

845 Brook Street, Rocky Hill, CT 06067  
T 860.563.0015  
ctgreenbank.com



April 15, 2016

Dear Connecticut Green Bank Board of Directors:

We have a meeting of the Board of Directors scheduled for Friday, April 22, 2016 from 9:00 to 11:00 a.m. in the Colonel Albert Pope Board Room of the Connecticut Green Bank at 845 Brook Street, Rocky Hill, CT 06067.

On the agenda we have the following items:

- **Consent Agenda** – review and approval of the meeting minutes for the January 15, 2016 meeting, an update on the transactions less than \$300,000 and no more in aggregate than 1,000,000 memo to clear the queue, and program and budget progress reports through Q3 of FY 2016.
- **President's Update** – we will provide an update on the program and budget progress to targets through Q3 of FY 2016, and report out on some other notable developments.
- **Strategic Discussions** – for this meeting, we have invited the Coalition for Green Capital to provide an update on the green bank movement across the country, an overview of the Green Bank Network (in collaboration with NRDC), plans to work with us on a Green Bank Playbook, and other initiatives they have underway.
- **Bond Indenture** – we will provide an update on our efforts to develop a bond indenture for specific projects (e.g., New England Hydropower – Meriden Project) as well as for a portfolio of products and programs that we hope to bring to the Board of Directors as part of our FY 2017 budget. We have provided you with some optional reading materials on the development of Moody's Green Bond Assessment methodology.
- **Staff Transaction Recommendations** – we have several transactions that we are recommending for approval, including:
  - a. **Residential Sector** – a request for approval to sell down our CT Solar Loan portfolio to The Reinvestment Fund and a slight revision to our resolution for the Solarize State Sponsored Housing Projects with CHFA;
  - b. **Commercial and Industrial Sector** – a request for approval to engage in a C-PACE transaction with CURE in Groton to finance various clean energy improvements, as well as a request for approval to extend the capacity of the CT Solar Lease II for commercial projects, including cities, towns, and school districts.

- c. **Statutory and Infrastructure Sector** – an update on the project status and a request for approval to expand the working capital loan facility for the New England Hydropower Company run-of-the-river hydro project in Meriden at Hannover Dam.
- **Other Business** – we have a number of other business items we wanted to discuss, including the state budget situation, progress on legislative initiatives underway, and efforts we have been taking to advance public policy at the regulatory level.

If you have any questions, comments or concerns, please feel free to contact me at any time.

We look forward to seeing you next week.

Sincerely,

A handwritten signature in blue ink, appearing to read 'B. Garcia', with a long horizontal flourish extending to the right.

Bryan Garcia  
President and CEO



## AGENDA

Board of Directors of the  
Connecticut Green Bank  
845 Brook Street  
Rocky Hill, CT 06067

Friday, April 22, 2016  
9:00-11:00 a.m.

Staff Invited: George Bellas, Craig Connolly, Mackey Dykes, Brian Farnen, Bryan Garcia, Ben Healey, Dale Hedman, Bert Hunter, and Kerry O'Neill

1. Call to order
2. Public Comments – 5 minutes
3. Consent Agenda\* – 5 minutes
  - a. Approval of Meeting Minutes for January 15, 2016, February 26, 2016, and March 3, 2016\*
  - b. Under \$300,000 and No More in Aggregate than \$1,000,000
  - c. Program Progress to Targets
  - d. Budget Progress to Targets
4. President's Update – 5 minutes
5. Board of Directors Strategic Discussions – 30 minutes
  - a. Green Bank Movement – Coalition for Green Capital
6. Connecticut Green Bank Bond Indenture – 15 minutes
7. Staff Transaction Recommendations\* – 45 minutes
  - a. Residential Sector Programs Transaction Recommendations – 10 minutes
    - i. CT Solar Loan Sell Down\* – 5 minutes
    - ii. Solarize SSHP with CHFA\* – 5 minutes
  - b. Commercial and Industrial Sector Program Transaction Recommendations – 25 minutes
    - i. C-PACE Transaction – Groton\* – 15 minutes
    - ii. CT Solar Lease II – Expansion of Commercial Facility\* – 10 minutes

- c. Statutory and Infrastructure Transaction Recommendations – 10 minutes
  - i. Hydro Project Update and Approval (Meriden)\* – 10 minutes
- 8. Other Business – 15 minutes
  - a. Connecticut State Budget for FY 2017 (Update)
  - b. 2016 Legislative Session (Update)
  - c. Regulatory Process (Update)
  - d. Other Business
- 9. Adjourn

\*Denotes item requiring Board action

Join the meeting online at <https://global.gotomeeting.com/join/770092493>

Or call in using your telephone:

Dial (657) 220-3412

Access Code: 770-092-493

Next Regular Meeting: Friday, June 17, 2016 from 9:00-11:00 a.m.  
Connecticut Green Bank, 845 Brook Street, Rocky Hill, CT



## **RESOLUTIONS**

Board of Directors of the  
Connecticut Green Bank  
845 Brook Street  
Rocky Hill, CT 06067

Friday, April 22, 2016  
9:00-11:00 a.m.

Staff Invited: George Bellas, Craig Connolly, Mackey Dykes, Brian Farnen, Bryan Garcia, Ben Healey, Dale Hedman, Bert Hunter, and Kerry O'Neill

1. Call to order
2. Public Comments – 5 minutes
3. Consent Agenda\* – 5 minutes
  - a. Approval of Meeting Minutes for January 15, 2016\*

### **Resolution #1**

Motion to approve the minutes of the Board of Directors Meeting for January 15, 2016, February 26, 2016, and March 3, 2016

- b. Program Progress to Targets
  - c. Budget Progress to Targets
4. President's Update – 5 minutes
5. Board of Directors Strategic Discussions – 30 minutes
  - a. Green Bank Movement – Coalition for Green Capital
6. Connecticut Green Bank Bond Indenture – 15 minutes
7. Staff Transaction Recommendations\* – 45 minutes
  - a. Residential Sector Programs Transaction Recommendations – 5 minutes
    - i. CT Solar Loan Sell Down\* – 5 minutes

### **Resolution #2**

**WHEREAS**, the Board of Directors (“Board”) of the Connecticut Green Bank (“Green Bank”) previously authorized the proper Green Bank officers to execute and deliver any contract or other legal instrument necessary to effect the acquisition of a portion of the CT Solar Loan program loan portfolio by one or more senior investors no later than twelve (12) months from August 19, 2014;

**WHEREAS**, a suitable senior investor was not identified within this twelve (12) month period; and

**WHEREAS**, a suitable investor has now been identified and is prepared to finance the remaining portfolio of loans.

**Now**, therefore be it:

**RESOLVED**, that the Board of Directors reauthorizes the proper Green Bank officers to execute and deliver any contract or legal instrument necessary to effect the acquisition or financing of a portion of the CT Solar Loan program loan portfolio substantially in accordance with the terms set forth in the memorandum submitted to the Board on April 15, 2016; 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 transaction.

ii. Solarize SSHP with CHFA\* – 5 minutes

### **Resolution #3**

**WHEREAS**, the Board of Directors (the “Board”) of the Connecticut Green Bank (“Green Bank”) previously authorized a partnership with the Connecticut Housing Finance Authority (“CHFA”) to support properties in the State Sponsored Housing Portfolio (“SSHP”), and other properties of similar use and purpose, in going solar; and

**WHEREAS**, Green Bank staff is now requesting clarification with respect to the support that various Green Bank subsidiaries and affiliates can offer to ensure the success of that partnership;

**NOW**, therefore be it:

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer of the Green Bank, is authorized, on behalf of the Green Bank and all relevant subsidiaries and affiliates, to execute a loan agreement and ancillary documentation with CHFA with terms and conditions materially consistent with those presented in the memorandum to the Board dated April 15, 2016 and revised April 20, 2015.

**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 legal instruments.

b. Commercial and Industrial Sector Program Transaction Recommendations – 25 minutes

- i. C-PACE Transaction – Groton\* – 15 minutes

#### **Resolution #4**

**WHEREAS**, pursuant to Section 157 of Public Act No. 12-2 of the June 12, 2012 Special Session of the Connecticut General Assembly and as amended (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**, 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 **\$741,702** construction and (potentially) term loan under the C-PACE program to CURE Innovations, LLC, the building owner of 93 Shennecossett Road, Groton, 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; and

**WHEREAS**, the Green Bank may also provide a short-term unsecured loan (the “Feasibility Study Loan”) from a portion of the Loan amount, to finance the feasibility study or energy audit required by the C-PACE authorizing statute, and such Feasibility Study Loan would become part of the Loan and be repaid to the Green Bank upon the execution of the Loan documents.

**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 and, if applicable, a Feasibility Study 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 Board dated April 15, 2016, 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 Act, 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.

- ii. CT Solar Lease II – Expansion of Commercial Facility – 10 minutes

#### **Resolution #5**

**WHEREAS**, at a special meeting of the Board of Directors of the Connecticut Green Bank (“Green Bank”) held on June 26, 2013, the Green Bank Board of Directors (the

“Board”) approved resolutions authorizing the creation of the CT Solar Lease 2 program (“Solar Lease 2”);

**WHEREAS**, the Green Bank intends to extend the commitment size and duration of the tax equity, credit facilities, and Green Bank participation supporting Solar Lease 2 as set forth in the memorandum submitted to the Board dated April 15, 2016 and revised April 20, 2016;

**NOW**, therefore be it:

**RESOLVED**, that the Green Bank Board of Directors (“Board”) authorizes the President of the Green Bank and any other duly authorized officer of the Green Bank, to execute and deliver amendments and other related documentation to extend the commitment size and duration of the tax equity, credit facilities, and Green Bank participation supporting Solar Lease 2 consistent with the memorandum submitted to the Board dated April 15, 2016 and revised April 20, 2016, 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 “sponsor equity commitment” for the CT Solar Lease 2 program for the purposes of Board authorization is defined as (a) capital contributions by CEZIA Solar Services Inc. to CT Solar Lease 2 LLC LESS (b) cumulative net income of CEZIA Holdings LLC derived from its role as “Developer” for the CT Solar Lease 2 program;

**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 legal instruments.

c. Statutory and Infrastructure Transaction Recommendations – 10 minutes

i. Hydro Project Update and Approval (Meriden)\* – 10 minutes

### **Resolution #6**

**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 and (3) Green Bank’s Comprehensive Plan for Fiscal Years 2015 and 2016 (the “Comprehensive Plan”), Green Bank continuously aims to drive private capital investment into clean energy projects;

**WHEREAS**, pursuant to the development of a small hydroelectric facility at the Hanover Pond Dam on the Quinnipiac River in Meriden (“Project”), on February 26, 2016 the Green Bank Board of Directors (the “Board”) authorized:

- i) construction financing in an amount not to exceed \$3.1 million,
- ii) a working capital guaranty in an amount not to exceed \$300,000 to New England Hydropower Company (“NEHC”), the project developer, under the Green Bank’s existing working capital facility partnership with Webster Bank; and,
- iii) term financing based on the following



- a. the issuance of New Clean Renewable Energy Bonds (“CREBs”) in an amount not to exceed \$3,100,000, and
- b. securing the issuance of CREBs utilizing the Special Capital Reserve Fund (“SCRF”) subject to further Board approval; and

**WHEREAS**, Green Bank staff now recommends that the Board authorize an increase in the working capital guaranty afforded to NEHC in connection to the Project under the Green Bank’s existing working capital facility partnership with Webster Bank.

**NOW**, therefore be it:

**RESOLVED**, that the Green Bank may increase the amount of its working capital guaranty under the Green Bank’s existing working capital facility partnership with Webster Bank, for draws made by NEHC solely in connection with this Project and in an amount not to exceed \$600,000 and may issue a guaranty to a third party lender for construction finance for the Project as more completely described in a memorandum to the Board of Directors dated April 15, 2016 and as revised on April 20, 2016;

**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 legal instruments. Submitted by: Bryan Garcia, President and CEO; Bert Hunter, EVP and CIO; Ben Healey and Mariana C. Trief, Clean Energy Finance.

