that they are unable to determine whether the adders are reflected in the pricing given to customers by installers. Id., p. 8. Further, for Eversource, 57% of projects with adders are third-party owned, and, of these projects, 97% direct payments to a tariff payment beneficiary that is not the customer of record. Id.. Likewise, for UI, 80% of projects with adders are third-party owned, and, of these projects, 73% direct payments to someone other than the customer of record. Id., p. 9.

Ultimately, the EDCs expressed concern over the auto-enrollment of customers in the underserved adders because the EDCs have no expectation "that such adders are reflected in customer pricing when installers decline to apply for them, and when commercial terms between a customer and installer are set prior to submitting an RRES application." EDC Comments, June 1, 2023, p. 9. Consequently, according to the EDCs, auto-enrollment of adders to third-party payment beneficiaries can reasonably be assumed to be "a windfall to the system owner" with no benefit to the customer of record. Id. To better ensure underserved customers are benefiting from the adders, the EDCs

recommended limiting the adders to projects that (1) apply for the adder in the initial application, or (2) are auto-enrolled and have the customer of record as the tariff payment beneficiary. <u>Id</u>. Finally, the EDCs noted that they do not currently collect contracts for all RRES applications. EDC Comments, Aug. 15, 2023, p. 10. The EDCs argued that it would be "administratively burdensome" to collect and review every contract to ensure savings are passed on to customers. <u>Id</u>. The EDCs consequently recommended that EOE be responsible for verification of customer savings for RRES customers, as this approach is similar to the one used in Massachusetts. Id.

CGB stated that it was a "proponent of data collection and transparency" to ensure customer savings from the RRES Program. CGB Comments, Aug. 15, 2023, pp. 11-13. Additionally, CGB stated that the Authority should focus on savings verification for the following two groups: (1) single family customers with third-party owned financing; and (2) affordable housing. <u>Id.</u>, pp. 12-13. Last, OCC agreed that "proactive action should be taken to ensure participant benefits are verified and enforced," possibly through a third-party administrator who can protect customers from misleading solar contracts. OCC Comments, Aug. 15, 2023, p. 16.

3. Authority Analysis

The Authority determines that changes are needed to the RRES Program to track whether and how much participants financially benefit from Program participation and to empower EOE to take appropriate action, if and when necessary, to apply the "four-tier" or "four strike" enforcement system established in the Residential Tariff Decision for suspending or banning the noncompliant developers. Residential Tariff Decision, p. 27. More specifically, the Authority determines that the following changes are needed: (1) new compliance requirements for contractors and associated EOE auditing direction; (2) EOE auditing of contractor marketing scripts and training materials; and (3) changes to the adder auto-enrollment process.

a. Financial Benefits Compliance

First, the Authority determines that requiring developers to provide information via an annual compliance filing (Financial Benefits Compliance) related to the financial benefits calculations *already provided to RRES Program participants* will advance the Program Objectives, particularly the fourth Program Objective, program accessibility through customer protections and disclosures, by protecting all customers through increased data transparency. The Financial Benefits Compliance will better inform the Authority and relevant stakeholders, as appropriate, as to the benefits received by RRES Program participants, including LMI customers. Notably, under the current Program requirements, if a low-income adder is sent to a tariff payment beneficiary that is not the customer of record, it is unclear whether the customer is benefiting from the adder as intended. Accordingly, the new reporting requirements will provide clarity to the Authority as to whether low-income customers are financially benefiting from the RRES Program. The required information will also assist EOE in its annual audit of RRES customer disclosure forms. See Residential Tariff Decision, p. 27; Year 1 Decision, p. 21.

To aid in implementation, the Financial Benefits Compliance builds off the information already required in the customer disclosure form; thus, the incremental requirements of this new compliance are largely in aggregating and explaining information that is already provided to customers, as developers already track and have established calculation methodologies for the customer disclosure forms. Specifically, the Authority directs each developer participating in the RRES Program to annually file the following with the Authority for all RRES projects deployed in the previous calendar year:

- 1. All customer disclosure forms;
- An unlocked Excel file summarizing key information from the customer disclosure forms, as well as other information provided to customers such as contracts and promotional materials, for each project as detailed below (Financial Benefits Summary Sheet); and
- 3. A narrative explanation of any calculation methodologies included in the Financial Benefits Summary Sheet (Sheet Narrative).

The Financial Benefits Summary Sheet shall include one row each for every project deployed by the developer under the RRES program in the previous calendar year. For each project, the following information shall be provided (i.e., each of the following should be a column in the Financial Benefits Summary Sheet): (1) site address; ¹⁶ (2) utility account number associated with the project; (3) annual contract rate increase amount; ¹⁷ (4) estimated year one production (kWh) as a percentage of estimated annual utility customer usage (kWh); ¹⁸ (5) estimated year one customer net savings; ¹⁹ (6) starting utility rate used to estimate net year one savings; ²⁰ (7) estimated net savings over the RRES tariff term (i.e., 20 years) if provided by the developer to customers in a contract or promotional materials, or if it can be easily extrapolated from the customer disclosure data; ²¹ and (8) utility rate used to estimate net savings over the RRES tariff term (i.e., 20 years) if provided by the developer to customers in a contract or promotional materials, or if it can be easily extrapolated from the customer disclosure data. ²²

The Sheet Narrative may be a simple summary document (e.g., as brief as a couple of pages) outlining the methodology used to calculate the above required information to be included in the Financial Benefits Summary Sheet, as applicable, along with a general list of the documents needed for such calculations (e.g., a customer's electric bill and sales contract are needed to verify the methodology for the fourth requirement, etc.). Developers should retain all documents listed in the Sheet Narrative at least through the end of the calendar year following the deployment of the system (i.e., for systems deployed in 2023, relevant documents should be maintained until December

¹⁶ Information already required in the customer disclosure form.

¹⁷ Information already required in the customer disclosure form for third-party owned systems. If the rate increase is another increment other than annual, provide an estimate of the annual amount. If a direct ownership customer, simply state "direct ownership".

¹⁸ Estimated year one production is already required in the customer disclosure form, if the percentage of customer load is not.

¹⁹ Information already required in the customer disclosure form. For direct ownership customers, convert the calculated monthly savings into an annual amount. Developers should use whichever methodology they are currently using to calculate annual or monthly savings as required for the disclosure form.

²⁰ Information already required in the customer disclosure form. For direct ownership customers, provide the starting utility rate used to estimate net average monthly savings.

²¹ Developers can mark this column "N/A" if this information is not provided to customers.

²² Developers can mark this column "N/A" if this information is not provided to customers.

31, 2024), as they may be requested by the Authority or EOE in reviewing such annual filings.

The Financial Benefits Compliance (e.g., customer disclosure forms, Financial Benefits Summary Sheet, and Sheet Narrative) shall be filed annually by all Program developers with the Authority as compliance in the reopener to the annual Program review docket for contractor education and enforcement (e.g., Docket No. 23-08-02RE01 for the 2024 filing, etc.). To give developers enough time to adjust to the new reporting requirements, the first annual filing will be due no later than June 1, 2024. All subsequent filings shall be due by April 1 annually (i.e., the 2025 compliance filing will be due on April 1, 2025).

The Authority also recognizes that each contractor's annual financial benefit tracking filing may contain sensitive customer information not suitable for public disclosure. All confidential material, unless otherwise directed by the Authority, must be provided in accordance with the instructions outlined in the annual docket's Notice of Proceeding. Currently, such instructions require the materials to be emailed to the Authority's Executive Secretary, Jeff.Gaudiosi@ct.gov, contemporaneously with the motion. The email's subject line shall state in all capital letters "CONFIDENTIAL MATERIAL - NOT FOR PUBLIC DISCLOSURE." Each page of any electronic confidential information shall also contain a header "CONFIDENTIAL — NOT FOR PUBLIC DISCLOSURE." Consequently, the Authority clarifies that contractors may file a Motion for Protective Order requesting that portions of their annual filing be protected. The Motion and accompanying affidavit shall be filed publicly along with the redacted version of the submission.²³ Last, the Authority clarifies that each contractor may file one Motion for Protective Order for their entire annual filing.

As discussed in prior annual RRES review docket Decisions, EOE annually audits customer disclosure forms. See Residential Tariff Decision, p. 27 ("an annual audit of a subset of customer disclosure forms, with at least one from each renewable energy contractor"); see also Year 1 Decision, pp. 21-22. Moving forward, the Authority directs EOE to annually audit a representative sample of the customer disclosure forms (e.g., a random selection of 5% of the forms for each developer) through the annual Program review docket for contractor education and enforcement (e.g., Docket No. 23-08-02RE01 for the 2024 filing, etc.). Additionally, EOE may audit a contractor's Financial Benefits Summary Sheet and Sheet Narrative and can request additional documentation or evidence as needed to verify a contractor's Financial Benefits Summary Sheet calculations, particularly for low-income customers to support the fifth Program Objective, increased inclusivity overall.

The Authority intends to evaluate the implementation of a minimum customer savings threshold for low-income customers in next year's annual RRES Program review proceeding, Docket No. 24-08-02. Additionally, the Authority will require that all RRES projects that receive money from Connecticut's Project SunBridge, which would be funded through the Greenhouse Gas Reduction Fund Solar for All competition if selected,

²³ For reference on how to write a Motion for Protective Order, contractors may consult protective orders filed in other dockets. Importantly, contractors are not required to hire an attorney to file or write a Motion for Protective Order, so long as the Motion for Protective Order contains specific legal arguments with reference to state or federal law describing with supporting facts as to why the information should be kept confidential, as well as an affidavit subscribed and sworn before a public notary.

demonstrate 20% household savings consistent with the U.S. Environmental Protection Agency (EPA) definition starting on January 1, 2025.²⁴

Last, the Authority recognizes that contractors may use different methodologies to calculate the net savings of their project installations, even if currently required to be included in the customer disclosure form. Consequently, the Authority may request written comments from all stakeholders in the next annual review proceeding on the utility of establishing a consistent methodology to calculate the net savings for all RRES project applications moving forward, and if so, what such methodology should be.

b. Auditing of Marketing Materials

Additionally, the Authority concludes that the continued expansion of the Program increases the need for monitoring of marketing information conveyed to customers, in support of the first Program Objective, the sustained and orderly development of the state's solar industry, and the fourth Program Objective, accessibility for customers by providing customer protections. Accordingly, the Authority directs EOE to review a sample of marketing materials for at least 25% of all RRES contractors by August 1 annually.²⁵ More specifically, EOE shall review contractor marketing materials for clearly deceptive or misleading marketing practices, as determined by EOE. Notably, EOE's review of contractor marketing materials supports the auditing process first laid out in the Residential Tariff Decision, where EOE reviews contractor breaches of the Program Manual, including misleading marketing of the RRES Program. Residential Tariff Decision, p. 27. EOE shall then file a written summary of any marketing materials filed by Program developers in the previous calendar year that are deemed to be clearly deceptive or misleading to Program customers, as determined by EOE, in the appropriate reopener to the annual Program review docket for contractor education and enforcement (e.g., Docket No. 23-08-02RE01, etc.) and consistent with the "four strike" system authorized in the Residential Tariff Decision.²⁶ More specifically, the summary should be provided directly to the developers in question and filed as correspondence if only representing one "strike" and filed as a motion if representing two or more "strikes".

To facilitate EOE's review, contractors participating in the RRES Program shall annually file their marketing scripts and training materials generated for or provided to anyone engaging with a customer.²⁷ Such filings shall be made in the reopener to the annual Program review docket for contractor education and enforcement by April 1 each year with the first filing due on June 1, 2024, consistent with the financial benefits compliance outlined in the above section. For clarity, contractors shall file one copy of

^{24 &}lt;u>See</u> U.S. EPA, Revised Request for Applications, Aug. 31, 2023, available at: https://www.grants.gov/web/grants/view-opportunity.html?oppId=348957.

²⁵ EOE shall also continue its current annual review of at least one customer disclosure form per renewable energy contractor. <u>See</u> Residential Tariff Decision, p. 27.

The penalties for developer non-compliance with any new tracking or marketing requirements set forth in this Decision, including the use of marketing practices that may be deemed deceptive pursuant to Conn. Gen. Stat. § 42-100b, include removal from the RRES Program, if recommended to the Authority by EOE. Ultimately, EOE shall follow the "four-tier" or "four strike" enforcement system established in the Residential Tariff Decision for recommending the suspension or banning of the noncompliant developer. Residential Tariff Decision, p. 27. EOE may, however, recommend the assessment of multiple strikes for a single audit if multiple violations are identified, particularly if they are severe.

²⁷ Marketing materials and scripts are not confidential, and providers should file them publicly.

each discreet marketing script and training material.²⁸ Further, the Authority clarifies that the collection and review of marketing materials shall be administered and enforced by EOE.

c. Auto-enrollment Process Changes

The Authority determines that changes are warranted to the auto-enrollment process for the low-income or Distressed Municipality adders. The Authority agrees with the EDCs' assessment that, absent a requirement that the adder value be reflected in a customer's solar pricing agreement, the after-the-fact application of the adders results in windfall profits to developers. Thus, the Authority directs the adder value to only be applied automatically by the EDCs to qualifying customers if the tariff payment beneficiary is the customer of record, or if the applicant applied for an adder in their original RRES application. This change will further the fifth Program Objective by helping to ensure that underserved customers are benefiting from the adders, since the adders will either be identified to the customer at the outset of the RRES application process, which requires the customer's review via the signing of several forms,²⁹ or be paid directly to the customer. Further, the Authority concludes that this change will not disincentivize developers such as PosiGen, who socialize the higher deployment costs of Distressed Municipalities across all projects, from focusing on underserved communities, since such developers may still collect the underserved adder provided that they apply for it in the original RRES application. Further, if an underserved customer qualifying for either Program adder is not (auto)enrolled by the Program Administrators for not meeting the new requirements outlined in this Decision, the Program Administrators shall still track such enrollment so that it may be counted toward the Program's 40% deployment target in underserved communities.

E. STATE AND FEDERAL INCENTIVE ELIGIBILITY

The Authority requested written comments from stakeholders on the usefulness of a mapping tool depicting areas with the most residents eligible for the low-income RRES adder, aggregated at the census block level, to aid RRES project deployment in underserved communities. Notice, July 18, 2023, p. 2. The Authority also requested stakeholder feedback on the usefulness of a mapping tool depicting census block areas where residents are eligible for both the low-income RRES adder (i.e., 60% or less of state median income) and the qualified low-income economic benefit project investment tax credit (low-income economic benefit ITC) adder (i.e., 80% or less of area median income). Id.

The CGB noted that, based on federal guidance, the low-income economic benefit ITC adder is intended for front-of-the-meter (FTM) projects with at least 50% of the facility's total output serving low-income households. <u>Id.</u>, p. 4. Nevertheless, CGB believed that a single tool on a website like EnergizeCT would be helpful for other ITC adders, particularly the low-income community 10 percentage point ITC adder, which is based on geographic location. <u>Id</u>. PosiGen noted that increased low-income RRES

²⁸ For example, if a contractor provides the same marketing script to multiple entities, then it may file one copy and note the entities to which it provides the script.

²⁹ In addition to the sales, lease, or power purchase agreement, the customer of record must sign the Tariff Terms and Conditions, a Customer Disclosure Form, and a Payment Beneficiary Form. EDC Compliance to Order No. 13, Dec. 15, 2022, Docket No. 22-08-02, Att. 2, pp. 22, 27, 40.

enrollment would "require further education and familiarity with both prospective customers and installers." PosiGen Comments, Aug. 15, 2023, p. 6. Therefore, PosiGen believed that the creation of new public identification tools, such as a census-level map using Low Income Home Energy Assistance Program (LIHEAP) data, would be helpful. Id., p. 7. PosiGen, however, did not support the creation of a new mapping tool for the low-income economic benefit ITC adder because the Department of Energy already has a mapping tool for the low-income communities 10 percentage point bonus credit and, as identified by CGB, because the low-income economic benefit ITC adder is better suited for the Shared Clean Energy Facilities (SCEF) Program. Id.

OCC agreed "that a tool to identify income eligibility would be useful in identifying physical overlaps in target populations," particularly for residents located in Distressed Municipalities, income-eligible communities, and environmental justice census block groups. OCC Comments, Aug. 15, 2023, p. 6. OCC consequently recommended the use of maps that include all three populations, to support outreach to underserved communities, and provided copies of such maps for stakeholder review. Id, pp. 6-8. Moreover, ConnSSA stated that its members would use a LIHEAP mapping tool when determining customer ITC adder eligibility. ConnSSA Comments, Aug. 15, 2023, p. 2.

The Authority concludes that the inclusion of a mapping "tool" on the RRES Program website will help developers better target underserved communities, thereby aiding the Program Objectives, particularly the fourth Program Objective, enhanced Program accessibility, and the fifth Program Objective, increased inclusivity overall. The Authority therefore directs the EDCs to include a link to Connecticut's environmental justice mapping tool on the RRES Program webpage(s) by January 1, 2024, along with a brief summary of the tool and how installers can use it.³⁰ Notably, in addition to highlighting Distressed Municipalities and environmental justice census block groups, the map contains a socioeconomic layering tool, which may be used to target areas of high poverty.

The Authority notes that qualified RRES projects located in some underserved communities are eligible for a 10-percentage point increase in the ITC under Category 1 of the Low-Income Communities Bonus Credit Program. Low-income communities are defined according to the New Markets Tax Credits (NMTC) section of the Internal Revenue Code as a census tract where (1) the poverty rate is at least 20%; or (2) in the case of a tract not located in a metropolitan area, the median family income does not exceed 80% of statewide median family income; or 3) in the case of a tract located in a metropolitan area, the median family income does not exceed 80% of the greater of statewide median family income or the metropolitan area median family income.³¹ Further, projects within each category may receive priority for an allocation if they meet at least one of two additional selection criteria (ASC) based on ownership and geographic location, and at least 50% of the capacity of each category will be reserved for projects that meet ASC. A facility will meet the Ownership Criteria if it is owned by a Tribal enterprise, an Alaska Native Corporation, a renewable energy cooperative, a qualified

Connecticut's environmental justice mapping tool may be found here: https://connecticut.maps.arcgis.com/apps/webappviewer/index.html?id=85bf095c8fc043edaa15ca5f7829fe3.

³¹ Eligibility criteria and additional guidance on the Low-Income Communities Bonus Credit Program is provided at https://www.federalregister.gov/documents/2023/08/15/2023-17078/additional-guidance-on-low-income-communities-bonus-credit-program.

renewable energy company meeting certain characteristics, or a qualified tax-exempt entity. To meet the Geographic Criteria, a facility must be located in (1) a Persistent Poverty County (PPC), or (2) a census tract designated in the Climate and Economic Justice Screening Tool (CEJST) as disadvantaged based on whether the tract is either (a) greater than or equal to the 90th percentile for energy burden and is greater than or equal to the 65th percentile for low income, or (b) greater than or equal to the 90th percentile for particulate matter (PM) 2.5 exposure and greater than or equal to the 65th percentile for low income.

RRES projects located in some underserved communities are also eligible for the Energy Community Tax Credit Bonus, which provides a 10 percentage point adder for qualified projects located in energy communities. The IRA defines energy communities as (1) brownfield sites; (2) metropolitan or non-metropolitan statistical areas that have, or had at any time since 2009, a) a 0.17% or greater direct employment or 25% or greater local tax revenues related to the extraction, processing, transport, or storage of coal, oil, or natural gas, and b) an unemployment rate at or above the national average unemployment rate for the previous year; and (3) a census tract or directly adjoining census tract that has had a coal mine closure after 1999 or coal-fired electric generating unit retired after 2009.³²

The map below displays the geographic overlap between Connecticut's Distressed Municipality list; census tracts designated as Low-Income Communities eligible for the ITC adder under Category 1 of the Low-Income Communities Bonus Credit Program³³, including the additional Geographic Criteria;34 and areas eligible for the ITC adder under the Energy Community Tax Credit Bonus (excluding brownfield sites).³⁵ The Authority also provides below a list of census tracts both located in Distressed Municipalities and eligible for the ITC Category 1 Bonus Credit as Low-Income Communities.³⁶ Authority directs the EDCs to include the attached map and table, and additional, similar resources identifying areas where RRES projects may be eligible for both state and federal incentives, on the RRES Program webpage(s), along with a brief description of federal incentive eligibility by January 1, 2024. Ultimately, the information shall be relocated to the PURA Data Dashboard when the dashboard is expanded to include Clean Energy Program data. At a minimum, the Authority will update the static map and list of census tracts annually, in order to help identify communities eligible for additional federal incentives and aid deployment among low-income and underserved communities in furtherance of the Program Objectives.

³² Additional information on the Energy Community Tax Credit Bonus and a mapping tool is available at https://energycommunities.gov/energy-community-tax-credit-bonus/.

Low-Income Communities as designated by the NMTC can be downloaded at https://www.cdfifund.gov/sites/cdfi/files/2023-08/NMTC_2016-2020_ACS_LIC_Sept1_2023.xlsb. The maps and data provided here utilize NMTC low-income community data based on the 2016-2020 American Community Survey, released in September 2023. For one year following the release of updated data, either the 2011–2015 ACS low-income community data or the updated data can be used to determine the poverty rate for a population census tract.

³⁴ CEJST data is available at https://screeningtool.geoplatform.gov/en/downloads.

³⁵ Energy Communities geographic eligibility data is available at https://edx.netl.doe.gov/dataset/ira-energy-community-data-layers.

³⁶ RRES projects in parts of Stamford, Danbury, and Bridgeport appear to be eligible for an ITC of up to 60%. RRES projects in Bridgeport are also eligible for the Distressed Municipality adder.

Additionally, the Authority notes that Category 3 of the Low-Income Communities Bonus Credit Program provides a 20 percentage point bonus to Qualified Low-Income Residential Building Projects that serve affordable housing customers, which are not constrained by geographic location.³⁷ As discussed in section IV.F.2, RRES multifamily affordable housing projects at covered housing facilities would be eligible to receive the additional ITC adder based on tenant benefit sharing requirements. For additional considerations related to multifamily affordable housing participation in the RRES Program, the Authority refers stakeholders to the ongoing work of DEEP, CGB, the Connecticut Housing Finance Authority (CHFA), the Connecticut Department of Housing (DOH), EOE, the EDCs, the U.S. Department of Housing and Urban Development (HUD), and the CT Fair Housing Center as part of the Multifamily Housing Working Group, established in the Year 1 annual review proceeding. Decision, June 8, 2022, Docket No. 21-08-02, pp. 1, 4-6; DEEP Correspondence, Sep. 1, 2023, pp. 13-16.

A list of eligible covered housing programs for Category 3 is provided at https://www.energy.gov/media/302641.

Figure 3: Geographic Eligibility for the Low-Income Communities Bonus Credit, Energy Community Tax Credit Bonus, and Distressed Municipalities

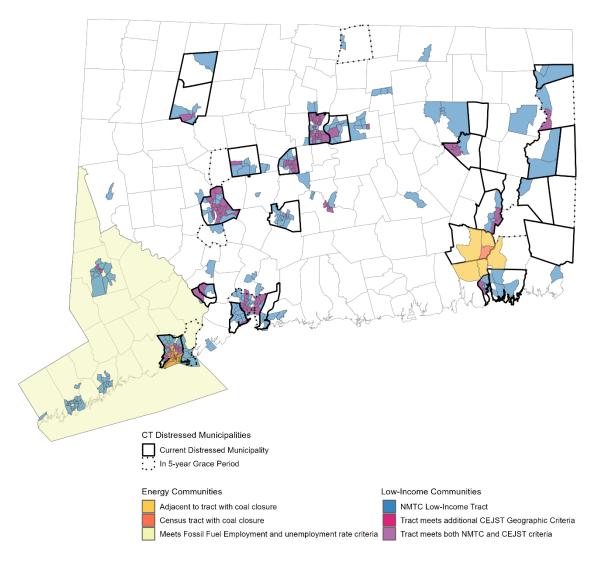


Table 5: NMTC Low-Income Census Tracts FIPS within Current Distressed Municipalities

9009350400	9009171100	9015903102	9011696500	9003501200	9003501300	9001072100
9009350500	9009352300	9015800501	9003405600	9011702500	9003501500	9003503700
9009352701	9005320101	9011870300	9003510200	9011702700	9011696401	9003503800
9009352702	9005320102	9011690800	9003510400	9011709200	9011696701	9003503900
9009352800	9009170600	9011696800	9003510300	9001073600	9009361500	9003504000
9009351100	9009170700	9011697000	9003415300	9003502700	9003500900	9003503500
9009350800	9009170800	9011702300	9003510700	9003503102	9003503300	9003504200
9009351800	9009171000	9001071000	9003510800	9003503101	9003510500	9003504300
9009351000	9015800300	9001071100	9003502300	9009120200	9003511200	9003504500
9009351200	9015800400	9001071200	9003415500	9011870200	9003501700	9003504100
9009351300	9015800600	9001071300	9003415600	9011690300	9003415400	9003504900

9009351400	9003500500	9001071400	9003415800	9011690400	9003416500	9003405700
9009350900	9009350101	9001071600	9003415900	9011690500	9003405500	9003502800
9009352200	9009180102	9001071900	9003416000	9011690700	9003500100	9003502900
9009352500	9009154102	9001072000	9003416100	9009154200	9003501800	9003502500
9009352600	9009154101	9001072200	9003502400	9009154500	9003510600	9003503000
9009352100	9009351601	9001072300	9003416200	9009154600	9003405100	9003502600
9015907200	9009351500	9001072400	9003416300	9009154900	9003406100	
9003524501	9009171300	9001072500	9003416600	9009155100	9003501400	
9009352400	9009171400	9001072600	9003416700	9015800700	9001073900	
9009351602	9009171500	9001072700	9003416800	9001072900	9001073100	
9009170900	9011696100	9001072800	9003417100	9001074000	9009180300	
9009155000	9011702800	9001073200	9003417500	9015907300	9009180200	
9009125200	9003417200	9001073300	9003504800	9015903200	9009350200	
9005310803	9003417300	9001073400	9003500200	9001070300	9009350300	
9005310804	9001257200	9001073500	9003500300	9001070400	9009170200	
9009351700	9003405402	9001073700	9009125300	9001070500	9009170300	
9009170100	9003524700	9001073800	9009125400	9001070600	9009170400	
9005310300	9003524400	9001074300	9003511300	9001070900	9005310100	
9005310801	9003524600	9001074400	9003500400	9001070200	9005310200	

Table 6: NMTC Low-Income Census Tracts FIPS within Distressed Municipalities in Five-Year Grace Period

9009345100	9009140102	9009141500	9001080500	9009140600	9003480700	9009142500
9009142000	9009141301	9009141600	9001080600	9009140700	9001081000	9009142601
9009140900	9009140101	9009141800	9009140200	9009361402	9001080400	
9009141200	9009142604	9009142100	9009140300	9015904400	9009141400	
9015904500	9009361401	9001080100	9009140400	9009140800	9009142300	
9009142605	9009142700	9001080200	9009140500	9003480600	9009142400	

F. MULTIFAMILY AFFORDABLE HOUSING

1. Master-Metered and Sub-Metered Participation

The Authority established a Multifamily Housing Working Group (MFH WG) in the Year 1 annual review proceeding to investigate outstanding issues surrounding multifamily housing participation in the RRES Program. Decision, June 8, 2022, Docket No. 21-08-02, Annual Residential Renewable Energy Tariff Program Review and Rate Setting (MFH Decision), pp. 1, 4-6. Currently, only individually metered multifamily affordable housing is eligible for the RRES Program, provided such housing agrees to distribute at least 20% of the financial benefit of the RRES tariff to tenants. EDC Compliance to Order No. 13, Dec. 15, 2022, Docket No. 22-08-02, Att. 2, pp. 41-45. The Authority later announced its intention in the Year 2 Decision to allow master-metered multifamily affordable housing to participate in the RRES Program by January 1, 2024,

after the MFH WG submitted benefit sharing recommendations for such properties. Year 2 Decision, p. 8.

The MFH WG recommended that master-metered multifamily affordable housing be eligible for the RRES Program if the system owner uses 20% of the net present value of the RRES tariff to complete pre-approved building upgrades, such as energy efficient windows, heat pumps, broadband access, etc., which would benefit tenants. MFH WG Compliance, June 1, 2023, Docket No. 21-08-02, pp. 1-3. Additionally, CGB stated a willingness to provide the upfront capital necessary for building improvements under the MFH WG's proposal. Id., p. 2. The MFH WG also proposed that any master-metered project be subjected to an audit by the Authority to ensure compliance. Id. Accordingly, the Authority requested written comments from stakeholders on the MFH WG's proposal for master-metered multifamily housing inclusion in the RRES Program. Notice, July 18, 2023, pp. 4-5. The Authority further requested stakeholder feedback on a framework to pass a master-metered multifamily affordable housing project's RRES benefit directly to tenants via direct payment or through on-bill or rent credits. Id., p. 5.

OCC agreed that the financial benefits of the RRES Program should be passed on to tenants. OCC Comments, Aug. 15, 2023, p. 12. However, OCC noted that renters do not necessarily accrue the same benefits as the landlord when building improvements are made (e.g., increased property values). <u>Id</u>. OCC believes that passing RRES financial benefits on to tenants would require regulation to prevent "unintended consequences for renters such as higher rents, higher energy bills, and increased displacement." <u>Id</u>., pp. 12-13. OCC further highlighted that Connecticut statutes does not protect renters "from assuming an unreasonable amount of the costs from energy efficiency upgrades." <u>Id</u>., p. 13. The EDCs deferred to the MFH WG's recommendation on master-metered participation in the RRES Program. EDC Comments, Aug. 15, 2023, p. 6.

In written comments, the MFH WG argued that the Authority should establish a "building-enhancement" definition for master-metered projects, if the MFH WG's proposal were accepted. MFH WG Comments, Aug. 15, 2023, p. 2. Additionally, the MFG WG believes that additional requirements for sub-metered units would "be burdensome and impractical for implementation, given the diverse array" of sub-metered systems. <u>Id</u>. The MFH WG noted that its proposal for passing RRES benefits on to tenants in master-metered properties would not harm tenants' eligibility for assistance programs. <u>Id</u>., p. 3. Conversely, after consulting with the U.S. Department of Housing and Urban Development (HUD), the MFH WG concluded that rent credits would "adversely affect tenants' eligibility for HUD assistance." <u>Id</u>. The MFH WG therefore did not recommend that the Authority adopt rent credits for master-metered properties participating in the RRES Program.

The Authority thanks the MFH WG for their thoughtful consideration of how to include master-metered multifamily affordable housing projects in the RRES Program and accepts with modification the proposal submitted. First, as stated above, the Authority requires that "at least 20% of the total financial benefit [of the RRES tariff] be directed to tenants" (emphasis added) for individually metered housing projects participating in the RRES Program. Year 2 Decision, pp. 13-14. While tenants may benefit from the building upgrades described in the MFH WG's compliance filing, the landlord would also financially benefit from building upgrades via increased property values. Further, if long-term tenant

rental agreements include building energy costs, upgrades to increase a building's energy efficiency would solely benefit the landlord if tenant rents were not adjusted downwards accordingly. Thus, the Authority concludes that if 20% of the net present value of the RRES tariff went to building upgrades, some percentage of that value would be provided to landlords, potentially to the detriment of tenants. Said another way, the Authority is concerned that allowing 20% of the net present value of the RRES tariff to be used on building upgrades would not result in 20% of the project value being distributed to building tenants. Consequently, the Authority requires that at least 25% of the net present value of the RRES tariff be spent on building upgrades, which would benefit the tenants of the master-metered multifamily affordable housing project. The MFH WG may submit a recommendation to the Authority requesting that this threshold be revised, so long as clear and quantitative analysis is provided to the Authority showing that this number would not allow master-metered multifamily affordable housing projects to be financially viable.

Furthermore, the Authority concludes that only certain building upgrades that provide the greatest value to either tenants or the electric grid may be used when determining master-metered multifamily affordable housing project qualification in the RRES Program. More specifically, the Authority determines that only the following upgrades will qualify for the arrangement described: (1) energy efficient windows or doors; (2) insulation; (3) energy efficient appliances; (4) heat pumps; (5) energy storage (if such storage enrolls in the Energy Storage Solutions Program); (6) broadband internet access (if such interest access is provided freely to tenants); (7) lead remediation or removal of environmental hazards such as asbestos necessary to enable energy efficiency upgrades; and 8) energy efficient lighting. The MFH WG may submit a recommendation to amend this list, provided sufficient justification is given to the Authority demonstrating tangible tenant financial benefits of any building upgrade additions.

Additionally, the EDCs shall require that developers of master-metered housing projects submit: (1) documentation outlining the net present value of the project's RRES tariff and how the developer reached such determination; (2) a detailed plan for the expenditure of 25% of the net present value of the project's RRES tariff on approved building upgrades; (3) a description of how the upgrades will financially benefit tenants (e.g., energy efficient lighting upgrades when utilities are included in rent will not by itself result in benefits passed to tenants, and thus may be deemed an ineligible upgrade in certain circumstances); (4) upon project approval, receipts and invoices for each approved building upgrade expenditure; and (5) photographic evidence of completed building upgrades, available upon request.

The Authority respectfully requests that the MFH WG develop and submit a plan for: (1) a member or members of the MFH WG to conduct eligibility screenings for project adherence with the above requirements prior to the start of construction; (2) at least annual audits of completed project's adherence with the above requirements; and (3) suggested remedies if projects later fail to adhere to the above requirements after receiving approval to proceed. The Authority's preference is for DEEP to work in conjunction with the EDCs to audit and verify the compliance documents outlined above; however, the Authority is open to alternative recommendations from the MFH WG regarding compliance auditing, provided that such recommendations are accompanied by a detailed justification.

Finally, before master-metered affordable housing projects can be approved for inclusion in the RRES Program, the Authority concludes that rental protections need to be considered by the MFH WG. As property values increase upon the completion of approved building upgrades, landlords could raise rents to levels unaffordable for low-income tenants, thereby hindering the fifth Program Objective, increased inclusivity overall. Accordingly, the Authority directs the MFH WG to submit proposed protections from eviction and renter protections for master-metered multifamily affordable housing that identify enforcement mechanisms for ensuring that tenants are not harmed via increased rents that are tied to the Authority's jurisdiction (e.g., including RRES compensation clawback provisions, etc.). The proposed protections shall also include a plan to determine eligibility of building upgrades whereby the landlord demonstrates that benefits will be passed to tenants (e.g., documentation demonstrating free broadband access will be provided) and, where appropriate, will result in financial benefits for tenants. Stated another way, the proposal must provide a clear plan for how tenants will financially benefit from all eligible building upgrades.

The Authority directs the MFH WG to provide a comprehensive proposal for master-metered housing projects' participation in the RRES program incorporating the above direction for review and approval by April 10. The MFH WG may propose updates to any of the Authority's conclusions outlined in this section, or to any recommendations previously made by the MFH WG, to ensure that the proposal most effectively advances the Program Objectives, so long as sufficient explanation and justification is provided. Last, the Authority clarifies that master-metered housing projects will not be eligible for the Program until the updated compliance is filed and an Authority ruling is issued.

2. Financial Benefit Sharing Requirement Updates

At the September 6, 2023 Technical Meeting, the MFH WG noted that the requirements for the federal Low-Income Communities Bonus Credit Program (Low-Income Bonus Credit), which increases a project's ITC between 10-20% above normal levels, are not aligned with the RRES Program's tenant benefit sharing requirement. MFH WG Corresp., Sept. 1, 2023, pp. 12-15. For example, the Low-Income Bonus Credit requires that at least 12.5% of a project's financial benefits be equitably distributed to Iow-income tenants, while the RRES Program requires that 20% of a project's financial benefits be distributed equally amongst Id, p. 15. Consequently, without a change to the RRES requirements, multifamily housing projects participating in the Program will not be eligible for the Low-Income Bonus Credit and will lose out on approximately \$127,200 of Federal funds. Id.

The Authority concludes that revisions to the RRES multifamily affordable housing requirements are needed to ensure that projects can benefit from the Low-Income Bonus Credit. Accordingly, the Authority will allow a minimum of 12.5% of the value of the RRES tariff to be equally shared with low-income tenants residing at a multifamily affordable housing project site, so long as the project is pursuing the Low-Income Bonus Credit. In such case, the remainder of the financial benefit to be shared with tenants (e.g., 7.5% of the value of the RRES tariff) shall be distributed equally amongst all non-low-income tenants residing at the project site, to maintain the 20% minimum benefit sharing requirement used in the Program currently. However, the average per unit financial benefit for non-low-income tenants cannot exceed the average per unit financial benefit for low-income tenants. Thus, for example, if dividing 7.5% of the financial benefit

amongst non-low-income tenants would result in a larger payment to those tenants than the payment to low-income tenants, the total financial value of the RRES tariff shared with tenants shall be distributed equally across all tenants. The Authority notes that the 12.5% low-income benefit sharing requirement will still be met in such circumstances, as this would effectively result in low-income tenants receiving more than 12.5% of the financial benefits. The Authority concludes that this change will further the first Program Objective, the sustained and orderly development of the state's solar industry, by opening up new revenue streams for multifamily affordable housing projects. Additionally, low-income tenants may receive greater total financial benefits with this programmatic change, thereby advancing the fifth Program Objective, increased inclusivity overall, particularly for low- and moderate-income customers. The Authority looks forward to the participation of multifamily affordable housing projects in the RRES Program as new revenue opportunities are unlocked.