8. Other Business – 15 minutes
  - a. Connecticut State Budget for FY 2017 (Update)
  - b. 2016 Legislative Session (Update)
  - c. Regulatory Process (Update)
  - d. Other Business
9. Adjourn

\*Denotes item requiring Board action

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Connecticut Green Bank, 845 Brook Street, Rocky Hill, CT



# Board of Directors Meeting Happy Earth Day 2016!

April 22, 2016



# 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

## Resolution 1



- **Meeting Minutes** – approval of meeting minutes of January 15, 2016\*
- **Under \$300,000 and No More in Aggregate than \$1,000,000** – memo to update board on transactions reviewed and approved by staff and clearing the queue for future transactions consistent with Comp Plan and Budget
- **Program** – Progress to Targets for FY 2016
- **Budget** – Progress to Targets for FY 2016

# Consent Agenda

No More in Aggregate than \$1,000,000



Project Name	Comprehensive Plan	Amount	Type
Holinko Estates	MFAH	\$27,150	Navigator Loan
Botticello Farms	C-PACE (Solar PV)	\$181,563	Benefit Assess.
<b>Total</b>		<b>\$208,713</b>	

Approximately \$210,000 in loans

Board of Directors  
Agenda Item #4  
President's Update



# President's Update



## Program Progress to Targets for FY 2016

- **Statutory and Infrastructure** – behind target of 90.0 MW, but expect to be well ahead of FY 2015 deployment of 50.5 MW. Extension of Federal ITC may have slowed down the market (i.e., thrill of the deal effect). Delays in closing AD projects due to length of time to permit facilities.
- **Residential** – the Energize CT Smart-E Loan seeing limited origination from CHIF/HES channels. We are spending a lot of time and effort that is leading to little results towards Comp Plan – we have redirected time and effort to low-income, multifamily, and health and safety issues...and R-PACE policy
- **Institutional** – supporting DEEP's efforts to close on “Lead by Example” projects. Challenges with the state bond cap and revisions to public policy (i.e., bond cap allocation and payback period).

# President's Update

## Program Targets Overview



	FY 2015			FY 2016 (through Q3)		
Targets	Target	Actual	% Var	Target	Actual	% Var
Capital Deployed (\$ MM)	\$451.6	\$360.1	(91.5)	\$575.1	\$259.9	(54.8)
Deployment (MW)	55.5	66.5	19.8	95.7	58.2	(39.2)
# Loans/Projects	4,500	7,185	59.7	11,291	6,656	(41.1)
Annual Saved (kMMBtu)	1,429	229	(84.0)	887	222	(75.0)

- **Targets** – Comp Plan stretch vs. achievable? (Stretch)
- **Status** – CAFR recognition of outputs and outcomes at approved vs. closed vs. completed projects? (Closed)\*

### REFERENCES

FY 2015 Actual data from FY 2015 CAFR

FY 2016 Actual data from April 15, 2016 memo

\* RSIP we assume projects approved are closed based on longstanding history of 95% of projects approved are completed

# President's Update (cont'd)



## Budget Progress to Targets for FY 2016

- **Asset Allocation** – strengthened balance sheet to \$130.5 million in assets and from current assets (i.e., \$10.8 million in cash) to other assets (i.e., \$90.4 million in loans and leases)
- **Budget** – above revenue projections (i.e., 2.5%) and below expense projections (i.e., 18.3%) as a result of lower spend on employee compensation and benefits, and advisory support services

# President's Update (cont'd)

## Other Notables



- **Statements of Financial Interests (SFI) Filing** – filing deadline is May 2<sup>nd</sup> for board members. CGB has achieved 100% compliance since its inception. If you have any questions, please contact Brian Farnen for assistance.
- **Board Effect** – Cheryl Samuels is leading an effort towards a more efficient and environmentally friendly online paperless process for board and committee materials. Piloting now through B&O Committee
- **UTC and Eversource Energy** – CGB options to assist the deal helped UTC reach a commitment with Eversource to move forward
- **Green Bonds** – commented into Moody's Green Bond Assessment (GBA) methodology as part of our developing green bond efforts

# President's Update (cont'd)

## Moody's GBA



- **Organization** – 15% of the points...mission, structure, expertise, etc. [meet all 5 sub-factors]
- **Use of Proceeds** – 40% of the points...investment of proceeds in green projects...taxonomy (i.e., 8 classifications) [≥95% of proceeds]
- **Disclosure on the Use of Proceeds** – 10% of the points [meet all 5 sub-factors]
- **Management of Proceeds** – 15% of the points [meet all 5 sub-factors]
- **Ongoing Reporting and Disclosure** – 20% of the points [meet all 5 sub-factors]

Grade	Detail	Score
GB1	Excellent	≤1.5
GB2	Very Good	1.5-2.5
GB3	Good	2.5-3.5
GB4	Fair	3.5-4.5
GB5	Poor	>4.5

# Board of Directors

Agenda Item #5a

Board of Directors Strategic Discussions

Green Bank Movement – Coalition for Green  
Capital



**coalition for green capital**

# **Green Bank Movement Growing Across the Country**

*Connecticut Green Bank Board Meeting – April 22, 2016*

Coalition for Green Capital

Reed Hundt, CEO

Jeffrey Schub, Executive Director

# Connecticut demonstrates how government can more efficiently expand access to clean energy

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- Green Bank model achieving scale
- Advancing and refining the model
- Creating a more just clean energy platform



# Green Banks are quickly spreading across U.S.

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## *Green Banks Operating Or Under Development/Consideration*



# Diverse set of governments want to copy Connecticut and achieve similar success

## Montgomery County, MD – Green Bank Implementation

- Passed legislation last summer to create County Green Bank as non-profit
- Closely modeled on CT approach, market focus, and products

## Washington, DC – Green Bank Viability Report

- Completing formal study for DC energy office, transitioning to implementation
- Likely be a quasi-public, like CT, with potential legislation moving quickly

## Nevada – Legislatively Directed Green Bank Assessment

- Interest in lower energy cost, economic growth, job creation, and private sector focus
- Policymakers looking for non-partisan solutions to move past NEM debacle

## Colorado – Governor's Energy Office Green Bank Study

- CO already has diverse, but scattered set of financing products
- Green Bank could coordinate, more efficient leverage; focus on PPP model

# Green Bank “Playbook” will be comprehensive how-to guide for governments

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- CGC & Connecticut Green Bank will capture the “what”, “how” and “why” of institution creation & product design
- States around the country are eager to replicate success
- Rapid and efficient information sharing is key
- Multimedia, internet-based information sharing

# White House shows increasing interest in federal support for state Green Bank Development

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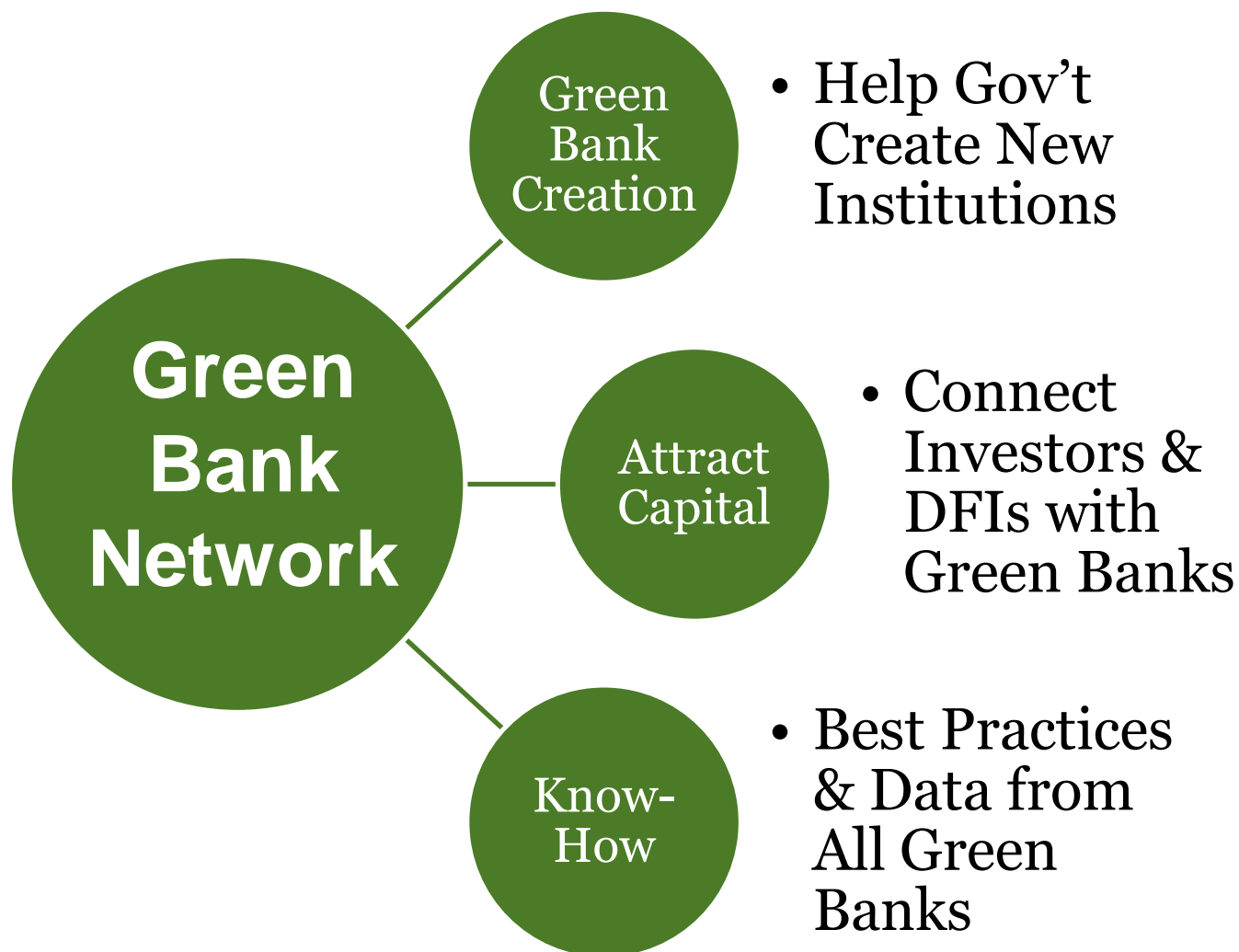
- White House hosted Green Bank Roundtable in June '15
- Focused on unlocking existing funding sources within departments that can be used for Green Bank activity
- WH increasingly engaged in direct state engagement, expressing support for Green Bank creation
- New DOE Report on “Energy Investment Partnerships” features Connecticut Green Bank

# Green Banks operating around the world



# Global Green Bank Network just launched, hub for new Green Bank development, knowledge sharing

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**coalition for green capital**

# Thank You

Comments and Questions:

Reed Hundt, CEO

[rehunt@gmail.com](mailto:rehunt@gmail.com)

Jeffrey Schub, Executive Director,

[jeff@coalitionforgreencapital.com](mailto:jeff@coalitionforgreencapital.com)

# Board of Directors

## Agenda Item #6

### Connecticut Green Bank Bond Indenture



# Green Bonds



## Timeline (January 15, 2016 meeting)

- **January 15, 2016** – discussion with BOD about bonding authorization policy, strategy, and timeline
- **January – March 2016** – Bond Counsel to ***draft master trust indenture*** (including review by Financial Advisor (Lamont), CGB, OTT, Sr. Managers). Indenture finalized.
- **April 22, 2016** – submit master trust indenture at the next scheduled BOD meeting (Earth Day 2016) for approval, and discuss plan for financing products and projects
- **June 17, 2016** – BOD to review and approve FY 2017 – FY 2018 Comprehensive Plan inclusive of authorization to use bond funds as a source of capital with SCRF
- **July 15, 2016** – any additional approvals required for bond issuance and SCRF authorization

# Green Bonds

## Expected Issuances



- **Meriden Hydro** – New Clean Renewable Energy Bonds
- **Bridgeport District Energy** – Private Activity Bonds
- **SHREC** – Potential securitization of Solar Home Renewable Energy Credits
- **General Purposes** – could use to raise capital for program needs (i.e., FY 2017)

# Bond Indenture CREBs Hydro Transaction



- **April 12** – reviewed indenture of trust for New Clean Renewable Energy Bonds w/Bond Counsel & OTT
- Changes to be made largely agreed
- Want to be sure staff, Bond Counsel & OTT have adequate time to review before bringing to BoD for approval (complete package is best – incl. SCRF self sufficiency opinion, etc.)
- Intend to bring forward for BoD approval @ **June 17 mtg**

## INDENTURE OF TRUST

Between

THE CONNECTICUT GREEN BANK

And

U.S. BANK NATIONAL ASSOCIATION

as Trustee

Section 204. Issuance and Delivery of the Initial Bonds. There are hereby authorized to be issued under this Indenture the Initial Bonds in an aggregate principal amount not in excess of \$3,350,000 as follows: Connecticut Green Bank Clean Renewable Energy Bonds (Hanover Pond Dam Project), Series 2016 A Bonds, dated, bearing interest and maturing, subject to prior optional [and mandatory sinking fund] redemption and having the other details, as follows:

# Board of Directors

## Agenda Item #7

### Staff Transaction Recommendations

Board of Directors  
Agenda Item #7ai  
Residential  
CT Solar Loan Sell Down

# CT Solar Loan Sell Down Background

- CT Solar Loan Program – partnership between Green Bank and Sungage Financial, Inc.
- Initially seeded in 2012 with \$1.5m of ratepayer funds and \$300k of ARRA-SEP funds for a loan loss reserve.
- Board authorized additional \$5m to expand the Program’s warehouse facility, followed by another \$5m as the Program continued to grow.
- In February 2014 Solar Mosaic, Inc. agreed to finance up to \$4m; however, later reduced its commitment to around \$1.1m.

# CT Solar Loan Sell Down Program Success to Date

- Total principal balance of loans over \$5m to around 300 homeowners.
- Sungage has “graduated” and gone on to raise \$100m from Massachusetts-based Digital Federal Credit Union to expand program across CA, FL, MA, NY, NJ, and TX (with continued activity in CT).

# CT Solar Loan Sell Down Request for Reauthorization

- Green Bank currently has 162 performing loans, with balance of \$3.1m outstanding, that have not been financed through Mosaic or prepaid.
- On Aug 19, 2014 Board authorized Green Bank to finance remaining portfolio no later than 12 months from that date.
- **Due to expiration of that authorization, staff now requests reauthorization from Board to finance \$2.51m of outstanding loans through The Reinvestment Fund, a community development financial institution.**



# CT Solar Loan Sell Down Financing Terms



## TRF Financing Terms

Amount	\$2,510,000
Term	7 years (84 months)
Interest Rate	[REDACTED]
Amortization	15-yr hypothetical amortization period
Origination Fee	[REDACTED]
Payment Schedule	84 monthly payments followed by bullet payment in 85 <sup>th</sup> month (7y term/15y amortization, \$1.4M bullet unless refinanced as expected)
Prepayments	Allowed quarterly, in whole or part

Board of Directors  
Agenda Item #7aii  
Residential  
Solarize SSHP with CHFA

# Solarize SSHP Initiative with CHFA



## **Background**

- Over past year, staff has worked with the Connecticut Housing Finance Authority (“CHFA”) to help affordable multifamily properties in the State Sponsored Housing Portfolio (“SSHP”) go solar
- BOD approved program / financing solution at its October 16, 2015 meeting
- Docs since finalized with existing SL2 investor / lenders; now in final negotiation with CHFA

## **Issue**

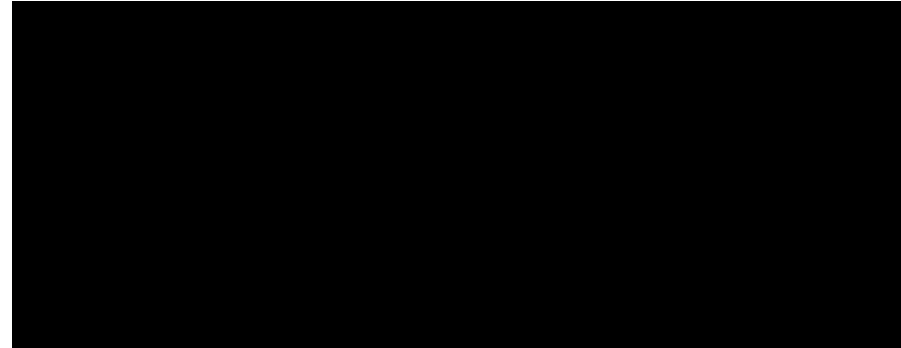
- Original BOD authorization open to interpretation with respect to permitted credit support to be provided by Green Bank and its subsidiaries

## **Request Approval To**

- Clarify authorization to enable CEFIA Solar Services Inc., CEFIA Holdings LLC, and Green Bank, as necessary, to provide credit support to the transaction (e.g., defeasance and debt service reserves) to enable successful execution of the program in partnership with CHFA

Board of Directors  
Agenda Item #7bi  
Commercial and Industrial  
C-PACE Transaction – Groton

# 93 Shennecossett Road, Groton Ratepayer Payback



# 93 Shennecossett Road, Groton

## Terms and Conditions



- **\$741,702** construction loan at 5% and term loan set at a fixed 5.70% over the 17-year term
- **\$741,702** loan against the property
  - Property valued at [REDACTED]
  - Loan-to-value ratio equals [REDACTED]; **Loan-to-cost ratio equals [REDACTED]**; Lien-to-value ratio equals [REDACTED]
- DSCR > [REDACTED]

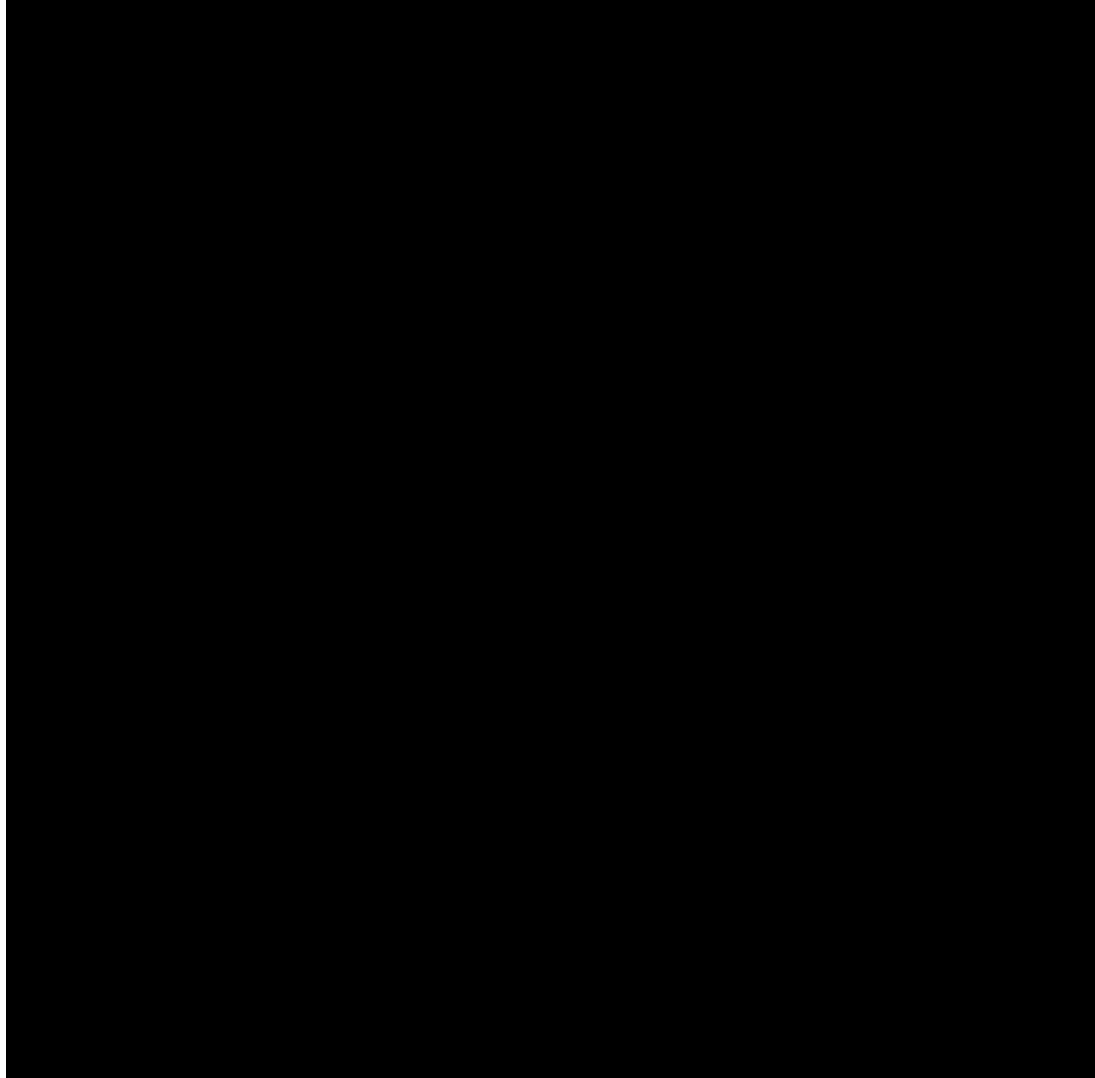
# 93 Shennecossett Road, Groton

## The Five W's



- **What?** Receive approval for a \$741,702 construction and (potentially) term loan under the C-PACE program to CURE Innovations, LLC. to finance the construction of specified energy upgrade
- **When?** Project to commence 2016
- **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?** CURE Innovations, LLC, the property owner of 93 Shennecossett Road, Groton CT
- **Where?** 93 Shennecossett Road, Groton CT

# 93 Shennecossett Road, Groton Project Tear Sheet





# 93 Shennecossett Road, Groton

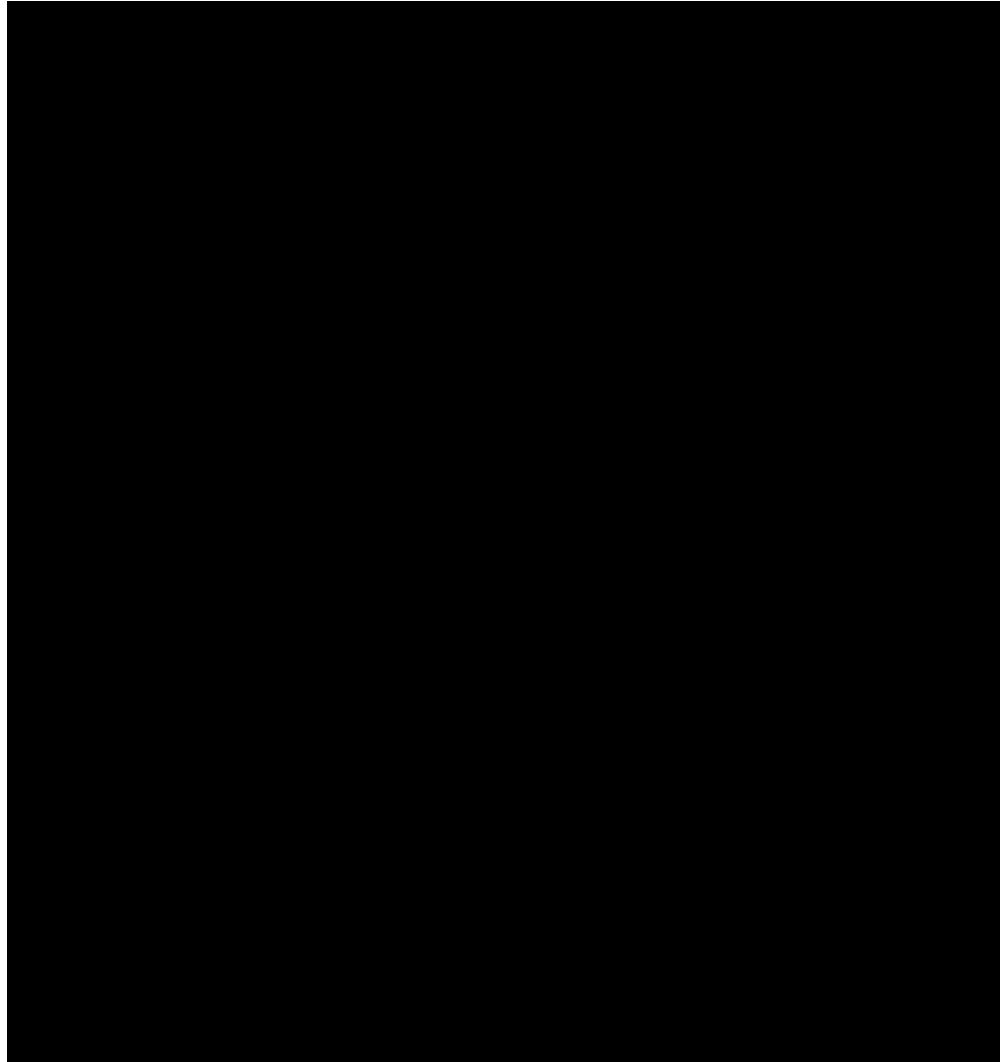
## Anticipated Cash Flow



<b>CGB Pro Forma</b>			
<i>Project Basics</i>		<i>Cash Flows</i>	
		<u>Date</u>	<u>CEFIA \$</u>
Amount Financed	\$741,702	May 2016	\$741,702
Construction Period (years)	0.25	Aug 2016	\$9,271
Term (years)	17	Jan 2017	\$68,703
		Jan 2018	\$68,703
Construction Financing Rate	5.00%	Jan 2019	\$68,703
Term Financing Rate	5.70%	Jan 2020	\$68,703
		Jan 2021	\$68,703
Construction Interest Payment (bullet)	\$9,271	Jan 2022	\$68,703
Yearly Debt Service Payments (made semi-annually)	\$68,703	Jan 2023	\$68,703
		Jan 2024	\$68,703
		Jan 2025	\$68,703
		Jan 2026	\$68,703
		Jan 2027	\$68,703
		Jan 2028	\$68,703
		Jan 2029	\$68,703
		Jan 2030	\$68,703
		Jan 2031	\$68,703
		Jan 2032	\$68,703
		Jan 2033	\$68,703
		Jan 2034	\$0
		Jan 2035	\$0
		Jan 2036	\$0