3. Percentage of Benefit to Tenants

Pursuant to Authority direction, the MFH WG filed a recommendation that at least 20% of the total financial benefit of the RRES tariff be provided to tenants in multifamily affordable housing projects. MFH WG Compliance, Sept. 30, 2022, Docket No. 21-08-02, p. 1. In making its recommendation, the MFH WG concluded that, on average, approximately 60% of the RRES tariff value was needed to cover system costs. Id. Consequently, the MFH WG believed that splitting the remaining financial benefit equally between tenants and system owners was the most equitable solution to ensure that tenants were financially benefiting from solar projects located at their place of residence. Id. The MFH WG further noted that additional incentives from the IRA may change the MFH WG's system benefit calculation once federal guidance was released. Id., pp. 2-3. In the Year 2 Decision, the Authority approved the MFH WG's recommendation to require at least 20% of the total financial benefit of the RRES tariff to be split equally between all tenants of multifamily affordable housing sites. Year 2 Decision, pp. 13-14. Further, the Authority requested that the MFH WG file updated financial benefit sharing recommendations in the current proceeding. Id., p. 14. In response, the MFH WG stated that it did "not have any additional recommendations to make at this time." DEEP Compliance, Aug. 1, 2023, p. 1.

Accordingly, the Authority requested written comments from stakeholders on whether system owners should be required to share a different percentage of the RRES tariff benefit with tenants of multifamily affordable housing sites. Notice, July 18, 2023, p. 6. The Authority specifically requested stakeholder consideration of whether system owners should be required to share some percentage of the net system benefit (instead of the total financial benefit) of the RRES tariff, since the percentage of the RRES tariff needed to cover system costs can vary from the 60% figure used in the MFH WG's calculations. Id. OCC responded to the Authority's request for written comments by stating its support for a modest increase in the total financial benefits sent to tenants, provided project viability was not jeopardized by such increase. OCC Comments, Aug. 15, 2023, p. 14. The EDCs and CGB deferred to the comments submitted by the MFH WG. EDC Comments, Aug. 15, 2023, p. 8; CGB Comments, Aug. 15, 2023, p. 8. Last, the MFH WG believes that since the RRES Program was still new, data is lacking "to substantiate recommendations for modifying the tenant benefit percentage." Id. The MFH WG also noted that system owners still had the flexibility to provide a greater

percentage of benefits to tenants than what is required by the Program Manual. Id., pp. 5-6.

The Authority concludes that changes are not warranted to the total percentage of the RRES tariff required to be shared with tenants (i.e., 20%) at this time, because evaluation of the impact of federal incentives on RRES project economics is still ongoing, and because the Authority lacks RRES multifamily housing project data to validate any changes. Nevertheless, should the MFH WG recommend additional changes to the current tenant benefit sharing requirements in the future, the Authority will consider such recommendations, to ensure that tenants receive appropriate benefits for solar projects located at their place of residence. The Authority ultimately remains committed to the fifth Program Objective, increased inclusivity overall, and, as such, the Authority will adjust Program requirements as needed to ensure Program equity at multifamily affordable housing sites.

4. Meter Sockets

At the June 21, 2023 Technical Meeting, developers noted difficulties in obtaining multi-gang meter sockets, which are frequently used in solar configurations for multifamily homes. Tr., June 21, 2023, 93:17-94:4. Further, a stakeholder argued that trough-type connections with single meters next to each other could be used in lieu of multi-gang meter sockets for Netting projects. Tr., 94:5-14. Therefore, the Authority requested written comments on any difficulties obtaining multi-gang meter sockets, particularly for multifamily affordable housing, and on recommendations for allowing alternatives to multigang meters for use in the RRES Program, including trough-type connections with single meters next to each other. Notice, July 18, 2023, p. 4.

While the EDCs acknowledged installer difficulties in obtaining multi-gang meter sockets, the EDCs did not support changing current metering requirements because the current requirements "maintain safety standards and avoid inherent risks of alternatives such as high maintenance costs and higher ease of tampering." EDC Comments, Aug. 15, 2023, p. 6. Conversely, Trinity Solar supported the use of trough-type connections with single meters installed side by side, because Trinity Solar believed this solution could "be easily implemented should this be safe and compliant with standards." Trinity Solar Comments, Aug. 15, 2023, p. 2. Trinity Solar also highlighted delays in obtaining multigang meter sockets among multiple manufacturers. Id. Similarly, ConnSSA noted manufacturer multi-gang meter socket delays, including an open purchase order dating back to March 2022. ConnSSA Comments, Aug. 15, 2023, p. 4. ConnSSA asserted that trough-type connections with tamper-resistant or security screws would be one possible alternative to multi-gang meter sockets. Id. Further, OCC supported alternatives to multigang meter sockets, should such alternatives be "safe and technically viable," to increase affordable housing participation in the Program. OCC Comments, Aug. 15, 2023, pp. 11-12.

The Authority does not authorize the use of trough-type connections with side-byside meter installations for use in the RRES Program at this time as additional research must first be conducted to determine solutions to any safety or tampering risks that may be associated with such metering configurations. Nevertheless, it is clear to the Authority that the allowance of trough-type connections with side-by-side meter installations would aid the deployment of solar installations at multifamily affordable housing sites, which

have thus far been hindered through an acute manufacturer shortage of multi-gang meter sockets. Moreover, the allowance of such metering configurations would further the Program Objectives, particularly the first and fifth Program Objectives, by supporting the sustained and orderly development of the state's solar industry and by increasing inclusivity overall. Consequently, the Authority intends to reconsider trough-type connections with side-by-side meter installations for use in the RRES Program next year in Docket No. 24-08-02, after the appropriate safety review has been completed by the EDCs.

Accordingly, by March 15, 2024, the EDCs shall develop and submit for review and approval a plan to alleviate any potential safety or tampering risks associated with trough-type connections with side-by-side meter installations. Such plan shall include implementation costs and expected timelines for allowing such metering configurations for use in the RRES Program. Additionally, when developing the proposal, the EDCs shall research any steps taken by other jurisdictions to allow trough-type connections with side-by-side meter installations at multifamily housing sites, to determine if such steps can be replicated in Connecticut. Finally, the EDCs shall consult with the Interconnection Working Group, established in the Decision dated November 25, 2020, in Docket No. 17-12-03RE06, PURA Investigation into Distribution System Planning of the Electric Distribution Companies – Interconnection Standards and Practices, when developing the proposal. Ultimately, the Authority determines that the benefits of allowing trough-type connections with side-by-side meter installations, via increased underserved Program enrollment and multifamily affordable housing participation, may warrant their inclusion in the RRES Program once the EDCs develop a proposal to alleviate the potential risks associated with such metering configurations.

5. Eligible Affordable Housing Facilities Reporting

The Authority refers the Agencies (i.e., DEEP, CGB, DOH, and CHFA) to Order Nos. 4 and 6 of the MFH Decision issued in the Year 1 annual review proceeding, which request that the Agencies file annually, by August 1, a list of housing facilities eligible under Tier I of the affordable housing definition approved in the MFH Decision, as well as the DEEP and DOH contact information for a housing facility seeking to be defined as "affordable housing" that does not meet the Tier I or Tier II thresholds of the affordable housing definition. MFH Decision, p. 16. The Authority notes that these orders were not fulfilled for the current year and reiterates the importance of providing this information annually to facilitate multifamily affordable housing participation in the RRES Program. Further, the Authority directs the EDCs to post the most recent compliance with Order Nos. 4 and 6 of the MFH Decision, along with contact information for each of the Agencies, on the RRES Program website by January 1, 2024, and annually thereafter.

In written exceptions, DEEP, on behalf of the MFH Working Group, proposed an alternative process to the annual list of eligible Tier I properties submitted to the Authority, whereby eligible properties could be added to the list on a rolling basis, with quarterly submissions of the Tier I list to the Authority. DEEP Exceptions, Oct. 24, 2023, p. 3. Further, DEEP proposed that if a project not on the current Tier I list seeks participation in RRES, the EDCs could contact the Agencies to verify that the project has been approved for participation in a CHFA or DOH program, and, if so, CHFA or DOH would provide the EDCs with proof of Tier I eligibility. Id. DEEP also opined that the change would allow projects to more easily apply for federal programs and facilitate timelier Tier

I property eligibility for RRES, as CHFA and DOH continuously approve new projects for their programs. <u>Id</u>. UI expressed support for rolling approval for Tier I eligibility and quarterly Tier I list submissions. UI Exceptions, Oct. 24, 2023, pp. 7-8. The Authority finds that the proposed change expands affordable housing Program eligibility, in support of the fifth Program Objective, increased inclusivity overall. Consequently, the Authority accepts the proposal to allow the Agencies to approve Tier I submissions on a rolling basis and to submit the list of Tier I properties to the Authority on a quarterly basis and directs the EDCs to update the Program Manual to incorporate such change.

G. Proposed Application Fees

Order No. 2 of the Year 2 Decision directed the EDCs to file annually for Authority review and approval an RRES application fee to "cover the estimated administrative costs associated with processing applications," including detailed calculations to justify the proposed fee. Year 2 Decision, p. 33. Eversource proposed maintaining the Year 2 RRES applications fees for Year 3 of the Program, because the current fees collected covered Eversource's entire administrative programmatic costs. Motion No. 8, Att. 1, p. 1. More specifically, Eversource collected approximately \$2.3 million in application fees. while the costs incurred by Eversource to administer the Program totaled approximately \$1.2 million. Id. While Eversource's collected application fees exceeded administrative programmatic costs, Eversource believed no fee change was warranted because: (1) the resulting excess is credited to customers; (2) the current fees do not present a barrier to RRES Program participation given recent application numbers; (3) current solar deployment levels exceed the historical average and may not be sustained; and (4) administrative costs are expected to increase in 2024 as Eversource enhances customer resources. Id. Additionally, Eversource stated that it would continue to monitor fee revenue and programmatic costs, to see if application fee changes were warranted in the future. Id., p. 2.

Similar to Eversource, UI proposed to maintain the Year 2 RRES application fees for Year 3 of the Program, because the current fees were "appropriately offsetting a significant portion of program costs without discouraging participation." Motion No. 9, p. 1. The fees collected by UI ultimately covered most but not all administrative programmatic costs (i.e., approximately \$162,000 in fees were collected, versus Program operation costs of \$179,000). Id. Moreover, keeping the fees the same would "reduce customer confusion" and "enable statewide alignment." Id. Finally, UI stated that it would continue to evaluate Program administrative costs and would report to the Authority if the fees collected vary significantly from actual Program costs. Id.

In a Notice of Request for Written Comments, the Authority requested stakeholder feedback on the EDCs' proposed Year 3 application fees. Notice, July 18, 2023, pp. 6-7. ConnSSA responded stating that the issue had been "worked out" and no fee increases had occurred. ConnSSA Comments, Aug. 15, 2023, p. 6. Additionally, OCC recommended a tiered fee approach to reduce barriers to low-income participation. OCC Comments, Aug. 15, 2023, p. 15. OCC cited the Home Energy Solutions (HES) Program as one example of a program offering reduced application fees for low-income residents, since the HES Program has an income-eligible fee waiver. <u>Id</u>. OCC noted that reduced fees for low-income and Distressed Municipality residents could aid in the participation of underserved communities in the Program. Id.

Given robust RRES Program enrollment, the Authority concludes that the current application fees fulfill their intent to cover most EDC costs associated with administering the Program, thereby minimizing cost impacts to nonparticipating ratepayers, while not posing a major barrier to Program participation. Residential Tariff Decision, p. 26. Consequently, the Authority grants Motion Nos. 8 and 9 and maintains the Year 2 application fees for Year 3 of the Program. Maintaining the Year 2 fees will further the first and third Program Objectives by reducing customer confusion and limiting Program costs. Additionally, while the Authority sees the potential value of a tiered fee system, where low-income applicants would pay reduced application fees, the Authority determines that additional analysis and stakeholder feedback is warranted before such fee structure is approved. More specifically, the Authority is concerned that reduced fees would not be passed on as cost savings to low-income applicants, particularly if the fees are paid by developers and incorporated into the sales or lease contract signed by the low-income customer. Moreover, the existing adders effectively accomplish the same objective. Therefore, the Authority may revisit the idea of a tiered fee system during the Year 4 RRES Program review to better consider the proposal's costs and benefits, while taking into consideration current low-income deployment rates.

Finally, the Authority clarifies that any application fee overcollection shall be held by the Company for a period of one year before being credited to all ratepayers to mitigate any potential see-saw effects due to under- or over-collection changes from one year to another. Regardless of whether the application fees are over- or under-collected relative to Program administrative costs, such balance shall be reviewed by the Authority in the appropriate rate adjustment mechanism proceeding before being charged or credited to customers. The Authority encourages the EDCs to continue to critically assess whether application fee collection will sufficiently cover future Program administrative costs through its August 1 annual application fee filing.

H. IMPROVED RRES APPLICATION

On September 15, 2022, the Authority directed the EDCs to establish an Application Process Working Group (APWG) to streamline and identify improvements to the RRES application process. Year 2 Decision, p. 29. Accordingly, last year in Docket No. 22-08-02, the APWG submitted for the Authority's review several recommended RRES application improvements, thereby resulting in the Authority's approval of various changes to better align the RRES application process with programmatic goals. Decision, Docket No 22-08-02 (APWG Decision), Feb. 8, 2023. Further, in a May 15, 2023 Notice of Request for Written Comments, the Authority sought comments on RRES application process improvements made to date, specifically for the challenging UI application, to investigate whether additional improvements should be made to further the Program Objectives and RRES deployment targets. Notice, May 15, 2023, pp. 4-5.

In response, ConnSSA stated that there has been "marginal improvement in getting projects through the challenging UI application process." ConnSSA Comments, June 1, 2023, p. 2. Similarly, PosiGen noted that the UI RRES application process has seen improvements throughout 2022 and 2023. PosiGen Comments, June 1, 2023, pp. 12-13. Nevertheless, PosiGen argued that more work was "needed to ensure that the remaining issues that have surfaced with the move to PowerClerk are addressed so that there can be greater consistency (for both UI and installers), but also so that approval timelines can be reduced." Id., p. 13. PosiGen also noted that application timelines are

twice as long for UI when compared to Eversource, primarily because of UI software bugs and learning pains. Id. Additionally, the EDCs highlighted the improvements made to the RRES application process to date, including UI's launch of a PowerClerk-based application process. EDC Comments, June 1, 2023, p. 13. The EDCs also noted several application improvements that are currently underway, including changes related to payment processing and customer data. Id, pp. 13-14. While integration challenges have occurred during UI's transition to PowerClerk, the EDCs highlighted UI's ability to address such challenges by working with applicants and a software vendor. Id., p. 13.

The Authority commends the EDCs' efforts to improve and streamline the RRES application process. The Authority notes that UI's average timeline from RRES application submission to issuance of permission to operate is now below that of Eversource (79 days for UI versus about 94 days for Eversource). Eversource Compliance, July 27, 2023, Docket No. 22-08-02, Att. 1, p. 1; UI Compliance, May 1, 2023, Docket No. 22-08-02, Att. 1, p. 1. The Authority encourages the EDCs to continue to proactively streamline RRES application processes and forms, to further reduce application barriers and timelines, in furtherance of the Program Objectives and RRES deployment targets.

I. ELECTRONIC SIGNATURES

The Authority directed the EDCs to file a robust electronic signature proposal for the RRES Program, including at least one feature to ensure customers are informed of relevant financial data and educational materials, by July 1. APWG Decision, p. 17. Accordingly, the EDCs made a revision to the Program's customer disclosure form "to ensure customers are informed of relevant financial data and educational material," including a hyperlink to the EDCs' customer educational pages. EDC Order No. 24 Compliance, June 30, 2023, p. 2. Additionally, UI stated that it uses an electronic signature feature provided by DocuSign to efficiently and conveniently obtain signatures required by the RRES application through an electronic process. Id., pp. 1-2. Further, Eversource was still implementing electronic signature capabilities for the RRES Program and planned to copy UI's signature process for the sake of consistency, with a planned launch date in the third quarter of 2023 at a cost of \$3.80 per document package. Id., p. 2. Notably, installers still have the capability to provide wet signatures with the launch of electronic signature processes. Id. Last, the EDCs remained "engaged with stakeholders on their respective e-signature plans/processes." Id.

Upon reviewing the EDCs' electronic signature proposal, the Authority requested written comments from stakeholders, including whether any changes should be made. Notice, July 18, 2023, p. 4. PosiGen stated that it uses "Ul's electronic signature process wherever possible and supports Eversource rolling out a similar process." PosiGen Comments, Aug. 15, 2023, p. 10. Nonetheless, PosiGen also believed that wet signatures should still be allowed for use in the Program. <u>Id</u>. Further, Trinity Solar believed that the "format for submitting signatures has been efficient." Trinity Solar Comments, Aug. 15, 2023, p. 2. Should additional revision be needed, however, Trinity Solar requested collaboration between developers and the EDCs to ensure a good customer experience. <u>Id</u>. ConnSSA conversely believed that the current UI electronic signature process was problematic. ConnSSA Comments, Aug. 15, 2023, p. 4. Finally, OCC favored a simplified application process, including the option to sign documents electronically. OCC Comments, Aug. 15, 2023, p. 11. OCC also argued that Program

participants should not incur additional fees to fulfill document signature requirements. Id.

In support of the Program Objectives, the Authority approves the EDCs' electronic signature proposal. More specifically, the Authority concludes that electronic signatures will increase Program efficiency and accessibility by enabling quick document and signature collection, thereby shortening application timelines and supporting the first and fourth Program Objectives. Further, EDC revisions to the customer disclosure form will help ensure customers are informed of relevant financial data and educational materials during the electronic signature process. The Authority clarifies that the implementation cost of electronic signatures should be paid for using the revenue collected from existing RRES application fees. Last, the Authority strongly encourages the EDCs to work with members of the previously-organized APWG before implementing any electronic signature changes, so that developers are adequately informed of process modifications, and to alleviate any potential developer concerns with EDC proposed changes.

J. CANCELLATION PERIOD

The EDCs cannot remove stale or duplicative RRES project applications according to the current Program requirements. Year 2 Decision, p. 27. Consequently, the Program queue could build up as outdated projects remain pending indefinitely. To resolve this issue, in the Year 2 Decision the Authority directed the EDCs to work with the Interconnection Policy Working Group (IPWG), established through Docket No. 17-12-03RE06, PURA Investigation into <u>Distribution System Planning of the Electric Distribution</u> Companies – Interconnection Standards and Practices, to propose a cancellation period for projects which have not progressed. Id., pp. 27-28. After discussions with the IPWG, the EDCs requested "authorization to automatically withdraw Level I (25 kW and less) applications that have remained in a status requiring customer/applicant action (e.g., received contingent approval/awaiting municipal inspection) for 12 months or more." EDC Order No. 18 Compliance, June 30, 2023, p. 2. The EDCs also proposed sending email notifications to both the applicant and customer no less than 15 business days before an application's cancellation, whereby the EDCs would maintain the application should a request to do so be received from either the applicant or the customer prior to the application's cancellation. Id. Last, the EDCs requested authorization to withdraw duplicate applications if the efficient enrollment of RRES customers is hindered. Id. Upon receiving notification of an application's impending cancellation, applicants and customers would be given 15 business days to request project retention, provided that a duplicate application is subsequently withdrawn. <u>Id</u>. Upon reviewing the EDCs' project cancellation proposal, the Authority requested written comments and feedback from all stakeholders. Notice, July 18, 2023, pp. 3-4.

PosiGen supported the EDCs' project cancellation proposal because PosiGen believes the proposal's cancellation timeframes are reasonable, and because developers would still be given an opportunity to maintain applications that should not be canceled. PosiGen Comments, Aug. 15, 2023, p. 9. Further, ConnSSA stated that the EDCs' proposal addressed developer concerns by alerting developers of impending project cancellations. ConnSSA Comments, Aug. 15, 2023, p. 3. Additionally, Trinity Solar stated support for the EDCs' proposal and argued that the developer and customer should be notified concurrently regarding impending application cancellations, to provide developers a chance to respond accordingly. Trinity Solar Comments, Aug. 15, 2023, p.

1. Finally, OCC argued that customers should not be penalized for stale applications that did not move forward through no fault of their own. OCC Comments, Aug. 15, 2023, p. 10.

In line with stakeholder comments, the Authority determines that the EDCs' proposal to cancel stale or duplicative RRES applications is in line with the Program Objectives because the proposal will increase Program efficiency through the removal of projects that will not progress, while giving both applicants and customers a reasonable timeframe to request the maintenance of a project application. Importantly, the proposal was also developed by the EDCs through an open and transparent process including discussions with project developers at APWG meetings, thereby supporting the first Program Objective, the orderly development of the state's solar industry. The EDCs' application cancellation proposal is therefore accepted and shall be included directly in the updated Program Manual to be filed in compliance with this Decision. The Authority clarifies that the applicant, customer, and developer, if the applicant's contact information has not been provided to the EDCs, shall be notified simultaneously according to the timetable included in the EDCs' proposals, to give all parties a chance to respond prior to an application's cancellation. The Authority thanks all parties involved and looks forward to the efficient administration of the RRES application queue.

K. COST DATA REPORTING

During the First Technical Meeting in this proceeding, stakeholders raised the issue of installed cost data reporting, noting that it was self-reported and that there was not much EDC guidance for how applicants should report such data. Hr'g Tr., June 21, 2023, 34:22-35:8. Consequently, the Authority requested written comments from stakeholders on cost data reporting requirements, including guidance on data standardization across all applicants. Notice, July 18, 2023, p. 7.

Accordingly, CGB remarked that updated Program data provides "transparency to the market" by helping customers compare costs, and by providing data for state, research, and educational organizations for the analysis of market trends. Comments, Aug. 15, 2023, p. 9. CGB also provided a list of data points publicly collected for the Residential Solar Investment Program (RSIP), which are not currently released publicly for the RRES Program. Id. CGB cautioned, however, that the RSIP data list was only a starting point for a potential data collection expansion in the RRES Program. Id. Additionally, CGB asserted that clear definitions and explanations for each field used in the RRES application "may help make data more consistent." Id. Further, ConnSSA believes that "[a]II parties would be helped by a document that clearly explains to installers how to enter [RRES project] information." ConnSSA Comments, Aug. 15, 2023, p. 6. Moreover, OCC supported standardized data reporting because it would increase Program transparency and "establish consistent baselines" for data analysis. OCC Comments, Aug. 15, 2023, p. 15. PosiGen supported the existing cost categories and argued that guidance could be provided to developers to ensure that cost data that should not be included, such as battery costs, are not reported by installers. Comments, Aug. 15, 2023, p. 12.

ConnectDER believes that data improvements could be made to help the Authority better understand interconnection and service upgrade cost impacts on residential solar projects, since interconnection costs could be split across several of the current RRES

cost categories included in the application. ConnectDER Comments, Aug. 15, 2023, pp. 1-2. ConnectDER ultimately recommended that the EDCs establish a single document outlining data reporting requirements, with specific guidance on interconnection and service upgrade costs, so that cost solutions could be developed more effectively. <u>Id.</u>, p. 2. Last, the EDCs welcomed suggestions on clear data reporting guidance to "to promote consistent collection of data." EDC Comments, Aug. 15, 2023, p. 8. The EDCs also believed that while current solar deployment outpaces the historical average, seemingly in contrast to reported solar costs, the quality of current installed cost data should not necessarily be questioned as such data matches what is reported on customer disclosure forms. <u>Id.</u>, p. 9.

The Authority determines that additional action is required to ensure that the project data collected is as standardized and accurate as possible. Moreover, the stakeholder comments make clear that additional EDC guidance would be helpful to Program participants by reducing customer confusion about what to include when answering data field questions in a project application. Different interpretations across Program participants reduce the reliability of the data collected, thereby negatively impacting any quantitative analysis of Program costs or data trends. Consequently, the Authority directs the EDCs to develop and submit for review and approval a draft project data guidance document that provides clear definitions for each data field required in an RRES application, including guidance on what not to include and specific examples for each data field. The EDCs shall consult with and allow members of the Application Process Working Group (APWG), established through the September 15, 2022 Procedural Order in Docket No. 22-08-02 and subsequently disbanded,³⁸ an opportunity to comment on the draft document prior to submission with the Authority. The guidance developed should not deviate substantially from developers' current interpretation of the data fields, particularly where developers have a consensus understanding of a field's definition, so that future data collected does not unnecessarily differ from the data collected in prior Program years. The EDCs shall file such document for review and approval with the Authority by February 1, 2024, and shall post such document on the Program webpage(s) alongside other installer resources once a final determination is reached by the Authority. Finally, by March 15, 2024, or 30 days after Authority approval of the project data guidance document, whichever occurs later, using the guiding document, the EDCs shall develop an "i", or information, button for any data fields where significant developer confusion is present in the web-based RRES application. When a developer hovers over the "i" button, a brief definition of the data field shall appear. The EDCs' compliance with this requirement shall include screenshots and descriptions of each "i" button.

Additionally, the Authority notes that the EDCs are currently required to file RRES Program information by August 1 annually, pursuant to Order No. 6 of the February 8, 2023 Decision. Decision, Feb. 8, 2023, p. 14. The Authority directs the EDCs to include in each annual filing a list of all existing fields collected in the RRES application, in addition

Per the September 15, 2022 Procedural Order in Docket No. 22-08-02, the APWG members included ConnSSA and its members, Sunrun, Tesla, Inc., as well as DEEP and OCC at their discretion. The September 15, 2022 Procedural Order is available at: https://www.dpuc.state.ct.us/dockcurr.nsf/8e6fc37a54110e3e852576190052b64d/52860e7d7cbbd895852588be0069270e/\$FILE/22-08-02%20Procedural%20Order%20-%20Application%20Process%20Working%20Group.pdf. The Authority understands that the APWG has not met since the report was filed on December 14, 2022, in Docket No. 22-08-02.

to any supplemental field data as indicated in CAE-1 and CAE-14 in the above-captioned proceeding and included in the EDCs' redacted filings. UI Interrog. Resp. CAE-14, Att. 4 Public; Eversource Compliance, Aug. 22, 2023, Att. 1. The annual filings shall also include fields with information on the application submission and approval date for each project. Lastly, the Authority directs the EDCs to include a copy of the Program data on the RRES Program websites. Notably, this data can be provided in any reasonable fashion (e.g., attached file, web link, embedded data), and may be relocated to the PURA data dashboard, as established pursuant to the Decision dated April 20, 2022 in Docket No. 21-07-01, Application of The Connecticut Light and Power Company and Yankee Gas Services Company, each Individually d/b/a Eversource Energy, The United Illuminating Company, Connecticut Natural Gas Corporation, and The Southern Connecticut Gas Company for Approval of Arrearage Forgiveness Program 2021-2022 (PURA Data Dashboard), when the dashboard is expanded to include Clean Energy Program data.

1. Roof Repairs

In the May 15, 2023 Notice of Request for Written Comments, the Authority sought information on the practice of bundling of solar costs with roof repairs, including information on whether any repair costs are included in the RRES Program \$/kW pricing information provided to the EDCs, so that the Authority can ensure that tax credits and ratepayer incentives are being used both properly and effectively. Notice, May 15, 2023, pp. 5-6. Additionally, the Authority noted "that under the Investment Tax Credit (ITC) only some solar roofing tiles and shingles may qualify, while strictly roofing or structural materials do not." Id., p. 6.

CGB subsequently filed written comments with the Authority stating that about 5% of Smart-E Loans involving solar PV installations involved non-solar costs, including roof repairs or tree removals, and that those non-solar costs amounted to approximately 18% of the total cost of the Smart-E loans for such projects. CGB Comments, June 1, 2023, p. 7. Further, ConnSSA stated that its members are aware that roof repair costs are ineligible for the ITC, but that costs for electric work necessary to complete projects are bundled with solar costs. ConnSSA Comments, June 1, 2023, p. 2. ConnSSA further argued that where project costs are being tracked, it should "clearly state [solar] costs do not include any other site prep or electrical upgrade work." Id. Additionally, OCC believed that ratepayer funding should not be used for roof repairs. OCC Comments, June 1, 2023, p. 3. Last, PosiGen stated that it does not bundle roof repair costs with its solar leases, and such costs are reported as separate invoices. PosiGen Comments, June 1, 2023, p. 15. Roof repairs are needed on between 10-20% of projects at a typical cost of between \$2,500 to \$7,000. Id. Notably, most of PosiGen's projects requiring roof repairs do not move forward due to the added cost. Id. The project cost data reported by PosiGen also only includes solar costs not inclusive of roof or electrical upgrades. Id., p. 16. PosiGen stated, however, that electrical upgrade costs should be reported with solar costs in instances where the electrical upgrade is required for the project to participate in the Program, including multi-gang meter socket upgrades required for Buy-All projects per the latest Eversource Information and Requirements Book. Id.

The Authority clarifies that roof and electrical repairs, under most circumstances, do not qualify for the ITC, and, likewise, should not be reported in the project cost data sent by developers to the EDCs. Consequently, the EDCs shall clarify in the RRES

Program documents to be filed in compliance with this Decision that RRES project cost data shall only include solar PV costs. However, for data tracking purposes, and to compare with historical data, the Authority directs the EDCs to add a location specifying costs for associated electrical upgrades in its Order No. 6 compliance, as those costs are sometimes bundled and may have been reported in historical project pricing. The Authority notes, however, that other funds, such as the Greenhouse Gas Reduction Fund or Solar for All, may be used to fund rooftop or electrical repairs.

L. RRES DATA PORTALS

In the Residential Tariff Decision, the Authority directed the EDCs to create a webpage containing relevant data related to the RRES Program, including aggregate avoided emissions, lease price, total installed cost, system size, and historical kilowatthour (kWh) dispatch. Residential Tariff Decision, p. 33. Further, the data was to be aggregated on a rolling six-month average and by town by January 1, 2023.³⁹ Id. After the EDCs created a webpage containing RRES Program data, the Authority requested written comments "on the accessibility, visibility, and content of the data on the webpages, including any recommendations for improvements." Notice, May 15, 2023, p. 5.

Accordingly, ConnSSA stated that its members saw "no appreciable impact from the EDC webpages [because] the summary data appears to be intermingled with contractor information." ConnSSA Comments, June 1, 2023, p. 2. ConnSSA therefore believed that customers would likely be unable to find or use RRES Program data unless the data were moved to a more prominent location. Id. Additionally, PosiGen believes that while Eversource's webpage is generally accessible to the public. Ul's webpage was not as the target audience is installers rather than consumers. PosiGen Comments, June 1, 2023, pp. 13-14. PosiGen nevertheless recommended changes to both webpages. Id. For the Eversource webpage, PosiGen recommended: (1) an expansion of the supply, distribution, and retail rates section to show a six-month time period, so consumers could have a better upstanding of rate fluctuations' impact on their solar system; (2) a display of average system size alongside project cost data; and (3) an inclusion of RRES approval timelines including for individual project phases. Id. Moreover, for the UI webpage, PosiGen recommended the following: (1) a clearer customer website navigation path; (2) a separation of the RRES and Non-Residential Renewable Energy Solutions (NRES) webpages to prevent customer confusion; (3) the inclusion of a link to the "Historical Rates, System Costs, and Program Data" from the "Getting Started" webpage; (4) a display of the average system size alongside project cost data; and (5) the inclusion of RRES approval timelines including for individual project phases. <u>Id.</u>, pp. 14-15.

Further, the EDCs stated that they were working on a joint data portal for all Program reporting requirements pursuant to a final Decision in Docket No. 21-07-01. EDC Comments, June 1, 2023, pp. 14-15. Consequently, the EDCs jointly released a

³⁹ All data reporting requirements outlined in the Residential Tariff Decision must be fulfilled by the EDCs. The Authority notes that Ul's RRES Program website currently lacks aggregate RRES data by town, which was required last January. Consequently, if the EDCs' RRES Program websites lack any data requirements outlined in the Residential Tariff Decision, the EDCs must publish such data when the EDCs file compliance with Order No. 29. As the RRES website requirements are already past due, the Authority may consider further actions including, but not limited to, civil penalties pursuant to Conn. Gen. Stat. § 16-41 if the website(s) remain deficient of any data requirements outlined in the Residential Tariff Decision. See Residential Tariff Decision, p. 33.

"Request for Proposal ('RFP') for the development of a centralized Data Reporting Platform ... to develop a user-friendly, web-based centralized data reporting platform, providing accurate reporting of the electric and gas companies' Energy Affordability data" in addition to other clean energy programs such as RRES. <u>Id.</u>, p. 15; Decision, April 20, 2022, Docket No. 21-07-01, p. 57. Additionally, the EDCs noted that at the RFP's conclusion, they could develop a detailed timeline and plan for improvements to the PURA Data Dashboard to include RRES data. Id.

The Authority concludes that changes are warranted to the existing RRES data reporting on the EDCs' websites to ensure user accessibility and data transparency. Therefore, the Authority directs the EDCs to incorporate, by April 1, 2024, the changes suggested by PosiGen into the RRES Program webpages. See PosiGen Comments, June 1, 2023, pp. 13-14. Additionally, to ensure that Program participants can easily access RRES programmatic information, the Authority directs the EDCs to break out the current RRES webpage(s) into three distinct pages displaying the following: (1) RRES customer educational materials and general programmatic information: (2) RRES required forms, fees, and installer materials; and (3) RRES programmatic data.⁴⁰ Each webpage shall also include links to the other webpages in a prominent and clearly identifiable section. The Authority finds that these changes to the RRES Program webpage(s) will further the first and fourth Program Objectives by fostering the sustained and orderly development of the state's solar industry and by increasing Program accessibility for customers. Last, the EDCs shall provide a detailed implementation timeline for the incorporation of RRES data into "a centralized Data Reporting Platform" by January 1, 2024.

M. System Expansion Under Netting Tariff

The Authority recently approved a modification to the Program Manual to allow RRES customers to expand existing solar projects under the Netting tariff. System expansions were previously only allowed using the Buy-All tariff. EDC Compliance to Order No. 13, Dec. 15, 2022, Docket No. 22-08-02, Att. 2, p. 2. However, on June 6, 2023, the Authority approved a revision to the Program Manual to allow customers with existing PV systems to enroll a second PV system in the RRES Netting tariff. Motion No. 16 Ruling 2, Docket No. 22-08-02. The change took effect immediately for Eversource customers. Id., p. 1. For UI customers, however, system upgrades, with an estimated timeline of seven months, will need to occur before the change can take effect. Id., p. 2. As a result, the Authority directed UI to file compliance in Docket No. 23-08-02 no later than two weeks after the completion of the UI system modification to allow existing solar PV customers to enroll a second PV system in the RRES Netting tariff, indicating the date(s) when the UI system modification was completed and when the change can take effect. Id. The compliance shall also include a clean and redlined final version of the RRES Program Manual incorporating such change. Id. The Authority looks forward to the successful completion of UI's system upgrades, which will further the first, third, and fourth Program Objectives by expanding RRES tariff options for existing solar PV customers.

1. Non-Bypassable Charge for Netting System Expansions

40 Including all the data requirements listed in the Residential Tariff Decision, in addition to the new data requirements ordered through this Decision. <u>See</u> Residential Tariff Decision, pp. 25-26, 33.

In the Residential Tariff Decision, the Authority directed the EDCs to jointly file proposals for non-bypassable charge designs for projects taking service under the Netting tariff in the RRES Program. Residential Tariff Decision, p. 47. Upon reviewing the EDCs' non-bypassable charge proposal, the Authority approved EDC system modifications to support the potential implementation of a non-bypassable charge in the RRES Program.⁴¹ Motion No. 24 Ruling, Feb. 24, 2022, Docket No. 21-08-02, pp. 1-3. Further, as discussed above, system expansions, where an existing solar customer decides to expand their original solar system, can immediately take service under the Netting tariff in Eversource territory, while such option will become available to UI customers after the completion of necessary system upgrades. Motion No. 16 Ruling 2, July 19, 2023, Docket No. 22-08-03, pp. 1-2. Additionally, the Authority requested a supplement to the EDCs' original nonbypassable charge proposal, including an identification of any changes to nonbypassable charge implementation costs or timelines, while taking into consideration the effects of allowing system expansions to take service under the Netting tariff. Motion No. 16 Ruling 1, June 9, 2023, Docket No. 22-08-02, p. 4. Consequently, the Authority requested written comments from stakeholders on whether the allowance of system expansions to take service under the Netting tariff requires modification if a nonbypassable charge is implemented in the RRES Program. Notice, July 18, 2023, p. 5.

In its supplemental compliance filing, UI stated that the estimated cost and timeline for allowing system expansions to take service under the Netting tariff remain valid, assuming no issues arise with the implementation of a non-bypassable charge. UI Compliance, Aug. 17, 2023, p. 2. Further, in written comments UI stated that if a nonbypassable charge were approved, add-on Netting systems could not be accepted by UI before the completion of IT billing and system upgrades, which could not begin until January 2024 based on UI's resource utilization for other regulatory projects. EDC Comments, Aug. 15, 2023, p. 7. Moreover, UI was unaware of additional barriers caused by the approval of a non-bypassable charge. Id. Eversource stated that it could support non-bypassable charges for all add-on Netting systems except those enrolled in a timeof-use rate because those customers are billed through a separate system, which could not support a non-bypassable charge for multiple Netting systems behind one meter. Id. Nevertheless, Eversource did not believe that this was a "meaningful barrier to implementing a non-bypassable charge and continuing to allow Add-On netting systems." since only a small number of customers are enrolled in both time-of-use rates and the RRES Program. Id. Additionally, PosiGen argued that no modification to the nonbypassable charge structure approved in Docket No. 21-08-02 would be needed for addon Netting systems. PosiGen Comments, Aug. 15, 2023, p. 11. Similarly, ConnSSA did not see the need for any modifications to the allowance of add-on Netting systems, because a non-bypassable charge could be applied solely to the production of the new system. ConnSSA Comments, Aug. 15, 2023, p. 5.