# 93 Shennecossett Road, Groton

## Key Financial Metrics



# Board of Directors

Agenda Item #7bii  
Commercial and Industrial  
CT Solar Lease II – Expansion of Commercial  
Facility

# CT Solar Lease II Expansion of Commercial Facility

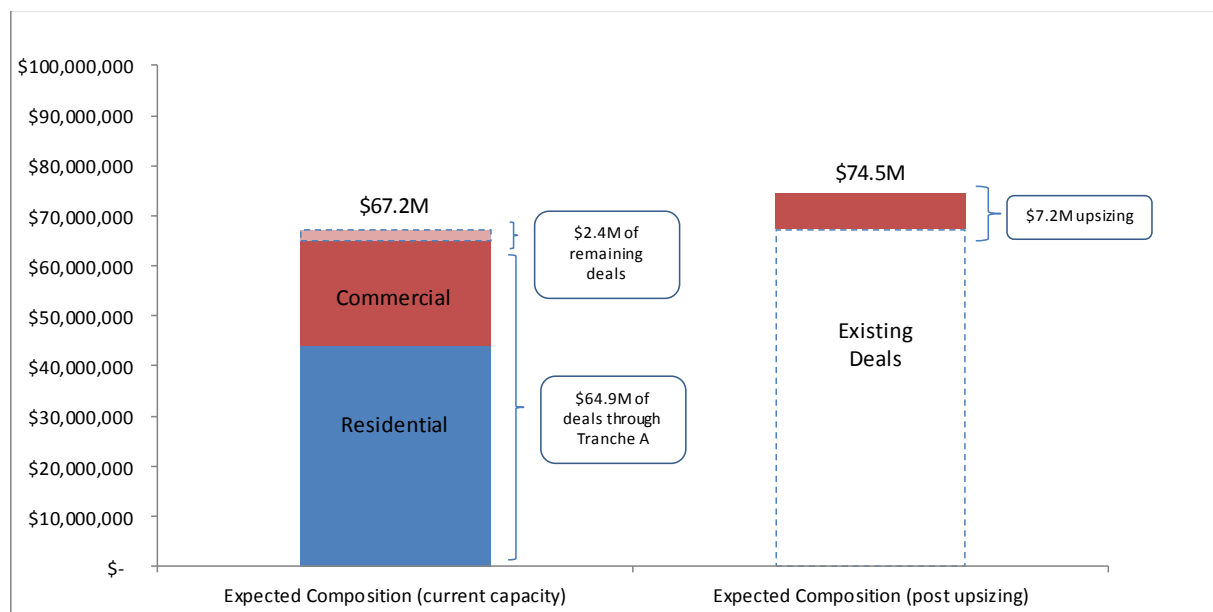


- **SL2 has been a success**

- Over \$67M of Residential and Commercial deals will be funded with current capacity
- 96% of capacity has gone through Tranche A (\$65M), with the remaining 4% already allocated

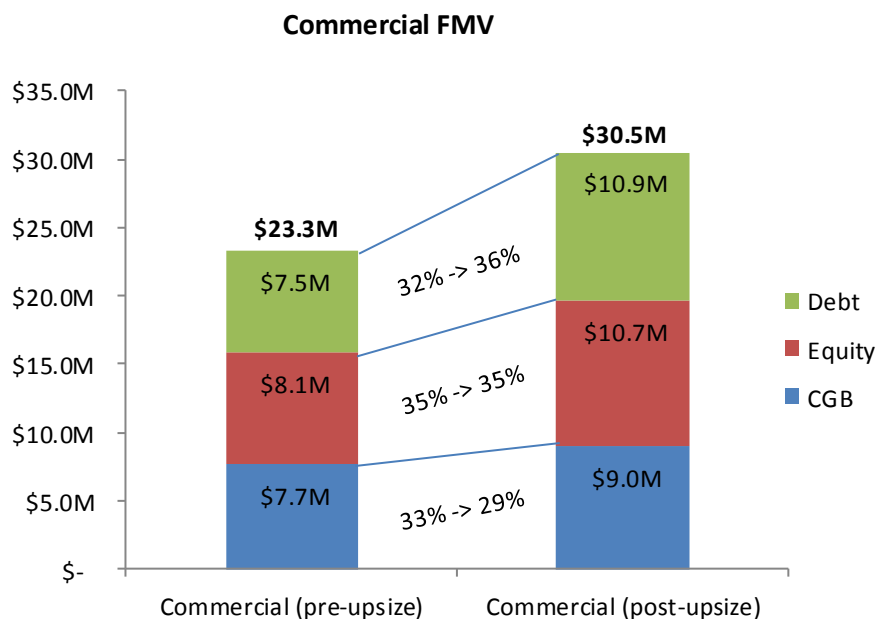
- **\$7M - \$8M of high priority commercial deals in 2016 currently unfunded**

- Able to provisionally secure an additional \$2.4M in tax equity and \$3.4M in debt capacity from US Bank and First Niagara, respectively



# Funding Upsizing

- Equity stays at 35% of the capital stack
- Increase debt portion of the commercial funding so as to equal 39% of the capital stack, excluding state housing authority projects – effectively 36% across commercial portfolio
- CGB funding comprises the balance of the funding, which is expected to decrease from 33% to 29%



# Projected Use of Funds



- Both existing and expected deals will be able to utilize additional capacity
  - Current debt capacity limited some funding of some existing deals
- Expected pipeline here is <10% of the “high likelihood” 2016 deals reported by developers
  - Given limited capacity, pipeline limited to key transactions for strategic partners

# Request



- Ability to extend facilities to the end of Q1 2017
- Amend documentation to allow for expanded tax and debt commitments
- Increase CGB capital commitment of \$1.8M
- Define: “sponsor equity investment commitment” for the CT Solar Lease 2 program for the purposes of Board authorization

Entity	Current Commitment	Upsizing Request	Total Commitment
Green Bank (CEFIA Solar Services)	\$22,637,869 <sup>(1)</sup>	\$1,800,000 <sup>(2)</sup>	\$24,437,869 <sup>(3)</sup>
US Bank (Firststar Development LLC)	\$23,659,490	\$3,400,000	\$26,059,490
First Niagara & Webster Bank	\$24,000,000	\$2,400,000	\$27,400,000

<sup>(1)</sup> \$22,637,869 is the gross sponsor equity investment commitment before reinvested proceeds from excess cash generated at CT Solar Lease 2 LLC. The net sponsor equity investment commitment<sup>(\*)</sup> is \$10,197,597<sup>(\*\*)</sup>.

<sup>(2)</sup> \$1,800,000 is the gross sponsor equity investment commitment before reinvested proceeds from excess cash generated at CT Solar Lease 2 LLC. The net sponsor equity investment commitment is \$1,300,000.

<sup>(3)</sup> \$24,437,869 is the gross sponsor equity investment commitment before reinvested proceeds from excess cash generated at CT Solar Lease 2 LLC. The net sponsor equity investment commitment is \$11,497,597.

<sup>(\*)</sup> The term “net sponsor equity investment commitment” is defined as (a) capital contributions by CEFIA Solar Services Inc. to CT Solar Lease 2 LLC LESS (b) cumulative net income of CEFIA Holdings LLC derived from its role as “Developer” for the CT Solar Lease 2 program.

<sup>(\*\*)</sup> as of March 31, 2016

Board of Directors  
Agenda Item #7ci  
Statutory and Infrastructure  
Hydro Project Update and Approval (Meriden)

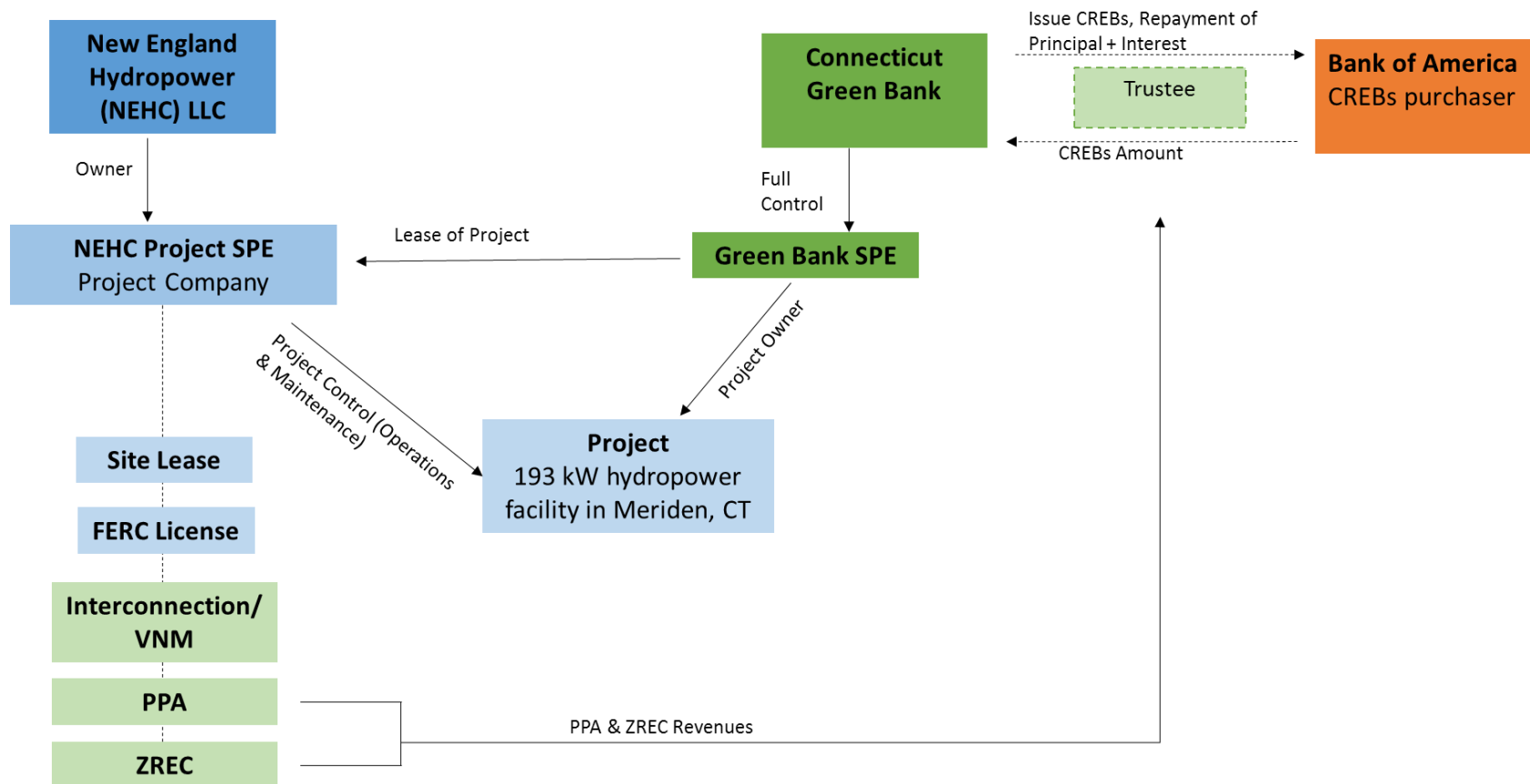


# New England Hydropower: Project Recap



- ▶ Project: 193kW hydroelectric facility in Meriden, CT
- ▶ On February 26, 2016 Board Approved:
  - ▶ Construction financing in an amount NTE \$3.1 million,
  - ▶ Working capital guaranty in an amount NTE \$300,000 to New England Hydropower Company (NEHC), under the existing working capital facility partnership with Webster Bank
  - ▶ Term financing based on the following prerequisites requiring further board approval:
    - ▶ Issuance of New Renewable Energy Bonds (CREBs) in an amount NTE \$3.1 million,
    - ▶ Securing the issuance utilizing the Special Capital Reserve Fund

# NEHC Updates: Ownership Structure



Structure meets CREBs and Federal Energy Regulatory Commission (“FERC”) license requirements while limiting Green Bank’s risk and liability.