The Authority determines that no changes are warranted to the allowance of addon Netting systems in the RRES Program at this time because non-bypassable charges could be supported by both EDCs for most add-on Netting systems. Nevertheless, the Authority reiterates its conclusion that non-bypassable charges are an important

⁴¹ The Authority clarifies that any EDC cost recovery associated with implementing a non-bypassable charge for the RRES Netting tariff remains subject to a full prudency review in the applicable Rate Adjustment Mechanism (RAM) proceeding. <u>See</u> Motion No. 24 Ruling, Feb. 24, 2022, Docket No. 21-08-02, p. 3.

mechanism designed to ensure that non-participating ratepayers are not facilitating a rate of return that is more than is necessary to sustain historical solar deployment, thereby supporting the third Program Objective, balancing Program costs and benefits. Residential Tariff Decision, p. 39. Therefore, should a significant number of add-on Netting systems that are unable to support the addition of a non-bypassable charge enroll in the Program, the Authority requests that the EDCs alert the Authority in the current RRES annual review proceeding (i.e., if in 2024, in Docket No. 24-08-02), so that the Authority can determine the appropriate steps, including potential EDC billing or IT modifications or additional programmatic changes.

N. OVERSIZING ALLOWANCE FOR SYSTEMS

In a May 15, 2023 Notice of Request for Written Comments, the Authority requested stakeholder feedback on the pros and cons of allowing residential solar customers to receive additional incentives for system oversizing, in return for sending "credits for a percentage of the energy generated to low-income residents at no cost to the recipient," as is currently done in Massachusetts via the Solar Equity Program. Notice, May 15, 2023, p. 4.

In written comments, the EDCs supported exploration of creative solutions to increase RRES inclusivity. EDC Comments, June 1, 2023, p. 10. Nevertheless, the EDCs believe that the RRES Program has already achieved some success on lowincome and underserved enrollment and noted that Conn. Gen. Stat. § 16-244z(b)(2) currently limits RRES system oversizing. ld. Further, the EDCs noted that the Massachusetts Solar Equity Program was launched by a private company and is helped by the unique programmatic design of the Solar Massachusetts Renewable Target (SMART) Program. Id., pp. 10-11. The EDCs also do not "have in place the processes and resources to transfer bill credits among a range and volume of customers similar to Massachusetts," which would require time and resources to implement in Connecticut. ld., p. 12. Ultimately, the EDCs stated that the proposal would increase RRES Program costs without improving outcomes for Connecticut electric customers, because the RRES Program currently supports customer inclusivity. Id. Additionally, while OCC recognized that system oversizing could increase Program participation, OCC was concerned that the proposal would undermine Program inclusivity. OCC Comments, June 1, 2023, pp. 2-3.

CGB, conversely, supported allowing additional incentives for system oversizing in the RRES Program in return for sending credits at no cost to low-income residents. CGB Comments, June 1, 2023, p. 6. CGB noted that through the existing Buy-All tariff, Program participants can already direct compensation to another party, and CGB sees no reason that such party could not be another electric meter. <u>Id</u>. CGB also highlighted the importance of ensuring "that this arrangement does not qualify as additional income or taxes," to avoid penalizing the low-income recipient. <u>Id</u>. Further, the city of New Haven supported the proposed change because residential solar customers could utilize additional space to satisfy other customers' loads while improving their projects' economies of scale. New Haven Comments, May 31, 2023, p. 3. New Haven also noted that the proposal would increase solar project equity, since wealthier customers would share benefits with low-income households. <u>Id</u>.

While the Authority remains committed to exploring innovative programmatic changes to increase low-income deployment in the RRES Program, to support the fifth Program Objective by increasing inclusivity overall, the Authority ultimately declines to implement a proposal to provide additional incentives for system oversizing in return for sending credits to low-income residents at no cost. Conn. Gen. Stat. § 16-244z(b)(2) does not allow RRES system oversizing, thereby currently preventing the proposal's implementation. Moreover, the Authority concludes that additional data would be needed before the proposal could be implemented, including implementation cost estimates from the EDCs and more specific information on the proposal's status and success in the SMART Program. The Authority highlights, however, that low-income enrollment in the RRES Program remains low, at only 4.3% of total deployment. EDC Comments, June 1, 2023, p. 5. Consequently, the Authority is concerned about low-income inclusivity and remains open to the consideration of similar proposals in the RRES Program in future Program years.

O. SOLAR PANEL RECYCLING

In a Notice of Request for Written Comments, the Authority sought stakeholder feedback "on any proposals or recommendations for solar panel recycling, including information on any programs in other jurisdictions." Notice, July 18, 2023, p. 4. Accordingly, CGB noted that solar panels remain useful for 20 to 25 years. CGB Comments, Aug. 15, 2023, p. 6. Additionally, with the passage of Public Act 21-115, CGB's mission was expanded to include "waste and recycling." ld. consequently interested in resolving the issue of solar panel recycling. Id. CGB ultimately recommended that the Authority "work with DEEP and the EDCs to study the potential waste from solar panels and battery storage over time and bring forth recommendations at the next annual review of the RRES and ESS programs." Id., pp. 6-7. Moreover, ConnSSA noted that solar panels ready for recycling were "not at a quantity for investors to create recycling businesses." ConnSSA Comments, Aug. 15, 2023, p. 4. ConnSSA nevertheless believed that the formation of a multi-state recycling program would be worthwhile and pointed to the success of other solar panel recycling programs, including Solarcycle in California. Id.

Further, PosiGen provided information on solar panel recycling solutions proposed in other states. PosiGen Comments, Aug. 15, 2023, p. 10. For example, to resolve the issue of solar panel recycling, other states have established task forces or working groups, extended producer responsibility, designed tax incentives for solar recycling facilities, and created solar decommissioning plans. <u>Id</u>. Any solar panel recycling policy, PosiGen argued, should consider both large- and small-scale solar installations, in addition to customer or third-party owned systems. <u>Id</u>. PosiGen concluded by providing several informational references on solar panel recycling efforts, including resources produced by the Solar Energy Industries Associations (SEIA). <u>Id</u>., pp. 10-11. Last, the EDCs stated that they were unaware of any solar panel recycling programs in their service territories. EDC Comments, Aug. 15, 2023, p. 5.

The Authority determines that a proactive approach is needed to resolve the issue of solar panel recycling and waste and consequently accepts a modified version of the proposal suggested by CGB in written comments. Accordingly, the Authority respectfully requests that CGB convene and lead a working group of relevant stakeholders, including DEEP and the EDCs, to develop recommendations to proactively address foreseeable

issues related to solar panel recycling and waste for residential solar projects in Connecticut. Additionally, the Authority anticipates that recycling will also become an important topic in the NRES, SCEF, and Energy Storage Solutions (ESS) Programs as well once commercial solar and batteries reach their end of life. Consequently, the Authority requests that CGB, in consultation with DEEP, the EDCs, and other stakeholders, develop recycling and waste recommendations for the NRES, SCEF, and ESS Programs as well. The Authority requests that the recommendations consider the environmental effects of solar panel and battery waste and the success or failure of approaches used in other jurisdictions. Further, all recommendations should include a description of the pros and cons of each approach, and an estimate of each approach's implementation timeline and cost. If suggested as an outcome of these collaborative efforts, the Authority would strongly consider creating a new fee, either applied at the time of project application or on an annual basis per developer, across the state's clean energy programs to cover the costs associated with solar panel and battery recycling. Last, the Authority requests that CGB provide an update on the stakeholder process, including any recommendations developed, by August 1, 2024. Ultimately, while solar panel recycling and waste is not yet a prevalent issue in Connecticut, the Authority concludes that the development of a solution is needed sooner rather than later, to ensure state preparedness for when the issue becomes more emergent, and in support of state environmental goals and the first Program Objective, the sustained and orderly development of the state's solar industry.

P. SOLAR PLUS STORAGE ADDER

The Authority sought stakeholder feedback on an increased incentive for solar plus storage projects, specifically for customers eligible for either the low-income or Distressed Municipality adder. Notice, July 18, 2023, p. 3. Further, the Authority requested comments on challenges related to solar plus storage project deployment, and whether an increased incentive should be provided solely by developers who meet a certain threshold of solar plus storage deployment among low-income or Distressed Municipality customers (e.g., if a developer deploys 40% of solar plus storage systems to underserved customers in a subsequent Program year). <u>Id</u>.

CGB stated support for the implementation of an adder to encourage the deployment of solar plus storage projects for underserved customers. CGB Comments, Aug. 15, 2023, p. 5. CGB noted several barriers to retrofitting existing solar with storage, including "additional research and labor costs to determine if the existing system is compatible with new energy storage technologies, the potential need for redesigning, rewiring, replacing old equipment, and, the cost of labor for installing new equipment." Id. Further, CGB asserted that a solar retrofit adder should be administered through the Energy Storage Solutions (ESS) Program, because retrofits for systems installed before the launch of RRES would then qualify for the adder. Id. Moreover, ConnSSA argued that an adder for solar plus storage projects should be worked out in Docket No. 23-08-05, the annual ESS Program review proceeding. ConnSSA Comments, Aug. 15, 2023, p. 3.

PosiGen similarly argued for a solar plus storage incentive to be investigated in Docket No. 23-08-05, where it can be considered in the context of existing ESS incentives. PosiGen Comments, Aug. 15, 2023, p. 8. PosiGen also noted that the cost of energy storage has not declined since the launch of the ESS Program. <u>Id</u>., p. 9.

Additionally, in an interrogatory response, PosiGen provided quantitative analysis of the estimated RRES adder needed to equalize customer savings between solar only and solar plus storage systems, for both standard and low-income customers. <u>Id.</u>, p. 8. The analysis was based on a typical PosiGen solar lease and considered existing RRES and ESS Program incentives. Interrog. Resp. CAE-21, p. 1. PosiGen cautioned however that its analysis used many complex variables and assumptions, including cost data likely to fluctuate in the future, as well as company-specific data. <u>Id</u>. PosiGen also assumed battery use over a 10-year time frame rather than the full 20-year RRES tariff length given uncertain battery replacement costs and the potential discontinuation of ESS incentives.⁴² <u>Id</u>., p. 2. Ultimately, PosiGen's analysis recommended a 20-year solar only lease rate of \$0.2132/kWh, a 20-year solar plus storage adder of \$0.0452/kWh for standard customers, and a 20-year solar plus storage adder of \$0.0297/kWh for low-income customers. <u>Id</u>.

OCC stated support for increased adders for solar plus storage projects for low-income or Distressed Municipality customers. OCC Comments, Aug. 15, 2023, pp. 9-10. Nevertheless, because many underserved customers live in rental properties, OCC noted concern that landlords would collect the solar plus storage adder and not share it with their tenants. Id. OCC believes a solar plus storage adder would also likely require coordination between the RRES and ESS Programs, "to ensure alignment between program benefits and application and eligibility criteria." Id., p. 10. Finally, while the EDCs noted support for promoting solar plus storage projects to underserved customers, the EDCs recommended that the Authority "carefully consider the effectiveness of [RRES and ESS] incentives in achieving target outcomes" of underserved deployment, instead of assuming "that further incentives would be effective or efficient." EDC Comments, Aug. 15, 2023, p. 5.

The Authority will not implement a solar plus storage adder in the RRES Program at this time. More specifically, the Authority concludes that a solar plus storage adder in the ESS Program would better balance non-participant cost and benefits, because, in contrast to the RRES Program, battery dispatch events in the ESS Program bring value to all ratepayers via peak shaving and ancillary services. Decision, Dec. 21, 2022, Docket No. 22-08-05, Annual Energy Storage Solutions Program Review - Year 2, p. 3. Consequently, the Authority may consider implementing a solar plus storage adder in Docket No. 23-08-05, Annual Energy Storage Solutions Program Review - Year 3, or another future annual review of the ESS Program. The Authority, nonetheless, determines that better coordination could exist between the RRES and ESS Programs. As a result, the Authority directs the EDCs to work with the ESS Program Administrators to promote or market the ESS Program through the RRES Program. As compliance, the EDCs shall file, by March 1, 2024, a plan for better coordination between the RRES and ESS Programs, so that RRES customers and developers are aware of the incentives and requirements of the ESS Program. Last, the Authority directs the EDCs to include, by January 1, 2024, a link to the ESS Program website, along with a brief description of the ESS Program, on the RRES Program webpage(s), to provide RRES stakeholders with easy access to information pertaining to the ESS Program.

⁴² Additional assumptions used by PosiGen include: (1) an 8 kW-DC solar system producing 9,288 kWh in year 1; (2) a 7.6 kW/18 kWh storage system size; (3) full ESS participation; (4) an Eversource customer with applicable RRES adders; (5) no customer savings from energy efficiency, only from solar; (6) a \$20,000 total battery cost; (7) a target of 20% savings or greater over the lease's term; and (8) a 20-year solar lease. Interrog. Resp. CAE-21, pp. 1-2.

Q. OMBUDSPERSON

In the Year 2 review of the Non-Residential Renewable Energy Solutions (NRES) Program, and in the Year 4 review of the Shared Clean Energy Facilities (SCEF) Program, stakeholders supported the implementation of an independent ombudsperson to resolve disputes between developers and the EDCs that do not require an Authority ruling. Decision, Nov. 9, 2022, Docket No. 22-08-03, <u>Annual Non-Residential Renewable Energy Solutions Program Review – Year 2</u>, pp. 31-32; Decision, Dec. 7, 2022, Docket No. 22-08-04, <u>Annual Shared Clean Energy Facility Program Review – Year 4</u>, pp. 19-20.

While the idea of a clean energy program ombudsperson has primarily been considered from the perspective of the NRES and SCEF programs to date, the Authority is concerned that developer disputes with the EDCs could become more common in the RRES Program if project applications and deployment levels remain at historic levels. EDC Corresp., June 16, 2023, pp. 13-14. Consequently, the Authority concludes that the use of an independent ombudsperson could be beneficial for the RRES Program in furtherance of the first Program Objective, the sustained and orderly development of the state's solar industry, and by furthering the fourth Program Objective, accessibility for customers through customer protections. However, as the number and type of issues that have risen to date have not been significant, the Authority only finds such ombudsperson appropriate if also determined to be necessary for the NRES and SCEF Programs so that costs can be shared across those programs in furtherance of the third Program Objective to balance participant costs. Therefore, if approved in one of the annual program review Decisions for the NRES or SCEF Programs, the Authority will issue a competitive request for proposal (RFP) to hire an independent ombudsperson to serve as a dedicated Program resource to resolve Program disputes that do not require a ruling from the Authority. In such case, the cost of the ombudsperson shall be partly recovered through RRES application fees. Since the ombudsperson would be used as a Program resource for other statewide clean energy programs besides RRES, only 25% of the cost of the ombudsperson shall be recovered by the EDCs through RRES application fees. Last, if an ombudsperson is deemed necessary for the NRES and SCEF Programs, the Authority will file a cost estimate for the ombudsperson in the present docket when the RFP process has concluded, which shall inform the EDCs' recommendation for RRES application fees for Year 4 of the Program.

R. TRANSFORMER COST SOCIALIZATION

The Authority recognizes that interconnection costs, including transformer upgrades, pose a barrier to the deployment of RRES projects, particularly for low-income residents who may be unable to afford unexpected distribution system upgrades. The Authority plans to issue a decision addressing interconnection costs for residential systems in Docket No. 22-06-29, <u>PURA Investigation into Distributed Energy Resource Interconnection Cost Allocation</u>, by the end of calendar year 2023.

S. PROPOSED PROGRAMMATIC CHANGES

1. Wiring Diagrams

In the Year 2 annual review proceeding, Tesla noted that the current EDC-approved Buy-All wiring configurations limit solar systems' ability to provide back-up

power to a home during a grid outage. Year 2 Decision, p. 17. Consequently, Order No. 18 of the Year 2 Decision, which was later updated to Order No. 16 in the APWG Decision (APWG Order No. 16), directed the EDCs to jointly develop with solar industry stakeholders several wiring configurations with the ability to provide home backup power during grid outages, including an estimated timeline and cost of implementation for each diagram. Year 2 Decision, p. 36. In the EDCs' compliance with APWG Order No. 16, several diagrams were submitted. EDC Order No. 16 Compliance, June 30, 2023, Atts. 1 and 2. Eversource stated that the diagrams could be implemented "without added time or cost," while UI stated that the diagrams would "have minimal impact on UI's billing systems and therefore may be implemented with relatively low cost to UI." EDC Order No. 16 Compliance, June 30, 2023, p. 2. Accordingly, the Authority requested written comments on the EDCs' compliance, including any support or opposition to implementing the proposed diagrams. Notice, July 18, 2023, p. 6.

In response, CGB stated that it had "not heard of any potential issues" with the diagrams. CGB Comments, Aug. 15, 2023, pp. 8-9. CGB also believes the diagrams would provide greater customer access to solar and storage configurations. Id., p. 8. Further, PosiGen supported the additional configurations because they would provide customers with new options. PosiGen Comments, Aug. 15, 2023, p. 12. Last, ConnSSA argued that it should be possible "to have the normal output circuit feed the grid via a [front-of-the-meter] connection and have the backup loads in the home be fed during an outage." ConnSSA Comments, Aug. 15, 2023, p. 5.

Additionally, on August 1, 2023, the EDCs filed metering wiring diagrams for Authority review and approval in Motion No. 10, in accordance with Order No. 7 of the Year 2 Decision. Order No. 7 directed the EDCs to review and update their meter wiring diagrams and guidelines no less than annually by August 1. Year 2 Decision, p. 32. Eversource proposed that its "meter wiring diagrams for configurations of the Netting and Buy-All Tariffs for Year 3 remain the same as presented in Year 2." Motion No. 10, p. 1. UI proposed a set of Netting and Buy-All metering diagrams that were "intended to simplify and consolidate various metering configurations into a single diagram for each Tariff". Id., p. 2. Notably, the EDCs' proposed wiring diagrams included the additional Buy-All and Netting tariff configurations filed in compliance with Order Nos. 16 and 25 of the APWG Decision, as discussed at the beginning of this section. Motion No. 10, Att. 1. Further, the EDCs filed a redlined version of the RRES Metering Guidelines reflecting the proposed changes. Motion No. 10, Att. 3. The Authority grants Motion No. 10, pursuant to any Program updates as directed by the Authority in this Decision.

In written comments, several stakeholders proposed additional updates to the metering guidelines and requirements of the RRES Program. Tesla recommended the Authority direct the EDCs to explicitly allow meter socket adapters (MSAs, also called meter collar adapters), which are currently disallowed under the RRES Metering Guidelines. Tesla Comments, Aug. 15, 2023, p. 2. Tesla asserted that customer-owned MSAs, which are a category of device installed between a residential utility meter and the meter socket, "allow for residential solar and battery storage systems to be installed roughly 10-times faster, with significantly less rewiring, and can help avoid the need for electrical panel upgrades." Id. Tesla further suggested that the EDCs employ certain approval and assessment criteria, such as allowing only MSAs that are approved or listed by a National Recognized Testing Laboratory, as has been done in other utility jurisdictions. Id. In written comments, ConnectDER also encouraged updating the RRES

guidelines to enable the use of MSAs, citing faster installation and avoided upgrade costs. ConnectDER Comments, Aug. 15, 2023, pp. 3-5. Like Tesla, ConnectDER suggested that the Authority and the EDCs take similar steps to approve certain MSAs as have been pursued by other states and utilities. Id.

Conversely, Eversource stated that the company had identified several issues with MSAs based on physical evaluations of the devices "that would have adverse impact on Company policies, processes, and safety measures." Eversource Corresp., Sep. 7, 2023. Specifically, Eversource noted that such devices are not compatible with the voltage measurement and recording equipment the Company uses to diagnose power quality issues. Id. In addition, Eversource stated that MSAs block access to the bypass switch on all self-contained meter sockets, such that meter replacements or maintenance require a customer outage. Id. Further, Eversource noted that the other utilities identified by Tesla that have approved MSAs do not require lever bypass sockets with clamping jaws for 200A services, which differs from Eversource's existing standards. Id.

Further, in written comments, ConnSSA suggested several additional metering requirement changes. The recommended changes included modifying or eliminating the requirement for meter grouping, allowing customers to have more than one Netting meter at the project site, and allowing Netting REC meters to be installed inside if the customer's existing utility meter is inside. ConnSSA Comments, Aug. 15, 2023, pp. 6-7. ConnSSA argued that the cost of these requirements is preventing the deployment of projects that would otherwise be viable. <u>Id</u>.

First, the Authority approves the wiring diagrams submitted by the EDCs in compliance with Order Nos. 16 and 25 of the APWG Decision. The Authority directs the EDCs to implement the new diagrams for immediate use in the RRES Program. The Authority foresees no issues with the diagrams' implementation and concludes that the diagrams will further the RRES Program Objectives, particularly the first, third, and fourth Program Objectives, by providing RRES participants with new wiring options at a minimal cost to non-participating ratepayers. The Authority thanks all parties involved for their work on this matter and looks forward to the allowance of backup power under the Buy-All tariff. If the approved diagrams are not sufficient to deploy solar systems that can provide backup power to a home during a grid outage, or if stakeholders believe that other options exist that may further advance the Program Objectives, the Authority invites data and information pertaining to cost, safety, equipment availability, and any improvements offered by such alternative configurations or solutions to be submitted in the next annual review proceeding (i.e., Docket No. 24-08-02).

Second, the Authority recognizes the concerns raised by Eversource regarding the potential adoption of MSAs and will therefore not allow MSAs for use in the RRES Program at this time. However, the Authority is generally inclined to allow MSAs for residential solar installations as they provide potential benefits that would advance the Program Objectives by lowering solar installation costs. Additionally, the potential to defer costly wiring upgrades by utilizing MSAs could be a particular benefit for low-income customers, thereby increasing low-income Program enrollment. Accordingly, the Authority directs the EDCs to file by April 10, 2024, a summary of all MSA safety concerns, along with solutions for each safety concern, and estimated costs and timelines for implementing each solution. In developing the compliance, the EDCs shall work directly with ConnectDER and Tesla to understand how other jurisdictions have addressed MSA

safety concerns, and to determine if steps taken by other jurisdictions to allow MSAs can be replicated in Connecticut. Further, the compliance shall also be filed in Docket No. 23-08-05, as similar concerns have been raised by Tesla in that proceeding. See, Tesla Comments, Aug. 30, 2023, Docket No. 23-08-05, pp. 5-9. Finally, the EDCs shall present their findings to the Interconnection Working Group and allow for written feedback from that working group before submitting its MSA safety concerns and solutions filing on April 10, 2024.

Third, the Authority does not approve the metering modifications suggested by ConnSSA for Program Year 3, as broad stakeholder input has not been provided on these topics in the annual review process. Consequently, the Authority declines to make a decision on these topics at this time, as PURA lacks pertinent information on the impact of such requirements, as well as the safety and feasibility of alternative metering configurations. Additionally, solar deployment under the RRES Program has significantly exceeded the historical average to date, thereby suggesting that the existing metering requirements do not pose a significant barrier to entry for Program participants. EDC Corresp., June 16, 2023, pp. 11-15. However, ConnSSA may work with the Interconnection Working Group to propose solutions to the metering problems described. Additionally, if compelling and detailed quantitative or qualitative information is provided to the Authority, the Authority may consider ConnSSA's suggested changes to the RRES metering requirements in a future annual review proceeding.

2. Production Meter Ownership and Non-Bypass Meter Sockets

In the APWG Decision, the Authority stated its intent to "re-implement the utility-owned meter socket requirement starting on January 1, 2024, absent overwhelming evidence that the requirement should not be reinstated." APWG Decision, p. 8. In briefs, the EDCs concurred with the Authority decision and requested that the Authority affirm the re-implementation of utility-owned production requirements beginning January 1, 2024. Eversource Brief, p. 8.

The Authority notes that no evidence has been received indicating that utility-owned production meters should not be required, and, thus, affirms its prior guidance to reimplement the requirement for utility-owned production meters beginning on January 1, 2024, for all new RRES applications.

Additionally, the Authority maintains the allowance of non-bypass meter sockets in the RRES Program through 2024. The Authority is concerned that continued meter shortages and supply chain challenges could hinder Program participation if non-bypass meter sockets were disallowed at this time without sufficient notice to installers. However, the Authority intends to reconsider the allowance of non-bypass meter sockets in the next annual Program review. Ultimately, unless stakeholders provide compelling and data-driven evidence for why the allowance of non-bypass meter sockets remains necessary in the next annual review proceeding, the Authority will not allow their use in the Program beyond the end of 2024.

3. Program Manual

On August 1, 2023, the EDCs jointly filed redline edits to the RRES Program Manual in Motion No. 11, in compliance with Order No. 1 of the Year 2 Decision, which directed the EDCs to annually file "(1) Program Manual and guidelines and (2) other resources for residential utility customers and/or renewable energy contractors to explain the technical, administrative, and procedural requirements of the Residential Tariff program, including all cash out provisions." Year 2 Decision, pp. 32-33.

The Authority grants with modification Motion No. 11, pursuant to the redline updates as directed by the Authority in this Decision. Further, the Authority directs the EDCs to file updated RRES Program documents, including the Program Manual (both a redlined and a clean version), incorporating the approved modifications authorized herein as compliance in this proceeding by December 15, 2023.

V. CONCLUSION AND ORDERS

A. CONCLUSION

In this Decision, the Authority explores and approves several changes to the RRES Program to better serve the Program Objectives. The Decision also approves the RRES Program Tariff rates for project applications received in calendar year 2023.

Further, the Decision includes the Authority's rulings to Motion Nos. 8, 9, 10, and 11 in the instant proceeding.

T. EXISTING AND NEW ORDERS

For the following Orders, the Company shall file an electronic version through the Authority's website at www.ct.gov/pura. Submissions filed in compliance with the Authority's Orders must be identified by all three of the following: Docket Number, Title and Order Number. Compliance with orders shall commence and continue as indicated in each specific Order or until the Company requests and the Authority approves that the Company's compliance is no longer required after a certain date. All Orders requiring Authority review and approval shall be submitted as a motion.

The below standing orders are a summation of prior orders related to the RRES Program that continue to apply. In some instances, the Authority has amended those standing orders with redline edits. The below new orders apply on a going forward basis.

1. Standing Orders to be filed in RRES Annual Review Dockets

- 1. Reference Interim Decision, Feb. 10, 2021, Docket No. 20-07-01, Order No. 4, p. 44: No later than [August 1], 2021, the EDCs shall develop and file for the Authority's review, modification, and approval a set of (1) Program Manual and guidelines and (2) other resources for residential utility customers and/or renewable energy contractors to explain the technical, administrative, and procedural requirements of the Residential Tariff program, including all cash out provisions. Such Program Manual, guidelines, and other resources shall strictly adhere to this Interim Decision, incorporating any direction provided herein. Any proposed rules and guidelines shall include a list of program eligibility requirements. The EDCs shall update all Program Manual, guidelines, and other resources by August 1 annually to reflect the most recent program information and Authority orders and/or rulings and file the aforementioned updated documents in the appropriate annual review docket (e.g., changes to be enacted in 2024 should be filed in Docket No. 23-08-02).
- 2. Reference Interim Decision, Feb. 10, 2021, Docket No. 20-07-01, Order No. 5, pp. 44-45: No later than [August 1], 2021, and annually thereafter, each EDC shall file, in the annual Residential Tariff program review and rate setting proceeding for the Authority's review, modification, and approval a proposal for a Residential Tariff program application fee to cover the estimated administrative costs associated with processing applications. The EDCs shall provide detailed calculations and written descriptions to explain and to justify the proposed application fee. In the same filing, the EDCs shall file for the Authority's review, modification, and approval a proposed nominal administrative fee pursuant to Section III.A. for any change orders or re-designation changes subsequent to the initial project interconnection, so long as a robust rationale for the proposed fee and fee level is provided. The 2021 submission shall provide a copy of the language to be included in the customer disclosure form informing program participants of the fee.
- 3. Reference Interim Decision, Feb. 10, 2021, Docket No. 20-07-01, Order No. 15, p. 46: No later than November 1, 2021, the EDCs shall file with the Authority link to their respective Residential Tariff program webpages. Such webpages shall include all relevant information regarding the "buy-all" and netting Residential Tariffs for interested residential customers and renewable energy contractors.

Such website shall be made public no later than January 1, 2022 and shall be updated as frequently as is practicable, unless otherwise directed herein, to reflect the most recent program information and Authority orders and/or rulings.

- 4. Reference Interim Decision, Feb. 10, 2021, Docket No. 20-07-01, Order No. 19, p. 47: No later than January 1, 2023, each EDC shall have in place a customer education and information webpage that shall, at a minimum, include the average installed cost (\$/W) and PPA or lease price (\$/kWh) for all Residential Tariff applications accepted by the EDC over the preceding 6-month period, as well as current and historical retail rates for the customer to compare their pricing and savings in real-time. Such website shall be updated at least monthly and customers shall be required to electronically acknowledge that they have reviewed the material on the customer education and information webpage as part of Residential Tariff application process. On or before January 1, 2022, each EDC shall submit a cost estimate for the development of such a webpage. On or before August 1, 2022, each EDC shall file with the Authority a working draft of such webpage.
- 5. Reference Interim Decision, Feb. 10, 2021, Docket No. 20-07-01, Order No. 21, p. 47: No later than June 1, 2022, each EDC shall publicly disclose the costs of setting up and maintaining the REC metering equipment, as well as the customer acquisition costs, on their respective Residential Tariff websites. Each EDC shall update the required information at least annually. No later than June 1, 2022, and annually thereafter, each EDC shall submit in the above-captioned proceeding and in the appropriate annual review docket (e.g., changes to be enacted in 2024 should be filed in Docket No. 23-08-02) the required REC metering cost information.
- 6. Reference Interim Decision, Feb. 10, 2021, Docket No. 20-07-01, Order No. 22, p. 47: No later than August 1, 2022, and annually thereafter, the EDCs shall jointly file, in the annual Residential Tariff program review and rate setting proceeding the Excel workbooks outlined in Section III.[C].6.a. The EDCs shall each use the same Excel workbook, including the same format and the exact same data fields, as each other. The EDCs shall follow all other direction provided in Section III.[C].6.a. The Authority further directs the EDCs to include the following in each annual filing: (1) any supplemental field data as indicated in CAE-1 and CAE-14 in Docket No. 23-08-02 and included in the EDCs' redacted filings; (2) a list of all existing data fields collected in the RRES application; (3) information on the application submission and approval date for each RRES project; (4) both solar PV costs, and other costs (e.g., costs of associated electrical upgrades); (5) the number and percentage of LIDR customers enrolled in the RRES Program, broken out by both LIDR tier and RRES tariff; (6) the number of add-on Netting systems enrolled in the Program which are unable to support the addition of a non-bypassable charge: (7) by each developer, the number and percentage of systems by type of housing (e.g., single family, 2-4 unit multifamily, or multifamily affordable housing); and (8) by each developer, the number and percentage of total approved RRES applications which are eligible for the low-income or Distressed Municipality adder(s). See, UI Interrog. Resp. CAE-14, Att. 4 Public; Eversource Compliance, Aug. 22, 2023, Att. 1. Last, the Authority also directs the EDCs to include a summary of the Program data on the RRES Program websites. Notably, this data

can be provided in any reasonable fashion (e.g., attached file, web link, embedded data), and may be relocated to the PURA Data Dashboard when the dashboard is expanded to include Clean Energy Program data.]

- 7. Reference Interim Decision, Oct. 6, 2021, Docket No. 21-08-02, Order No. 8, p. 28: No later than January 1, 2022, the EDCs shall submit revised compliance with Order No. 14 of the Residential Tariff Decision for Authority review and approval. The EDCs shall review and update their meter wiring diagrams and guidelines as appropriate, but no less frequently than August 1 annually, and submit the revised documents in the appropriate Annual Review docket.
- 8. Reference Decision, June 8, 2022, Docket No. 21-08-02, Order No. 4, p. 16: No later than August 1, 2022, and [quarterly] thereafter, PURA requests that the Agencies file as compliance in the appropriate RRES annual review docket (i.e., in Docket No. 22-08-02 on August 1, 2022, etc.) a list of housing facilities eligible under Tier I of the affordable housing definition approved in Section II.A of this Decision. [The EDCs shall post the most recent compliance with this order, along with contact information for each of the Agencies, on the RRES Program website by January 1, 2024, and quarterly thereafter.]
- 9. Reference Decision, June 8, 2022, Docket No. 21-08-02, Order No. 5, p. 16: No later than August 1, 2022, and annually thereafter, the EDCs shall file as compliance in the appropriate RRES annual review docket (i.e., in Docket No. 22-08-02 on August 1, 2022, etc.) a list of housing facilities eligible under Tier II of the affordable housing definition approved in Section II.A of this Decision.
- 10. Reference Decision, June 8, 2022, Docket No. 21-08-02, Order No. 6, p. 16: No later than August 1, 2022, and annually thereafter, PURA requests that the Agencies file as compliance in the appropriate RRES annual review docket (i.e., in Docket No. 22-08-02 on August 1, 2022, etc.) the DEEP and DOH contact information for a housing facility seeking to be defined as "affordable housing" that does not meet the Tier I or Tier II thresholds of the affordable housing definition approved in Section II.A of this Decision. [The EDCs shall post the most recent compliance with this order on the RRES Program website by January 1, 2024, and annually thereafter.]
- 11. Reference Decision, June 8, 2022, Docket No. 21-08-02, Order No. 9, p. 17: No later than August 1, 2023, and annually thereafter, the EDCs shall file as compliance documentation of the distribution of the incentive adders to validate that the required percentage of the benefit was received by the tenants in multifamily affordable houses in the previous year (e.g., calendar year 2022 for the August 1, 2023 filing), for both the cases of on-bill credits for individually metered units and annual checks or other approved distribution methodology for those multifamily homes where units are not individually metered.
- 12. Reference Year 2 Decision, Order No. 12, p. 35: On a [quarterly basis beginning on January 1, 2024] through [the duration of the RRES Program], the EDCs shall provide updates to Docket No. 21-08-02 Response to Interrogatory CAE-8. Specifically, the Authority adapts the ruling in Docket No. 21-08-02 to Motion No. 26 dated March 22, 2022, which directed the EDCs to submit as a compliance filing

an update to Interrogatory CAE-8 on or before the 15th of every month through January 1, 2023 (i.e., the final filing would have been made on December 15, 2022), to instead direct the compliance filings to continue monthly through January 1, 2024. Such filings shall be made in [the annual review proceeding (i.e., in 2024, Docket No. 24-08-02)] and should also include tariff type and incentive adder status information. [Last, beginning by July 1, 2024, the quarterly filings shall include: (1) the total number of low-income customers and customers located in Distressed Municipalities, and associated project capacity, which do not receive either adder, in addition to the existing breakouts for customers enrolled in the low-income and Distressed Municipality adders; (2) the number and associated project capacity of customers who reside in environmental justice census block groups, broken out by customers that qualify for the low-income and Distressed Municipality adders and those that do not; and (3) the number and associated project capacity of RRES customers who qualify for the Federal Justice 40 disadvantaged communities definition.]

- 13. Reference Year 2 Decision, Order No. 15, p. 35: No later than January 1, 2023, the EDCs shall update any clean energy and hardship program webpages where dual enrollment in any clean energy programs is adversely impacted or otherwise prohibited. Specifically, Eversource shall update at least their RRES Program and New Start webpages with a disclaimer alerting customers that, until such time as a proposal to enable concurrent participation in the RRES Program and the New Start Program is submitted by Eversource and approved by the Authority, existing New Start Program participants are unable to continue to participate in New Start once enrolled in the RRES Program. Moreover, moving forward, the Authority requires Eversource and UI to provide such disclaimer(s) on the appropriate clean energy program website for any instances where hardship program enrollment is jeopardized or negatively impacted by enrollment in solar programs, or vice versa. Each disclaimer should include an explanation of why dual enrollment is adversely impacted or prohibited. Further, the EDCs shall file a copy of the disclaimer(s) as compliance and provide links to the online locations where the disclaimer(s) is/are located.
- 14. Reference Year 2 Decision, Order No. 17, p. 36: No later than May 1, 2023, and quarterly thereafter for the remainder of the RRES Program, the EDCs shall submit information for the prior quarter (e.g., January 1, 2023 through March 31, 2023 for the May 1, 2023 filing) on the following items related to RRES Program applications: (1) the length of time from application to submission to tariff review approval; (2) the length of time from tariff review approval to interconnection contingent approval; (3) the length of time to receive the work order number needed to apply for permits from cities and towns: (4) the length of time to process payments when applicable; (5) the length of time for any applicable witness tests; (6) the number of days between when the utility is notified of a completed inspection to meter installation; and, (6) the length of time for final issuance of the permission to operate. The RRES APWG may recommend additions to this list in their final report filed on December 14, 2022. Such filings shall be submitted in the relevant RRES Program review docket (e.g., any updates related to Year 2 of the RRES Program shall be disclosed in this proceeding, Docket No. 22-08-02).

15. Reference Year 2 Decision, Order No. 22, p. 37: Through the end of the RRES Program, the EDCs shall follow the guidance provided in Section IV.N of this Decision when making administrative changes to the RRES Program without prior PURA approval. Such changes shall be clearly documented, explained, and justified in a compliance filing submitted at least ten (10) business days prior to such changes taking effect in the relevant RRES Program review docket (e.g., any changes related to Year 2 of the RRES Program shall be disclosed in this proceeding, Docket No. 22-08-02). Justification must include a clear articulation of how each Program Objective may or may not be impacted and how the requested change would serve to further the Program Objectives overall.

- 16. Reference Decision, Feb. 8, 2023, Docket No. 22-08-02, Order No. 26, p. 17: As required, the Authority directs the EDCs to identify any required NEPOOL waivers to allow the program to continue without the utility-owned meter socket requirement through June 2024, and to request the requisite authorization from PURA.
- 17. Reference Motion No. 16 Ruling 2, Docket No. 22-08-02, p. 2: [UI shall] file compliance in Docket No. 23-08-02, no later than two weeks after the completion of the UI system modification, indicating the date(s) when the UI system modification project was completed and customers with existing PV systems can enroll under the Netting tariff in UI's territory. Further, the compliance shall include a clean and redlined final version of the RRES Program Manual incorporating such change.

2. New Orders

- 18. No later than December 15, 2023, the EDCs shall file as compliance updated RRES Program documents, including the Program Manual and RRES Metering Diagrams, incorporating all the approved modifications authorized in this Decision. Such filing shall include both a clean and a redlined version of all RRES Program documents.
- 19. Reference Decision, Feb. 22, 2023, Docket No. 22-08-01, pp. 4-5: No later than January 1, 2024, and annually thereafter, the EDCs shall file an updated Frequently Asked Question document and Fact Sheet for the RRES Program that reflects the Program modifications as directed in the most recent final Decision issued through the RRES Program Annual Review proceeding, Docket No. XX-08-02.
- 20. No later than January 1, 2024, the EDCs shall include a link to the ESS Program website, along with a brief description of the ESS Program, on the RRES Program website(s). The EDCs shall file compliance with the Authority when this order is fulfilled.
- 21. No later than January 1, 2024, the EDCs shall include a link to Connecticut's environmental justice mapping tool on the RRES Program webpage(s), along with

a brief summary of the tool and how installers can use it.⁴³ Additionally, no later than January 1, 2024, the EDCs shall include the map and table in Section IV.E., and additional, similar resources identifying areas where RRES projects may be eligible for both state and federal incentives, on the RRES Program webpage(s), along with a brief description of federal incentive eligibility. The EDCs shall file compliance with the Authority when this order is fulfilled.

- 22. No later than January 1, 2024, the EDCs shall amend the RRES customer disclosure form to include the following information: (1) definitions of each RRES adder; (2) adder amounts; (3) a list of programs whose participation would qualify a customer for the low-income adder (e.g., Home Energy Solutions - Income Eligible [HES-IE]); (4) a link to the Distressed Municipality webpage of the Department of Economic and Community Department (DECD); and (5) a link to a webpage with the latest guidance on state median income percentiles, broken out by family size. Further, the above information shall be displayed in a prominent location in the customer disclosure form to ensure customers are aware of the Additionally, the Authority directs the EDCs to include such RRES adders. information on the RRES Program website when the customer disclosure form is amended. As compliance, the EDCs shall file both a clean and redlined version of the RRES customer disclosure form, and links to the Program webpage(s) which were updated to fulfill this order.
- 23. No later than January 1, 2024, the EDCs shall submit as compliance a detailed implementation timeline for the incorporation of RRES data into a centralized data reporting platform. See, EDC Comments, June 1, 2023, p. 15.
- 24. No later than February 1, 2024, and annually thereafter, the EDCs shall hold at least one webinar with solar developers to inform them of the underserved adder eligibility criteria, in addition to other Program requirements and information. Further, during the webinar to be held by February 1, 2024, the EDCs shall update Program installers on the implementation of LIDR and provide information and examples of how installers can identify LIDR-enrolled customers, to ensure that LIDR customers are receiving bill savings from participation in the RRES Program. At least 30 days' notice shall be provided to Program stakeholders prior to the date of the webinar on the Program website. As compliance, the EDCs shall file the date, time, and location of the webinar with the Authority in the applicable annual review proceeding at least 21 days prior to the webinar.
- 25. No later than February 1, 2024, the EDCs shall file a draft document for the Authority's review and approval that provides clear definitions for each data field required in a RRES application, including guidance on what not to include and providing specific examples for each one. The draft guidance shall be developed by the EDCs in coordination with Application Process Working Group members. The guidance developed should not deviate substantially from developers' current interpretation of the data fields, where developers have a consensus understanding of a field's definition, so that future data collected does not

Connecticut's environmental justice mapping tool may be found here: https://connecticut.maps.arcgis.com/apps/webappviewer/index.html?id=85bf095c8fc043edaa15ca5f78 299fe3.

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unnecessarily differ from the data collected in prior Program years. The EDCs shall post such document on the Program webpage(s) alongside other installer resources once a final determination is reached by the Authority.

- 26. No later than March 1, 2024, the EDCs shall file as compliance a plan for better coordination between the RRES and ESS Programs, so that RRES customers and developers are aware of the incentives and requirements of the ESS Program. The EDCs shall coordinate with the ESS Program Administrators when developing such plan.
- 27. No later than March 15, 2024, or 30 days after the Authority's approval of the project data guidance document developed in Order No. 25, whichever occurs later, the EDCs shall use the data guidance document to develop an "i" or information button for any required data fields where significant developer confusion is present in the web-based RRES application. When a developer hovers over the "i" button, a brief definition of the data field shall appear. The EDCs' compliance with this requirement shall include application screenshots and the text descriptions of each "i" button.
- 28. No later than March 15, 2024, the EDCs shall develop and submit for the Authority's review and approval a plan to alleviate any potential safety or tampering risks associated with trough-type connections with side-by-side meter installations. Such plan shall include implementation costs and expected timelines for allowing such metering configurations for use in the RRES Program. Additionally, when developing the proposal, the EDCs shall research any steps taken by other jurisdictions in the United States to allow trough-type connections with side-by-side meter installations at multifamily housing sites, to determine if such steps can be replicated in Connecticut. Finally, the EDCs shall consult with the Interconnection Working Group, established in a Decision dated November 25, 2020, in Docket No. 17-12-03RE06, PURA Investigation into Distribution System Planning of the Electric Distribution Companies Interconnection Standards and Practices, when developing the proposal.
- 29. No later than April 1, 2024, the EDCs shall incorporate the changes suggested by PosiGen into the RRES Program webpages. See, PosiGen Comments, June 1, 2023, pp. 13-14. Additionally, to ensure that Program participants can easily access RRES programmatic information, the Authority directs the EDCs to break out the current RRES webpage(s) into three distinct pages displaying the following: (1) RRES customer educational materials and general programmatic information; (2) RRES required forms, fees and installer materials; and (3) RRES programmatic data. Each webpage shall also include links to the other webpages in a prominent and clearly identifiable section. The EDCs shall file compliance with the Authority when this order is fulfilled.
- 30. No later than April 1, 2024, the EDCs shall include underserved enrollment percentages, broken out by both low-income and Distressed Municipality status, in the Program data published on the EDCs' respective websites. If an underserved customer qualifying for a Program adder is not (auto)enrolled by the Program Administrators for not meeting the new requirements outlined in this Decision (i.e., the tariff payment beneficiary is not the customer of record, and the

developer did not apply for an adder in the initial Program application), the Program Administrators shall still track such enrollment and include it in the data reporting so that it may be counted toward the Program's 40% deployment target in underserved communities. Consistent with the existing data on the Program website, the EDCs shall update the underserved deployment data no less than monthly. Last, the EDCs shall file compliance with the Authority when this order is first fulfilled.

- 31. No later than April 10, 2024, the Authority requests that the Multifamily Housing Working Group (MFH WG) provide a comprehensive proposal for master-metered housing projects' participation in the RRES program, incorporating proposed protections from eviction and renter protections for master-metered multifamily affordable housing that identify enforcement mechanisms for ensuring that tenants are not harmed via increased rents that are tied to the Authority's jurisdiction (e.g., including RRES compensation clawback provisions, etc.). The filing shall also include a clear plan for how tenants will financially benefit from all eligible building upgrades (e.g., documentation demonstrating the quantifiable financial benefits free broadband access will provide tenants, etc.). In the compliance filing, the MFH WG may propose updates to any of the Authority's conclusions outlined in Section IV.F., or to any recommendations previously made by the MFG WG, to ensure that the proposal most effectively advances the Program Objectives. Additionally, the Authority requests that the MFH WG develop and submit a plan for: (1) a member or members of the MFH WG to conduct eligibility screenings for project adherence with master-metered Program requirements prior to the start of construction; (2) at least annual audits of completed projects' adherence with the master-metered Program requirements; and (3) suggested remedies if projects later fail to adhere to the master-metered Program requirements after receiving approval to proceed.
- 32. No later than April 10, 2024, the EDCs shall file a summary of all meter socket adapter (MSA) safety concerns, along with solutions for each safety concern, and estimated costs and timelines for implementing each solution, in Docket Nos. 23-08-02 and 23-08-05. In developing the compliance, the EDCs shall work directly with ConnectDER and Tesla to understand how other jurisdictions have addressed MSA safety concerns, to determine if steps taken by other jurisdictions to allow MSAs can be replicated in Connecticut. Finally, before submitting their compliance, the EDCs shall present their findings to the Interconnection Working Group, established in a Decision dated November 25, 2020, in Docket No. 17-12-03RE06, PURA Investigation into Distribution System Planning of the Electric Distribution Companies Interconnection Standards and Practices. In so doing, the EDCs shall allow for written feedback from Interconnection Working Group members on the EDCs' compliance before filing it with the Authority.
- 33. No later than June 1, 2024, and April 1 and annually thereafter, all renewable energy contractors participating in the RRES Program shall file in the reopener to the annual Program Review docket for contractor education and enforcement (e.g., Docket No. 23-08-02RE01 for 2024, etc.,) their marketing scripts and training materials generated for or provided to anyone engaging with a customer. Last, the Authority clarifies that the collection of marketing materials shall be administered and enforced by EOE.

34. No later than June 1, 2024, and April 1 annually thereafter, all Program developers shall file in the reopener to the annual Program review docket for contractor education and enforcement (e.g., Docket No. 23-08-02RE01 for the 2024 filing, etc.), a Financial Benefits Compliance, in accordance with Section IV.D. Specifically, the Authority directs each developer participating in the RRES Program to annually file with the Authority the following for all RRES projects deployed in the previous calendar year: (1) All customer disclosure forms: (2) An unlocked Excel file summarizing key information from the customer disclosure forms, as well as other information provided to customers such as contracts and promotional materials, for each project as detailed below (Financial Benefits Summary Sheet); and (3) A narrative explanation of any calculation methodologies included in the Financial Benefits Summary Sheet (Sheet Narrative). Financial Benefits Summary Sheet shall include one row each for every project deployed by the developer under the RRES Program in the previous calendar year. For each project, the following information shall be provided (i.e., each of the following should be a column in the Financial Benefits Summary Sheet): (1) site address; (2) utility account number associated with the project; (3) annual contract rate increase amount; (4) estimated year one production (kWh) as a percentage of estimated annual utility customer usage (kWh); (5) estimated year one customer net savings; (6) starting utility rate used to estimate net year one savings; (7) estimated net savings over the RRES tariff term (i.e., 20 years) if provided by the developer to customers in a contract or promotional materials, or if it can be easily extrapolated from the customer disclosure data; and (8) utility rate used to estimate net savings over the RRES tariff term (i.e., 20 years) if provided by the developer to customers in a contract or promotional materials, or if it can be easily extrapolated from the customer disclosure data. The Sheet Narrative may be a simple summary document (e.g., as brief as a couple of pages) outlining the methodology used to calculate the above required information to be included in the Financial Benefits Summary Sheet, as applicable, along with a general list of the documents needed for such calculations (e.g., a customer's electric bill and sales contract are needed to verify the methodology for the fourth requirement, etc.). Last, the Authority clarifies that the collection of financial benefit documentation shall be administered and enforced by EOE. EOE may audit a contractor's Financial Benefits Summary Sheet and Sheet Narrative and can request additional documentation or evidence as needed to verify a contractor's Financial Benefits Summary Sheet calculations, particularly for low-income customers.

35. No later than August 1, 2024, the Authority requests that CGB provide an update on the stakeholder process to develop recommendations to resolve the issue of solar panel and battery recycling and waste for clean energy projects in Connecticut. The Authority respectfully requests that CGB convene and lead a working group of relevant stakeholders, including DEEP and the EDCs, to develop recommendations to resolve the issue of solar and battery waste that consider the environmental effects of solar panel and battery waste and the success or failure of approaches used in other jurisdictions. Further, all recommendations should include a description of the pros and cons of each approach, and an estimate of each approach's implementation timeline and cost. The Authority requests that the update, including any recommendations developed, be filed in Docket Nos. 24-08-02, 24-08-03, 24-08-04, and 24-08-05.

36. No later than October 1, 2024, and annually by August 1 thereafter, EOE shall complete its audit of the Financial Benefits Compliance filings and a sampling of RRES developer marketing materials and file any findings with the Authority as directed in Section IV.D.3. of this Decision following the "four strike" system authorized in the Residential Tariff Decision as necessary.

DOCKET NO. 23-08-02

ANNUAL RESIDENTIAL RENEWABLE ENERGY SOLUTIONS PROGRAM REVIEW – YEAR 3

This Decision is adopted by the following Commissioners:

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Marissa P. G	illett

John W. Betkoski, III

Michael A. Caron

CERTIFICATE OF SERVICE

The foregoing is a true and correct copy of the Decision issued by the Public Utilities Regulatory Authority, State of Connecticut, and was forwarded by Certified Mail to all parties of record in this proceeding on the date indicated.

Coffy Sin	November 1, 2023
Jeffrey R. Gaudiosi, Esq.	 Date

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STATE OF CONNECTICUT

PUBLIC UTILITIES REGULATORY AUTHORITY TEN FRANKLIN SQUARE NEW BRITAIN, CT 06051

DOCKET NO. 23-08-05

ANNUAL ENERGY STORAGE SOLUTIONS PROGRAM REVIEW – YEAR 3

November 29, 2023

By the following Commissioners:

Marissa P. Gillett John W. Betkoski, III Michael A. Caron

DECISION

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DECISION

I. INTRODUCTION

A. SUMMARY

In this Decision, the Public Utilities Regulatory Authority (Authority or PURA) approves updates to the Energy Storage Solutions Program (ESS Program or Program), administered by The Connecticut Light and Power Company d/b/a Eversource Energy (Eversource), The United Illuminating Company (UI; collectively, with Eversource, the electric distribution companies or EDCs), and the Connecticut Green Bank (CGB; collectively, with the EDCs, the Program Administrators). The approved changes are intended to better align the ESS Program with the Program objectives.

B. BACKGROUND OF THE PROCEEDING

On July 28, 2021, the Authority issued its Final Decision in Docket No. 17-12-03RE03, PURA Investigation into Distribution System Planning of the Electric Distribution Companies – Electric Storage (Storage Decision) establishing a nine-year program to support electric storage in Connecticut, starting on January 1, 2022, and continuing through at least December 31, 2030, pursuant to Public Act 21-53 (PA 21-53) and Conn. Gen. Stat. §§ 16-11, 16-19, 16-19e, and 16-244i and in accordance with the October 2, 2019 Interim Decision in Docket No. 17-12-03, PURA Investigation into Distribution System Planning of the Electric Distribution Companies (Equitable Modern Grid Decision). The Authority annually reviews key ESS Program metrics, including deployed megawatts (MW), and makes strategic adjustments as necessary to support the program objectives. Storage Decision, p. 43. Additionally, during the last year of each three-year Program cycle (e.g., 2024), "the Authority will conduct a full program review ... including an evaluation of the existing program design to ensure that the Program is: (1) delivering on the expected value to Connecticut's ratepayers; and (2) is meeting the Program Objectives." Id., p. 44.

The Authority conducted the first annual ESS Program review in Docket No. 21-08-05, <u>Annual Review of the Electric Storage Program – Year 1</u>, issuing a Decision on December 8, 2021 (Year 1 Decision). The Decision reviewed the Year 1 Program design documents and other key compliance filings, and addressed other topics regarding Program implementation, to successfully execute the first year of the ESS Program beginning January 1, 2022.

Further, the Authority conducted the second annual ESS Program review in Docket No. 22-08-05, <u>Annual Energy Storage Solutions Program Review – Year 2</u>, and issued a Decision on December 21, 2022 (Year 2 Decision). The Year 2 Decision reviewed Year 1 deployment data in the ESS Program and implemented several changes to better align the ESS Program with the program objectives.

C. CONDUCT OF THE PROCEEDING

On May 16, 2023, the Authority issued the Notice of Proceeding in the above-captioned docket.

On June 23, 2023, the Authority issued a Notice of Request for Written Comments on the following topics: new front-of-the-meter storage barriers not addressed in the Year 2 Decision; updated incentive levels; an expansion of the Distressed Municipality adder to include environmental justice census block groups; a grace period allowance for the Distressed Municipality adder; the addition of a vendor fee cap; financial benefit sharing for multifamily projects; project extensions to account for supply chain or interconnection challenges; approved battery manufacturers; and the inclusion of additional battery types in the Program. The Authority received nine sets of written comments from interested stakeholders on or before August 11, 2023.

On August 3, 2023, the Authority held a Technical Meeting to discuss the topics outlined in the June 23, 2023 Notice of Request for Written Comments.

On August 11, 2023, the Authority issued a second Notice of Request for Written Comments on the following topics: the Program Administrators' recommended Program changes; CGB's marketing plan for high emission areas; CGB's actively managed charging proposal; application process changes and working group implementation; inspection requirements; the eligible contractor application; the Program's battery integration process; residential battery enrollment; commercial incentive changes; battery net metering credits; flood proofing requirements; siting and safety guidelines; and a grid edge grace period allowance. The Authority received 11 sets of written comments from interested stakeholders on or before September 13, 2023.

On September 1, 2023, the Authority issued a second Notice of Request for Technical Meeting to discuss the topics included in the second Notice of Request for Written Comments. The Notice was revised on September 13, 2023, to include discussion of the EDCs' proposed rate design for wholesale distribution charges that would be included in their respective front-of-the-meter (FTM) wholesale distribution access tariffs. The second Technical Meeting was subsequently held on September 29, 2023.

On October 2, 2023, the Authority issued a Notice of Request for Briefs providing stakeholders the opportunity to summarize their positions on various topics discussed in the instant proceeding. The Authority subsequently received seven briefs on or before October 16, 2023.

On November 6, 2023, the Authority issued a Proposed Final Decision and provided an opportunity for docket Participants to file written exceptions.

D. PARTICIPANTS

A listing of all Participants to this proceeding is appended hereto as Appendix A.

II. LEGAL AUTHORITY

Section 2 of PA 21-53 directed the Authority to "develop and implement one or more programs, and associated funding mechanisms, for electric storage resources connected to the electric distribution system." PA 21-53 § 2. Pursuant to PA 21-53, in addition to Conn. Gen. Stat. §§ 16-11, 16-19, 16-19e, and 16-244i (see Section II of the Storage Decision), the Authority established the Program through the Storage Decision. Furthermore, the Authority was permitted to select CGB, the Department of Energy and Environmental Protection (DEEP), the EDCs, a third party, or any combination thereof to implement and/or administer the Program. PA 21-53 § 2(d)

As previously stated, the Authority indicated in the Storage Decision that it will initiate an annual docket to review key ESS Program metrics, to ensure that the Program is on track to meet its deployment targets. Storage Decision, p. 43. Herein, the Authority reviews the Program documents developed by the Program Administrators, relevant compliance filings, and current incentive rates to determine if and how the ESS Program can and should be modified to better align with the direction provided in the Storage Decision.

III. PROGRAM OBJECTIVES

In the Storage Decision, the Authority adopted the following seven (7) objectives (Program Objectives) to guide the Program Administrators in the development and implementation of the Program:

- 1) <u>Provide positive net present value to all ratepayers</u>, or a subset of ratepayers paying for the benefits that accrue to that subset of ratepayers.
- 2) Provide multiple types of benefits to the electric grid, including, but not limited to, customer, local, or community resilience, ancillary services, peak shaving, and avoiding or deferring distribution system upgrades or supporting the deployment of other distributed energy resources.
- 3) Foster the sustained, orderly development of a state-based electric energy storage industry.
- 4) Prioritize delivering increased resilience to: (1) low-to-moderate income (LMI) customers, customers in environmental justice or economically distressed communities, customers coded for medical protection, and public housing authorities as defined in Conn. Gen. Stat. § 8-39(b); (2) customers on the grid-edge who consistently experience more and/or longer than average outages during major storms; and (3) critical facilities as defined in Conn. Gen. Stat § 16-243y(a)(2).
- 5) <u>Lower the barriers to entry</u>, financial or otherwise, for electric storage deployment in Connecticut.
- 6) <u>Maximize the long-term environmental benefits of electric storage</u> by reducing emissions associated with fossil-based peaking generation.
- 7) <u>Maximize the benefits to ratepayers derived from the wholesale capacity market</u>.

Storage Decision, pp. 5-7. Accordingly, the Authority relied on the Program Objectives to guide its review of the Program Administrators' compliance filings and in evaluating the current ESS Program design and assessing any possible changes to be ordered in this proceeding. The primary objective of the Authority's review was to better align the ESS Program with the Program Objectives and the direction provided in the Storage Decision. The Storage Decision states that, "[k]ey Annual Review filings shall be submitted on or around August 1st . . . including, but not limited to: an annual report, including Program results and recommendations for Program modifications as discussed in Section V.F." Storage Decision, p. 43.

The Authority reaffirms that the above listed Program Objectives shall guide the Program Administrators in their administration of the ESS Program, particularly in instances not explicitly addressed through the approved ESS Program documents or through Authority direction in prior Decisions or motion rulings. Finally, the Authority reaffirms that the fourth Program Objective, prioritizing increased resilience, shall be explicitly guided by a goal of 40% deployment amongst low-income populations or in Distressed Municipalities, in line with the Justice 40 goal set in the Storage Decision. Storage Decision, p. 13.

IV. AUTHORITY ANALYSIS

A. PROGRAM OVERVIEW

Public Act 21-53 established statewide energy storage deployment goals, namely: (1) 300 MW by December 31, 2024; (2) 650 MW by December 31, 2027; and (3) 1,000 MW by December 31, 2030. Further, PA 21-53 § 2 directed the Authority to develop the Program authorized in the Storage Decision, while PA 21-53 § 3 authorized DEEP to competitively procure energy storage projects. The Authority subsequently established an ESS Program deployment target of 580 MW by the end of 2030 to help achieve these statewide targets. Storage Decision, p. 5. The Authority also authorized three-year Program cycles with interim goals of 100 MW by 2025 and 300 MW by 2028, as shown in Table 1. Id., p. 8.

Pursuant to the Year 1 and Year 2 Decisions, energy storage projects under the ESS Program are eligible for both upfront and performance-based incentives, as shown in Tables 2, 3, and 4 below. Upfront incentives vary based on whether the project's host customer is a residential or commercial and industrial (C&I) customer, while performance-based incentives are the same for all participating customers. Energy storage increases the affordability, resiliency, and reliability of the state's electric grid, and can help reduce carbon emissions from the state's power sector, thereby highlighting the importance of the ESS Program.

Table 1: Program Deployment Targets

CUSTOMER CLASS	Tranche 1	Tranche 2	Tranche 3	TOTAL
Residential	50 MW	100 MW	140 MW	290 MW
Commercial and Industrial	50 MW	100 MW	140 MW	290 MW
Total	100 MW	200 MW	280 MW	580 MW

Storage Decision, p. 8.

Table 2: Residential Upfront Incentives (Tranche 1)

Incentive Step	Installed Capacity (MW)	Baseline (\$/kWh)	Underserved Community (\$/kWh)	Low- Income (\$/kWh)	Grid Edge Adder
1	10	\$200	\$300	\$400	+50%
2	15	\$170	\$300	\$400	+50%
3	25	\$130	\$300	\$400	+50%

Year 1 Decision, p. 11; Year 2 Decision, pp. 18-19.

Table 3: Commercial Upfront Incentives (Tranches 1 and 2)

Installed Capacity (MW)	Small Commercial (\$/kWh)	Large Commercial (\$/kWh)	Industrial (\$/kWh)	Priority Customer Adder ¹
50	\$200	\$175	\$100	+25%
100	\$200	\$175	\$100	+25%

Year 1 Decision, p. 11; Year 2 Decision, p. 18.

Table 4: All Customer Classes Performance-Based Incentives (Tranche 1)

Year	's 1-5	Years	s 6-10
Summer	Winter	Summer	Winter
(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)
\$200	\$25	\$115	\$15
\$225 annually		\$130 a	nnually

Year 1 Decision, p. 12.

¹ A priority customer is any customer located on grid edge, critical facilities, small businesses, and customers replacing a fossil fuel generator. Year 2 Decision, pp. 17-18.

Tables 5 and 6, below, provide a summary of the number of C&I and residential ESS projects approved by the Program Administrators from January 1, 2022 to June 30, 2023. As can be seen from the tables, 48.68 MW of C&I energy storage projects and 2.16 MW of residential energy storage projects have been approved by the Program Administrators.

Table 5: Commercial Project Application Data as of June 30, 2023

Size Category	Number of Approved Projects	Total System Power Rating (MW)	Total System Energy Capacity (kWh)
Large C&I	14	28.07	78,394
Eversource	11	25.55	72,735
UI	3	2.52	5,659
Medium C&I	9	16.53	51,620
Eversource	7	10.36	32,350
UI	2	6.17	19,270
Small C&I	7	4.09	16,890
Eversource	7	4.09	16,890
UI	0	0	0
Grand Total	30	48.68	146,904

CGB Compliance, Aug. 1, 2023, Annual Evaluation Report, pp. 2-3, 23.

Table 6: Residential Project Application Data as of June 30, 2023

	Number of Approved Projects	Total System Power Rating (kW)	Total System Energy Capacity (kWh)	Low Income (# of Projects)	Underserved Community (# of Projects)
Eversource	140	1,166	2,592	1	6
UI	175	991	2,018	0	166
Grand Total	315	2,157	4,580	1	172

CGB Compliance, Aug. 1, 2023, Annual Evaluation Report, pp. 2, 22-23.

B. UPFRONT INCENTIVES

1. Residential Upfront Incentives

As shown in Table 6 above, 315 residential battery projects totaling 2.16 MW have been approved for the ESS Program as of June 30, 2023, a number that is far below the pace necessary to achieve the Program's goal of 50 MW of residential storage deployment by the end of 2024. Year 2 Decision, p. 34. Accordingly, this section discusses upfront incentives, and specifically increases residential upfront incentive rates and the residential upfront incentive cap, effective immediately, in order to increase residential Program participation.

During this proceeding, six stakeholders commented on the need for increased residential incentives. First, Guidehouse, the Program's evaluation, measurement, and verification (EM&V) consultant, recommended increasing incentives for residential customers to enhance the Program's residential participant cost test (PCT) value. Program Administrator Corresp., Aug. 3, 2023, p. 12. The Program's residential PCT is currently 0.79, which is below the Program's target PCT value of 1.2 Id; Storage Decision, pp. 33-34. Further, the Program Administrators believe that the high upfront cost of batteries is hindering residential storage adoption. Program Administrator Corresp., Aug. 3, 2023, p. 15. The Program Administrators noted that the Program's current average residential battery cost (i.e., \$31,500) is significantly above the average residential battery cost used in the Program's original incentive design (i.e., \$12,500). Id. CGB also argued that residential Program enrollment is undersubscribed relative to expected participation levels because of rising battery costs. CGB Corresp., Sept. 25, 2023, p. 23. Consequently, CGB supported doubling the Program's low-income and underserved incentive rates, in addition to increasing the Program's residential upfront incentive cap from \$7,500 to \$16,000 per battery for all customers. Id. Additionally, the EDCs argued that increasing residential upfront incentives across all customer types is paramount to increasing residential enrollment. EDC Corresp., Sept. 25, 2023, p. 7. The EDCs noted that residential upfront incentive increases can keep the Program's ratepayer impact measure (RIM) score above the Program's target of 1.4. Id.

The Northeast Clean Energy Council (NECEC) supported expanded upfront incentive caps for residential customers because residential storage systems "are generally less affordable on a per kW basis" than commercial systems as residential systems do not benefit from economies of scale. NECEC Comments, Aug. 30, 2023, p. 2. Therefore, expanded residential upfront incentive caps, NECEC opined, would yield high participation rates. Sunnova Energy International Inc. (Sunnova) also supported increasing residential upfront incentives to accelerate residential storage adoption by decreasing the high upfront costs of batteries. Sunnova Comments, Aug. 30, 2023, p. 6. Increased residential incentives, Sunnova argued, would result in "a greater adoption rate for energy storage and ultimately [P]rogram success." Id. Finally, the Office of Consumer Counsel (OCC) noted that high upfront battery costs remain a barrier to residential storage adoption. OCC Comments, Aug. 30, 2023, p. 14.

The Authority conducted discovery regarding residential upfront incentive increases to determine their effects on the Program's PCT and RIM values. At the Authority's direction, the Program Administrators submitted a proposal that would: (1) double the existing low-income and underserved upfront incentive rates; (2) raise the upfront incentive cap from \$7,500 to \$16,000; and (3) increase the standard upfront incentive rate by 1.5 times its current value. Program Administrator Interrog. Resp. CAE-34, pp. 1-2. If the proposal was adopted, the average standard residential PCT would increase from 0.74 to 0.81, the average underserved PCT would increase from 0.82 to 0.95, and the average low-income PCT would increase from 0.83 to 0.97. Id., p. 6. Further, Program costs would increase by \$18.8 million if an additional 28 MW of residential storage were enrolled in the Program, and the Program's residential RIM

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² A PCT value of 1 indicates that the Program is attractive to participants, because the benefits provided by the Program outweigh the costs of participation. Storage Decision, pp. 33-34.

would decline from 1.97 to 1.61. <u>Id.</u>, pp. 6, 8. Finally, only about 70% of the proposed upfront incentive increases would go toward reducing a participant's battery cost because as upfront incentives increase, a customer's federal Investment Tax Credit value, which is based on a system's total installed cost minus any upfront incentives, declines. <u>See</u> Program Administrator Interrog. Resp. CAE-34, p. 11.

The Authority determines that upfront incentive rate increases are needed for all three residential customer classes to ensure that the Program incentivizes the level of residential participation needed to meet the Program's residential enrollment targets. Accordingly, the Authority adopts with modification the residential upfront incentive proposal submitted by the Program Administrators. More specifically, effective immediately, the standard residential upfront incentive rate shall increase by 1.25 times current upfront incentive levels, while the underserved and low-income upfront incentive rates shall increase by 1.5 times their current levels. The rate increases shall apply to all three Tranche 1 residential Incentive Steps. Further, effective immediately, the Authority authorizes the proposed increase in the upfront incentive cap from \$7,500 to \$16,000. Additionally, consistent with current Program requirements, participants shall only be eligible for the maximum upfront incentive if the new maximum value (i.e., \$16,000) is below 50% of the battery project's cost and the applicable incentive rate multiplied by the battery's kWh capacity. See CGB Compliance, June 15, 2023, Clean Program Manual, p. 43.

The approved upfront incentive changes balance participant and nonparticipant interests and result in a less substantial increase to Program costs relative to the Program Administrators' proposal, thereby supporting the first Program Objective, providing positive net value to all ratepayers. Notably, the Program Administrators' proposal only considers RIM impacts for 28 MW of new residential customer enrollments by 2024, which is below the 50 MW residential enrollment target for Tranche 1. See Program Administrator Interrog. Resp. CAE-34, pp. 6, 8. Accordingly, if the Program's Tranche 1 residential target was achieved under the Program Administrators' proposal, the Program's residential RIM would decrease below the value given by the Program Administrators (i.e., below 1.61), increasing the risk that the Program does not achieve its 1.4 RIM target. Therefore, to limit negative RIM impacts, and to support a gradual approach to residential upfront incentive changes, the Authority approved half of the residential upfront incentive rate increases sought by the Program Administrators. Last, the Authority clarifies that residential storage projects remain eligible for federal funding in excess of the ratepayer-funded residential upfront incentive increases approved through this Decision, to further support the development of the state's residential storage industry.

The Authority further clarifies that the upfront incentive rate increases approved through this Decision shall not apply retroactively to projects that have already received reservations of funds but have not yet been deployed. The objective of increasing the residential upfront incentive rates is to increase the number of new residential projects participating in the Program, not to provide additional revenue to projects that are already financially viable at the existing incentive levels. Further, contractors will not be permitted to cancel projects with existing reservations of funds with the purpose of reapplying to receive the higher incentive rate. See CGB Exceptions, Nov. 15, 2023, p. 2. The Program Administrators shall explicitly include this clarification in the Program Manual to be filed

in compliance with this Decision (e.g., by updating language in Section 3.1.3 of the Program Manual). Additionally, the Program Administrators should check new residential project applications against canceled residential projects to ensure that such projects are not being canceled solely to reapply once the higher incentive rates take effect.

The Authority concludes that higher upfront incentives are needed for underserved and low-income participants versus standard customers to support the fourth Program Objective, prioritizing increased resilience to low-income customers and Distressed Communities. Additionally, disadvantaged populations are less likely to be able to afford the high upfront costs associated with battery installations when compared to standard customers, highlighting the need for increased incentives for disadvantaged residents. Moreover, as of July 2023, only 3 residential customers qualified as low-income, further highlighting the need for higher incentive increases for low-income customers when compared to standard customers. CGB Comments, July 20, 2023, p. 3. In summary, as described at the beginning of this section, total residential enrollment (2.16 MW) is insufficient to achieve the Program's residential enrollment target (50 MW), showcasing the need for increased residential upfront incentives for all three residential customer classes.

The Authority authorizes the above measured approach to increasing residential upfront incentives as the high upfront cost of batteries only partly explains the Program's low residential enrollment numbers; thus, the Authority is wary of increasing incentives more than what may be necessary to drive deployment. For example, low residential Program enrollment can also be explained by the nascency of the residential battery storage market in Connecticut, limited customer awareness, a lack of manufacturer participation in the Program, and the Program's complex application enrollment flow. Moreover, current battery storage costs have increased in recent years due to inflationary pressures and supply constraints, both of which have eased in recent months. Paired with federal efforts to scale energy storage manufacturing and to provide financial incentives for the deployment of residential battery systems, the Authority is hopeful that the installed cost paid by residential customers will decline in the coming years. Consequently, the Authority implements the aforementioned incentive level increases supplemented by addressing additional residential enrollment barriers discussed in other parts of this Decision to increase residential Program participation, including in Sections IV.C. and IV.I. The Authority will continue to monitor residential deployment and may make further incentive adjustments in the future if warranted by residential deployment numbers and market conditions, including considering any updated cost test results (e.g., RIM, PCT).

a. Tranche 2 Residential Upfront Incentives

The Authority highlights that residential upfront incentive rates have not yet been established for Tranche 2 of the Program. As stated in the Storage Decision, the Authority will "revisit electric storage deployment targets, the breakdown of deployment targets by customer class, and incentive structures considering the current status of energy storage in Connecticut" during the three-year cycle Program review. Storage Decision, p. 44. Therefore, the Authority directs the Program Administrators to file for the Authority's review and approval any proposed changes to the residential upfront incentive rate for Steps 2 and 3 of Tranche 1 and to develop proposed residential upfront incentive rates

for Tranche 2 by the start of the next annual ESS Program Review on June 15, 2024, which will serve as the beginning of the Program's three-year review. The Program Administrators shall consider, at a minimum, the Program's residential enrollment trends, battery cost data, and actual project PCT values when making their Tranche 2 residential upfront incentive recommendation. To the extent that residential project enrollments increase in the near-term, the Program Administrators shall file the proposed Tranche 2 residential upfront incentive rates within 60 days from the conclusion of Incentive Step 2 in residential Tranche 1, if Incentive Step 2 concludes prior to June 15, 2024.

The Authority concludes that a proactive approach to future residential upfront incentive levels will advance multiple Program Objectives, including the third Program Objective, the sustained and orderly development of the state's energy storage industry, and the fifth Program Objective, lowering energy storage deployment barriers in Connecticut.