# NEHC Updates: Financing



## ▶ CREBs

- ▶ Draft Bond Indenture shared with the Board
- ▶ **Allocation application** substantially complete, no rush in submitting as bonds must be issued within 6 months after allocation is awarded.
- ▶ Positive **diligence** from **Bank of America's** meetings with NEHC and global water engineer who performed previous diligence.

## ▶ Construction Finance

- ▶ **Construction finance (NTE \$3.1 Mil) from local bank** with Green Bank guaranty - limits Green Bank's involvement before CREBs allocation.
- ▶ Increase in **working capital** to avoid delays as construction loan closes - amount (NTE) \$600,000 through Green Bank's existing partnership with Webster Bank

# NEHC Updates: Construction



- ▶ Change in Project's General Contractor to **Bancroft Contracting Company ("Bancroft")**
  - ▶ Project is better fit for Bancroft's hydropower business.
  - ▶ Bancroft is a construction company with annual revenue in excess of \$25 million (~40% of revenue in the hydro space) and bonding capacity in excess of \$50 million. Notable clients include Brookfield Renewables, NextEra Energy, Green Mountain Power, First Light Power and ENEL.
- ▶ Contract to purchase **Archimedes Screw Generator** close to execution (reviewed for CGB by former CCEF independent hydro expert).

# NEHC Updates

## Proposed Resolutions



- ▶ Increase working capital guaranty in an amount NTE \$600,000 under the Green Bank's existing facility with Webster Bank for draws made by NEHC connection with this Project
- ▶ Authorization to issue a guaranty to a third party lender for construction finance for the Project instead of a loan by Green Bank as originally contemplated by staff and authorized by the Board on February 26, 2016

# Board of Directors

## Agenda Item #8

### Other Business

# Connecticut State Budget Deficit for FY 2017



- **Budget Deficit** – \$930 million projected for FY 2017...revenues not being realized, and spending drastically exceeds revenues...leading to significantly unbalanced budget
- **Legislative Proposals**
  - ✓ Appropriations Committee proposed cuts to the budget that was still short by \$340 million
  - ✓ Finance, Revenue and Bonding Committee proposed diverting \$22 million in RGGI funds as revenues to the State Budget
- **Governor's Proposal** – balanced budget, that did not include a transfer of RGGI funds to the State Budget

# Legislative Session 2016



- **Budget...Budget...Budget!!!**
- **Bill No. 366** – provides for technical fixes to C-PACE, SHREC, and administrative powers of the CGB (i.e., separation from CI “for administrative purposes only”) through Energy & Technology Committee
- **Bill No. 5563** – R-PACE



# Regulatory Process

## 2015 and 2016



- **Docket No. 13-08-14** – VNM and agricultural facilities addressing “ownership” issue
- **Docket No. 16-02-25** – Cargill Falls Hydro Project allowing for ZREC extension
- **Docket No. 13-02-03RE01** – RSIP REC aggregation to allow for easier process for registering, certifying, and transacting RECs
- **Docket No. 15-07-17** – SHREC REC aggregation to allow for easier process for registering, certifying, and transacting RECs

Board of Directors  
Agenda Item #9  
Adjourn

Subject to changes and deletions

## **CONNECTICUT GREEN BANK**

### **Board of Directors**

Draft Minutes – Regular Meeting

Friday, January 15, 2016

A regular meeting of the Board of Directors of the **Connecticut Green Bank (the “Green Bank”)** was held on January 15, 2016 at the office of the Connecticut Green Bank, 845 Brook Street, Rocky Hill, CT, in the Colonel Albert Pope board room.

1. **Call to Order**: Catherine Smith, Chairperson of the Green Bank and Commissioner of the Department of Economic and Community Development (“DECD”), called the meeting to order at 9:00 a.m. Board members participating: Mun Choi; Bettina Ferguson, State Treasurer’s Office; Norma Glover; John Harrity; Reed Hundt (by phone); Rob Klee, Vice Chairperson of the Green Bank and Commissioner of the Department of Energy and Environmental Protection (“DEEP”); Matthew Ranelli; Patricia Wrice.

Members absent: Tom Flynn and Kevin Walsh

Staff Attending: George Bellas, Andy Brydges, Joe Buonannata, Craig Connolly, John D’Agostino, Mackey Dykes, Brian Farnen, Bryan Garcia, Ben Healey (by phone), Dale Hedman, Bert Hunter, Andrea Janecko, Alex Kovtunencko, Alysse Lembo-Buzzelli, Jane Murphy, Kerry O’Neill, Cheryl Samuels, Genevieve Sherman and Kim Stevenson.

Others Attending: Henry Link, Melissa Patterson-Meador and Mike Trahan.

2. **Public Comments**

There were no public comments.

3. **Consent Agenda**

Ms. Smith explained to the Board that Mr. Garcia would review program and budget progress to targets during the President’s Update portion of the agenda, and then called for discussion and a vote on the items in the Consent Agenda.

**Upon a motion made by Mr. Klee, seconded by Mr. Harrity, the Board members voted unanimously in favor of adopting the Consent Agenda and Resolution #1 as written.**

Resolution #1

Motion to approve the minutes of the Board of Directors Regular Meeting for December 18, 2015

**4. President's Update**

Mr. Garcia informed the Board that U.S. Department of Housing and Urban Development Secretary Julian Castro was visiting several Connecticut cities that day and that CGB staff Kerry O'Neill and Gladys Rivera would attend at least one of the scheduled events. Next, Mr. Garcia updated the Board on the "Energy on the Line" partnership between the Green Bank and DECD, stating that the \$800,000 of incentives had been approved by the Manufacturing Innovation Fund advisory board - bringing the opportunity for C-PACE financing to more manufacturers. Lastly, Mr. Garcia invited the Board to visit the Green Bank's recently launched website, [www.ctgreenbank.com](http://www.ctgreenbank.com).

*Program and Budget Progress to Targets*

Mr. Garcia updated the Board on how the Green Bank was progressing programmatically, as well on budget progress to targets. Regarding the Residential programs, he explained that the Smart-E Loan program is behind on its fiscal year goals due in part to (1) competition from another loan product (i.e., the utility subsidized Heating Loan) that was discussed with the Board in December where there is a target of 135 loans and only 44 loans closed to date, and (2) lack of origination efforts through the CHIF/HES channel where the goals were set by the utilities to originate 300 loans and only 10 loans have been closed to date. Mr. Garcia added that he and Ms. O'Neill are going to shift focus since there is very little that can be done to meet these goals and focus efforts on health and safety issues with low-income and multifamily programs.

Mr. Garcia noted that the Green Bank is beginning to see projects emerge from private capital partners and that an organizational effort moving forward will be to continue to unlock those markets. He stated that the Green Bank will assess staying in the market if necessary to move projects forward or stepping out to allow for the private sector to continue progressing, while the Green Bank focuses on other areas.

Regarding the budget, Mr. Garcia explained that the Green Bank model is in full effect, with current assets shifting to other assets (i.e., loans and leases), and that the FY 2016 budget is ahead on revenue projections and behind on expenses. George noted that expenses are likely to pick-up for marketing and other consulting services in Q3 and Q4.

Ms. Smith asked what risk the current low energy prices pose to the Green Bank, if any. Mr. Garcia replied that the source of funds received by the Green Bank remains steady. Mr. Harrity then asked if low energy prices could hurt the demand for clean energy upgrades, to which Mr. Hunter explained that there is a natural replacement market for some equipment, so residents should still be encouraged to upgrade outdated and inefficient equipment.

Mr. Klee asked if a seasonality trend is apparent with solar. Ms. O'Neill replied that the Green Bank sees seasonal variances with the installation of solar systems, but that the sales cycle is steadier year round – as evidenced by past Solarize campaigns that have been successful even in cold weather months.

Ms. Glover asked if there is an assumption that more solar companies entering the Connecticut market will translate into increased adoption of solar systems. Mr. Hunter replied in the affirmative, explaining that companies take a significant step entering the Connecticut market which is between a much larger New York market and a heavily subsidized Massachusetts market. Ms. O'Neill added that the market should continue to grow with the recent multi-year extension of the Federal Investment Tax Credit (“ITC”), with Attorney Farnen noting that the Green Bank will likely not see the expected bump in installations this year because of the extension.

Ms. Smith echoed Mr. Garcia's earlier request that the Board continue to provide consistent feedback to Green Bank staff in the future.

## **5. Board of Directors Strategic Discussion**

Mr. Garcia explained that this portion of the agenda would focus first on “green bonds,” then on the Green Bank's evaluation framework.

### *Green Bonds*

Mr. Garcia reminded the Board that discussions on bonding have gone back several years with the Connecticut Office of the Treasurer (“OTT”) and acknowledged that Ms. Ferguson and OTT will continue to be a key partner of the Green Bank moving forward.

Regarding the public policy that allows the Green Bank to issue bonds, Mr. Garcia explained that it allows issuance of revenue bonds authorized by a resolution of the Board to support the purposes of the organization. He noted that the legislation allows the Green Bank to establish a non-impairment provision of the system benefit fund received by the Green Bank to protect bond holders. He noted that the organization has access up to \$100 million of a Special Capital Reserve Fund (SCRF) to support the issuance of bonds

Mr. Hunter provided an overview of the Green Bank's bond strategy, including a reminder that in the fall of 2015, 20 firms responded to a Request for Proposals and were selected to perform the role of book-running senior manager, co-manager, and/or private placement agent for bonds issued by the Green Bank.

Ms. Ferguson noted that OTT has done three green bond issuances to date. Ms. Smith asked what the pricing may look like, to which Mr. Hunter replied that pricing will depend on the issuance. He added that if the bonds are Special Capital Reserve Fund ("SCRF")-backed, the credit rating will be a bit lower than the State's general obligation bond rating. Mr. Hunter also provided an example, stating if the State is AA rated, the Green Bank issued bonds may be AA-, which should cost the Green Bank just 10-15 basis points more than the State rate.

Mr. Hundt asked why the Green Bank's bonds would be rated lower than the State's. Mr. Hunter replied that the input the Green Bank received was related to bond issuance backed by leases with a State agency. He added that when dealing with counterparties rated at a certain level, it is hard to improve upon a credit rating unless you supplement it with something else – an additional undertaking or collateral. Ms. Ferguson agreed, adding that it is a longstanding practice with the rating agencies.

Ms. Smith expressed interest in how the process might work for the Green Bank to receive its own credit rating, being a small agency relative to the State. Ms. Ferguson replied that even though the Green Bank's rating will be lower than the State's, as a new credit in the market, she believes the Green Bank can receive a good price (interest rate) for its issuances.

Regarding the bonding timeline, Mr. Hunter explained that each bond issuance will require separate Board approval. He noted that Green Bank will plan to submit a master trust indenture at the April Board meeting (which falls on Earth Day) and discuss a plan for financing products and projects. He added that at the June Board meeting, the Green Bank will ask the Board to review and approve a Comprehensive Plan for Fiscal

Years 2017-2018, inclusive of authorization to use bond funds as a source of capital with SCRF.

Mr. Klee acknowledged that the Green Bank has set a solid framework for potential bond issuance and Ms. Glover praised Ms. Ferguson's efforts at OTT on this topic. Ms. Smith added that with the State frequently coming close to its bonding cap, it is good to have the Green Bank as another avenue for issuing bonds.

Mr. Harrity asked if it is possible to do a retail type bond so that people can invest in the Green Bank's bonds. Ms. Ferguson replied that every State issued bond has a one day retail period supported by a marketing campaign to alert potential investors. She added that there is often a very good response during the retail period and restated her initial thought that as a new name in the market, the Green Bank's bonds will also be well received. Staff agreed to investigate retail bond issuances in denominations less than the typical minimum of \$5,000.

#### *Evaluation Framework*

Mr. Garcia explained to the Board that the team is working on an evaluation framework for green banks based on the mission and goals of the Connecticut Green Bank. He noted that one of the five key points of a recently released report of the SEE Action report from December 2015 was to develop a program logic model to illustrate the market transformation theory for financing products. Having set some context, he turned the presentation over to Mr. Brydges to explain the model.

Mr. Brydges described the Green Bank's effort to develop an organization-wide evaluation, measurement and verification ("EM&V") framework, noting that the first step was to create a program logic model and input the Green Bank's data to track the progress of its programs. Mr. Brydges provided an overview of the seven steps of the model, beginning with the Green Bank's financing and marketing programs and data accessibility, and ending with prospective impacts, including increased financial savings, investments and jobs, and decreased greenhouse gas emissions. The focus of the discussion was on the "Financing Market Transformation Process" portion of the model which describes a long-term feedback loop whereby increasing the supply of capital and consumer demand results in greater data availability and a lower risk profile for clean energy investments.

Mr. Klee noted that Green Bank funds are only part of this model and that it is also important to factor in its marketing and other support. Ms. Smith asked if, at a macro-level, companies are doing better because of these savings, including with job growth.

Additionally, Ms. Wrice inquired if the social benefits like public health of having these savings were also being captured, to which Mr. Garcia and Mr. Brydges replied that the model does discuss indirect factors. Mr. Garcia added that they are looking into health and safety benefits, and that, eventually, the Green Bank will collect that data for evaluation to attempt to quantify those benefits.

Ms. Glover stated that it will be interesting to deploy this model, and asked if it will be applicable to most of the Green Bank's programs. Mr. Garcia replied in the affirmative, explaining that people will now be able to track the programs' progress and that the model will help the Green Bank focus on key performance indicators and that this evaluation framework will be useful to other green banks.

Mr. Ranelli expressed hesitation around the idea of attribution, stating that while all factors have to be measured, it may be difficult to tell whose effort is doing what. He recommended that a frank discussion should be had on reduction of greenhouse gas emissions and advised that this is something to consider as selling off renewable energy credits ("RECs") is not a one-to-one benefit.

Mr. Brydges described a former Green Bank program (i.e., CT Solar Loan) within the parameters of the model, but acknowledged that some work must still be done to present the model more clearly. Mr. Garcia noted that the Green Bank's efforts on the model should encourage other states to share their data and best practices.

Mr. Klee stated that the full story of this model should be financing, as well as installer/distributor and customer perspectives. He asked how the model would be shared, to which Mr. Garcia replied that data will initially be presented via Yale University and SEE Action network webinars, but more thinking will need to be done regarding how actively it will be promoted beyond that.

Mr. Hundt stated that it was announced in Paris that ClimateWorks Foundation is providing seed funding for a new global green bank network, spearheaded by the Coalition for Green Capital and the Natural Resources Defense Council. He noted that the program logic model could be an exciting tool for the network and that the Connecticut Green Bank should use that channel to discuss evaluation frameworks for green banks.

Mr. Harrity asked about the potential for competition amongst green banks for access to private capital. Ms. Smith replied that the more the green banks pass off to the private sector, the better, and added that if the programs work, they will continue to attract private capital. She expressed that the staff should keep the model usable and not get



too caught up in too much analysis. Mr. Brydges noted that this issue is a prime argument for regionalization, since neighboring states often have differing ways of doing business. Mr. Klee agreed with Mr. Brydges' point – particularly from the contractor perspective, and Ms. O'Neill added that the Green Bank is already having informal conversations with neighboring states and lenders on Residential PACE so that the region becomes more attractive to investors.

## **6. Staff Transaction Recommendations**

Mr. Garcia introduced the staff transaction recommendations, noting that the small hydro transaction would be pulled from consideration and reintroduced likely at a special Board meeting later in the first quarter of 2016.

Mr. Hundt drew the Board's attention to an op-ed in the January 14, 2016 edition of the *New York Times* co-authored by U.S. Senator Lisa Murkowski entitled "Stop Wasting America's Hydropower Potential." The Board and Green Bank staff agreed to discuss the topic in more detail at a later meeting and that connecting with DEEP on the subject matter was appropriate.

### **Residential Sector Programs Transaction Recommendations**

#### *Working Capital Program*

Mr. Healey discussed the request to extend the scope of the existing \$5 million residential sector Working Capital Loan Guarantee program.

Mr. Healey explained that the program was initially approved by the Board about two years prior for the CT Solar Loan, CT Solar Lease and Smart-E Loan programs and that Green Bank staff now feels it should be expanded across all Board-approved Green Bank residential financing programs. He noted that the purpose of the program is to give qualifying contractors/developers access to increased lines of credit and noted that Webster Bank would continue providing the funds, secured by a guarantee from the Green Bank.

Mr. Healey stated that the request is for the Board to approve an increase in the maximum credit limit of a working capital line of credit to \$2.5 million for the PosiGen engagement and \$500,000 for all other contractors participating in Green Bank residential financing programs. He explained the rationale of the request to the Board, stating that this program would continue to provide contractors with access to low-cost capital and also assist PosiGen with entering the Connecticut market.

Ms. Ferguson asked if PosiGen entering the Connecticut market was the impetus for the request, to which Mr. Healey replied that though the Green Bank had been considering the expansion for some time, PosiGen's growth trajectory did spur the action. Ms. Ferguson then asked how much working capital has been used from the existing program and Mr. Healey explained that the minimal amount that has been used has been fully repaid.

**Upon a motion made by Mr. Ranelli, seconded by Mr. Klee, the Board members voted unanimously in favor of adopting the resolution regarding the Residential Working Capital Program as written. Ms. Smith and Ms. Glover were not present at the time of the vote.**

Resolution #3

**WHEREAS**, in March of 2013, the Connecticut Green Bank (the "Green Bank") Board of Directors (the "Board") approved the Contractor Working Capital Loan or Guarantee Program, making available up to \$5,000,000 of guarantees for working capital loans issued to contractors installing residential clean energy and energy efficiency measures under the Green Bank's Solar Loan, Solar Lease and Smart-E Loan Programs; and

**WHEREAS**, in June of 2015, Green Bank approved the PosiGen Residential Solar Lease Engagement, making available up to \$10,000,000 in debt capital for investment directly into PosiGen's Connecticut capital stack to support solar leases deployed primarily to low and moderate income households.

**NOW**, therefore be it:

**RESOLVED**, that the Board approves of the extension of the Working Capital Program to all residential financing programs supported by the Green Bank;

**RESOLVED**, that the Board approves of an increase in the maximum credit limit of a working capital line of credit to \$2.5 million for the PosiGen Engagement and to \$500,000 for all other contractors using Green Bank residential financing programs; 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 legal instruments.

**Note:** Ms. Smith and Mr. Choi departed the meeting after the Residential recommendations. Mr. Klee assumed the role of Chairperson from this point forward.

## **Commercial and Industrial Sector Programs Transaction Recommendations**

### *Working Capital and Timeliness Reserve Funds for C-PACE*

Mr. Healey discussed the request to create timeliness reserve capacity associated with the Green Bank's new C-PACE financing facility with Hannon Armstrong ("HA") equal to 3% of total assets financed, not-to-exceed \$750,000. Additionally, Green Bank staff is requesting the establishment of an internal working capital facility to allow for the short-term deployment of funds during construction (which would be recovered in monthly draws from HA, not-to-exceed \$750,000).

Mr. Healey explained that a \$500,000 timeliness reserve was in place for the previous facility with Clean Fund, so Green Bank staff hopes to establish something similar with HA. He added that the rationale for the working capital facility request is to ensure that projects move smoothly through construction without delays.

Mr. Klee asked what the Green Bank's experience has been so far on both the timeliness reserve and working capital facility, and how many C-PACE projects have experienced slow movement of funds. Mr. Healey replied that most municipalities improve their processes after completing one project; however, with over 100 municipalities opted into C-PACE and not all having done projects, the Green Bank is seeking to mitigate any potential issues. He explained that four or five projects have been impacted by slow movement of funds to date, totaling approximately \$165,000 in timeliness funding released – most of which has been recovered, with the remaining funds currently being paid back via workout solutions on a few customers' property tax bills.

Mr. Healey added that the working capital facility will serve primarily as an operational smoothing tool. Mr. Bellas explained to the Board that he supports this request based on his prior experience dealing with this issue. He stated that he is hopeful that the Green Bank has forecasted this need correctly, noting that while \$750,000 is a fair initial request, Green Bank staff may ask the Board later to increase the facility to \$1 million.

Mr. Ranelli asked if this would be a commitment on the Green Bank balance sheet, to which Mr. Bellas replied that only the funds used would appear on the balance sheet.

Ms. Ferguson proposed that these additional funds be built-in upfront for any future financing program facilities so that the Board can anticipate such requests. Mr. Ranelli added that the request could be built into the deal so that not just Green Bank funds are being utilized.

**Upon a motion made by Ms. Ferguson, seconded by Ms. Wrice, the Board members voted unanimously in favor of adopting the resolution regarding the Working Capital and Timeliness Reserve Funds for C-PACE as written.**

Resolution #4

**WHEREAS**, on December 17, 2015, Green Bank closed on a financing facility with HASI OBS OP A LLC, a Maryland limited liability company (“HA”), and HA C-PACE LLC, a Delaware limited liability company (“HA C-Pace”) in support of the C-PACE program and in order to fund C-PACE transactions (the “HA Facility”);

**WHEREAS**, at its August 17, 2015 meeting, the Green Bank Deployment Committee authorized an increase in the timeliness reserve capacity associated with the Green Bank’s C-PACE partnership with the private capital provider Clean Fund, up to a not-to-exceed level of \$500,000 against \$18 million in assets sold, and staff has requested the establishment of similar timeliness reserve capacity associated with the Green Bank’s C-PACE partnership with HA to cover the first \$25 million of this new facility; and

**WHEREAS**, under the HA Facility, the Green Bank is permitted to advance more than its pro rata share of funds to C-PACE borrowers during construction in order to avoid disruption in construction activities, and staff has requested the establishment of an internal working capital facility to permit short term funding that will be repaid under the terms of the HA Facility.

**NOW**, therefore be it:

**RESOLVED**, that the Green Bank Board of Directors (“Board”) authorizes the creation of a \$750,000 timeliness reserve fund associated with the HA Facility subject to advanced amounts not to exceed three percent (3%) of all assets financed under such HA Facility;

**RESOLVED**, that the Board further authorizes the creation of a working capital facility associated with the HA Facility in an amount not to exceed \$750,000 for the purpose of allowing the Green Bank to make construction disbursements to C-PACE borrowers in excess of the Green Bank’s pro rata

share of such financing, which exceedance amount will then be recovered under the terms of the HA Facility; 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 legal instruments.

**7. Executive Session – Personnel Matters**

**Upon a motion made by Mr. Ranelli, seconded by Ms. Ferguson, the Board members voted unanimously in favor of moving into Executive Session for personnel matters at 10:36 a.m.**

**8. Regular Session – Voting on Personnel Resolutions**

The Board voted to return the meeting to regular session at 11:15 a.m. and proceeded to vote on three proposed resolutions.

**Upon a motion made by Mr. Klee, seconded by Ms. Ferguson, the Board members voted unanimously in favor of adopting Resolution #5 as written.**

Resolution #5

**RESOLVED**, that the Board of Directors of the Connecticut Green Bank (Green Bank) as required by the Operating Procedures of the Green Bank, approve of the revised director-level position descriptions for the Director and Managing Director of Commercial and Industrial Programs as presented to the Board of Directors on January 15, 2016.

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**Upon a motion made by Mr. Klee, seconded by Ms. Wrice, the Board members voted unanimously in favor of adopting Resolution #6 as written.**

Resolution #6

**RESOLVED**, that the Board of Directors of the Connecticut Green Bank (Green Bank) designates the responsibility to the Budget and Operations Committee to assess and determine an adjustment in compensation for Mackey

Dykes in the event he must step-in as Interim Director until such time as the Director of Commercial and Industrial Programs position is filled.