Incentive Step	Installed Capacity (MW)	Baseline (\$/kWh)	Underserved Community (\$/kWh)	Low- Income (\$/kWh)	Grid Edge Adder
1	10	\$250	\$450	\$600	+50%
2	15	\$212.5	\$450	\$600	+50%
3	25	\$162.5	\$450	\$600	+50%

Table 5: Updated Residential Upfront Incentives (Tranche 1)

2. Underserved Adder Eligibility Expansion

The fourth ESS Program Objective includes language to "[p]rioritize delivering increased resilience to . . . low-to-moderate income (LMI) customers, customers in environmental justice or economically distressed communities, customers coded medical [protection], and public housing authorities as defined in Conn. Gen. Stat. § 8-39(b)." Additionally, the current incentive structure in the ESS Program provides adders to: (1) customers with incomes below 60% of the state median; and (2) underserved communities, defined as customers that reside in an economically Distressed Municipality, as defined by the most recent list developed by the Connecticut Department of Economic and Community Development (CT DECD), or multifamily affordable housing as contemplated by Conn. Gen. Stat. § 16-244z. Year 1 Decision, pp. 8-9; Year 2 Decision, p. 34. Notably, Conn. Gen. Stat. § 22a-20a defines environmental justice communities as including Distressed Municipalities as defined by the CT DECD and census block groups that are not in Distressed Municipalities in which 30% or more of the population lives below 200% of the federal poverty level.

Accordingly, to support the fourth ESS Program Objective to "[p]rioritize delivering increased resilience to...low-to-moderate income (LMI) customers, customers in environmental justice or economically distressed communities, customers coded medical [protection], and public housing authorities as defined in Conn. Gen. Stat. § 8-39(b)," the Authority sought stakeholder feedback on whether to expand the Distressed Municipality adder to include census block groups that meet the environmental justice community definition under the Connecticut General Statutes but which are not already located in a Distressed Municipality. Notice, June 23, 2023, pp. 2-3. The Authority specifically sought

comments on whether the benefits of increased inclusivity from the adder expansion would outweigh potential increased programmatic costs and customer confusion. Id.

The City of New Haven supported the proposed definition expansion because it would help the Authority meet its 40% target deployment in low-income and underserved communities and align the Distressed Municipality adder with the state definition of environmental justice communities. New Haven Comments, July 20, 2023, pp. 2-3. CGB also supported the proposed expansion of the locational adder, and further suggested that the Authority consider expanding the locational definition to also include Community Reinvestment Act eligible communities (defined as less than 80% AMI), as both environmental justice communities and Community Reinvestment Act eligible communities are within the "Vulnerable Communities" definition of Public Act 20-05. CGB Comments, July 20, 2023, pp. 5-7. CGB noted that such expansion could maximize Inflation Reduction Act tax credit benefits to such communities. Id. In addition, CGB urged the Authority to maintain consistency between the locational definitions in the RRES and ESS Programs. Id. DEEP similarly noted the importance of aligning state and federal program income eligibility and recommended that the Authority consider amending the definition of a low-income customer to "at or below 60% SMI or below 80% AMI" for consistency with IRA incentives, federal Home Energy Rebate Programs, and the Solar for All program. DEEP Comments, Aug. 11, 2023.

The EDCs generally agreed with a reasonable expansion of the ESS program eligibility criteria to better align with the RRES Program eligibility criteria. EDC Comments, July 20, 2023, pp. 3-4. Further, the EDCs cited similar written comments in Docket No. 23-08-02, Annual Residential Renewable Energy Solutions Program Review - Year 3, in which they stated that the definitions of Distressed Municipalities and environmental justice communities are "sufficiently consistent for customers of both to be eligible for the same Distressed Municipality adder," and that the EDCs could likely implement the change for Year 3 at a reasonable cost. Id. However, the EDCs noted that the Authority should still carefully consider impacts to the balance of benefits between Program participants and non-participants. Id. OCC similarly expressed support for the goal of increased Program inclusivity but requested that the Authority order the EDCs to file cost estimates for implementing the change in order to better compare the benefits with increased programmatic costs. OCC Comments, July 20, 2023, p. 3.

The Authority acknowledges that impacts between participants and ratepayers must be balanced, and further notes that the ESS Program is on track to meet its 40% underserved deployment target, because 46.5% of approved residential projects qualify for an underserved adder. CGB Comments, July 20, 2023, pp. 3-4. Moreover, while total residential enrollment lags behind programmatic targets, the Authority concludes that the residential upfront incentive increases approved in Section IV.B.1., in addition to other changes approved in this Decision, will likely increase Program enrollment among all residential customer classes, including among underserved populations. Moreover, there may be low-income customers enrolled in the ESS Program not receiving an adder, meaning 46.5% of approved projects is likely a conservative approximation of the percentage of underserved customers enrolled in the ESS Program. Further, the Authority is concerned that the inclusion of environmental justice census block groups in the Distressed Municipality upfront incentive adder could negatively impact the third Program Objective, fostering the sustained and orderly development of the state's electric

storage industry, by adding unneeded complexity to the Distressed Municipality upfront incentive adder.

Additionally, determination of whether a customer resides in an environmental justice census block group is not as accessible as the current requirements for the Distressed Municipality upfront incentive adder, which are based solely on a customer's town of residence. Finally, the Authority declined to expand eligibility for the Distressed Municipality adder to include environmental justice census block groups in the RRES Program. Consequently, the Authority determines that maintaining consistent definitions between the ESS and RRES Programs will further the Program Objectives by reducing developer confusion. Decision, Nov. 1, 2023, Docket No. 23-08-02, (RRES Year 3 Decision), pp. 12-14. Accordingly, the Authority will not expand customer eligibility for the Distressed Municipality upfront incentive adder in the ESS Program.

Last, while the Authority declines to amend the income eligibility threshold from 60% of State Median Income to 80% of Area Median Income for the reasons outlined in the RRES Year 3 Decision (see RRES Year 3 Decision, p. 15), the Authority makes "multifamily affordable housing as contemplated by Conn. Gen. Stat. § 16-244z" eligible for the low-income adder as this change is consistent with the treatment of multifamily affordable housing in the RRES Program. See RRES Program Manual, p. 47.3

3. Commercial Upfront Incentives

In contrast to residential battery enrollment, commercial enrollment has greatly exceeded programmatic targets. Commercial Tranche 1 completed enrollments in March of 2023, almost two years before the Tranche's expected conclusion at the end of 2024. CGB Compliance, March 14, 2023, p. 1. Additionally, 34.9 MW have already been approved for the 100 MW commercial Tranche 2. Tech Mt'g Tr. Aug. 3, 2023, 71:1-2. Notably, while performance incentives and residential upfront incentives are both set to automatically decline over time, commercial upfront incentives remain the same across all three commercial incentive Tranches. CGB Compliance, June 15, 2023, Clean ESS Program Manual, pp. 41, 45. Consequently, the Authority requested written comments on whether a declining-block upfront incentive structure should be established for commercial Tranche 3 of the ESS Program. Notice, Aug. 11, 2023, pp. 5-6. As an alternative, the Authority also requested comments on whether it would be appropriate to wait to open Tranche 3 until further commercial project Tranche 1 and Tranche 2 data is available. Id.

CGB stated that there is insufficient data to determine whether a declining-block incentive structure is warranted for commercial projects because few commercial projects have been completed thus far. CGB Comments, Aug. 30, 2023, p. 15. Nevertheless, CGB "is always focused on declining incentive block structures as evidenced by the RSIP" and would ideally submit proposals for Tranche 3 commercial incentives once Tranche 2 nears completion. Id. CGB further proposed "a declining block structure" for commercial projects if allocated commercial capacity were increased from current levels. CGB Corresp., Sept. 25, 2023, p. 22. Similarly, NECEC argued that "it is too early to determine

³ Available at: https://www.eversource.com/content/docs/default-source/save-money-energy/residential-renewable-energy-solutions-program-manual.pdf?sfvrsn=2f505776_7.

whether the [P]rogram is on track to meet deployment goals, due to the slow pace" of commercial project deployment. NECEC Comments, Aug. 30, 2023, p. 1. CPower argued against commercial Tranche 3 upfront incentive reductions, because there was no evidence that battery development costs would decline by the time Tranche 3 is opened. CPower Comments, Aug. 30, 2023, pp. 18-19. CPower also stated that interconnection costs remain uncertain because no medium or large commercial ESS projects have completed the interconnection process yet. <u>Id</u>. Ultimately, CPower supported revisiting commercial upfront incentive levels next year. <u>Id</u>., p. 19. Last, OCC recommended that the Authority review current commercial incentive levels to ensure that "they do not exceed the amount necessary to secure sufficient [commercial] enrollment." OCC Comments, Aug. 30, 2023, p. 16.

The Authority determines that further evaluation is needed before approving changes to the current commercial upfront incentive rates. Accordingly, the Authority directs the Program Administrators to reevaluate commercial upfront incentive rates ahead of the three-year Program review to be conducted next year. More specifically, by June 15, 2024, the Authority directs the Program Administrators to file for review and approval a recommendation for new upfront incentive rates for the small, medium, and large commercial categories for the unallocated commercial MWs remaining in Tranche 2 as of June 15, 2024, as well as rates for the MWs in Tranche 3. After the submission of this recommendation on June 15, 2024, the Program Administrators shall pause all commercial passive dispatch enrollments in the Program until the Authority determines the commercial upfront incentives for the remainder of Tranche 2 and for Tranche 3.4 The Authority expects to issue a ruling on the Program Administrators' commercial incentive recommendation in the Year 4 Decision in Docket No. 24-08-05, after which commercial passive dispatch enrollments are expected to resume for the Program, unless the Authority determines otherwise in the Year 4 Decision. This evaluation is consistent with the intention of the three-year reviews to "ensure that the Program is...delivering on the expected value" and to reevaluate the "deployment targets, the breakdown of deployment targets by customer class, and incentive structures." Storage Decision, p. 44.

Further, through modeling and data analysis of current commercial project data, the Program Administrators shall work with the Program's EM&V consultant (i.e., Guidehouse) to ensure that the commercial upfront incentive recommendation will achieve a PCT at or slightly above 1, because a PCT above 1 "indicates that the program benefits outweigh program costs and therefore that the incentives provided through the program will result in even greater benefits." See Storage Decision, pp. 33-34.

The Authority highlights that the average PCT for commercial Tranche 2 is currently 1.15, which is above the assumed value needed to incent sufficient commercial Program enrollment. See CGB Interrog. Resp. CAE-23. Additionally, commercial enrollment far exceeds the Program's original commercial targets, which further suggests that a decline in commercial upfront incentive rates will still allow the Program to achieve its commercial enrollment goal. Further, while the Program's nonresidential RIM is currently above 1.4 (1.93), when interstate benefits are not considered in the Program's RIM calculation, the Program's RIM drops to 0.90, which suggests that non-participating

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⁴ The Program Administrators shall also pause commercial passive dispatch enrollments in the Program if all Tranche 2 MWs are allocated prior to June 15, 2024.

Connecticut ratepayers are not financially benefiting fully from the ESS Program at current incentive payment levels. <u>See</u> Program Administrator Corresp., Aug. 3, 2023, p. 12; Program Administrator Interrog. Resp. CAE-7. Therefore, the Authority directs the Program Administrators to work with the Program's EM&V consultant (i.e., Guidehouse), using modeling and data analysis of current commercial project data, to propose incentive rates closer to a participant cost test (PCT) at or slightly above 1.

Ultimately, a reevaluation of future commercial upfront incentives during next year's review will advance multiple Program Objectives, including the first Program Objective, providing positive net present value to all ratepayers, by ensuring that ratepayer funds do not exceed the amount necessary to incent commercial enrollment. The Authority also originally intended for the ESS Program to have a declining-block upfront incentive structure, which has yet to be realized for the commercial Program sector. See Storage Decision, p. 5. Consequently, the first three-year cycle provides the Authority with an opportunity to critically examine the success of the Program to date, to assess how best to set commercial upfront incentives moving forward, and to establish a measured approach to implementing the intended declining-block upfront incentive structure for the commercial portion of the Program. Additionally, allowing the current Tranche to continue through June 15, 2024 furthers the third Program Objective to foster the sustained, orderly development of a state-based electric energy storage industry by allowing for a runway before any changes are evaluated or take effect.⁵

C. PROJECT ENROLLMENT PROCESS CHANGES

1. Form Removal and Application Process Working Group

In response to the Authority's June 23, 2023 Notice of Request for Written Comments, EnergyHub, the administrator of the Program's residential Distributed Energy Resource Management System (DERMS), recommended that the Authority resolve "points of friction in the current application and enrollment process" to make the ESS Program less complex with the goal of attracting more developers and interested customers. EnergyHub Comments, July 20, 2023, p. 2. To simplify the enrollment flow, EnergyHub proposed requiring only one ESS application through the battery manufacturer, instead of having two applications through both the battery manufacturer and CGB. <u>Id.</u>, p. 3. Further, Sunrun argued for a simplification of the Program enrollment flow because developers are currently required to "submit extensive documentation through the Green Bank portal at multiple stages of project interconnection and program enrollment." Sunrun Comments, June 20, 2023, p. 4.

Consequently, the Authority requested comments from all stakeholders on potential changes to the current ESS application enrollment flow, including whether and how existing application processes, forms, and data requirements should be simplified to make the ESS Program less complex for developers by reducing the administrative burden and application timelines. Notice, Aug. 11, 2023, pp. 3-4. Moreover, the Authority noted the successful development of an Application Process Working Group last year in Docket No. 22-08-02 to streamline the RRES Program enrollment flow, thereby resulting

⁵ The November 6, 2023 Proposed Final Decision in this proceeding was intended to provide this runway. Any implication otherwise was unintentional.

in the Authority's approval of various changes to better align the RRES application process with programmatic goals. Decision, Feb. 8, 2022. Docket No 22-08-02, <u>Annual Residential Renewable Solutions Program Review – Year 2</u>; <u>Id.</u> Therefore, the Authority also requested comments on whether a similar approach would help resolve potential application barriers for the ESS Program. Notice, Aug. 11, 2023, pp. 3-4.

In response, CGB welcomed "the opportunity to collaborate with stakeholders to streamline ESS" enrollment. CGB Comments, Aug. 30, 2023, p. 8. However, given that only a small number of active contractors currently participate in the Program, CGB opined that changes to the ESS enrollment process could be made on "an ad-hoc basis." ld. CGB remained open to holding a residential enrollment working group in the future. ld. Similarly, UI did not recommend the creation of a working group because the Program Administrators have already been working to understand bottlenecks in the application process. UI Comments, Aug. 30, 2023, p. 3. Eversource also did not support the development of an application process working group. Eversource Comments, Aug. 30, 2023, pp. 3-4. Eversource nevertheless noted that "one large battery manufacturer has indicated that they would be more willing to participate in the ESS Program if the Program could enable enrollment through their mobile app," which could be accomplished by reviewing application information the battery partner is able to collect through their existing apps. Id., p. 4. Additionally, Eversource believes that the ESS Program has longer application timelines than the RRES Program because of "the amount of additional information required for ESS Program participation in addition to the complexity of battery projects and installer experience level." Id., p. 5.

CPower had no objection to simplifying the application and enrollment process and believes that any application changes should focus "mainly on the residential portion of the Program." CPower Comments, Aug. 30, 2023, pp. 14-15. Moreover, OCC noted that an application process working group could help "identify difficulties with the application process [and] could help root out any problems and ameliorate any issues that remain with the application process." OCC Comments, Aug. 30, 2023, pp. 10-11. Last, Tesla was "very supportive" of improvements to the ESS application process. Tesla Comments, Aug. 30, 2023, p. 2. Tesla noted that in-app enrollment processes were efficient in attracting new customers by reducing application burdens and excessive paperwork, and highlighted Connected Solutions and California's load reduction program as two examples of successful in-app battery enrollment programs. Id. Tesla proposed that the Authority direct the Program Administrators to eliminate "several specific enrollment documents, enrollment processes, and eligibility requirements that could impede the adoption of inapp ESS enrollment." Id., p. 3. Tesla recommended removing the utility approval to energize letter, the self-inspection report and photos, the one-line diagram, the home energy audit, and the electric bill from the ESS application, among other suggested Ultimately, Tesla argued that, with the sunsetting of changes. ld., pp. 3-4. ConnectedSolutions, "delaying implementation of a streamlined ESS in-app enrollment process threatens to create a period during which new [battery] customers fail to enroll in any battery [demand response] program." Id., p. 5.

CGB further stated that it takes on average 237 days for a project to receive an upfront incentive payment after the project is submitted for CGB review. CGB Interrog. Resp. CAE-16. Strikingly, the average application completion timeline for the ESS Program is significantly higher than the RRES Program, where projects receive

permission to operate within an average of between 79-94 business days. Eversource Compliance, July 27, 2023, Docket No. 22-08-02, Attachment 1, p. 1; UI Compliance, May 1, 2023, Docket No. 22-08-02, Attachment 1, p. 1. Additionally, 62% of ESS applications with reservations of funds received an application rejection at any point in the ESS application process. CGB Interrog. Resp. CAE-17. On average, application rejections occur 27 days after a residential project was submitted for CGB review and 193 days after a commercial project was submitted for CGB review, respectively. Id. Applications can be rejected at three different times during the application review process: (1) during the initial application review stage; (2) after funds are reserved and the project has been completed; and (3) during a project's inspection. Id. Last, applications are most commonly rejected due to incomplete or missing project data or application documents. CGB Interrog. Resp. CAE-18. A potential solution to reduce application rejections, CGB believed, would be to "provide contractors with a checklist for all of the materials that the Green Bank requires through the process." Id.

Upon weighing stakeholder comments and application data, the Authority directed the EDCs to include an inventory of all Program forms identified for removal in briefs, to reduce application timelines through the removal of document requirements. Notice, Oct. 2, 2023, p. 1. Additionally, the Authority directed CGB to include a discussion of any areas of disagreement it has with the EDCs' proposed form reductions. Id. In response, the EDCs recommended the removal of several documents for all customer applications. First, the EDCs recommended removing the customer's electric bill from the Program's list of required documents because this requirement is duplicative of other enrollment processes, including the collection of the customer's account number and DERMS customer verification. Eversource Brief, Oct. 16, 2023, p. 18; UI Brief, Oct. 16, 2023, p. 5. Further, the EDCs recommended removing the home energy audit requirement for homes built prior to 1980 because this requirement is duplicative of RRES application requirements and because 100% of ESS residential customers are co-located with solar. Eversource Brief, Oct. 16, 2023, p. 18; UI Brief, Oct. 16, 2023, p. 5. The EDCs also recommended removing the approval to energize letter and one line diagram from the Program's required document list because both documents are already collected in the EDCs' interconnection application. Eversource Brief, Oct. 16, 2023, pp. 17-18; UI Brief, Oct. 16, 2023, p. 6.

Conversely, CGB recommended removing the one-line diagram, self-inspection report, and site plan for active dispatch only customers because these documents are used to facilitate CGB's inspections, which do not occur for active dispatch only systems. CGB Brief, Oct. 16, 2023, pp. 1-2. CGB also recommended removing the electric bill for active dispatch only customers because electric account information is verified by EnergyHub. <u>Id</u>, p. 2. Additionally, CGB recommended removing the sales contract for active dispatch only systems because the sales contract is used to calculate the upfront incentive, which is only applicable for passive dispatch customers. <u>Id</u>. Last, CGB recommended removing the approval to energize letter and energy audit documentation for all customers, for reasons similar to what were provided by the EDCs. <u>Id</u>., pp. 2-3.

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⁶ According to the ESS Program website, approximately 11 documents are required for each ESS application. See https://energystoragect.com/contractor-resources-2/.

The Authority concludes that application process changes are needed to reduce the ESS Program's high rejection rate (62%) and lengthy application review timelines (237 days), and, consequently, provides new direction to the Program Administrators. First, to reduce application barriers by removing unnecessary or redundant forms, the Authority approves several documentation changes supported by both the EDCs and CGB. More specifically, the Authority approves the removal of the following forms from the active dispatch only application: (1) electric bill; and (2) one-line diagram. Further, the Authority approves the removal of the approval to energize letter for all applications because the EDCs already have this letter on file as a part of the interconnection approval process. The Authority does not, however, approve the removal of home energy audit documentation for homes built before 1980 for projects not co-located with solar. Home energy audits provide financial benefits to customers via energy bill savings. Increased energy efficiency also reduces greenhouse gas emissions by reducing overall energy consumption, thereby supporting the sixth Program Objective. The Authority acknowledges, however, that the home energy audit is duplicative if the ESS customer is also enrolled in the RRES Program or previously received funding through the Residential Solar Investment Program, which also required home energy audits. Consequently, the Authority clarifies that the Program Administrators do not need to collect home energy audit documentation as a part of the ESS residential application if the project is co-located with a solar project, since the overwhelming majority of existing solar projects have already been subject to home energy audit requirements.

Second, the Authority directs the ESS Program Administrators to establish an Application Process Working Group (APWG). The Authority determines that an APWG will further the Program Objectives by improving application inefficiencies, in furtherance of the third Program Objective, the sustained and orderly development of the state's energy storage industry. Notably, while the Program Administrators opposed an APWG in written comments, at the first Technical Meeting, CGB stated a belief that an APWG would "greatly help the Program," after which UI stated it was "in agreement" with CGB. Hr'g Tr., Aug. 3, 2023, 53:23-24, 54:3-4. The APWG shall focus specifically on ways to simplify or streamline the complex ESS enrollment flow for residential projects, whose enrollment is lagging significantly behind programmatic goals, in contrast to commercial projects. The Program Administrators shall invite all active residential ESS contractors for inclusion in the APWG, so that informed decisions can be made on any application process improvements. Further, the APWG shall be co-led by both the EDCs and CGB. The Program Administrators shall also allow any other interested parties, including stakeholders not currently participating in the ESS Program such as Tesla or Sunrun, to join the APWG by request. Additionally, the Authority recognizes that improvements may be warranted to the ESS commercial enrollment flow as well, to improve commercial application timelines or to address commercial enrollment inefficiencies. Consequently, the APWG may recommend improvements to the commercial application, in addition to the residential enrollment flow. The APWG shall strive to reach consensus whenever possible in recommending changes to the ESS enrollment flow. Last, if recommended by the APWG, the Authority would strongly consider the removal of the following documents identified by the EDCs in briefs, which may be duplicative of existing interconnection processes, for all application types: (1) operations agreement; (2) the electric bill; (3) site plan; and (4) the one-line diagram.

The Program Administrators shall file a report with the Authority (APWG Report) by March 15 including consensus recommendations and feedback from APWG members. and providing specific recommendations on the following: (1) required application field questions that can be omitted from the ESS Salesforce-based application; (2) required application forms that can be consolidated or removed; and (3) a proposal to combine or streamline the separate ESS applications and enrollment processes to the fullest extent possible, including a method to combine a project's DERMS-enrollment application with the existing ESS incentive approval application.⁷ If consensus on any of the above cannot be reached, the Program Administrators shall include in the APWG report a fair and accurate description of all views expressed. The APWG shall meet a minimum of four times, and the Program Administrators shall include the dates and attendees of each APWG meeting in the APWG Report. Finally, the Authority clarifies that any consensus recommendations not requiring changes to the Program Manual or Program documents may be implemented immediately by the Program Administrators. The Authority looks forward to reviewing the APWG Report, which will aid the Program Objectives by reducing application barriers, timelines, and project rejections.

2. Eligible Contractor Application

As outlined in Section 4.3. of the Program Manual, contractors and third-party owners are required to submit an application to the Program Administrators via the Program website before gaining access to the ESS enrollment portal. CGB Compliance, June 15, 2023, Clean ESS Program Manual, pp. 23-30. The ESS Eligible Contractor application requires approximately 10 documents, each with their own specific requirements. <u>Id.</u>, pp. 23-26. Additionally, a contractor's eligibility in the ESS Program may be forfeited if at least one application is not submitted per year. <u>Id.</u>, p. 29.

Notably, other statewide clean energy programs, including the RRES and Non-Residential Renewable Energy Solutions (NRES) Programs, do not require Eligible Contractor applications. Accordingly, the Authority requested written comments on the pros and cons of requiring contractor applications prior to joining the ESS Program, including whether any changes to the current Eligible Contractor application are warranted to increase contractor participation. Notice, Aug. 11, 2023, p. 4.

CGB opined that its Eligible Contractor application process is not onerous or exclusive. CGB Comments, Aug. 30, 2023, p. 10. CGB argued that its Eligible Contractor application serves as "an indicator of quality" and aids in preventing unprofessional contractors from enrolling in the Program. Id. CGB further argued that in contrast to the solar market, the battery market is not mature and needs greater engagement to foster the market's development. Id. Additionally, CPower argued that the development of a commercial storage project requires skill and expertise to navigate project uncertainties and technical issues. CPower Comments, Aug. 30, 2023, p. 16. Consequently, CPower recommended no changes to the commercial Eligible Contractor application. Id., p. 17. Last, OCC supported requirements that would ensure that ESS contractors have the

⁷ The Authority is aware of at least four separate ESS project applications that must be completed before incentive payout: (1) the DERMS-enrollment application required by certain battery manufacturers; (2) CGB's incentive approval application; (3) CGB's project completion application; and (4) a project's interconnection application with the EDCs.

necessary qualifications to safely install battery projects. OCC Comments, Aug. 30, 2023, p. 12.

The Authority directs the Program Administrators to investigate improvements to the Eligible Contractor application through the APWG established in the prior section. Accordingly, the Program Administrators shall include a fourth item in the APWG Report: a recommendation to streamline or reduce the requirements included in the Eligible Contractor application. The Authority concludes that the lack of residential contractor participation in the ESS annual review proceeding makes it difficult to determine whether the existing Eligible Contractor application is problematic for residential contractors. Nevertheless, given the small number of active residential contractors currently participating in the Program, the Eligible Contractor application may pose a barrier to Program participation. The Authority notes that it takes a contractor on average 26 days to receive approval for the ESS Program, which suggests that the Eligible Contractor enrollment process could benefit from process improvements or form reduction to reduce potential application barriers. CGB Interrog. Resp. CAE-24. Nevertheless, the Authority concludes that, given the infancy of the residential energy storage market in Connecticut, an Eligible Contractor application furthers the Program Objectives by ensuring that contractors meet the Program's licensing and safety requirements. The Authority looks forward to the APWG's recommended improvements to the Eligible Contractor application, which would advance the Program Objectives by lowering barriers to entry.

3. Inspection Requirements

Section 3.6.1. of the Program Manual outlines an inspection process for ESS projects, where the Program Administrators may conduct a field inspection of any completed system. CGB Compliance, June 15, 2023, Clean ESS Program Manual, pp. 16-17. Additionally, the Program Manual states that the Program Administrators "will work to ensure that inspections are performed in a reasonable timeframe and do not impose an excessive burden or inconvenience on customers." Id., p. 17. The Authority requested written comments on the current ESS inspection process to better understand the need for CGB-led ESS inspections. Notice, Aug. 11, 2023, p. 4. More specifically, the Authority requested comments "on the pros and cons of CGB-led ESS inspections, whether the current inspection process is duplicative of municipal and/or EDC inspections, and whether ESS inspections are an excessive burden to customers and/or developers." Id..

Eversource averred that CGB-led inspections should be "phased out before the next program cycle." Eversource Comments, Aug. 30, 2023, p. 5. Eversource noted that most of CGB's inspection requirements are duplicative of existing state, utility, or municipal inspections. Id. Nevertheless, Eversource supported a "methodical sampling approach to ensure installers are complying with Program requirements." Id. Additionally, Eversource argued that "signing off on items for which another entity (in this case, a town's electrical inspector) is responsible for approving could create customer confusion and could expose the Program Administrators to the risk of unnecessary liability." Eversource Brief, Oct. 16, 2023, p. 19. Similarly, UI stated that CGB-led inspections provided "no added benefit to the developer, customer, or program; only increases to overall program costs and lead times." UI Comments, Aug. 30, 2023, p. 4. Like Eversource, UI noted that CGB-led inspections were duplicative of inspections that

are already occurring. <u>Id</u>. Consequently, UI recommended eliminating CGB-led inspections. <u>Id</u>. Moreover, Tesla argued that ESS inspection processes were redundant when compared with the existing EDC interconnection process. Tesla Comments, Aug. 30, 2023, p. 4.

Conversely, CGB argued that its inspections were important for fostering the sustained and orderly development of the state's storage industry, given the "nascency of the market for battery storage." CGB Comments, Aug. 30, 2023, p. 9. CGB also argued that its inspectors worked closely with Program participants to ensure inspections were completed in a timely manner. <u>Id</u>. CGB anticipated that, in the future, installers who consistently passed inspections would only have to submit "self-inspections." <u>Id</u>. Additionally, OCC argued that ESS inspections should occur only for the "purpose of verifying that storage resources align with program requirements and goals." OCC Comments, Aug. 30, 2023, p. 11.

The Authority conducted further discovery on the impacts of CGB-led inspections. CGB stated that each inspection costs approximately \$450. CGB Interrog. Resp. CAE-19. Of the 81 completed residential projects, 90% (or 73 projects) were inspected by CGB, of which 67% failed inspection. CGB Interrog. Resp. CAE-20. Projects most commonly failed CGB inspections due to labeling issues.⁸ CGB Interrog. Resp. CAE-21. The average number of days from when a residential project enters the CGB inspection pipeline to when the project receives CGB inspection approval is approximately 54. CGB Interrog. Resp. CAE-22.

The Authority concludes that the CGB-led inspections require modifications to better align them with the Program Objectives. Specifically, the Authority is concerned that the CGB-led inspections, as currently envisioned, may be hindering the first Program Objective to achieve net ratepayer benefits, as each inspection costs \$450 and inspections have been conducted for 90% of residential projects to date,⁹ and the fifth Program Objective to lower barriers to entry, as these inspections add an average of 54 days to the project approval process.¹⁰ Moreover, the Authority is concerned by the high number of inspection failures due to "labeling issues", which seem unrelated to the operational soundness of the energy storage project.

The Authority primarily raises these concerns for CGB's awareness and to provide feedback to help optimize the Program's results with the Program Objectives. Ultimately, the Authority recognizes that CGB inspections are likely more thorough than inspections conducted by other parties and, therefore, provide additional comfort or security to Program participants, particularly in a nascent market, thereby aiding the third Program Objective to foster the sustained orderly development of the in-state industry. Consequently, the Authority defers to CGB's recommendation that CGB-led inspections continue for Year 3 of the Program but directs one modification to make the optional

⁸ CGB requires 10 labels on a residential storage project. <u>See https://energystoragect.com/wp-content/uploads/2023/08/BESS-Checklist-2020-Code-Labels.pdf.</u>

⁹ The total CGB-led residential project inspection costs to date (approximately \$33,000) is not as much of a concern to the Authority as the potential cost of auditing 90% of all future residential ESS Program projects and the costs of commercial project inspections.

¹⁰ 54 days is more than 50% of the average *total* approval time in the RRES Program.

nature of these inspections more apparent. Specifically, for all applications beginning January 1, 2024, the customer must explicitly opt-in to the inspection process. CGB may choose the mechanism through which customers opt-in (e.g., a check box in the ESS Program application, one-off email, etc.), but may only select one such mechanism. Further, if CGB utilizes email to receive customer opt-in for CGB inspections, the email must state that the inspection is optional in the email's subject header and first sentence. Moreover, CGB shall only send the inspection opt-in email to each customer once, consistent with the above direction that only one mechanism may be used to request customer opt-in. If the customer does not respond to the inspection opt-in email within 15 days, the Program Administrators shall assume that the customer has declined an optional inspection and move the application to the next stage in the application review process. CGB shall identify the mechanism through which they will seek customer opt-in to the CGB-led inspections via compliance filed in the instant proceeding no later than December 20, 2023; if CGB selects email, the inspection opt-in email shall also be submitted with this compliance filing. Further, the Authority clarifies that stakeholders may propose an alternative inspection opt-in process to the APWG, if such proposal would more effectively resolve the inspection concerns identified in this section.

The Program Administrators shall remove required application forms pertaining to CGB inspections for projects that have opted-out of CGB's inspection process (e.g., by not responding to the opt-in email within 15 days, or by replying to the email before 15 days and opting out of the inspection). All references to CGB inspections in the Program Manual shall also clarify that CGB inspections are optional. CGB Compliance, June 15, 2023, Clean Program Manual, pp. 13, 16-18, 29-30, 47, 85. However, CGB shall still retain the right to audit systems, but such audits shall not impact the approval of a specific project if the customer declines to opt-in to the CGB-led inspection process.

The Authority appreciates CGB's efforts to ensure the sustained orderly development of the storage industry in Connecticut and will continue to evaluate potential Program barriers related to inspections in future annual review proceedings. However, as a trusted partner, the Authority anticipates and appreciates that CGB will internalize the concerns highlighted above and will address them to the extent they are hindering the ESS Program's ability to achieve the Program Objectives.

D. Interconnection Reform

In Order No. 10 of the Year 2 Decision, the Authority directed the policy and technical interconnection working groups (IX WG)¹¹ to file with the Authority no later than July 1, 2023, specific recommendations to address energy storage interconnection concerns, "including but not limited to: streamlining the documentation needed for energy storage interconnection, defining timelines for energy storage interconnection approval, and determining how to model energy storage systems for interconnection." Year 2 Decision, p. 40.

11 The policy and technical interconnection working groups (IX WG) were established pursuant to a Decision dated November 25, 2020, in Docket No. 17-12-03RE06, <u>PURA Investigation into Distribution System Planning of the Electric Distribution Companies – Interconnection Standards and Practices (RE06 Decision).</u>

On June 1, 2023, CGB filed a motion (Motion No. 3) in this proceeding requesting that the Authority provide further guidance and clarification to the IX WG, including detailed agendas and expectations for each IX WG meeting, to ensure that the IX WG meet the requirements of Order No. 10. Motion No. 3, p. 2. CGB was also concerned about the number of energy storage models eligible for EDC interconnection, since the EDCs' interconnection application software, PowerClerk, only allows interconnections for systems that are approved by the California Energy Commission. 12 Id., p. 4. The Authority granted Motion No. 3 in part and extended the Order No. 10 compliance deadline until September 1, 2023. Motion No. 3 Ruling 2, p. 3. Further, the Authority amended the requirements of the IX WG's Order No. 10 compliance to include the following:

1) a proposed process for the EDCs to notify developers when the interconnection study begins and is expected to be approved for each application; 2) a proposal, including estimated implementation costs and timelines, for all interconnection process forms coming from one source; 3) a proposal for evaluating energy storage based on the expected charging and discharging patterns of storage systems, especially for those systems collocated with solar and/or those systems participating in the Active and Passive Dispatch components of the ESS Program; and 4) a plan for rectifying the deficiencies in the number of models able to interconnect through PowerClerk.

Motion No. 3 Ruling 2, p. 3.

On behalf of the IX WG, the EDCs filed compliance with Order No. 10. <u>See</u> EDC Compliance, Sept. 1, 2023. In the compliance, the EDCs stated that the Guidelines for Generator Interconnection have been revised to clarify that ESS systems are included under the Guidelines. <u>Id.</u>, p. 2. Moreover, the EDCs stated that their Fast Track and Study Process Guidelines provide information and guidance on the interconnection study process, "including how EDCs presently notify developers of study start and expected end dates" (i.e., via the interconnection study agreement or by email once all study deliverables are met). <u>Id</u>. The EDCs also clarified that all interconnection forms already come from one source (i.e., PowerClerk). <u>Id</u>. The EDCs further stated that they gave IX WG participants guidance on how to reach out to the EDCs with questions regarding the required interconnection forms. <u>Id</u>.

Additionally, the EDCs submitted a proposal to evaluate energy storage based on the systems' expected charging and discharging patterns. EDC Compliance, Sept. 1, 2023, p. 2. More specifically, the EDCs proposed to evaluate the distribution impacts of energy storage using dispatch limiting schedules. In the proposal, developers would be required to submit when the battery plans to charge and discharge during the following periods (i.e., developers would fill out tables like the ones shown below):

¹² At least 19 energy storage companies expressed interest in joining the ESS Program and are not on the California Energy Commission's approved battery equipment list. Program Administrator Interrog. Resp. CAE-9.

Table 6: EDC Proposed Dispatch Limiting Schedules¹³

Maximum MW Charge						
Charge Limiting Schedule	00:00 - 09:00	09:00 – 12:00	12:00 – 18:00	18:00 – 00:00		
Spring (March, April, May)						
Summer (June, July, Aug.)						
Fall (Sept., Oct., Nov.)						
Winter (Dec., Jan., Feb.)						

Maximum MW Discharge						
Discharge Limiting Schedule	08:00 – 10:00	10:00 – 16:00	16:00 – 18:00	18:00 – 08:00		
Spring (March, April, May)						
Summer (June, July, Aug.)						
Fall (Sept., Oct., Nov.)						
Winter (Dec., Jan., Feb.)						

EDC Compliance, Sept. 1, 2023, Attachment 2, pp. 10-11. Further, the EDCs plan to inform developers of potential adjustments to a project's proposed dispatch limiting schedule so that the project may avoid distribution system upgrades on a case-by-case basis. EDC Compliance, Sept. 1, 2023, Attachment 2, p. 10. Compliance with a project's proposed dispatch limiting schedule will be enforced by operational restrictions as determined by the EDC, including via a "Real Time Automatic Controller." Id. Finally, the EDCs clarified that they no longer restrict the number of energy storage models interconnecting through PowerClerk because the energy storage model manufacturer field was changed from a required to an optional field. EDC Compliance, Sept. 1, 2023, p. 3.