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**Upon a motion made by Mr. Klee, seconded by Mr. Harrity, the Board members voted unanimously in favor of adopting Resolution #7 as written.**

Resolution #7

**RESOLVED**, that the Board of Directors of the Connecticut Green Bank (Green Bank) designates the responsibility to the President of the Green Bank to create an Institutional sector position to meet the market needs at a level below Director and subject to the reporting out to the Chairperson and Vice Chairperson of the Board of Directors.

**9. Adjourn:** Upon a motion made by Ms. Glover, seconded by Ms. Ferguson, the Board voted unanimously in favor of adjourning the January 15, 2016 meeting at 11:21 a.m.

Respectfully Submitted,

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Rob Klee, Vice Chairperson

**CONNECTICUT GREEN BANK**  
**Board of Directors**

Draft Minutes – Regular Meeting  
Friday, February 26, 2016

1. **Call to order:** Catherine Smith, Chairperson of the Green Bank and Commissioner of the Department of Economic and Community Development (“DECD”), called the meeting to order at 4:09 p.m. Board members participating: Bettina Bronisz, State Treasurer’s Office; Norma Glover; John Harity (by phone); Reed Hundt (by phone); Rob Klee, Vice Chairperson of the Green Bank and Commissioner of the Department of Energy and Environmental Protection (“DEEP”) (by phone); Matthew Ranelli and Mun Choi (by phone)

Members Absent: Patricia Wrice, Tom Flynn, & Kevin Walsh

Staff Attending: Bryan Garcia, Anthony Clark, Bert Hunter, Jane Murphy, Mackey Dykes, George Bellas, Mariana Trief, Brian Farnen, Ben Healey (by phone), Alex Kovtunenکو, and Cheryl Samuels.

2. **Public Comments**

Carol Wasserman (NEHC), Michael Kerr (NEHC), and Philip Moreschi (Fuss & O’Neill) attended but made no public comment.

3. **Consent Agenda**

- a. Approval of Meeting Minutes for January 15, 2016

**Resolution #1**

Motion to approve the minutes of the Board of Directors Regular Meeting for January 15, 2016

- b. Financial Statements through December 31, 2015
- c. Transactions up to \$300,000 and No More in Aggregate than \$1,000,000

**Upon a motion made by Bettina Bronisz, and seconded by Matt Ranelli, the Board members voted unanimously in favor of adopting the Consent Agenda and Resolution #1 as written.**

4. **Staff Transaction Recommendations**

- a. **Commercial and Industrial Transaction Recommendations**

- i. **Cargill Falls – C-PACE Transaction was moved up on the agenda at the request of the Chair**

Ben Healey discussed the Cargill Falls project, providing an in-depth overview. He stated that this project had already previously been approved by the Deployment Committee. He stated that as a result of several changes in the project scope, staff, on behalf of the developers, is currently looking to secure additional funding for the project.

He explained that this is a C-PACE project, providing behind the meter hydro power, together with a redeveloped mill site that will result in affordable residential housing and some commercial space. He explained that the great upside of this is that the hydro portion is part of a larger redevelopment. He explained that there are half a dozen buildings on this site, which will include residential and commercial space.

The total project is \$25 million, with the real estate development being approximately \$20 million and the hydroelectric development comprising the balance. He advised that there is a firm commitment on closing on all of the financing related to the real estate portion of the development, and these funds are expected to close once the hydro portion is complete within the next few months.

He explained that this is a 900 kilowatt project, projected to generate 3 million kilowatts annually, with a useful lifetime of 50 years. He explained that if you compare this with solar, to get 3 million kilowatt hours in a year, that would cost approximately \$9 million, but half of that for the hydro, or \$4.7 million. He explained that this is a clean energy win of significant proportions.

He explained that the Deployment Committee had initially approved this project a little over a year ago at \$2.25 million. He explained that approximately \$1.65 million has been dispersed to date. He explained that staff is asking to increase the project size in terms of the C-PACE investment.

Ben Healey explained the reasons for the increase in cost. He advised that in an effort to keep the costs down, the developers had chosen Chinese turbines. Staff had determined that they could not be comfortable with them, because they were concerned about the accessibility of parts and extremely limited performance experience outside China.

He explained that staff is requesting to double the project investment to \$4.7 million. He explained that to make it work for cash flow that there will be an interest-only period of two years, and during this time there will be a cash sweep to the Connecticut Green with a target yield at 9%. If the target rate is not met, then cash deficiencies will be repaid out of the excess cash during the amortization period. He explained that this project is expected to be placed with the Hannon facility, although this will not happen immediately, but considered later after the project has completed construction (both the hydroelectric and the real estate development).



Ben Healey explained that once the project is completed, it is behind the meter power offsetting retail rates. He explained that the developers currently have a \$95 ZREC. He advised that if the project is not interconnected with Eversource within 30 days (April 1) the developers will lose that ZREC. He explained that the assumptions presented to the Board are based on a new, lower ZREC. He explained that, during the project period, cash flows are expected to be sufficient to pay back the financing. He explained that, based on the project pro forma, it is approximately a \$2 million NPV for the risk that the Connecticut Green Bank is taking. He advised that this is not a project without risks and wants the Board to be aware of that. He explained that the Green Bank has the benefit of the C-PACE benefit assessment lien, as well as the hydro equipment, because the Green Bank has a security interest in that.

Ben Healey explained that it should work as structured and that the staff is requesting approval. He explained that it is in line with the Connecticut Green Bank's clean energy mandate and also reinforces their role as a driver of economic development.

Norma Glover expressed concerns that they will not meet the deadline with the FERC license. Ben Healey advised that this project has met the requirement associated with the license and that there is no risk of losing it.

Matt Ranelli advised that he is inclined not to support the request. He advised that he is concerned that the developers had not returned to their investors for the additional funds. He explained that it seems odd that they would come back to the Connecticut Green Bank for the money. Commissioner Smith asked if the financing is segregated between the housing and the energy portions of the project. Bert Hunter advised that yes it is.

Ben Healey advised that the Connecticut Green Bank has been the sole financier for the hydro. He explained that they could go out and source new capital, but the goal was that the developers were so focused on meeting the deadline that they trusted that the Connecticut Green Bank would be on board with them.

Commissioner Smith questioned if there was a sense of when they might hear back from PURA on a request for the extension. Ben Healey advised that they are not sure, but he doesn't feel it would be delayed, more likely if passed, which is not assured, it would be retroactive of the extension.

Matt Ranelli explained that he is concerned that the developer has not put a personal guarantee on this project. Ben Healey explained that the development team was hired by the owners of the project and that he's not entirely sure of what their personal wealth might be. He advised that in terms of personal guarantees on the housing side, there would not be much value in their personal guarantees. They would have to go back to their investors.

Commissioner Smith questioned who the developers for the hydro are. Ben Healey explained that there are several. He explained that there is a hydroelectric expert with 30 years of experience and a construction management firm that was retained at the insistence of the Connecticut Green Bank. He explained that it is not a traditional hydro developer. It's an assortment of players.

Commissioner Smith advised that one of her concerns is that the people doing the work have no skin in the game. Brian Farnen stated that the struggle is that personal guarantees don't work well with traditional C-PACE deals but we could seek for additional security and skin in the game. He explained that additional direction would be contingent on looking at some other kinds of fees. Ben Healey explained that on the housing development side a developer fee has already been reduced to zero. The owners in this case will make their money over the long-term ownership of a successful project.

Norma Glover questioned how much the Connecticut Green Bank has into this project. George Bellas stated that it is about \$1.4 million in advances on the current C-PACE. Bert Hunter explained that they have a full and complete security interest.

Bettina Bronisz expressed her concern that they will not be able to come back in the future for anything else as it will already have been exhausted.

Matt Ranelli expressed his concern that they cannot run it if things go south for the developers at this point in time. Bert Hunter advised that they do have that in the existing agreement and that they will take it over if they cannot build the rest of the project.

Commissioner Smith questioned if everything were to go wrong, what is the Connecticut Green Bank be left with. Ben Healey explained that they have a current financing agreement that is co-signed by two LLCs. He advised that under that agreement they have the ability to foreclose on the property, complete and operate the project.

Commissioner Smith questioned what the value would be that the Connecticut Green Bank would be getting back. Ben Healey explained that it would be a very rare case to sell it someplace else. He stated that if the rest of the mill doesn't get built, and that they sell back at only wholesale prices the Green Bank might not get its principal plus interest back. He stated that the Green Bank will get its principal back. He explained that the money comes back without a whole lot of extra return in a worst case scenario.

Commissioner Klee stated that this is much more complicated than the typical solar install. He questioned if it gets into service, will it stay in service during the construction phase. Ben Healey explained that things

would just be carefully worked around with no expectation that the hydro would have to be shut down on a continuous basis.

Matt Ranelli requested that staff come back with more information at a later date. He requested that the owner try to find another source of capital. Bert Hunter confirmed that work will stop if the funds are not provided. He explained that it was the choice of improving the turbines and a project scope that was now fully developed that had increased the costs. He explained that the developers didn't anticipate the increased costs. He explained that if the Board does not approve, all of the contractors will demobilize. He explained that the restart cost might sink the ability of this project to move forward as well as delay the Department of Housing's ability to move forward. Matt Ranelli questioned how soon work would stop. Ben Healey stated that he is not sure in the context of dollars, but they would basically tell the contractors to cease working.

Commissioner Smith questioned if because they're rushing, has this increased the costs. Bert Hunter stated no, expediting the project doesn't have anything to do with project cost at this stage.

Commissioner Smith questioned why they cannot see if there are any other sources of funding. Ben Healey explained that it wouldn't be a short-term search. Commissioner Smith questioned if they could do it on just one of the turbines working. Ben Healey stated that they could, but it would then have to be fully redesigned, because of the flow and the hydraulics.

Reed Hundt requested that they discuss this project and call for a vote next week. Bert Hunter stated that one week would be the most that they would want to push it.

Commissioner Smith expressed her concern that it seems that the developers are unable to do this without the help of Ben Healey and would rather not approve it. Bert Hunter stated that there's no doubt that the developers have been very disappointing in this project. He stated that from the beginning staff had the feeling that they would need to provide significant guidance. He explained that staff has done exceptional diligence from the equipment and supply side. He stated that all of those conversations had convinced staff that the developers were on the wrong track. He explained that for the project to be successful equipment needed to be supplied from within the United States. He explained that they now have people doing the construction that know what they're doing. He advised that there is nothing unusual about this project at this stage.

In response to a question about expected performance once operational, Bert Hunter explained that as far as operating and maintaining, once these facilities start, there's very little that stops them, other than water flow which has been analyzed and confirmed. He explained that this equipment is locally sourced and operated by an asset manager that presently has 5 similar projects under management and two more in the

works. He stated that he is confident with where the project is at this point.

In response to a question about potential additional cost overruns, Bert Hunter explained that at this late stage with one month to go, staff did not anticipate that the capital costs would increase. He explained that the project is in a much better place now with much better equipment as a whole now.

Commissioner Smith questioned if the Board would like more time to discuss this project and have a vote on it next week. Matt Ranelli advised that he would prefer to wait another week. Norma Glover stated that she feels uncomfortable about giving \$5 million in 90 days.

Commissioner Smith advised that she would like to give the Board a couple of more days to discuss. As a result, action on was postponed to a future meeting of the Board.

## **b. Strategic Investments**

**Upon a motion made by Bettina Bronisz, and seconded by Matt Ranelli the Board unanimously approved the change**

### **i. New England Hydropower Company (Hanover Pond Project)**

Bert Hunter discussed New England Hydropower and the Hanover Pond Project. He introduced Phil Moreschi (Fuss & O'Neill), Michael Kerr, and Carol Wasserman (NEHC). Phil Moreschi explained that his company has been assisting with the permits and many elements of the installation process. Bert Hunter explained that this is a legacy project to establish a faster and lower cost installation process.

Bert Hunter discussed the project in detail. He discussed what has been completed so far and the next steps in the process. He explained that the PPA goes on for 20 years with two 10-year extensions. He explained that everything is coming together. He stated that the commercial operation should be up and running by mid-fall. He stated that they have been working with NEHC and that the key issue is technology, which is well established. He stated that critical replacement parts would be sourced within the United States. He also stated that financing is provided with Clean Renewable Energy Bonds through Bank of America.