The Authority approves with modification the IX WG's Order No. 10 compliance. Specifically, while the steps outlined by the EDCs in the Order No. 10 compliance will generally improve energy storage interconnection barriers by clarifying existing interconnection processes and by reforming the interconnection study process for energy storage projects, the Authority concludes that additional changes are needed to ensure the EDCs' proposal most effectively advances the Program Objectives. First, the Authority determines that ESS projects' proposed dispatch limiting schedules shall be verified using the Program's existing DERMS provider if the projects are less than 500 kW, since such projects do not currently need to be verified using a Real Time Automatic Controller (i.e., SCADA) per existing interconnection guidelines. EDC Compliance, Sept. 1, 2023, Exhibit B, p. 16. Accordingly, by December 20, 2023, the EDCs shall amend the Generator Interconnection Technical Requirements to clarify this requirement for projects participating in the ESS Program. The Authority concludes that this clarification will

¹³ The time intervals shown in Table 7 are "for reference only and can be changed by the developer to fit their intended operational schedule." EDC Compliance, Sept. 1, 2023, Exhibit B, p. 10. The seasonal windows, however, are fixed and cannot be adjusted by the developer. UI Exceptions, Nov. 15, 2023, p. 3.

advance the fifth Program Objective, lowering barriers to entry for Program participants, by ensuring that ESS projects do not have to enroll in multiple automatic controller programs.

Second, the Authority cannot conclude whether the EDCs' proposal most effectively reduces energy storage interconnection timelines because the EDCs did not include detailed qualitative or data-driven explanation in their proposal. EDC Compliance, Sept. 1, 2023, p. 2. Consequently, the Authority directs the EDCs to review energy storage interconnection practices currently used in other jurisdictions, specifically in cases where other utilities have adopted storage interconnection requirements intended to both ensure distribution reliability and minimize unnecessary interconnection and grid upgrade costs (i.e., smart interconnection requirements, discharge limiting schedules for energy storage interconnections, etc.). The EDCs shall then compare their proposal with the practices identified in other jurisdictions to determine whether the EDCs' proposal, including but not limited to the proposed (dis)charge limiting schedules, should be adjusted to more effectively enhance reliability and reduce storage interconnection timelines and costs. The EDCs shall also present their findings to the IX WG before filing them with the Authority. The EDCs shall state whether and why changes to their proposed (dis)charge limiting schedules are or are not warranted in their compliance, which shall include data-driven analysis for any conclusions reached. The EDCs shall file a summary of their findings with the Authority, incorporating all the above direction, by August 1 in the next annual review proceeding. In the interim, however, the EDCs' proposed (dis)charge limiting schedules are approved for immediate use for storage interconnections. Further, the Authority directs the EDCs, if they have not already done so, to add an option labeled as "TBD" or "Other" to the drop-down list for all energy storage manufacturer fields required by the PowerClerk interconnection application, to broaden the number of energy storage models that may apply for interconnection, thereby increasing Program participation.

Finally, so the Authority can monitor interconnection timelines and project attrition rates for ESS commercial projects, each EDC shall file as compliance by August 1 annually in that year's annual Program review docket (i.e., 2024 compliance shall be filed in Docket No. 24-08-05) an ESS Interconnection Report. The Report shall consist of a summary of the state of interconnection for all commercial ESS projects and shall include, at a minimum: (1) the interconnection status of each commercial ESS project; (2) the expected EDC interconnection approval due date for each commercial project per EDC interconnection guidelines, as applicable; (3) the date all required interconnection materials were submitted to the utility for each commercial ESS project; (4) the number of days from when all required interconnection materials were submitted to the utility for each commercial ESS project up to the completion of the interconnection process; (5) the attrition rate for all commercial ESS projects, based on the withdrawal of a project's interconnection application; (6) a list of the most common reasons for ESS interconnection delays; and (7) EDC-proposed solutions for each of the most common reasons delaying ESS interconnections.¹⁴ The Authority intends to review the information

¹⁴ If either EDC is unable to provide the information required for the ESS Interconnection Report for preexisting Program applications because such information was never collected or tracked, the EDC may state so in the Report in lieu of providing such information. <u>See</u> UI Exceptions, Nov. 15, 2023, p.

included in the ESS Interconnection Report on an annual basis to determine if changes are needed to the interconnection process for ESS projects, in support of the third Program Objective, the sustained and orderly development of the state's energy storage industry.

1. Interconnection Cost Socialization

Even with the changes approved in this Decision, interconnection costs may hinder the deployment of ESS projects, especially large commercial projects that may encounter high distribution system cost upgrades during the interconnection study and review process. Accordingly, the Authority directs ESS participants to Docket No. 22-06-29, PURA Investigation into Distributed Energy Resource Interconnection Cost Allocation, and Docket No. 22-06-29RE01, PURA Investigation Into Distributed Energy Resource Interconnection Cost Allocation — Non-residential Interconnection Upgrades, as a permanent solution for residential interconnection cost socialization is expected to be implemented in Docket No. 22-06-29 by the end of the year and discovery on a solution for commercial interconnection cost socialization is currently ongoing.

E. FRONT-OF-THE-METER (FTM) INCENTIVE AND TARIFF DESIGN

In Order No. 9 of the Year 2 Decision, the Authority directed the Program Administrators to "establish a working group with relevant stakeholders, in accordance with section IV.B.4., to provide a complete set of FTM tariff and incentive designs, including at least one wholesale distribution rate, in addition to specific estimates on FTM tariff costs and implementation timelines." Year 2 Decision, p. 39.

The Authority specified that the FTM tariff design must allow for "use case" or "revenue" stacking and directed the working group to use gap analysis to identify ways for FTM storage to optimize all opportunities, "including but not limited to, forward capacity markets, ancillary service markets, and peak shaving." Id. In addition, the Authority directed the EDCs to develop at least one Wholesale Distribution Charge (WDC) and present it for the working group's consideration. The Authority specified that such WDC "shall be similar to the FERC-approved ComEd tariff, which was used in the modeling completed by CGB's consultant Sustainable Energy Advantage LLC and filed as compliance on June 10, 2022, in Docket No. 21-08-05." Id. Further, the Authority directed the Program Administrators to file benefit-cost analysis of the combination of any WDC and incentive designs as part of the working group's final report. Id. Finally, the Authority noted that while the Working Group Report may recommend an updated version of the Option 5 incentive structure modeled by CGB and filed as Correspondence in Docket No. 22-08-05, "the Working Group Report must adjust the incentive level based on the proposed WDC and must show that Option 5 appropriately allows for the optimization of all FTM use case opportunities." Id.

^{5.} However, the EDCs shall be required to collect all information required for the Report for all new Program applications submitted on and after January 1, 2024.

The EDCs subsequently filed a Motion (Motion No. 8) for a two-month extension of time to file the Working Group Report. Motion No. 8, June 20, 2023, Docket No. 22-08-05. The Authority granted an extension of time until December 29, 2023, for filing the final Working Group Report, incentive designs, and gap analysis, but granted an extension to file the FTM tariff until September 12, 2023, to align with the annual docket review schedule. The Authority further noted that any tariff should be based on distribution system cost-causation; specifically, "[a]bsent system costs incurred due to interconnection (e.g., transformer, line, and substation upgrades), the Authority operates under the strong presumption that the incremental cost to serve FTM storage systems is minimal and, thus, the distribution costs applied through a wholesale distribution rate should be similar in magnitude." Motion No. 8 Ruling, June 27, 2023, Docket No. 22-08-05, p. 2.

On September 12, 2023, the EDCs jointly filed compliance with Order No. 9 and Motion No. 8 with information on the rate design for WDC that would be included in their FTM Wholesale Distribution Access Tariffs (WDATs) for the service of delivering power to energy storage systems to be later resold at wholesale. EDC Compliance, Docket No. 22-08-05, Sep. 12, 2023. In the compliance filing cover letter, the EDCs describe the filing with the Authority as solely informational because FERC "has exclusive jurisdiction over the rates, terms, and conditions of wholesale distribution service," and note that the EDCs intend to file the proposed WDAT with FERC for review and approval. Id.

The EDCs' proposed tariff includes a two-part rate with a monthly Customer Charge and time-differentiated Demand Charges, which are "based on a modified system" average cost rate methodology and reflects input from Working Group participants regarding ESS service configurations and charging operations." EDC Compliance, Docket No. 22-08-05, Sep. 12, 2023. The EDCs further note that the proposed Demand Charge consists of two time-of-use (TOU) periods, with the peak period designated as 3 p.m. to 8 p.m. on weekdays. Id. To develop the time-differentiated rates, the EDCs allocated costs to respective TOU periods "using the period's respective probability of peak applied to relevant distribution system assets." Id. Eversource's proposed off-peak and peak rates are \$2.01 and \$3.83 per kW-month, respectively, with a fixed monthly customer charge of \$30; Ul's respective off-peak and peak rates are \$1.79 and \$3.14 per kW-month, with a monthly customer charge of \$37.68. EDC Compliance, Sep. 12, 2023, Docket No. 22-08-05, Attachments 1A and 1B. Finally, the EDCs note that the proposed FTM tariff design evolved based on stakeholder input, including introducing a TOU approach, and state that the tariff design will continue to be developed further to incorporate additional stakeholder feedback, including expansion to a three-period TOU structure with a lower off-peak rate and adjustments to the Demand Charge design, tariff terms and conditions, and cost of service. EDC Compliance, Docket No. 22-08-05, Sep. 12, 2023; EDC Correspondence, Sep. 25, 2023, p. 10; Eversource Exceptions, Nov. 15, 2023, p. 8.

In response to the EDCs' proposed FTM tariff, Elevate Renewables F7, LLC (Elevate) submitted an alternative FTM tariff design as a minority report to the EDCs' proposed rate, stating that the EDCs' rate proposal "is not representative of the working group majority and does not have the full support of the FTM working group." Elevate Comments, Sep. 13, 2023, Attachment 2, p. 2. Specifically, Elevate argued that the EDCs' proposal is insufficient to incentivize the development of the FTM storage industry,

primarily because the proposal would apply relatively high demand charges in off-peak periods. <u>Id</u>. Accordingly, the Elevate rate design contains charges for demand during peak hours only. <u>Id</u>. Further, the alternative proposal converts a portion of the demand-based revenue requirement into volumetric charges to further reduce the demand charge barrier to ESS deployment. <u>Id</u>. Finally, Elevate's proposal would differentiate revenue requirements into high and low voltage categories so that "ESS only pay for the infrastructure located at voltages greater than or equal to their interconnection voltage." <u>Id</u>.

NECEC and Agilitas Energy, Inc. (Agilitas) also filed correspondence with the Authority arguing that the EDCs' proposed rate design does not comply with the Authority's directive in Motion No. 8 regarding cost-causation. NECEC stated that the EDCs' calculation of demand charges based on an "average" system cost approach results in ESS customers paying a portion of the existing system costs rather than the incremental cost of wholesale distribution service. NECEC Correspondence, Sep 19, 2023, Docket No. 22-08-05, p. 2. Similarly, Agilitas stated that the EDCs did not provide evidence that ESS projects result in net incremental costs to the distribution system and requested that PURA direct the EDCs to propose a rate based on evidence of costcausation. Agilitas Correspondence, Sep. 20, 2023, Docket No. 22-08-05, p. 2. More broadly, NECEC notes the working group did not reach consensus regarding whether average or marginal costs were appropriate to calculate costs and requested Authority guidance on the appropriate method to use. NECEC Correspondence, Sep 19, 2023, Docket No. 22-08-05, p. 2. In addition, NECEC appreciated the EDCs' incorporation of time-differentiation in response to stakeholder concerns, but believed that the probability of peak methodology used was flawed. Id. NECEC disputed that "off-peak peak" usage drives distribution investment costs and requested that PURA direct the EDCs to release their probability of peak analysis for Authority and Working Group review. NECEC recommended that the EDCs' average cost proposals be refined to utilize more granular time periods, including seasonal differentiation. Id.

In the Year 2 Decision, the Authority stated that "upon review of the Working Group" Report, the Authority may consider Ul's proposal to implement FTM storage in a docket separate from the ESS annual review proceeding, if it is deemed more appropriate to consider the BTM and FTM programmatic elements separately." Upon consideration of the relevant compliance filings in the current proceeding, the Authority determines that the schedule for submission of the necessary information does not allow time for Authority review before a decision is issued in the current Program Review proceeding. Accordingly, the Authority will consider the implementation of FTM incentives and tariff design in a separate decision in the current docket pending the submission of all relevant compliance filings. Specifically, the Authority notes that the final FTM Working Group Report, FTM tariff and incentive designs including updated cost of service and threeperiod TOU structure, and gap analysis to identify ways for FTM storage to optimize all opportunities, will be filed by December 29, 2023. Motion No. 8 Ruling, June 27, 2023, Docket No. 22-08-05, p. 2. In addition, the EDCs plan to further develop the actual rates using the most recent available data and may further review and adjust the peak period to reflect time of ESS operation and charging requirements before filing with FERC. EDC Compliance, Docket No. 22-08-05, Sep. 12, 2023, Cover Letter, pp. 1-2. Additionally, the Authority clarifies that, as discussed in the second Technical Meeting, the EDCs shall include in the final FTM tariff filing their probability of peak analysis used to develop the

rate design for Authority and Working Group review. Tech Mt'g Tr. Sep. 29, 2023, 34:9:15.

Finally, while the Authority declines to address the EDCs' legal arguments regarding FERC jurisdiction over the WDATs in this Decision, the Authority strongly opposes the EDCs' exclusive use of average costs in setting the WDAT rates. As such and as necessary, the Authority will contest the filing at FERC when the WDATs are filed to highlight that clear direction was provided to the EDCs regarding the allocation of *distribution* costs in the WDATs and that the EDCs intentionally took another approach. Regardless of the FERC process, it is unclear why the EDCs persist in disregarding the Authority's direction as the EDCs will be made whole under current interconnection practices, which requires the ESS developers to directly pay for any distribution system costs incurred by interconnecting their ESS. This policy is not currently under review in this context; even if the current policy for contributions in aid of construction to fully cover the required upgrade costs were removed, such costs would still be eligible for recovery through a rate case proceeding or another mechanism.¹⁵

Moreover, balancing marginal and average costs to both encourage the deployment of incremental load, which ESS represents, and to benefit existing ratepayers by spreading existing costs over more kWh, kW, and customers is not a novel concept. Indeed, Connecticut has already grappled with these concepts, including in its development and application of electric vehicle tariffs and programs. Procedural Order, Oct. 11, 2023, Docket No. 21-09-17, PURA Investigation into Medium and Heavy-Duty Electric Vehicle Charging. The Authority has also weighed these issues in the UI rate case in establishing an economic development tariff. See, Decision, Aug. 25, 2023, Docket No. 22-08-08, Application of The United Illuminating Company to Amend its Rate Schedule. The Authority concedes that a truly marginal cost approach would not benefit existing ratepayers if only distribution system costs and benefits were considered, but the benefits of ESS deployment enabled by such tariffs would. Nevertheless, an approach that charges ESS somewhere between marginal and average costs would be more than reasonable and justifiable as it would both benefit existing ratepayers (i.e., it would recover revenue above the marginal cost to serve the ESS, thus lowering customer rates through revenue decoupling) and encourage the deployment of energy storage in Connecticut in line with the policy objectives of PA 21-53.16 An approach that charges a marginal cost rate and slowly increases to average cost over the first five years of the tariff may also be a reasonable approach.¹⁷ Given the existence of reasonable alternatives to a strictly average cost-based approach, the alignment of such

¹⁵ The Authority is currently reviewing relevant policies in Docket No. 22-06-29RE01. Specifically, the Authority is investigating "interconnection upgrade cost sharing," which would, by its nature, include detailed plans for how developers and/or customers would pay for any upgrades required to connect distributed energy resources.

¹⁶ As further clarification, the Authority reiterates that marginal costs are likely *de minimis*, while average costs in this case refer to the average cost approach currently being refined by the EDCs based on stakeholder input, as described above. Thus, a charge between zero and the EDCs' proposal could be considered reasonable.

¹⁷ Regardless of the concerns raised by developers about a transition to an average cost approach over a defined period (see, e.g., Elevate Exceptions, Nov. 15, 2023, pp. 3-5), such an approach would lower the charges paid by ESSs under a WDAT compared with the modified average cost approach currently proposed by the EDCs.

approaches with the intended ratepayer and public policy outcomes, and the lack of financial impact to the EDCs of such approaches, the Authority strongly encourages the Companies to reconsider their current tariff design proposals before submitting them to FERC.

F. FINANCIAL BENEFIT SHARING IN MULTIFAMILY PROJECTS

The Authority previously clarified that the definition and eligibility criteria for multifamily affordable housing shall be the same across both the RRES and ESS Programs. Year 2 Decision, p. 34. The RRES Program, however, requires "at least 20% of the total financial benefit [of the RRES tariff] to be directed to tenants in multi-family affordable homes." Decision, Nov. 2, 2022, Docket No. 22-08-02, pp. 13-14 (RRES Year 2 Decision). Consequently, CGB filed a motion in Docket No. 22-08-05 requesting clarification as to whether, consistent with the RRES Program, 20% of the total ESS financial benefits were also required to be shared with tenants served by multifamily affordable housing projects. Motion No. 7, Docket No. 22-08-05, pp. 1-2. The Authority ultimately determined that 20% of the ESS financial benefits were not required to be shared with tenants. Motion No. 7 Ruling, Docket No. 22-08-05, pp. 1-2. Nevertheless, the Authority encouraged stakeholders to file comments in the present docket on the appropriateness of a requirement for financial benefit sharing in multifamily affordable housing in the ESS Program, including "a proposed percentage and the methodology for applying such percentage." Id.

CGB supports ESS benefit sharing at multifamily affordable housing sites. CGB Comments, July 20, 2023, p. 9. CGB proposed, however, that such benefit sharing be limited to only backup power, because "the financial benefits can vary per project." Id. Moreover, the EDCs argued that financial benefit sharing in the ESS Program "would be challenging because wiring configurations for multi-family dwellings vary from location to location." EDC Comments, July 20, 2023, p. 5. The EDCs also believe that financial benefit sharing could discourage ESS projects in multifamily affordable housing because lower revenue for project owners could "jeopardize project economics." Id. Last, OCC is concerned that a landlord would collect the underserved adders without sharing the benefits with tenants, "whose economic status or actual dwelling location form the basis for eligibility." OCC Comments, July 20, 2023, p. 5. OCC therefore would support any action that would ensure underserved adders are directed toward ESS Program participants. Id.

The Authority declines to approve financial benefit sharing for multifamily affordable housing sites in the ESS Program this year because the Authority does not have the requisite quantitative analysis to determine an appropriate value that would maintain a PCT value of one. The financial benefit sharing approved for the RRES Program was based on financial analysis for solar systems, which provide different benefits than energy storage projects, particularly regarding resilience and demand charge reduction. RRES Year 2 Decision, p. 13. As a result, 20% financial benefit sharing with tenants, as used in the RRES Program, may or may not be appropriate in the ESS Program.

Nevertheless, to ensure that tenants of multifamily affordable housing sites are benefiting from energy storage projects, in support of the Program Objectives, the Authority concludes that further investigation of financial benefit sharing in the ESS Program is warranted. Therefore, the Program Administrators shall file as compliance with the Authority by June 15, 2024, a recommendation for a percentage of ESS incentives or project net benefits 18 that shall be distributed equally amongst all tenants of a multifamily affordable housing site. The analysis shall focus solely on the performance incentive, since the upfront incentive is intended to reduce upfront energy storage costs, which are paid by the site owner or project developer. The Authority acknowledges, however, that multifamily affordable housing projects may have a significantly higher upfront incentive than normal commercial projects. 19 Further, the analysis shall include, at a minimum, quantitative financial analysis, estimated rates of return (factoring in both ESS incentives and additional incentives such as demand charge reduction and Federal tax credits), and PCT values. Additionally, the financial analysis and estimated rate of return shall exclude any monetary benefits provided through the RRES Program. The compliance shall also include recommendations for enforcement and incentive distribution to tenants, including discussion of options such as on-bill electric credits and direct payments. The Program Administrators shall also consult with relevant parties when writing the compliance, including the Connecticut Department of Housing (DOH), the Connecticut Finance Authority (CFA), the Department of Energy and Environmental Protection (DEEP), and storage developers. Finally, because the RRES Program already requires tenant benefit-sharing for all revenue associated with the RRES tariff, the Program Administrators may exclude ESS multifamily affordable housing projects dually enrolled in the RRES Program from the proposed tenant benefit-sharing requirement.

The Authority ultimately intends to review the Program Administrators' multifamily housing benefit sharing recommendation in the Year 4 review of the ESS Program in Docket No. 24-08-05 and will request stakeholder comments at such time, as appropriate. Finally, to further ensure that tenants in underserved communities are benefiting from storage projects at multifamily affordable housing sites during Year 3 of the ESS Program, the Administrators shall require that the battery's backup power be distributed amongst the host customer and tenants during a power outage. By December 20, 2023, the Program Administrators shall file as compliance with the Authority updated Program documents incorporating the above direction.

G. VENDOR FEE CAP

During the Year 2 review of the ESS Program, CGB stated that most vendors collect a percentage of the performance incentive for managing a customer's residential battery and, consequently, recommended that the Authority consider implementing a vendor fee cap. CGB Brief, Docket No. 22-08-05, p. 2. Additionally, CGB recommended that vendor fees be published on the Program website for greater transparency. <u>Id</u>. The

¹⁸ Net benefits refer to the expected rate of return an ESS project brings to the system owner, exclusive of any onsite solar revenue.

¹⁹ A large, grid edge commercial customer would be given an upfront incentive equal to \$125/kWh. However, if the same site was considered multifamily affordable housing, the upfront incentive would equal \$450/kWh, which is almost four times greater. <u>See</u> CGB Compliance, June 15, 2023, pp. 5, 41-42.

Authority accordingly requested written comments on CGB's proposal for a vendor fee cap and the inclusion of vendor fee information on the ESS Program website. Notice, June 23, 2023, p. 3.

In response, CGB clarified that, while some vendors charge fees for customer participation in ConnectedSolutions, "no vendors have instituted any direct fees for residential customers participating" in the ESS Program. CGB Comments, July 20, 2023, p. 8. Nevertheless, CGB recommended a vendor fee cap of "no greater than 20% of the total performance incentive payment, and support[ed] making any applicable fees publicly available on the Eligible Equipment list" published on the ESS website, in addition to collecting such information during the ESS application process. Id. Additionally, OCC supported a fee cap and the publishing of vendor fees on the Program website. OCC Comments, July 20, 2023, p. 4. OCC ultimately believes that "vendors should not be unduly profiting from ratepayer contributions intended to enhance the Program for participants." Id. Moreover, the EDCs supported the publication of vendor fees online in the eligible technology section of the Program website "to further improve program transparency to consumers." EDC Comments, July 20, 2023, p. 5. nevertheless concluded that further investigation would be needed to determine whether vendor fee publication would inhibit vendor participation in the Program. Id. Ultimately, however, the Program Administrators proposed a 20% cap on residential energy storage vendor fees, in addition to publishing residential vendor fee data on the ESS Program Program Administrator Compliance, Aug. 1, 2023, Proposed Program Modifications, p. 10. The Program Administrators did not propose publishing or capping commercial vendor fees, because of the "bespoke nature" and "complexity" of commercial projects. Id.

Further, while EnergyHub did not oppose the publication of vendor fees on the Program website, EnergyHub cautioned against vendor fee caps because vendor fee caps may negatively impact a vendor's ability to offer flexible payment offerings, including "payment plans to LMI customers." EnergyHub Comments, July 20, 2023, p. 2. EnergyHub also believes that vendors have "adhered to a strict policy of transparency with customers" when participating in the Program. Id. Additionally, while CPower took no position on the implementation of residential vendor fee cap, CPower opposed a vendor fee cap for nonresidential vendors. CPower Comments, July 20, 2023, p. 11. CPower argued against a nonresidential vendor fee cap because commercial storage projects were "considerably more complex" than residential projects, with financial arrangements varying greatly. Id., p. 12. CPower also asserted that business owners, unlike residential customers, did "not need to be protected from excessive vendor fees [because they] have the expertise and wherewithal to make [financial] decisions." Id. Last, CPower argued that competition should protect customers from vendors charging excessive storage fees. Id.

The Authority determines that the publication of vendor fees on the ESS Program website is not necessary at this time, in part because the ESS Program website currently contains average installed cost data on the website's data dashboard.²⁰ Notably, the Program's average installed cost data can be filtered by customer type (e.g., large

²⁰ The ESS data dashboard may be accessed here: <u>Energy Storage Solutions Performance Report – Energy Storage Solutions (energystoragect.com/ess-performance-report/)</u>.

commercial, 1-4 residential, etc.), project status, EDC, and contractor name. Nevertheless, average installed cost data only partly illustrates a host customer's financial benefit from an ESS project. Conversely, the disclosure of additional financial information (e.g., the percentage of the battery funded by the vendor, the percentage of Program incentives retained by the vendor and not passed on to the customer in some form, etc.) would paint a more complete picture as to whether the host customer appropriately benefits from an ESS project. Financial arrangements may also vary greatly between project applications, particularly for commercial projects negotiated on a per-project basis, making direct financial comparisons between vendors difficult. See CPower Exceptions, Nov. 15, 2023, pp. 4-5. However, the Program's PCT value includes quantitative analysis of multiple project benefits and costs, including net avoided outage benefits, participant bill savings, upfront and performance incentives, federal tax credits, storage system costs, and storage lease values, which are all used to come up with a value that indicates how greatly a project's benefits outweigh its costs. Storage Decision, p. 33. Consequently, the Program's PCT value provides a means to directly compare the financial benefits ESS projects provide to host customers between Program vendors.

Therefore, to protect consumers and businesses from excessive project fees or unfair financial agreements by increasing transparency and by encouraging vendor competition, and in support of the Program Objectives, the Authority directs the Program Administrators to take the following steps. First, to provide more actionable information to potential ESS Program participants, the Program Administrators shall update the Program data dashboard by January 1, 2024 to also include average installed cost data calculated as \$/kWh and \$/kW. The Program Administrators shall add these additional calculations to relevant tables included on the data dashboard that allow for such information to be viewed by customer type, project status, EDC, and contractor. Second, the Program Administrators shall continue collecting information on fees charged by vendors, including both contractors and original equipment manufacturers (OEMs), related to performance incentives for all projects (Performance Incentive Fees).21 Relatedly, the Program Administrators shall file as compliance by August 1, and annually thereafter, in that year's annual ESS Program review docket (e.g., the August 1, 2024 filing should be submitted in Docket No. 24-08-05) a summary of the Performance Incentive Fees for all residential projects deployed through the end of the previous month (e.g., through July 2024 for the August 1, 2024 filing) by developer. Last, CGB shall file as compliance by August 1, and annually thereafter, the average PCT broken out by customer type, project size category, and Program developer for both residential and commercial customer projects, utilizing all information available to CGB, including Performance Incentive Fee data, to ensure an accurate accounting of the PCT. The PCT shall also specifically be conducted from the perspective of the host customer; to the extent that this necessitates a change from the methodology that has historically been applied, CGB shall submit PCT values calculated using both the historical methodology and the customer-focused methodology.

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²¹ The Authority understands that the Program Administrators currently collect this information. To the extent that this understanding is incorrect or the Program Administrators do not collect vendor fees related to performance incentives for certain types of projects (e.g., not for commercial and industrial customers and projects), the Authority clarifies that the Program Administrators shall begin collecting vendor fee information related to performance incentives for all projects for which such information is not currently collected.

To the extent that CGB determines that the average PCT values by Program developer constitute trade secrets or information given in confidence and not required by statute, CGB may file the compliance confidentially with the Authority's Executive Secretary. See Notice of Proceeding, May 16, 2023, p. 2 (providing information on confidential filings). The Authority may direct the inclusion of residential Performance Incentive Fees and average PCT values on the Program website at a later date, if the Authority deems it prudent to do so, and after all stakeholders have had a chance to weigh in on the inclusion of such information on the Program website. While the Authority will not impose a Performance Incentive Fee cap at this time, the Authority may consider doing so in future Program years if the Performance Incentive Fee and PCT data suggests that consumers are being subjected to unfair financial agreements, to ensure that ratepayer funds are primarily benefiting host customers rather than storage developers and contractors.

H. PROJECT EXTENSIONS

The Authority previously approved a CGB proposal to cap reservation of funds extension requests at six months to ensure the sustained and orderly development of the state's energy storage industry, in accordance with the third Program Objective. Year 2 Decision, p. 22. Pursuant to the Year 2 Decision, ESS upfront incentive funds could be reserved for up to 24 months for any project application, including the six-month extension. CGB Compliance, June 15, 2023, p. 11.

Subsequent to the issuance of the Year 2 Decision, CPower filed a motion in April 2023 requesting an additional one-year extension for Tranche 1 projects that have completed a System Impact Study, so that funds may be reserved for up to 36 months. Motion No. 2, pp. 1-2. CPower argued that many Tranche 1 projects are not on track to reach commercial operation within two years, partly because of interconnection process delays. <u>Id.</u>, pp. 1-2, 6. CPower also argued that project financiers would require assurance of incentive eligibility before funding any required interconnection upgrades. <u>Id.</u>, p. 3. Consequently, without an additional reservation of funds extension, CPower claimed that projects would either stall or drop out of the interconnection queue. <u>Id.</u>, p. 5. The Authority approved CPower's motion and increased reservation of funds extension requests for all Tranche 1 projects to up to 36 months for projects that have completed a System Impact Study, to prevent ESS project attrition, in support of the Program Objectives. Motion No. 2 Ruling, June 13, 2023, p. 3.

Based on the new evidence provided by CPower, the Authority announced its intention to review the extension cap approved last year in the present docket and stated that additional extensions may be approved if supply chain challenges persisted in 2023. Year 2 Decision, p. 22. In response, CPower reiterated its view that the interconnection process has taken longer than expected. CPower Comments, July 20, 2023, p. 12. CPower also argued that a project would only be able to complete the interconnection process within two years if no issues occurred and if the project did not require any interconnection upgrades. Id., p. 15. Supply chain issues, CPower stated, also contributed to project uncertainty. Id. CPower ultimately believes that the "most important change that PURA could mandate to address interconnection delays and supply chain issues is to lengthen the amount of time allowed to bring a storage project to fruition." Id., p. 15.

p. 16. CPower recommended that the Authority give all Tranche 2 projects two years from when funds are reserved to complete project development, with the option of an additional one-year extension if the project's System Impact Study has been funded. Id. Last, CPower argued for the allowance of two one-year extensions for projects subject to group interconnection studies, provided the project has funded its share of the group study. Id.

Additionally, CGB argued that extensions requests were primarily caused by interconnection delays and supply chain issues. CGB Comments, July 20, 2023, p. 10. Interconnection approval, CGB noted, can take a year or more for some projects. Id. Finally, OCC supported changes to extensions "in order to ensure that qualifying projects are not needlessly delayed." OCC Comments, July 20, 2023, p. 6. Moreover, the Program Administrators proposed modifying the current ESS extension policy to give all commercial projects a full 24 months to reach project completion, with the option of an additional 12-month extension at the discretion of the Program Administrators. Program Administrator Compliance, Aug. 1, 2023, Proposed Program Modifications, p. 10. Residential projects, conversely, would be given 12 months to reach commercial operation under the Program Administrators' proposal, with the option of one 6-month extension. Id.

Given uncertain interconnection timelines and continued supply chain challenges, the Authority concludes that changes are warranted to extension requests in the ESS Program to ensure reservations of funds are not needlessly canceled and to support the orderly development of the state's energy storage industry. Therefore, the Authority extends the project completion deadline for all commercial Tranches to 24 months, with the option of an additional one-year extension if the project has funded a System Impact Study, as applicable. The Authority further recognizes that circumstances beyond the control of the applicant may exist that could prevent residential project completion within the 12 months allotted. Consequently, all residential projects shall have up to 24 months to reach commercial operation upon issuance of reservation of funds. Additionally, to prevent unnecessary project attrition, the Program Administrators may approve extension requests beyond 24 months (if no System Impact Study) or 36 months (if the first extension request was granted) for commercial projects and beyond 24 months for residential projects. More specifically, to maintain consistency between the State of Connecticut's clean energy programs,²² the Program Administrators may grant a second extension request if at least one of the following five criteria are met: (1) the generation facility or project is unique and more complex than ordinary customer-sided distributed generation installation projects, such as having additional technology-specific regulatory or local siting requirements: (2) the project developer has worked diligently and in good faith in developing the project since inception; (3) the project is near completion or likely to begin commercial operation within the requested extended deadline; (4) a significant portion of the total project investment has already been made and would potentially be stranded if the contract is terminated; and/or (5) the interconnection process extended beyond the utilities' initial estimates and/or significantly (e.g., one month) beyond the

²² The criteria for the second ESS extension request are identical to the extension criteria recently approved for the Non-Residential Renewable Energy Solutions (NRES) Program. <u>See</u> Decision, Nov. 8, 2023, Docket No. 23-08-03, <u>Annual Non-Residential Renewable Energy Solutions Program Review – Year 3</u>, p. 56.

average interconnection process timeline. If granted, the second extension shall prolong the project completion deadline proportional to the delay experienced and/or the amount of time demonstrated that is needed to complete the project. The Authority clarifies that all extension requests are subject to review by the Program Administrators and are not guaranteed, especially if the applicant cannot provide sufficient explanation as to the cause of the project's delay. Further, all such extension requests shall be handled by the Program Administrators, who have the exclusive right to grant or deny such requests.

The Program Administrators shall update the Program documents to be filed in compliance with this Decision incorporating the direction outlined above. Ultimately, the Authority concludes the changes outlined will further the success of the ESS Program by advancing the third and fifth Program Objectives, by fostering the sustained and orderly development of the state's energy storage industry and by lowering barriers to project deployment. Last, as this topic has now been adjudicated on several occasions, the Authority is not inclined to revisit this topic in future annual Program reviews unless a change is suggested based on clear quantitative and data-driven evidence and agreed upon by the Program Administrators.

I. EQUIPMENT ELIGIBILITY REQUIREMENTS

1. Integration and Application Process

A battery manufacturer receives final approval to participate in the ESS Program when a New Technology Application has been submitted and is approved by the Program Administrators and when the equipment is fully integrated with the respective DERMS provider (commercial or residential). CGB Compliance, June 15, 2023, Clean ESS Program Manual, pp. 62-68. In the first Notice of Request for Written Comments, the Authority requested stakeholder input on the availability of eligible equipment in the ESS Program and any equipment approval delays experienced thus far. Notice, June 23, 2023, p. 4. In response to the Notice, CGB stated that "the software integration process for the residential DERMS (EnergyHub) is more complex than comparable programs, including ConnectedSolutions, and requires significant resources to complete," in part because of the data requirements associated with DERMS integration. CGB Comments, July 20, 2023, p. 11. As a result, CGB recommended reducing integration data requirements and allowing a "more open market for DERMS providers." <u>Id</u>.

Consequently, in response to CGB's comments, the Authority requested feedback from all stakeholders on the current energy storage integration process for the ESS Program to see if changes were warranted, such as an expansion in the number of DERMS providers and/or a reduction in the Program's integration data requirements. Notice, Aug. 11, 2023, p. 5. When responding to the Notice, UI did not recommend that additional DERMS providers be introduced to the Program because UI believes that ESS DERMS integration issues are primarily caused by the Program's "stringent telemetry requirements and onerous enrollment process." UI Comments, Aug. 30, 2023, p. 4. UI cited the lack of integration issues in the ConnectedSolutions Program, which uses the same DERMS providers as ESS, to support its conclusion. Id. Further, UI believes that adding more DERMS providers to the Program would increase Program costs and create confusion amongst developers and vendors. Id., pp. 4-5. Ultimately, UI recommended that the Authority instead focus on the data and application requirements of the Program.

<u>Id.</u>, p. 5. Eversource agreed with UI's comments and believes that additional DERMS would create "dispatch complexity." Eversource Comments, Aug. 30, 2023, pp. 5-6. Further, Eversource argued that allowing additional DERMS providers would not "meaningfully increase Program enrollments" because the existing DERMS are "actively pursu[ing] additional integrations with additional smaller manufacturers on behalf of the EDCs to help expand Program eligibility." <u>Id.</u>, p. 6. Last, in 2024, the EDCs plan to conduct an open RFP for the Program's DERMS provider to support the Program upon the conclusion of the EDCs' existing DERMS contracts at the end of 2024. EDC Corresp., Sept. 25, 2023, p. 5.

Conversely, CGB reiterated its original comments and stated that additional DERMS providers would "allow more competition into the market, allowing for the most efficient, user-friendly, and practical DERMS provider(s) to succeed and propel the ESS Program forward." CGB Comments, Aug. 30, 2023, p. 11. Additional DERMS providers also allow for faster Program integrations, CGB opined. Id. CGB further stated that for an energy storage manufacturer to integrate with EnergyHub, the manufacturer must have "local storage of at least 2 weeks of telemetry data, cloud storage of telemetry data for 6 months, and the ability to send 15-minute interval data to EnergyHub with latency of no greater than 15-minutes." Id. Moreover, CPower supported allowing any qualified provider to act as a Program DERMS provider. Cpower Comments, Aug. 30, 2023, p. 17. Cpower noted that "the DERMS function can be performed by any entity with the technical capability to receive and transmit a signal." Id. Cpower also currently functions as a DERMS provider for its ISO-NE capacity market and ConnectedSolutions customers. ld., p. 18. Additionally, Cpower argued that having a single DERMS provider "adds an unnecessary and redundant link in the communication chain, creating more potential for communication failures and needlessly increasing the Program administration and battery integration cost." Id., p. 17. Like Cpower, Sunnova supported "a more open market for DERMS providers" and believes a more open DERMS market could reduce Program costs by removing administrative layers and by streamlining the integration process for Program participants. Sunnova Comments, Aug. 30, 2023, p. 7. Sunnova also believes that an open DERMS market would allow more companies to participate in the Program. ld.

Enel X (Enel) argued that the Program's requirement for near real-time data was not supported by most battery vendors. Enel Comments, Aug. 30, 2023, p. 1. Enel also argued that the Program's current data requirements were "onerous for the battery operator to communicate" and costly to set up. <u>Id</u>. Moreover, Enel stated that most storage systems are unable to locally store telemetry data for a minimum of two weeks, which is another Program integration requirement. <u>Id</u>., p. 2. Enel believed that cloud storage was the most effective way for a battery system to store data. <u>Id</u>. If the battery's connection with the cloud went down, Enel's systems "are capable of logging data and sending the system performance for the period the connection was offline." <u>Id</u>. Last, OCC supported a streamlined integration process for the ESS Program. OCC Comments, Aug. 30, 2023, p. 13.

Further, when submitting their annual recommendations for Program modifications, the Program Administrators recommended that the data latency exchange be extended from once every 15 minutes to at least hourly. Program Administrator Compliance, Aug. 1, 2023, Proposed Program Modifications, p. 8. Additionally, the

Program Administrators updated the New Technology Application: (1) to allow aggregators to apply to the Program; (2) to account for the various parties involved in Program integration; (3) to establish clearer integration expectations for applicants by requiring them to provide a "clear timeline and resource allocations for integration efforts;" and (4) to simplify DERMS telemetry requirements. <u>Id.</u>, pp. 8-9. Ultimately, the Program Administrators believed that the recommended changes to the New Technology application would increase Program participation. <u>Id.</u>, p. 7.

The Authority determines that changes are warranted to the ESS technology integration and application process to reduce barriers to battery manufacturer participation in the Program.²³ First, the Authority concludes that allowing a more open DERMS market may advance the third Program Objective by providing additional optionality for Program participants, potentially increasing manufacturer participation in the ESS Program and overall Program enrollment. Second, allowing a more open DERMS market may lead to a reduction in battery integration costs, as Program participants choose a DERMS provider that would provide the lowest integration cost for their chosen battery manufacturer. Third, OEMs may be less likely to integrate to a competitor's DERMS platform; notably, the Program's commercial DERMS platform, Concerto, is administered by Generac, a competitor to other national battery companies. Nevertheless, the Authority concludes that further investigation is warranted before a more open DERMS market is approved for the ESS Program, to fully evaluate the proposal's costs and benefits.

Therefore, the Authority directs the EDCs to submit for review and approval by March 15 a plan to allow multiple DERMS to participate in the ESS Program. The plan shall propose a method to allow new DERMS providers to join the ESS Program if the following conditions are met: (1) the DERMS can fulfill all existing ESS data collection and dispatch requirements; (2) the functionality required of a DERMS can be achieved (e.g., sending control, dispatch, and override signals at the appropriate time); (3) the DERMS' data matches a preset format (e.g., the data format of the existing DERMS providers); and (4) the cost incurred by ratepayers associated with the new DERMS is likely to be less than the cost of the existing ESS DERMS provider(s) on a per-project DERMS basis (i.e., the administrative, fixed, and per-project operations and/or performance costs associated with the new DERMS divided by the likely number of projects that will participate using such DERMS is lower than the same calculation for the existing ESS DERMS provider[s]). Additionally, the plan shall outline a way to verify that all data and cost requirements are met when determining whether to allow new DERMS providers into the Program. The plan shall also outline a way for the EDCs to contract with new DERMS providers, if and when necessary, if it is prudent, reasonable, and aligned with the above direction and Program Objectives. Further, the plan shall outline all EDC-concerns associated with allowing multiple DERMS in the Program, along with solutions for each concern, and estimated costs and timelines for implementing each solution. Last, upon the submission of the EDCs' plan to allow multiple DERMS to participate in the ESS Program, the Authority intends to hold a Technical Meeting to discuss the plan with all stakeholders, to fully evaluate the plan's costs and benefits before issuing a ruling.

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As of October 18, 2023, only ten residential battery manufacturers were approved to participate in the ESS Program. See https://energystoragect.com/submitted_ess_system_status_list/.

The Authority also intends to scrutinize the need for all Program DERMS providers in future ESS Program annual review proceedings to determine whether changes are warranted. Accordingly, by December 20, 2023, and annually by August 1 thereafter, the EDCs shall file as compliance all existing DERMS fees by each DERMS provider that are paid to support the ESS Program. Notably, the Freedom of Information Act (FOIA) exempts certain records from public disclosure. See Conn. Gen. Stat. § 1-210(b). In particular, FOIA exempts "trade secrets," which are defined as "information, including formulas, patterns, compilations, programs, devices, methods, techniques, processes, drawings, cost data, customer lists, film or television scripts or detailed production budgets that (i) derive independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from their disclosure or use, and (ii) are the subject of efforts that are reasonable under the circumstances to maintain secrecy." Conn. Gen. Stat. § 1-210(b)(5)(A). Additionally, FOIA exempts "commercial or financial information given in confidence, not required by statute." Conn. Gen. Stat. § 1-210(b)(5)(B). The Authority determines that the EDCs' existing DERMS fees contain information that constitutes trade secrets and commercial or financial information given in confidence and not required by statute. Therefore, the Authority concludes that the EDCs' DERMS fees are exempt from public disclosure under Conn. Gen. Stat. § 1-210(b)(5)(A) and (B).

Further, the public disclosure of EDC DERMS fees could impact the fees submitted by other DERMS providers wishing to enroll in the Program, if the Authority were to allow this in the future, because alternative DERMS providers could submit the maximum fee allowable to join the Program. Accordingly, the EDCs shall file all existing DERMS fees under seal with the Authority. Additionally, to support public transparency of all Program costs to the fullest extent possible, the Program Administrators shall include all DERMS fees paid to support the Program in an aggregate (i.e., total) amount in the annual evaluation report filed pursuant to Order No. 3. Last, the Authority directs the EDCs to file as compliance with the Authority its open RFP for new ESS DERMS provider(s) no later than 15 days from when such RFP is first publicly issued, so that the Authority can monitor the EDCs' DERMS solicitation process.

Second, the Authority approves with modification the Program Administrators' proposed revisions to the New Technology Application subject to the changes outlined below. First, the Authority directs the Program Administrators to remove the question pertaining to the California Energy Commission list, as this is no longer relevant due to the interconnection changes discussed in Section IV.D. See Program Administrator Compliance, Aug. 1, 2023, Clean Program Manual, p. 62. Further, the Authority accepts the Program Administrators removal of the requirement that manufacturers locally store battery data. Id., p. 66. The Authority concludes that cloud data communication is an acceptable and proven alternative to local data storage, and the existing local data storage requirement may be difficult for some battery manufacturers to meet. Nevertheless, the Authority will require the Program Administrators to include a warning in the ESS Terms and Conditions, a manufacturer-specific document signed by the customer, for any manufacturers of systems incapable of storing two weeks of data locally. See Program Administrator Compliance, Aug. 1, 2023, Clean Program Manual, p. 58. The warning shall state that if system data cannot be retrieved in the event of a

system outage for manufacturers relying on cloud data storage, the battery's performance in any dispatch events for which data cannot be retrieved will be recorded as zero. The Authority determines that this additional disclosure will ensure customers are informed of any potential risks associated with cloud battery data storage.

Last, the Authority approves with modification the Program Administrators' Program Administrator recommendation to require greater latency of battery data. Compliance, Aug. 1, 2023, Clean Program Manual, p. 66. While no stakeholder provided evidence to demonstrate that the Program's latency requirements prohibited manufacturers from participating in the Program or analysis quantifying the time and monetary impact of any barriers identified (e.g., the time and expense to set up automated reporting), given the multiple stakeholder comments in opposition to the requirements and the small number of equipment manufacturers currently eligible for the Program, the Authority is sufficiently convinced that the Program's data latency requirements are a barrier to manufacturer participation. Notably, the EDCs, who have no financial incentive to make such assertion, were among the stakeholders who asserted that the Program's data latency requirement is burdensome. See Eversource Exceptions, Nov. 15, 2023, p. 5; UI Exceptions, Nov. 15, 2023, p. 13; CGB Exceptions, Nov. 15, 2023, p. 5; Sunrun Exceptions, Nov. 15, 2023; Enel Comments, Aug. 30, 2023, p. 1. Consequently, the Program Administrators shall require a one-month latency of battery system performance data (i.e., battery data shall be provided at least once a month to the Program's DERMS provider and/or the Program Administrators). Importantly, the granularity of the battery data to be provided monthly shall remain at 15-minute interval lengths, so the Authority may evaluate peak load reduction at the most granular level possible.

Ultimately, the Authority concludes that the integration and technology application changes discussed in this section will advance the third Program Objective, the sustained and orderly development of the state's energy storage industry, and the fifth Program Objective, lowering barriers to entry, by creating a plan for allowing additional DERMS, by clarifying the Program's integration process, and by reducing manufacturer data requirements. The Authority may adjust the Program's integration requirements in the future, including telemetry or data interval requirements, if the changes outlined in this section are insufficient to increase manufacturer participation in the Program, or if stakeholders provide clear and quantitative analysis demonstrating that a specific requirement is prohibiting manufacturer participation in the Program and/or evidence that the volume of requirements are still presenting barriers. Any such data should also be accompanied by a recommended solution that achieves the Program Objectives.

2. Additional Eligible Battery Types

Currently, only electro-chemical energy storage systems are eligible for the ESS Program. CGB Compliance, June 15, 2023, p. 21. Accordingly, in a June 23, 2023 Notice of Request for Written Comments, the Authority requested stakeholder feedback on the energy storage types eligible for the ESS Program, including whether additional types should be eligible for the ESS Program. Notice, June 23, 2023, p. 5.

In response, CGB supported the inclusion of alternative energy storage technologies in the ESS Program provided the technologies meet the necessary Program safety and technical requirements, including UL-9540 and "the ability to discharge 80% of capacity within a 5-hour passive dispatch window, or up to 100% of capacity within a 3-hour active dispatch window." CGB Comments, July 20, 2023, pp. 11-12. Additionally, OCC "strongly support[ed] expanding Program eligibility to all storage technologies that can provide safe and reliable storage benefits for Program participants." OCC Comments, July 20, 2023, p. 6.

The Authority concludes that an expansion of energy storage types eligible for the ESS Program would further the third, sixth, and seventh Program Objectives by increasing opportunities for Program eligibility more broadly, thereby increasing Program participation. Consequently, the Authority determines that alternative energy storage technologies shall be eligible for the ESS Program, including but not limited to: hydrogen storage; mechanical storage; thermal storage; and pumped hydropower. The Authority clarifies that electric vehicles, however, shall not be allowed in the ESS Program at this time, as important barriers discussed in the Year 2 proceeding have not been resolved to warrant their inclusion in the Program, including, as first suggested by OCC: "the dependability of timed dispatch, IT investments, and the degradation of EV batteries." Year 2 Decision, pp. 28-29.24 Accordingly, the Program Administrators shall update the Program Manual to state that all energy storage technologies other than EVs shall be eligible for the ESS Program, provided the technologies meet the safety and technical requirements, and all other requirements of the Program. Finally, the Authority clarifies that all energy storage technologies shall use the same incentive calculation methodology.

J. SITING AND SAFETY

The Authority requested written comments on any existing flood proofing, safety, or siting guidelines and/or requirements developers follow when installing batteries to determine whether changes to the Program Manual are warranted to ensure appropriate battery siting. Notice, Aug. 11, 2023, pp. 7-8. Further, the Authority requested comments on whether additional resources are needed to assist developers in understanding and following local building, safety, and siting codes. <u>Id</u>.

CGB stated that it was not enforcing flood proofing requirements. CGB Comments, Aug. 30, 2023, p. 16. Additionally, CGB believed that local authorities "should be knowledgeable of current code requirements of systems that are located in a flood zone." Id. CGB stated that it "will continue to work with industry professionals... to determine if any future action is necessary" for projects sited in a flood plain. Id. CGB also noted that building code requirements "can be confusing for all parties involved." Id. Consequently, CGB recommended increasing stakeholder education through seminars with municipal inspectors and other industry professionals. Id., p. 17. Moreover, OCC expressed interest in reviewing stakeholder input on how flooding and fire risks could be mitigated for battery storage projects through proper siting and installation guidance. OCC Comments, Aug. 30, 2023, p. 19.

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²⁴ Electric vehicle inclusion in the Program may be reconsidered in the future if the barriers identified in the Year 2 Decision are resolved.

Further, CPower stated that batteries would be unlikely to be sited in a flood plain. because the cost to insure such a project would be prohibitive. CPower Comments, Aug. 30, 2023, p. 20. Consequently, CPower believes that it is unnecessary to add flood proofing requirements for projects located in flood plains. Id. CPower argued that the costs of flood proofing requirements for projects located outside of flood plains would be substantial, thereby adversely affecting project economics. Id., p. 21. Changes to Program requirements that would impact the financial viability of projects under development would "send a chilling message to potential storage developers about the stability of the program rules," CPower argued. Id. CPower also believes that any additional siting or safety requirements instituted by the Authority would be redundant and would offer little value to projects or ratepayers, because "[n]ational labs, EDCs, municipalities, and state departments already have their own time-tested, expertdeveloped safety and compliance requirements." Id. Nevertheless, CPower argued that it would be beneficial for the Authority to "establish a state-wide, universal e-Permitting" system for use by all municipal jurisdictions," because e-permits would streamline and standardize project permitting forms statewide. Id.

The Authority concludes that safety and siting educational resources for energy storage developers would advance the third Program Objective, the sustained and orderly development of the state's energy storage industry, and the fifth Program Objective, lowering barriers to energy storage deployment, by providing clarity to Program participants on existing safety and siting requirements for energy storage projects. Consequently, the Authority directs the Program Administrators to create an educational resource (Energy Storage Siting Resource) for Program participants compiling existing, publicly available resources regarding any applicable flood proofing, building code, safety, and siting requirements affecting residential and commercial ESS projects, and providing relevant state and municipal contact information, which need not be exhaustive (e.g., "the relevant department in most municipalities are X, Y, Z"). For clarity, such resource shall simply aggregate publicly available resources into one place for developer ease of access.

The Program Administrators shall file the Energy Storage Siting Resource by April 1, 2024, in the present docket, after which the resource shall be published on the ESS website. Further, the Energy Storage Siting Resource shall be updated when Order 16 of the Year 2 Decision is fulfilled, after a new building code for energy storage projects is adopted statewide, and annually thereafter, to ensure the Resource remains up to date and relevant for Program participants. Further, after the Energy Storage Siting Resource is completed, CGB shall hold at least one seminar with Program stakeholders reviewing the siting and safety requirements for energy storage projects. The seminar shall be held no less than once annually, to ensure that Program participants are informed of any potential code or safety changes. As compliance, CGB shall file the date of such seminar annually with the Authority no less than 10 days after such seminar is held. Last, while the Authority would support the creation of a statewide e-permitting system for battery storage projects, as suggested by CPower, the development of such a tool requires coordination with and involvement of other state agencies and/or may be better suited for legislative action.

K. GRID EDGE GRACE PERIOD ALLOWANCE

In the Year 2 Decision, the Authority approved a 50% upfront incentive adder for residential grid edge customers, and a 25% upfront incentive adder for commercial grid edge customers. Year 2 Decision, p. 18. Further, pursuant to Order No. 1, by August 1 annually, the EDCs are required to submit for the Authority's review and approval an updated map of circuits qualifying as grid edge. <u>Id.</u>, pp. 37-38. Notably, circuits can be removed as grid edge during the annual map updates, thereby affecting project eligibility for the grid edge upfront incentive adder. <u>See</u> Motion No. 10, p. 1.

Accordingly, the financial viability of storage projects under development that do not have reservation of funds may be adversely impacted if the project suddenly becomes ineligible for the grid edge upfront incentive adder after the maps are updated. The Authority therefore requested comments on whether a grace period should be implemented for the grid edge map adder, where the maps submitted under Order No. 1 would take effect January 1 of the following year. Notice, Aug. 11, 2023, p. 7. The Authority further requested additional solutions or comments to resolve the potential problem described. <u>Id</u>.

In response, UI proposed that projects which are eligible for the grid edge upfront incentive adder at the time of reservation of funds be allowed to receive the adder "even if the system is no longer on the grid edge map following an annual update." UI Comments, Aug. 30, 2023, p. 7. Additionally, if a project is not eligible for the grid edge upfront incentive adder at the time of reservation of funds but becomes eligible after the maps are updated, UI proposed that the contractor or customer contact CGB to request an updated reservation of funds letter inclusive of the grid edge adder. Id. UI believes that its proposed methodology would provide "predictability for the developer and ease the administrative burden for the Program Administrators." Id. Further, CGB clarified that the grid edge adder was currently assigned at the reservation of funds stage and "would not be removed if, at a later stage in the project lifecycle, the project no longer qualifies as grid edge." CGB Comments, Aug. 30, 2023, p. 17. CGB believes that this policy provides greater certainty for project developers and customers. Id. Moreover, CPower argued that the Authority should "[I]ock in the adder that a customer qualifies for at the time it receives [reservation of funds] for the entire 10-year term of the Program," to prevent projects from being subjected to undue risk. CPower Comments, Aug. 30, 2023. p. 22. Last, OCC recommended that the Authority establish a grace period for the grid edge adder that is similar to the grace period for the Distressed Municipality adder. OCC Comments, Aug. 30, 2023, pp. 20-21.

The Authority concludes that a grace period is needed for the grid edge upfront incentive adder to ensure that storage projects currently in the planning stages that are expecting a grid edge adder, and that do not yet have reservation of funds, do not suddenly become ineligible for the grid edge adder. Consequently, when the new grid edge maps are approved by the Authority in August, the EDCs shall not update the grid edge maps until January 1 of the following year. The Authority determines that this grace period will provide developers with adequate notice to anticipate the financial impacts to any projects under development that will become ineligible for the grid edge adder. Further, the Authority is aware that CGB conducts monthly training with ESS contractors. Hr'g Tr., Aug. 3, 2023, 42:18-19. Upon Authority approval of the new grid edge maps,

CGB shall inform developers of any expected changes to the grid edge maps during its monthly contractor trainings, so that developers are not surprised when the maps change in January. The Authority also clarifies that projects that receive an upfront incentive adder, including a grid edge adder, in a reservation of funds letter shall remain eligible for such adder for the project's entire duration in the Program.²⁵ The Authority determines that these changes will provide greater certainty to Program participants, thereby advancing the third Program Objective, the sustained and orderly development of the state's electric storage industry.

L. ESS PROGRAM DATA DASHBOARD

Order No. 24 of the Storage Decision directed the Program Administrators to "publish a website containing all relevant Program data, incorporating all direction provided in Section V.D." no later than January 1, 2023. Storage Decision, p. 53. Further, Section V.D lists all data requirements that must be present on the Program website developed by the Program Administrators.²⁶ The Program Administrators subsequently filed compliance with Order No. 24 stating that a dashboard containing all required data was developed pursuant to the original order.²⁷ Program Administrator Compliance, Dec. 30, 2022, Docket No. 17-12-03RE03, p. 1.

While the Program Administrators' ESS website contains most of the data required by Order No. 24, the Authority concludes that the webpage does not meet all the requirements outlined in Section V.D. of the Storage Decision. See Storage Decision, pp. 42-43. Specifically, the website lacks the following data requirements: (1) aggregate storage dispatch, at the most granular level possible; (2) historical aggregate hourly dispatch; (3) program administrative costs; and (4) aggregate avoided emissions (CO₂, NO_x, SO_x). The Authority further concludes that while aggregate storage dispatch data and aggregate avoided emissions may not have been readily available January 1, 2023, with the conclusion of the Year 2 summer dispatch season and the participation of multiple batteries in the ESS Program, such information should be available now. Consequently, the Authority directs the Program Administrators to refile compliance with Order No. 24 once all data requirements have been met and are publicly accessible on the ESS Program website, no later than January 1, 2024.

²⁵ In other words, an application with an existing reservation of funds letter containing a grid edge adder shall remain eligible for the adder even if the project site is no longer considered grid edge after the map is updated.

Pursuant to Section V.D. of the Storage Decision, the Program Administrators must include all the following on the ESS Program website: (1) aggregate storage dispatch, at the most granular level possible; (2) historical aggregate hourly dispatch; (3) six-month rolling average installed cost data; (4) historical installed cost and TPO customer agreement data, by contractor, system locations, and application date; (5) Program incentive funds disbursed; (6) Program administrative costs; (7) installed capacity (number of units, kW, and kWh), in aggregate and by town; (8) installed capacity (number of units, kW, and kWh) in low-income households and underserved communities; (9) aggregate avoided emissions (CO₂, NO_x, SO_x); and (10) average project metrics, such as incentive per unit, electric storage system size (kWh), and electric storage system size (kWh). Storage Decision, p. 42.

The Program Administrator's ESS performance data dashboard may be accessed here: https://energystoragect.com/ess-performance-report/.

M. EMISSIONS REDUCTION

1. Marketing Plan Targeting High Differential Emission Areas

Energy storage can increase emissions if not deployed strategically. As a result, to ensure that the ESS Program was not increasing emissions to the detriment of state emissions goals, CGB submitted several recommendations last year in the Year 1 annual review docket, Docket No. 21-08-05, including a proposal to market energy storage in areas with high emissions using locational data. CGB Compliance, Aug. 23, 2022, Docket No. 21-08-05, pp. 28-33. Upon reviewing CGB's proposal, the Authority directed CGB to submit:

a marketing plan scoped to target areas with the highest differential between peak and trough emissions on a temporal scale over which a battery will charge and discharge [including] information on potential marketing activities, customer demographics of those who have installed or applied for battery storage to date and potential customers in the target locations, benefit-cost analysis, expected outcomes from such a marketing plan, and scope objectives. Further, the marketing plan scope must also contain data collection and evaluation requirements, in addition to an estimated budget, and a timeline for implementation.

Year 2 Decision, p. 40.

On August 1, CGB filed a draft marketing plan for use in fiscal year 2024 targeting areas with the highest emissions differential. CGB stated that its emissions analysis discovered that residential energy storage systems have a positive impact on emissions reductions, "due to the prevailing trend of residential storage being co-located with solar." Motion No. 7, pp. 1-2. As a result, CGB proposed updating its existing ESS marketing plan to focus on areas where solar plus storage deployment would have the greatest emission benefits, specifically areas with the highest differential in monthly average emissions, as determined by CGB's consultant, Kevala. Id. The marketing plan's goal would be to continue to increase awareness of battery storage and the ESS Program. Id. Further, CBG's marketing campaign would also target Distressed Municipalities. Additionally, the marketing campaign would include several different tactics, including podcasts, online ads, and streaming television ads. Id., p. 3. The success of the marketing plan would be evaluated by: (1) landing page form submissions on the ESS Program website; (2) performance against industry advertising benchmarks; (3) web traffic and engagement; and (4) an awareness study conducted by Great Blue Research to gauge knowledge of battery storage and the ESS Program. Id., pp. 3-4. The total cost of the media campaign would be \$100,000, of which half (\$50,000) would be used to "target high priority areas [and] grid edge circuits." <u>Id.</u>, p. 4.

Last year, the Authority was concerned about the benefit cost analysis of the marketing plan, since targeting areas with high differentials between peak and trough emissions may not increase Program enrollment. Year 2 Decision, p. 24. Accordingly, the Authority requested written comments on CGB's marketing plan scoped to target areas with high emissions differentials, including on whether the proposal's cost

outweighs potential benefits, in addition to any other suggested modifications to the proposed plan. Notice, Aug. 11, 2023, p. 2.

UI was generally supportive of CGB's marketing plan targeting high emissions differential areas. UI Comments, Aug. 30, 2023, p. 1. UI was, however, concerned about the benefit cost analysis of a marketing plan targeting high emissions differential areas. Id., p. 2. Nevertheless, UI indicated that CGB's plan to limit emissions-related marketing activities to 50% of the marketing campaign's budget limited ratepayer risk while providing an opportunity for stakeholders to evaluate the effectiveness of an emissions-related marketing campaign in the future. Id. Conversely, Eversource stated that emissions reduction was not a main motivator for batteries. Eversource Comments, Aug. 30, 2023, p. 3. Consequently, Eversource argued that ESS marketing in high emissions differential areas would not lead to increased Program enrollment. Id. Last, OCC looked forward to reviewing the data generated by the marketing plan to determine if "increased storage capacity will help to reduce the emissions in certain areas, in order to gauge whether the projected marketing plan costs will be offset by emission reduction benefits." OCC Comments, Aug. 30, 2023, p. 7.

The Authority approves with modification CGB's marketing plan targeting high emissions differential areas, thereby granting with modification Motion No. 7. The Authority concludes that a marketing plan targeting high emissions differential areas will help ensure that the ESS Program aligns with the state's climate goals, thereby supporting the sixth Program Objective by maximizing the long-term environmental benefits of electric storage. Notably, the estimated cost of CGB's marketing plan for fiscal year 2024 (\$100,000) is below CGB's marketing campaign costs for the prior year (\$187,087), thereby supporting the first Program Objective, providing positive net value to all ratepayers, by decreasing programmatic costs. See CGB Interrog. Resp. CAE-3. The Authority, however, clarifies that no greater than 50% of the marketing campaign's costs shall be spent on high emissions differential areas, which may be inclusive of other priority areas including Distressed Municipalities or grid edge circuits.²⁸ As noted by UI, using approximately 50% of the marketing plan's budget on high emissions differential areas will allow the Authority to evaluate the success of ESS marketing in such areas to see if the marketing plan's continuation is warranted in the future, while limiting ratepayer risk if such marketing proves unsuccessful. Further, the focus of the remaining funds for the marketing campaign (i.e., \$50,000) shall be left up to the discretion of CGB.

Last, so that the Authority can evaluate the success of ESS marketing in high emissions differential areas, CGB shall file as compliance by August 1, 2024, an evaluation of the success metrics highlighted in their marketing proposal, including: (1) landing page form submissions on the ESS Program website; (2) performance against industry advertising benchmarks; (3) web traffic and engagement; and (4) an awareness study conducted by Great Blue Research to gauge knowledge of battery storage and the ESS Program. If the proposed marketing plan proves successful in supporting the Program Objectives and increasing ESS awareness and adoption in high emissions

²⁸ The Authority clarifies that CGB may target specific zip codes with the highest emissions differential to further refine its marketing plan. <u>See</u> CGB Exceptions, Nov. 15, 2023, pp. 5-6. The Authority also clarifies that CGB may make adjustments to the marketing plan so long as such adjustments do not contradict the direction contained in this Decision.

differential areas, the Authority may direct CGB to continue prioritizing ESS marketing in high emissions differential areas in future Program years.

2. Actively Managed Charging

The Authority previously stated that it anticipated reviewing and potentially approving a voluntary managed charging program to maximize the emissions reductions of the ESS Program through the Year 3 Annual Review proceeding. Year 2 Decision, p. 25. Accordingly, in Order No. 14, the Authority directed CGB to submit for Authority review and approval:

a plan to implement actively managed charging as a part of the ESS Program, so that emissions are most effectively reduced by the Program. The actively managed charging plan must include any necessary penalties and/or incentives required to ensure the success of the proposal, in addition to clear justification for said penalties and/or incentives. The actively managed charging plan must also discuss the proposal's feasibility and locational impacts and include a cost estimate and timeline for successful implementation. Moreover, the plan must reference which vendor will be used to gather the data necessary to implement the plan, in addition to specifying any emissions impact analysis which would need to be completed before the plan's implementation.

Year 2 Decision, p. 41.

On August 1, 2023, CGB submitted a Motion (Motion No. 8) in compliance with Order No. 14, which included analysis of the emissions impacts of ESS and a proposal prepared by Kevala to implement a Managed Charging Adder (MCA). Motion No. 8, Aug. 1, 2023. Kevala modeled the emissions impact of ESS and developed the MCA proposal based on a Total Carbon Accounting analysis of regional average emissions and locational marginal emissions using one year of publicly available data on hourly generation emissions, network and grid infrastructure, hourly load, and DER attributes. ld. Kevala's results indicated key differences between customer classes. Residential systems are currently co-deployed with solar, so business-as-usual operations of the systems are expected to reduce emissions without additional incentives. Id. As additional managed charging would likely only reduce emissions by 0.2%, Kevala did not believe that "the complexity and expenditure to achieve this reduction is worthwhile." Conversely, commercial systems are larger and are incentivized to minimize demand charges, likely charging during overnight hours where carbon intensity is highest; thus, Kevala stated that "managing the charging of C&I BESS is attractive from an emissions reduction standpoint." Id. Accordingly, Kevala proposed a statewide managed charging period between 6 a.m. and 3 p.m. for June through September, and an adder of \$40/kW for years 1-5 and \$25/kW for years 6-10 for commercial ESS customers to allow the charging behavior to be scheduled within the optimal time period. Motion No. 8, Attachment 2, p. 5. Kevala estimated that appropriate management of C&I charging could reduce average CO₂ emissions by 36.3%. <u>Id</u>. Kevala further noted that grid carbon conditions are expected to change over the next ten years and recommended that CGB evaluate and recalibrate the charging period every 2-3 years. <u>Id</u>.

CGB did not recommend approving the MCA in the current Annual Review proceeding. Motion No. 8, pp. 2-5. Specifically, CGB stated that the emissions analysis indicated that the ESS Program currently has minimal impact on overall emissions, as 100% of residential projects to date have storage co-located with solar, and further efforts to manage charging would have minimal additional impact. Id. CGB also did not recommend implementing managed charging to optimize emissions benefits for C&I customers because the optimal charging window of 6 a.m. to 3 p.m. coincides with the on-peak window for commercial customers; therefore, charging during this window could result in higher demand charges and disincentivize commercial customers from participating in managed charging. Id. Further, CBG stated that the ESS Program's current design already incentivizes ESS customers to discharge batteries during periods of high grid stress and "[i]ntroducing an additional incentive for managed charging could be perceived as double incentivizing systems to behave in a way they are already behaving." Id. Finally, CGB was concerned that the MCA would add cost and complexity to the program without clear benefits for the RIM. Id. Accordingly, CGB recommended that the topic be revisited during the next three-year review period in 2027, when more data will be available regarding the deployment of solar and co-located storage; actual emissions impacts of the ESS Program; and shifting emissions impacts due to the evolving generation mix, end-use electrification, and DER deployment. Id.

The Authority subsequently sought stakeholder comment on Motion No. 8, including comments on the costs and benefits, impacts of charging restrictions on the Program Objectives and participation, and suggested modifications to the proposal. Notice, Aug. 11, 2023, pp. 2-3. Both EDCs, as well as OCC, supported CGB's recommendation that actively managed charging not be pursued at this time, and should be revisited in the next program cycle. UI Comments, Aug. 30, 2023, p. 3; Eversource Comments, Aug. 30, 2023, p. 2; OCC Comments, Aug. 30, 2023, p. 9. CPower similarly did not support implementing actively managed charging for the reasons CGB identified; further, CPower was concerned that adding the new cost of the MCA to the program would adversely impact the RIM, necessitating cost reductions in other aspects of the Program that would negatively affect participation. CPower Comments, Aug. 30, pp. 13-14.

Conversely, WattTime supported further consideration of actively managed charging, noting that there is a substantial risk that the energy storage receiving ESS incentives could increase emissions without managed charging. WattTime Comments, Aug. 30, 2023, p. 1. However, WattTime argued that the use of marginal emissions data is more appropriate to measure the change in emissions caused by the charging and discharging of storage systems than Kevala's approach of Total Carbon Accounting. Id. WattTime acknowledged that actively managed charging could increase Program complexity and cost, and recommended that, should the Authority decide the cost and complexity of managed charging outweigh emissions savings, the Authority conduct an emissions assessment using marginal emissions data in each program review to determine whether the Program is significantly exceeding its emissions-reduction obligations and inform whether managed charging should be revisited. Id.

Upon weighing the actively managed charging proposal and stakeholder comments, the Authority will not implement actively managed charging to optimize emissions reductions in the ESS program for the next Program year, thereby providing a ruling to Motion No. 8. The Authority concurs with stakeholder positions that consideration of managed charging will be more appropriate once further data is available regarding actual emissions impacts of the ESS Program, recognizing that residential participation to date is far below Program targets and few commercial projects have reached the deployment stage. Absent additional data, the Authority is concerned that an actively managed charging program will harm the Program Objectives, particularly the first Program Objective, providing positive net value to all ratepayers, by raising Program costs. However, the Authority intends to reevaluate the topic of managed charging in future years pending additional data on the ESS Program's emissions impacts, in support of the sixth Program Objective, maximizing the long-term environmental benefits of electric storage by reducing emissions associated with fossil-fuel generation. Any future review of the topic will include a prospective analysis of the emissions benefits in future years of the ESS Program (e.g., in the late 2020s and 2030s), as the generation mix is expected to see a significant shift over the next decade as the state works towards its 100% zero carbon electricity goal by 2040.

N. Cost Recovery

In the Storage Decision, the Authority directed CGB to:

submit its costs into both [EDC rate adjustment mechanism (RAM)] dockets splitting its costs between Eversource and UI based on the proportion of megawatts deployed in each EDC's respective service territory ... The EDCs shall each pay the CGB its annual costs authorized by the Authority associated with the administration of this Program in monthly installments starting the first month electric rates reflect the recovery of such costs from ratepayers ... 2022 program costs not included in the January 15, 2022 filings will be addressed through the 2023 RAM proceeding.

Storage Decision, pp. 48-49.

In the present docketed proceeding, CGB stated that given the current RAM timeline, more than two years may pass before CGB's incurred Program costs are recovered from ratepayers. CGB Comments, Aug. 30, 2023, p. 4. For example, 2023 costs are filed in the 2024 RAM dockets and do not begin to be recovered from ratepayers until September 1 of each year, after which CGB's incurred ESS costs are recovered on a monthly basis for twelve months. <u>Id.</u>, pp. 4-5. Consequently, costs incurred in 2023 are not fully recovered until August 2025. CGB Corresp., Sept. 25, 2023, p. 24. During the first and second ESS Program years, the extended cost recovery timeline did not pose a burden to CGB because only a small number of upfront incentives were disbursed. CGB Comments, Aug. 30, 2023, p. 4. However, in future Program years, CGB is expected to pay out more than \$25 million in upfront incentives, mostly to commercial projects still under development. <u>Id.</u>, pp. 4-5. If CGB must wait two years to recover such costs, CGB argued it would be "under some financial stress [which] could impact other Green Bank programs." <u>Id.</u>, p. 5. CGB subsequently proposed to be allowed to recover estimated

Program costs "on a yearly basis, with the opportunity to true-up these costs within the RAM filing." Id.

The Authority approves changes to CGB's ESS cost recovery timeline in line with the Authority's current practice to allow for "Known and Measurable" adjustments to RAM rate components to recover reasonably well-known expenses likely to be incurred in the calendar year in which a particular RAM proceeding is occurring. Specifically, the Authority authorizes CGB to seek recovery of ESS Program costs that have not yet been incurred for the Program year of the RAM proceeding in which they are filing (e.g., anticipated Year 3 ESS Program costs may be recovered through the 2024 RAM proceedings). To receive recovery of anticipated costs, CGB must provide detailed cost estimates, informed by past invoices or outstanding reservation of funds letters, in the applicable RAM proceeding by January 15 of each year following all applicable guidance for "Known and Measurable" adjustment requests. For example, in the 2024 RAM proceeding, CGB shall submit estimates of 2024 ESS Program costs by January 15, in addition to any outstanding 2023 Program costs for which CGB has not yet recovered from ratepayers.

As estimated costs will likely differ from actual incurred costs, the Authority clarifies that all recovery of costs for the upcoming Program year will be subject to reconciliation in the following year. If actual costs do not match the January 15 estimate filed by CGB, CGB may seek to recover the cost difference in the next RAM proceeding. To illustrate, if the January 15, 2024 cost estimate is less than CGB's actual incurred 2024 costs, CGB may seek to recover any additional costs in the 2025 RAM proceedings. Additionally, if CGB's ESS cost estimates are *more* than the actual incurred costs, such as in cases of commercial project cancellations, CGB shall subtract any overpayments from the cost estimate submitted in the next RAM proceeding. Further, at such time, CGB shall inform the Authority of the cause of any cost overpayments in addition to the cost overpayment amount. To prevent cost overpayments, CGB shall assume that a percentage of commercial projects with reservations of funds will be canceled. Accordingly, for commercial ESS upfront incentives, CGB shall request funding for the percentage of commercial projects with reservations of funds that have not yet been recovered by ratepayers minus the assumed project attrition rate. For the 2024 RAM proceeding, the commercial project attrition rate shall be informed by the actual ESS commercial cancellations to date, relative to the total number of commercial projects with reservations of funds. CGB shall report the assumed project attrition rate in its RAM filing, and such rate shall be updated in each subsequent RAM filing using actual project data. If the assumed project attrition rate proves incorrect, CGB will have an opportunity to recover distributed upfront incentives by reconciling the cost difference in a subsequent RAM proceeding. CGB shall also continue to split all ESS costs between Eversource and UI based on the proportion of megawatts deployed in each EDC's respective service territory.

Finally, the Authority clarifies that all cost estimates submitted by CGB, or costs incurred through CGB's administration of the ESS Program, are subject to a full prudency review by the Authority and are not guaranteed to be approved for cost recovery. The Authority notes that CGB's itemized 2022 expenses filed in the past RAM proceeding lacked supporting documentation of costs incurred. CGB Compliance, Feb. 3, 2023, Docket No. 23-01-04. Accordingly, the Authority reiterates that all estimated costs or

costs incurred should be submitted with necessary financial documentation, including invoices, request for proposals, contracts, etc., to demonstrate prudency. Failure to do so moving forward may result in a delay or denial of cost recovery.

O. CRITICAL FACILITY DEFINITION

The Authority designated grid edge customers, critical facilities, small businesses, and customers replacing a fossil fuel generator as priority customer classes most likely to further the Program Objectives and consequently provided such classes with additional incentives to facilitate their deployment (i.e., forward capacity market [FCM] rights). Storage Decision, p. 21. In the Year 2 Decision, however, the Authority removed FCM participation from the Program in exchange for an upfront incentive adder of 25% for eligible commercial customers, and of 50% for eligible residential customers, to increase the Program's RIM. Year 2 Decision, pp. 17-18. Only customers previously eligible for FCM participation (i.e., grid edge customers, critical facilities, small businesses, and customers replacing a fossil fuel generator) qualified for the aforementioned upfront incentive adder. Id.

Notably, upon reviewing Year 2 enrollment data, the Authority discovered that an abnormally large number of projects qualify as critical facilities under the current Program requirements (i.e., 73%, or 11 out of 15 projects). Program Administrator Interrog. Resp. CAE-2. The current Program Manual defines critical facilities as any facility that was deemed essential pursuant to Governor Ned Lamont's Executive Order 7H, issued during the COVID-19 pandemic, or according to Conn. Gen. Stat. § 16-243y(a)(2).²⁹ CGB Compliance, June 15, 2023, Clean Program Manual, pp. 42-43. Upon investigating further, the Authority discovered that most facilities were deemed essential by Executive Order 7H, including, among other businesses, restaurants, insurance companies, banks, wholesale clubs, and liquor stores. Conversely, Conn. Gen. Stat. § 16-243y(a)(2) defines a critical facility as:

any hospital, police station, fire station, water treatment plant, sewage treatment plant, public shelter, correctional facility or production and transmission facility of a television or radio station, whether broadcast, cable or satellite, licensed by the Federal Communications Commission, any commercial area of a municipality, a municipal center, as identified by the chief elected official of any municipality, or any other facility or area identified by the Department of Energy and Environmental Protection as critical.

The Authority concludes that the current critical facilities definition is overly broad and therefore necessitates a change. The creation of additional incentives for priority customer classes was intended to aid deployment of those projects that would provide the greatest societal benefits and positive impacts on the Program Objectives. Consequently, the Authority never intended priority customer incentives to encompass most project locations. Further, the fourth Program Objective, prioritizing increasing resilience, defines critical facilities solely according to the statutory definition. The

²⁹ Executive Order 7H may be found here: https://portal.ct.gov/-/media/Office-of-the-Governor/Executive-Order-No-7H.pdf.

Orders/Lamont-Executive-Orders/Executive-Order-No-7H.pdf.

Authority ultimately concludes that the statutory definition better reflects the intent of the critical facilities adder in the Program, because this definition includes only the locations most essential to the functioning of a community in a time of a power outage, such as hospitals, police stations, and public shelters. The Authority therefore directs the Program Administrators to solely use the statutory definition when determining critical facility eligibility for the upfront incentive adder, effective January 1, 2024.

P. RESIDENTIAL RENEWABLE ENERGY SOLUTIONS (RRES) ANNUAL PROGRAM UPDATES

1. Additional Solar Plus Storage Wiring Configurations

Docket Participants in this proceeding should be aware of the approval of new solar plus storage wiring diagrams in the Authority's RRES Year 3 Decision. In the RRES Year 3 Decision, the Authority approved several wiring diagrams developed by the EDCs, which will allow additional solar plus storage configurations to provide home backup power during grid outages. See EDC Order No. 16 Compliance, June 30, 2023, Attachments 1 and 2; RRES Year 3 Decision, pp. 53-55. More specifically, with the approval of the new wiring configurations, the following system configurations will be able to provide home backup power during grid outages: (1) DC-coupled solar plus storage wiring diagram under the Buy-All tariff, for both single- and multi-family homes; (2) DCcoupled systems under the Buy-All tariff for homes with existing solar systems; (3) ACcoupled systems under the Buy-All tariff for homes with existing solar systems; and (4) AC-coupled systems under the Buy-All tariff, specifically for single-family systems. Id. The approval of the new solar plus storage wiring diagrams will advance the third and fifth ESS Program Objectives by fostering the sustained and orderly development of the state's energy storage industry, and by lowering the barriers to entry for energy storage deployment in Connecticut.

2. Battery Recycling

The Authority also determined in the RRES Year 3 Decision that a proactive approach is needed to resolve the potential issue of solar panel and battery waste. Consequently, the Authority respectfully requested that CGB convene and lead a working group of relevant stakeholders, including DEEP and the EDCs, to develop by August 1, 2024, recommendations to resolve the potential issue of solar panel and battery recycling and waste for clean energy projects in Connecticut.³⁰ RRES Year 3 Decision, pp. 50-51. In developing the recommendations, CGB should consider the environmental effects of solar panel and battery waste and the success or failure of approaches used in other jurisdictions. Further, all recommendations should include a description of the pros and cons of each approach, and an estimate of each approach's implementation timeline and cost. If suggested by CGB and the working group, the Authority would strongly consider creating a new application fee across the state's clean energy programs to cover the costs associated with solar panel and battery recycling. Id. Ultimately, while solar and battery waste is not yet a prevalent issue in Connecticut, the Authority determined that the

³⁰ The Authority requests that CGB lead the recycling working group. However, if CGB would like to colead the recycling working group with one or more other government agencies, CGB may do so. In such case, the Authority requests that CGB identify any government agency(ies) co-leading the working group in its Order No. 11 compliance filing.

development of a solution is needed sooner rather than later, to ensure state preparedness for when the issue becomes more emergent, and in support of state environmental goals and the third and sixth ESS Program Objectives, the sustained and orderly development of the state's energy storage industry, and the maximization of the long-term environmental benefits of electric storage.

3. Meter Socket Adapters

In the present proceeding, Tesla argued for the allowance of meter socket adapters (MSAs) in the ESS Program because MSAs "allow for residential solar and battery storage systems to be installed roughly 10-times faster, with significantly less rewiring, and can help avoid the need for electrical panel upgrades." Tesla Comments, Aug. 30, 2023, p. 6. Nevertheless, Eversource opposed MSA approval in the RRES Program and highlighted several MSA safety risks. See Eversource Corresp., Sep. 7, 2023, Docket No. 23-08-02. For example, Eversource argued that MSAs block access to the bypass switch on all self-contained meter sockets, such that meter replacements or maintenance require a customer outage. Id.

In the RRES Year 3 Decision, the Authority recognized the benefits of MSAs and indicated a preference for their adoption but did not yet approve their use because of the safety concerns highlighted by Eversource. Consequently, the Authority directed the EDCs to file by April 10, 2024, a summary of all MSA safety concerns, along with solutions for each safety concern, and estimated costs and timelines for implementing each solution. The EDCs will file their compliance in both Docket Nos. 23-08-02 and 23-08-05, so that the effects of MSA (dis)approval can be evaluated in both proceedings. See RRES Year 3 Decision, pp. 54-56.

Q. Program Redlines

Order No. 22 of the Storage Decision directs the Program Administrators to file by August 1 annually "an updated BCA, and recommendations for any Program modifications." Storage Decision, p. 53. In compliance with Order No. 22, the Program Administrators filed proposed Program modifications and updated Program documents, including an updated Program Manual. See Program Administrator Compliance, Aug. 1, 2023. In this section, the Authority addresses several suggested revisions to the Program documents filed in compliance with Order No. 22 that are not addressed by other aspects of this Decision. Finally, the Authority approves all additional redline changes proposed by the Program Administrators, which are not discussed in this section or affected by other parts of the Decision.

1. Upfront Incentive Clawback Provision

First, CPower suggested that the clawback provision for noncompliance with the Program's passive dispatch requirements be relaxed "to avoid creating undue risk for Program participants." CPower Comments, Aug. 30, 2023, p. 9. Under the current Program requirements, projects receiving an upfront incentive must participate in greater than 90% of all passive dispatch events each year. CPower Corresp. Sept. 22, 2023, p. 7. If a project does not meet this requirement, the project must return 10% of the upfront incentive for the first offense, and a "prorated portion of [the upfront] incentive for the

remaining years and expulsion from the [P]rogram for the second offense." Id. Further, CPower noted that when an active dispatch event is held, the passive dispatch event scheduled for that day is canceled. Id., p. 8. The Program Administrators, CPower highlighted, can call up to 60 active dispatch events per summer. Id. If all 60 active dispatch events were called during passive dispatch event days, only about five passive dispatch events would be held during the summer season. Id. Consequently, missing just one of these five events would trigger an upfront incentive clawback, CPower noted, thereby creating undue risk for project developers. Id., p. 9. CPower proposed changing the upfront incentive clawback to be based on 90% participation in passive and active dispatch events during the summer season. Id., p. 10. Similarly, NECEC supported CPower's recommendation because NECEC believed that the "clawback provision is extremely sensitive to mishaps, making participation in passive dispatch events risky." NECEC Comments, Aug. 30, 2023, p. 3. CGB conversely argued against adjustments to the Program's upfront incentive clawback provision because the Program Administrators lack battery dispatch data. CGB Corresp., Sept. 25, 2023, p. 26.

The Authority is not persuaded by the arguments presented by CPower and NECEC as commercial project interest has significantly exceeded expectations to date. Further, the Authority plans to move away from adjudicating these type of Program design elements (i.e., design aspects that have been previously adjudicated, existed for multiple years, and no evidence exists to show that the specific requirement is impairing the Program's ability to meet its deployment goals) in future years, as too many adjustments to details of the ESS Program serve to undermine the consistency and predictability the storage industry needs to effectively scale solutions in Connecticut and maintain participation over several years. Moreover, developers in this proceeding and others have consistently advocated for this type of year-to-year consistency. For the Authority to consider changes to the Program's upfront incentive clawback provision, multiple developers would need to demonstrate in a future annual review proceeding, by submitting data-driven or project specific data, that this provision is hindering the ability for projects to be financed, thereby hindering overall Program enrollment. The Authority is hesitant to make changes to this provision because the upfront incentive participation requirement is needed to send a strong signal to all projects to follow the pre-arranged hours under the passive dispatch portion of the Program. Further, the Program's passive demand response parameters are intended to act as a safeguard against missing the one peak hour each year that the regional grid is planned around. The benefits of the Program are largely driven by reducing regional demand during the annual peak, making all program elements that ensure dispatch during potential peak hours vital to the success of the Program. In short, the Authority finds that changing the upfront incentive clawback provision, based on the data and analysis in the instant proceeding, hinders the third Program Objective to foster the sustained, orderly development of a state-based electric energy storage industry as it represents a change from a previously adjudicated program design element and may potentially impact the first Program Objective to provide positive net present value to all ratepayers. As such, the Authority declines to adopt this change through this proceeding.

2. Residential and Commercial Program Allocation

Currently, the residential and commercial MW allocations for the ESS Program are the same (i.e., 50/50). Year 2 Decision, p. 4. CGB proposed increasing the Program's commercial MW allocation to 70% of the Program's capacity, because commercial interest in the Program exceeds residential interest. CGB Comments, Aug. 30, 2023, pp. 3-4. Similarly, CPower recommended an 86% percent MW allocation for the Program's commercial sector to better account for the interest received in the commercial sector to date. CPower Corresp., Sept. 22, 2023, p. 22.

The Authority declines to change the MW allocations between the commercial and residential sectors of the Program at this time because the issue was already adjudicated in last year's proceeding. More specifically, as concluded in the Year 2 Decision, the Authority will not "review the residential and non-residential allocation split to ensure that it serves the Program Objectives again until the three-year program cycle review proceeding in 2024, as contemplated in the Storage Decision." Year 2 Decision, p. 30; See Storage Decision, pp. 43-44. Consequently, the Authority intends to revisit this topic next year. At such time, stakeholders are encouraged to submit both qualitative and quantitative data in the relevant docketed proceeding (i.e., Docket No. 24-08-05) to explain why the current commercial and residential MW allocations warrant change. While commercial enrollment currently far exceeds residential enrollment, process and incentive changes made through this Decision may increase residential enrollment. Additionally, in line with the fourth Program Objective, the Authority seeks to deliver increased resilience to a wide swath of customers through the ESS Program, including low-income customers, customers in Distressed Communities, customers coded for medical protection, public housing authorities, and residential customers on the grid edge. Ultimately, a larger commercial MW allocation may detract from this goal, as more Program benefits flow to businesses. Nevertheless, if programmatic data demonstrates that current residential targets are unrealistic even with the changes made in this Decision, the Authority may adjust the Program's MW allocations next year, in support of the third Program Objective, the sustained and orderly development of the state's electric storage industry.

3. Forward Capacity Market Participation

In the Year 2 Decision, the Authority prohibited forward capacity market (FCM) participation in the Program to improve the Program's RIM score at the recommendation of CGB. See Year 2 Decision, pp. 17-18. In place of FCM participation, the Authority approved a 50% upfront incentive adder for residential customers, and a 25% upfront incentive adder for commercial customers, if such customers were previously eligible for FCM participation (i.e., grid edge customers, critical facilities, small businesses, eligible customers replacing a fossil fuel generator). Id.

However, in this proceeding, several stakeholders expressed support for allowing forward capacity market (FCM) participation in non-summer months. To begin, the Program Administrators argued that developers needed "additional revenue streams for many of their battery projects to become commercially viable." Program Administrator Compliance, Aug. 1, 2023, Proposed Program Modifications, p. 7. The Program Administrators contended that one way to allow developers to access additional revenue

streams would be to allow FCM participation during non-summer months only. Id. Additionally, NECEC supported allowing FCM participation during non-summer months, because non-peak times "do not require as much energy flexibility for the ESS [P]rogram, and could be used by participants to maximize the value of their storage through other markets." NECEC Comments, Aug. 30, 2023, p. 2. Similarly, CPower argued that FCM participation in non-summer months would not increase ratepayer costs, because the payment for FCM participation comes "from another capacity supplier that is shedding" its capacity supply obligation (i.e., the payment would not come from load). CPower Comments, Aug. 30, 2023, pp. 7-8. Further, CPower believed that commercial project attrition could be reduced by allowing FCM participation. Id., p. 7. Last, Sunnova argued that the Authority should allow FCM participation year-round, because Sunnova believed that capacity rights were a "critical aspect... [in] value calculations for expected compensation mechanisms". Sunnova Comments, Aug. 30, 2023, pp. 2-3. Further, Sunnova argued that FCM participation allowance would help projects achieve financial viability and "apply downward pressure on wholesale market prices" through more competitive auctions. Id. Last, Sunnova understands ISO NE's capacity tariff to require capacity availability year-round, which is verified by ISO NE through audits, thereby precluding FCM participation during solely the non-summer months. Id., p. 5-6.

The Authority conducted discovery on the Program Administrators' proposal to allow FCM participation during non-summer months to determine the proposal's expected RIM impacts. In response, the Program Administrators stated that it was unclear whether FCM participation in non-summer months would be considered as "cleared capacity" from an Avoided Energy Supply Costs (AESC) perspective. Program Administrator Interrog. Resp. CAE-6, p. 1. Further, the 2021 AESC states that uncleared capacity can later become cleared. Id. If FCM participation in non-summer months is considered cleared, the Program RIM would decline from 1.95 to 0.91 under a scenario where 100% of all Program capacity is cleared in FCM markets. Id., p. 2; Program Administrator Corresp., Aug. 3, 2023, p. 12. Conversely, if FCM participation in non-summer months is considered uncleared, the RIM would experience only marginal declines from 1.95 to 1.91. Program Administrator Interrog. Resp. CAE-6, p. 2.

The Authority declines to allow FCM participation during non-summer months at this time as such participation would negatively impact the Program's RIM if such capacity were cleared in the FCM. A RIM decline from 1.95 to 0.91 would significantly impact the first Program Objective, providing positive net value to all ratepayers, by decreasing the cost effectiveness of the Program. Moreover, as discussed in Section IV.B.3., participation in the commercial sector of the Program far exceeds the Programmatic targets set in the Storage Decision. Consequently, the Authority concludes that the commercial sector of the Program does not require additional revenue streams (i.e., FCM participation) to incent the level of storage development needed to fulfill the Program's While residential storage deployment has lagged behind the commercial targets. commercial sector of the Program, the residential upfront incentive changes authorized in this Decision will increase available revenue for residential projects, thereby encouraging residential project development. Moreover, FCM participation during nonsummer months may require storage assets to make their capacity available year-round, thereby impacting overall dispatch participation and peak shaving induced by the Program, in hindrance of the second Program Objective.

Last, the Authority determines the broader issue of FCM participation in the Program has already been adjudicated through the Year 2 Decision, where the Authority prohibited FCM participation to increase the Program's RIM while authorizing increased upfront incentives for projects which were previously eligible for the FCM. See Year 2 Decision, pp. 17-18. Absent compelling evidence that the Year 2 Decision negatively impacted the Program Objectives or stymied Program enrollment, the Authority sees no reason to reverse its prior determination on this topic.

4. Passive Dispatch Window Length

Finally, the Program Administrators proposed working with the Program's EM&V consultant (i.e., Guidehouse) to evaluate whether a shorter passive dispatch window would be beneficial for the Program. Program Administrator Compliance, Aug. 1, 2023, Proposed Program Modifications, p. 10. The Program Administrators noted that the 3 p.m. – 8 p.m. time window for passive dispatch overlaps with the peak solar generation period. Id. Further, the Program Administrators argued that a shorter passive dispatch window may be beneficial because such change would "increase the likelihood of batteries being able to dispatch uniformly, which is one of the program requirements for participation in passive dispatches." Id.

The Authority concludes that there is insufficient data to determine whether a change in the passive dispatch window would be beneficial to the Program's benefit cost tests. Therefore, the Program's passive dispatch requirements shall remain unchanged for Year 3 of the Program. Nevertheless, the Authority concludes that a change in the passive dispatch window length or time may benefit the Program Objectives by reducing potential hurdles to the Program's uniform dispatch requirement, thereby advancing the fifth Program Objective, lowering barriers to entry. Accordingly, the Authority directs the Program Administrators to submit by June 15, 2024, an evaluation of the current passive dispatch window, including both qualitative and quantitative analysis of the benefits and costs of any proposed passive dispatch window changes. Additionally, the evaluation must consider the effects of any passive dispatch requirement changes on each of the Program's benefit cost tests. Ultimately, if the Program Administrators' passive dispatch evaluation suggests that the Program would benefit from changes to the current passive dispatch requirements, the Authority may adjust the passive dispatch window in the next annual review proceeding.

V. CONCLUSION AND ORDERS

A. CONCLUSION

In this Decision, the Authority explores and approves several changes to the ESS Program to better serve the Program Objectives. Further, the Decision provides several additional clarifications for stakeholders. The Decision also includes the Authority's rulings to Motion Nos. 7 and 8.

B. EXISTING AND NEW ORDERS

For the following Orders, the Company shall file an electronic version through the Authority's website at www.ct.gov/pura. Submissions filed in compliance with the Authority's Orders must be identified by all three of the following: Docket Number, Title, and Order Number. Compliance with orders shall commence and continue as indicated in each specific Order or until the Company requests and the Authority approves that the Company's compliance is no longer required after a certain date. All Orders requiring Authority review and approval shall be submitted as a motion.

The below standing orders are a summation of prior orders related to the ESS Program that continue to apply. In some instances, the Authority has amended those standing orders with redline edits. The below new orders apply on a going forward basis.

1. Standing Orders to be filed in ESS Annual Review Dockets

- 1. Reference Decision, July 28, 2021, Docket No. 17-12-03RE03, Order No. 8, p. 52: No later than October 1, 2021, and by August 1 annually thereafter, the EDCs shall submit for the Authority's review and approval a map of circuits that meet the grid edge criteria in Section III.D. The EDCs shall include the map in all relevant Program documentation and on the EDCs' respective Program webpages.
- 2. Reference Decision, July 28, 2021, Docket No. 17-12-03RE03, Order No. 12, p. 52: No later than October 1, 2021, the EDCs shall provide a list of all electric storage systems that are eligible for the Program in Docket No. 21-08-05. Any updates shall be submitted in the appropriate Annual or Program Review docket [by August 1, and annually thereafter], as applicable.
- 3. Reference Decision, Dec. 21, 2022, Docket No. 22-08-05, Order No. 3, p. 38: No later than August 1, 2022, and annually thereafter, the Program Administrators shall submit an annual report summarizing the Program results to date, including an updated BCA [and an updated BCA calculator], and recommendations for any Program modifications to the ESS Program documents including the Program Manual, providing both a clean and a redlined version of all documents and an accompanying narrative document explaining how the recommended changes would help achieve the Program Objectives, which may also be the annual report, in the relevant Annual Review proceeding (i.e., in Docket No. 23-08-05 on August 1, 2023, etc.). The Program Administrators shall include active dispatch only projects in the Program's total 580 MW deployment goal, and the Program Administrators shall exclude active dispatch only projects from the Program's Tranche and incentive step MW capacity limits. Further, the Program Administrators shall track total active dispatch only project MW deployment and include such information in the annual report filed with the Authority. [Last, the Program Administrators shall include all DERMS fees paid to support the Program in an aggregate or total amount.
- 4. Reference Decision, July 28, 2021, Docket No. 17-12-03RE03, Order No. 25, p. 53: No later than June 15, 2024, and every three years thereafter, the Program

Administrators shall submit the EM&V consultant's full report on the established Program metrics into the relevant Program Review proceeding.

- 5. Reference Decision, July 28, 2021, Docket No. 17-12-03RE03, pp. 48-50: Each Program Administrator shall submit their prudently incurred costs associated with the administration of the Program in a given calendar year into the subsequent year's annual review of the Revenue Adjustment Mechanism (RAM) (e.g., costs incurred in 2023 by UI shall be submitted into the 2024 RAM proceeding). The EDCs shall submit such costs into their individual RAM review docket, whereas the CGB [may seek recovery of ESS Program costs that have not yet been incurred for the Program year of the RAM proceeding in which they are filing, in accordance with the guidance set forth in Section IV.N. of the Year 3 Decision. Further, CGB shall submit its detailed cost estimates for the subsequent Program year by January 15, and annually thereafter,] into both dockets splitting its costs between Eversource and UI based on the proportion of megawatts deployed in each EDC's respective service territory.
- Reference Decision, July 28, 2021, Docket No. 17-12-03RE03, Order No. 24, p. 53: No later than January 1, 2023, the Program Administrators shall publish a website containing all relevant Program data, incorporating all direction provided in Section V.D.
- 7. Reference Decision, July 28, 2021, Docket No. 17-12-03RE03, Order No. 26, p. 53: The CGB shall provide notice to the Authority as a compliance filing and in the applicable docket(s) when a given capacity block is near completion. Specifically, the CGB shall: (1) set a date for the start of the subsequent step (e.g., first day of the next month), and (2) notify the market and the Authority that current step will end on a specific date (e.g., last day of the current month) and that the subsequent step will begin the day after (e.g., first day of the next month).
- 8. Reference Decision, Dec. 8, 2021, Docket No. 21-08-05, Order No. 9, p. 40: No later than August 1, 2022, and annually thereafter, the Program Administrators shall submit its compliance with Order No. 22 of the Storage Decision, incorporating the direction provided in Sections IV.B.2. and V.A.4.iii. of this Decision.
- 9. Reference Decision, Dec. 21, 2022, Docket No. 22-08-05, Order No. 15, p. 41: No later than [August 1], 2024, and annually thereafter until the end of the ESS Program, the Program Administrators shall file project cancellation data for the Authority's review in the relevant ESS annual review docket. The cancellation data must show which tranche the canceled projects were selected for, as well as the reasons behind the project cancellations, if known by the Program Administrators.
- 10. Reference Decision, Dec. 21, 2022, Docket No. 22-08-05, Order No. 16, p. 41: No later than 30 days from DAS adoption of an updated building code that incorporates best practices for electric storage, and annually thereafter, the Program Administrators shall file as compliance with the Authority the current best guidance on siting, local permitting, and safety for local officials and developers on FTM [and behind-the-meter] storage construction and development. Such

guidance shall be developed in consultation with relevant state agencies, including DAS, DEEP, and the Siting Council. Such guidance shall also be provided on the ESS Program's website. A link to such guidance shall be provided to the Authority as a part of the compliance filing. [Upon the fulfillment of this order, the Energy Storage Siting Resource shall be updated to incorporate any new siting guidance from DAS.]

11. Reference Decision, Nov. 1, 2023, Docket No. 23-08-02, Order No. 35, p. 67: No later than August 1, 2024, the Authority requests that CGB provide an update on the stakeholder process to develop recommendations to resolve the issue of solar panel and battery recycling and waste for clean energy projects in Connecticut. The Authority respectfully requests that CGB convene and lead a working group of relevant stakeholders, including DEEP and the EDCs, to develop recommendations to resolve the issue of solar and battery waste that consider the environmental effects of solar panel and battery waste and the success or failure of approaches used in other jurisdictions. Further, all recommendations should include a description of the pros and cons of each approach, and an estimate of each approach's implementation timeline and cost. The Authority requests that the update, including any recommendations developed, be filed in Docket Nos. 24-08-02, 24-08-03, 24-08-04, and 24-08-05.

2. New Orders

- 12. No later than December 20, 2023, the Program Administrators shall file for the Authority's review and approval updated ESS Program documents, including the Program Manual, incorporating all of the approved modifications authorized in this Decision. Such filing shall include both a clean and a redlined version of all ESS Program documents.
- 13.No later than December 20, 2023, the EDCs shall amend the Generator Interconnection Technical Requirements to clarify the requirement that ESS projects' proposed dispatch limiting schedules shall be verified using the Program's existing distributed energy resource management system (DERMS) provider, in accordance with Section IV.D. Further, the Authority directs the EDCs, if they have not already done so, to add an option labeled as "TBD" or "Other" to the drop-down list for <u>all</u> energy storage manufacturer fields required by the PowerClerk interconnection application.
- 14. No later than December 20, 2023, the ESS Program Administrators shall establish an Application Process Working Group (APWG) with relevant stakeholders, in accordance with Section IV.C.1., to focus specifically on ways to simplify or streamline the complex ESS enrollment flow for residential projects. Additionally, the APWG may recommend improvements to the commercial application, in addition to the residential enrollment flow. The APWG shall be co-led by both the EDCs and CGB. By March 15, 2024, The Program Administrators shall provide in a report to the Authority (APWG Report) specific recommendations on the following: (1) required application field questions that can be omitted from the ESS Salesforce-based application; (2) required application forms that can be consolidated or removed; (3) a proposal to combine or streamline the separate

ESS applications and enrollment processes to the fullest extent possible, including a method to combine a project's DERMS-enrollment application with the existing ESS incentive approval application; and (4) a recommendation to streamline or reduce the requirements included in the Eligible Contractor application, as described in Section IV.C.2. If consensus on any of the above cannot be reached, the Program Administrators shall include in the APWG report a fair and accurate description of all views expressed. The APWG shall meet a minimum of four times, and the Program Administrators shall include the dates and attendees of each APWG meeting in the APWG Report. Finally, the Authority clarifies that any consensus recommendations not requiring changes to the Program Manual or Program documents may be implemented immediately by the Program Administrators, provided such changes do not contradict a prior Authority ruling.

- 15. No later than December 20, 2023, and August 1 annually thereafter, the EDCs shall file as compliance all existing DERMS fees by each DERMS provider that are paid to support the ESS Program, in accordance with Section IV.I.1. The Authority also directs the EDCs to file as compliance with the Authority its open RFP for new ESS DERMS provider(s) no later than 15 days from when such RFP is first publicly issued, so that the Authority can monitor the EDCs' DERMS solicitation process.
- 16. No later than December 20, 2023, CGB shall file as compliance an identification of the mechanism through which they will seek customer opt-in to the CGB-led inspections. If CGB selects email as the mechanism to receive customer opt-in for CGB inspections, the inspection opt-in email shall also be submitted with this compliance filing, and must state that the CGB- inspection is optional in the email's subject header and first sentence.
- 17. No later than January 1, 2024, the Program Administrators shall: (1) refile compliance with Order No. 24 of the Storage Decision once all data requirements have been met and are publicly accessible on the ESS Program website, in accordance with Section IV.L.; and (2) add average installed cost data calculated as \$/kWh and \$/kW to relevant tables included on the Program data dashboard that allow for such information to be viewed by customer type, project status, EDC, and contractor, in accordance with Section IV.G.
- 18. Reference Decision, Feb. 22, 2023, Docket No. 22-08-01, 2022 Clean and Renewable Energy Program Data and Report, p. 5: No later than January 5, 2024, and annually thereafter, CGB shall provide updated fact sheets for both residential and C&I customers for the ESS Program that reflect the program modifications as directed in the most recent Final Decision issued through the ESS Program Annual Review proceeding, Docket No. XX-08-05.
- 19. No later than March 15, 2024, the EDCs shall submit for the Authority's review and approval a plan to allow multiple DERMS to participate in the ESS Program, following all direction outlined in Section IV.I.1.
- 20. No later than April 1, 2024, the Program Administrators shall create an educational resource (Energy Storage Siting Resource) for Program participants compiling existing, publicly available resources regarding any applicable flood proofing,

building code, safety, and siting requirements affecting residential and commercial ESS projects and providing relevant state and municipal contact information, which need not be exhaustive (e.g., "the relevant department in most municipalities are X, Y, Z"). For clarity, such resource shall simply aggregate publicly available resources into one place for developer ease of access. The Program Administrators shall file the Energy Storage Siting Resource in the present docket, after which the resource shall be published on the ESS website. Further, the Energy Storage Siting Resource shall be updated when Order 10 is fulfilled, after a new building code for energy storage projects is adopted statewide, and annually thereafter, to ensure the Resource remains up to date and relevant for Program developers. The Program Administrators shall file as compliance with the Authority in the applicable ESS proceeding (i.e., for 2024, Docket No. 24-08-05) any future updates to the Energy Storage Siting Resource.

- 21. No later than June 15, 2024, the Program Administrators shall file as compliance with the Authority a recommendation for a percentage of ESS incentives or project net benefits that shall be distributed equally amongst all tenants of a multifamily affordable housing site, in accordance with Section IV.F. The analysis shall focus solely on the performance incentive and shall include, at a minimum, quantitative financial analysis, estimated rates of return (factoring in both ESS incentives and additional incentives such as demand charge reduction and federal tax credits), and PCT values. Additionally, the financial analysis and estimated rate of return shall exclude any monetary benefits provided through the RRES Program. The compliance shall also include recommendations for enforcement and incentive distribution to tenants, including discussion of options such as on-bill electric credits and direct payments. The Program Administrators shall also consult with relevant parties when writing the compliance, including the Connecticut Department of Housing (DOH), the Connecticut Finance Authority (CFA), the Department of Energy and Environmental Protection (DEEP), and storage developers. Finally, because the RRES Program already requires tenant benefitsharing for all revenue associated with the RRES tariff, the Program Administrators may exclude ESS multifamily affordable housing projects dually enrolled in the RRES Program from the proposed tenant benefit-sharing requirement.
- 22. No later than June 15, 2024, the Program Administrators shall submit as compliance in this proceeding an evaluation of the current passive dispatch window in accordance with Section IV.Q.4., including both qualitative and quantitative analysis of the benefits and costs of any proposed passive dispatch window changes. Additionally, the evaluation must consider the effects of any passive dispatch requirement changes on each of the Program's benefit cost tests.
- 23. No later than June 15, 2024, the Program Administrators shall file for the Authority's review and approval in the most recent annual review proceeding a recommendation for new upfront incentive rates for the small, medium, and large commercial categories for the unallocated commercial MWs remaining in both Tranches 2 and 3, in accordance with Section IV.B.3. During the commercial upfront incentive reevaluation period, the Program Administrators shall pause all commercial passive dispatch enrollments in the Program until the Authority determines whether commercial upfront incentives should decline for all new

commercial projects. Further, through modeling and data analysis of current commercial project data, the Program Administrators shall work with the Program's EM&V consultant (i.e., Guidehouse) to ensure that the commercial upfront incentive recommendation will achieve a participant cost test (PCT) at or slightly above 1.

- 24. No later than August 1, 2024, and annually thereafter, CGB shall file as compliance in the applicable annual review proceeding (i.e., in 2024, Docket No. 24-08-05) the average participant cost test (PCT) broken out by customer type, project size category, and Program developer for both residential and commercial customer projects, utilizing all information available to CGB, including Performance Incentive Fee data, to ensure an accurate accounting of the PCT. The PCT shall also specifically be conducted from the perspective of the host customer; to the extent that this necessitates a change from the methodology that has historically been applied, CGB shall submit PCT values calculated using both the historical methodology and the customer-focused methodology.
- 25. No later than August 1, 2024, and annually thereafter, the Program Administrators shall file as compliance in the applicable annual review proceeding (i.e., in 2024, Docket No. 24-08-05) a summary of the Performance Incentive Fees for all residential projects deployed through the end of the previous month (e.g., through July 2024 for the August 1, 2024 filing) by developer, following all direction contained in Section IV.G.
- 26. No later than August 1, 2024, and annually thereafter, each EDC shall file as compliance an ESS Interconnection Report, as detailed in Section IV.D., in the applicable annual review proceeding (i.e., in 2024, Docket No. 24-08-05). The Report shall consist of a summary of the state of interconnection for all commercial ESS projects and shall include, at a minimum: (1) the interconnection status of each commercial ESS project; (2) the expected EDC interconnection approval due date for each commercial project per EDC interconnection guidelines, as applicable; (3) the date all required interconnection materials were submitted to the utility for each commercial ESS project; (4) the number of days from when all required interconnection materials were submitted to the utility for each commercial ESS project up to the completion of the interconnection process; (5) the attrition rate for all commercial ESS projects, based on the withdrawal of a project's interconnection application; (6) a list of the most common reasons for ESS interconnection delays; and (7) EDC-proposed solutions for each of the most common reasons delaying ESS interconnections.
- 27. No later than August 1, 2024, CGB shall file as compliance in Docket No. 24-08-05 an evaluation of the success metrics highlighted in their marketing proposal in accordance with Section IV.M.1., including: (1) landing page form submissions on the ESS Program website; (2) performance against industry advertising benchmarks; (3) web traffic and engagement; and (4) an awareness study conducted by Great Blue Research to gauge knowledge of battery storage and the ESS Program.

28. No later than August 1, 2024, the EDCs shall review energy storage interconnection practices currently used in other jurisdictions, specifically in cases where other utilities have adopted storage interconnection requirements intended to both ensure distribution reliability and minimize unnecessary interconnection and grid upgrade costs (i.e., smart interconnection requirements, discharge limiting schedules for energy storage interconnections, etc.). The EDCs shall then compare their proposal with the practices identified in other jurisdictions to determine whether the EDCs' proposal, including but not limited to the proposed (dis)charge limiting schedules, should be adjusted to more effectively reduce storage interconnection timelines and costs. The EDCs shall also present their findings to the IX WG before filing them with the Authority. The EDCs shall state whether and why changes to their proposed (dis)charge limiting schedules are or are not warranted in their compliance, which shall include data-driven analysis for any conclusions reached. Last, the EDCs shall file as compliance a summary of their findings with the Authority in Docket No. 24-08-05, incorporating all direction outlined in Section IV.D.

- 29. No later than 60 days from the conclusion of Incentive Step 2 in residential Tranche 1, or by June 15, 2024, whichever occurs sooner, the Program Administrators shall file for the Authority's review and approval any proposed changes to the residential upfront incentive rate for Steps 2 and 3 of Tranche 1 and proposed residential upfront incentive rates for Tranche 2, as described in Section IV.B.1. The Program Administrators shall consider, at a minimum, the Program's residential enrollment trends, battery cost data, and actual project PCT values when making their Tranche 2 residential upfront incentive recommendation.
- 30. No less than once annually after the Energy Storage Siting Resource referenced in Order No. 20 is first completed, CGB shall hold at least one seminar with Program stakeholders reviewing the siting and safety requirements for energy storage projects. The seminar shall help ensure that Program participants are informed of any potential energy storage code or safety changes. As compliance, CGB shall file the date of such seminar annually with the Authority in the applicable annual review proceeding (i.e., if 2024, Docket No. 24-08-05) no less than 10 days after such seminar is held.

DOCKET NO. 23-08-05 ANNUAL ENERGY STORAGE SOLUTIONS PROGRAM REVIEW – YEAR 3

This Decision is adopted by the following Commissioners:

Marissa P. Gillett

John W. Betkoski, III

Michael A. Caron

CERTIFICATE OF SERVICE

The foregoing is a true and correct copy of the Decision issued by the Public Utilities Regulatory Authority, State of Connecticut, and was forwarded by Certified Mail to all parties of record in this proceeding on the date indicated.

Jeffrey R. Gaudiosi, Esq.

Executive Secretary

Public Utilities Regulatory Authority

November 29, 2023

Date

Participant	Representing
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