**Upon a motion made by Norma Glover, and seconded by Matt Ranelli, the Board voted unanimously to approve. Bettina Bronisz advised that her vote does not represent a position for the Office of the Treasurer with respect to the special capital reserve fund, which must be considered and approved by the OTT independently of Ms. Bronisz's vote on the resolution for the financing. Commissioner Klee advised that he is voting only on the financing and does not**

**represent a position with respect to other matters that come before the Department of Energy and Environmental Protection concerning the proposed project.**

**Resolution #2**

**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 and (3) Green Bank’s Comprehensive Plan for Fiscal Years 2015 and 2016 (the “Comprehensive Plan”), Green Bank continuously aims to develop financing tools to further drive private capital investment into clean energy projects;

**WHEREAS**, New England Hydropower Company, LLC (“NEHC”) has used previously committed Operational Demonstration funding from the Connecticut Clean Energy Fund, Green Bank’s predecessor organization, to develop a small hydroelectric facility at the Hanover Pond Dam on the Quinnipiac River in Meriden (“Project”) and has requested financing support from the Green Bank, including working capital during project development;

**WHEREAS**, Banc of America Public Capital Corp (“Bank of America”) has extensive energy and tax credit bond financing expertise and has indicated interest in financing the Project as well as future renewable energy projects via New Clean Renewable Energy Bonds (“CREBs”). **WHEREAS**, the Green Bank would be considered a Qualified Issuer and Qualified Owner under CREBs, and the Project would qualify as a Qualified Renewable Energy Facility (as all of those terms are defined under regulations issued by the Internal Revenue Service);

**WHEREAS**, Green Bank staff recommends that the Green Bank Board of Directors (“Board”) approve of construction financing using ratepayer capital and the subsequent issuance of CREBs, in an amount to exceed \$3,100,000 along with allocating the minimum capital reserve required for the use of the Special Capital Reserve Fund (“SCRF”), in an amount not to exceed \$250,000, as a strategic selection and award because of the special capabilities of Bank of America to provide capital at attractive rates for tax credit bond financing, the uniqueness of the Project, and the strategic innovation associated with securing the Green Bank’s first CREBs allocation.

**NOW**, therefore be it:

**RESOLVED**, that the Green Bank Board of Directors hereby approves an appropriation and bond authorization of \$3,100,000 for construction and financing costs for the Project, including costs associated with ownership of the Project (as required under CREBs regulations), as a strategic selection and award pursuant to Green Bank Operating Procedures Section XII; and

**RESOLVED**, that the Green Bank may extend a working capital guaranty, under the Green Bank’s existing working capital facility partnership with Webster Bank, to draws made by NEHC solely in connection with this Project and in an amount not to exceed \$300,000;

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer is authorized to proceed with the prerequisites to the issuance of CREBs in an amount not to exceed \$3,100,000 with terms and conditions consistent with the memorandum submitted to the Board dated February 19, 2016, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 270 days from the date of authorization by the Board of Directors, provided that staff will submit for Board approval all resolutions required to approve all relevant documentation (such as an indenture of trust) required for the actual issuance of bonds;

**RESOLVED**, that the Green Bank Board of Directors hereby declares the Green Bank's official intent that payment of Project construction and financing 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 proceeds of the CREBs financing in an amount not to exceed \$3,100,000; and

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer is authorized to take appropriate actions to secure the issuance of CREBs utilizing the SCRF, provided the Green Bank complies with all statutory requirements for the SCRF, which will require among other things (1) State of Connecticut Office of Policy and Management approval, (2) an opinion of sufficiency as set forth in the Connecticut General Statutes ("CGS"), and (3) approval by the Office of the State Treasurer and other documentation required under the CGS; 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 legal instruments.

ii. **United Technologies Corporation**

Bert Hunter discussed the United Technologies Corporation ("UTC") transaction. He advised that the goal being sought jointly by UTC and Eversource is a 15% energy savings. He explained that timing is critical and work must begin on the work plan in the April to June timeframe. He advised that the Connecticut Green Bank will offer to provide a bridge loan to UTC while documentation is finalized for the proposed Bank of America financing. He advised that this enables UTC to undertake the investments required under the work plan while not displacing any capital needed for their core business activities.

**Upon a motion made by Norma Glover, and seconded by Bettina Bronisz, the Board voted unanimously to approve.**

**Resolution #3**

**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 and (3) Green Bank's Comprehensive Plan for Fiscal Years 2015 and 2016 (the "Comprehensive Plan"), Green Bank continuously aims to

develop financing tools to further drive private capital investment into clean energy projects;

**WHEREAS**, Eversource has proposed for subsidiaries of United Technology Corporation (“UTC”) a comprehensive energy savings program that will result in investments by UTC over a 3 year period that are anticipated to result in energy savings of approximately 15% (“UTC Energy Investment”);

**WHEREAS**, Bank of America has exclusive rights to the management of the PURA program to provide long-term financing for customer-side distribution resources (the “PURA Program”);

**WHEREAS**, the Green Bank proposes to make available to the relevant subsidiaries of UTC a \$5,500,000 bridge financing facility (“Bridge Loan”) to UTC in support of the UTC Energy Investment;

**WHEREAS**, Green Bank staff recommends that the Green Bank Board of Directors approve of the Bridge Loan as a strategic selection and award because of the special capabilities of Bank of America to provide capital at attractive rates under the PURA Program, the uniqueness of the UTC Energy Investment made possible due to the PURA program, the strategic importance of UTC to the Connecticut aerospace and defense industry, and the urgent need to act on the energy savings program as the energy savings measures to be financed will commence installation in the March through June 2016 period;

**NOW**, therefore be it:

**RESOLVED**, that the Green Bank Board of Directors hereby approves the Bridge Loan to the relevant UTC companies as a strategic selection and award pursuant to Green Bank Operating Procedures Section XII;

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer is authorized to proceed with the Bridge Loan commitment and documentation in an amount not to exceed \$5,500,000 with terms and conditions consistent with the memorandum submitted to the Board dated February 22, 2016, 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; 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 legal instruments.

## 5. Executive Session – Personnel Matters

**Upon a motion made by Bettina Bronisz, and seconded by Norma Glover, the Board entered Executive Session at 5:34 p.m.**

**Upon exiting Executive Session at 5:45 p.m., the Board unanimously approved Resolution 5.**

**Resolution #5**

**RESOLVED**, pursuant to Section 3.6 of the CGB Bylaws and Section VII of the CGB Operating Procedures, the Connecticut Green Bank Board of Directors (the "Board") approves the position of Vice President of Commercial and Industrial Programs ("Officer");

**RESOLVED**, the Board authorizes that the Chairperson of the Board shall determine the compensation for the Vice President of Commercial and Industrial Programs position in accordance with the approved salary ranges; and

**RESOLVED**, the Board approves the job description and responsibilities of the Director and Managing Director of Operations positions as described in Attachment A

**6. Adjourn**

The meeting was adjourned at 5:47 p.m.

Respectfully Submitted,

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Catherine Smith, Chair

DRAFT



# CONNECTICUT GREEN BANK

## Board of Directors

Draft Minutes – Special Meeting  
Thursday, March 3, 2016

- 1. Call to order:** Bryan Garcia called the meeting to order at 4:33 p.m. Board members participating: Catherine Smith (by phone), Bettina Bronisz (by phone), Norma Glover (by phone), John Harrity (by phone), Reed Hundt (by phone), Rob Klee (by phone), Matthew Ranelli, Patricia Wrice (by phone), Mun Choi (by phone), and Tom Flynn (by phone)

Members Absent: Kevin Walsh

Staff Attending: Bryan Garcia, Brian Farnen (by phone), Ben Healey (by phone), Cheryl Samuels, and Laura Fidao (by phone).

- 2. Public Comments**

There were no public comments.

- 3. Staff Transaction Recommendations**

- i. Cargill Falls – C-PACE Transaction**

Bert Hunter provided an update on the Cargill Falls transaction. He explained that there had been some questions from John Harrity and Matthew Ranelli regarding the transaction and he asked Ben Healey to address them. Ben Healey provided updated information pertaining to the questions. There was a question on whether or not there was town support. Ben Healey stated that the town has been actively involved including working with the Department of Housing. He stated that there is currently a question regarding water flow, but that it will be resolved next week. He advised that there is no siting counsel requirement.

The second question that had been raised was with respect to advocacy groups. Ben Healey explained that there is no new disruption to the run of the river and that there have been no concerns from any environmental groups.

Bert Hunter explained that a revised proposal had been sent out explaining two scenarios. Bert Hunter explained concerning scenario #2 staff contacted Enhanced Capital, a current capital partner. He explained that the transaction fits the target industry of Enhanced Capital, as well as the company size and the employee size restriction. He explained that they have been around since 1999, and that they manage a number of targeted investment programs in 18 other states in addition to Connecticut. He explained that another division of Enhanced Capital is also involved in the low income housing tax credits associated with this project.

Bert Hunter explained that staff had been able to achieve a non-binding term sheet with Enhanced Capital that would set forth the terms and conditions up to a

\$1.2 million investment. He explained that the interest rate would be 7.8% and would be senior to the Green Bank's interests. He explained that there would be no prepayment penalty, but there would be a requirement that the advance be repaid at the five year anniversary. He explained that there would be an interest only period of 12 months. He explained that that would be accommodated by the cash flow streams. He stated that staff is confident that they would be able to bring in another capital provider to refinance the payment to Enhanced Capital once the entire project is stabilized in 2-3 years.

Norma Glover questioned if Enhanced Capital was out of Stamford, CT. Bert Hunter stated, yes and that they are in the same office building as the Green Bank. Norma Glover questioned if there is a history of working in this arena for Enhanced Capital. Bert Hunter stated, not with hydroelectric, but it is a target industry in green technology. Commissioner Smith stated that Enhanced Capital has been an investor in numerous small companies around the state. She stated that she feels that it's a good choice for this project.

Bettina Bronisz explained that her concern was that this was not competitively bid. She stated that the Green Bank should have a stable capital provider on board for the future. Brian Farnen stated that they can still do that if they go with the original deal. He explained that they might be better off with that (i.e., scenario #1) and to sell down at a later date in an orderly fashion.

Bert Hunter stated that the resolutions as they are drafted do not suggest that they take the Enhanced Capital deal, but sell down the \$1 million upon construction completion. He stated that they should use this as a placeholder, and that they could approach Hannon Armstrong on it. He stated that the concern is that once they take that option (i.e., Hannon Armstrong), the Green Bank would be in a very weak position to re-trade the deal (given that the funding would fall under our existing agreement with Hannon Armstrong). He explained that staff would plan to keep Enhanced Capital in for about two to three years and the transaction will be very attractive to another investor by that point.

Ben Healey stated that the combo of no prepayments and the 12 month interest only period provide a lot of flexibility. Bettina Bronisz stated that this reduces the Green Bank's exposure, but dollar for dollar she questioned if it increases the amount of money that this overall project is going to cost. Bert Hunter explained that this is precisely the tradeoff. He explained that the Green Bank has put forward a 9% interest rate for two years while Enhanced Capital prices at 7.8% - saving the project interest costs. At the same time, after the interest only period, the Green Bank's funding rate to the project drops to 6-1/4%, which does disadvantage the project in the last 3 years (i.e., years 3 through 5). Ben Healey stated that there is also a slightly earlier amortization so there will be some cash flow impact. He explained that it's relatively minimal, but it will reduce the net cash available after debt service and for cash available to service the Green Bank's funding to the project.

**Upon a motion made by Pat Wrice and seconded by Matt Ranelli  
Resolution Two (supporting scenario #2 outlined in the**

**memorandum to the Board with a change to reflect reducing the Green Bank's risk by at least \$1,000,000 be accomplished by December 31, 2016 rather than by the project's completion date) passed unanimously.**

**Resolution #2**

**WHEREAS**, Pursuant to Section 157 of Public Act No. 12-2 of the June 12, 2012 Special Session of the Connecticut General Assembly and as amended (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**, the Green Bank Board of Directors (the "Board") has approved a \$40,000,000 C-PACE construction and term benefit assessment program;

**WHEREAS**, the Deployment Committee previously approved a C-PACE benefit assessment with a not-to-exceed amount of one hundred and ten percent (110%) of \$2,250,000 to Historic Cargill Falls Mill, LLC ("HCFM"), the property owner of 58 Pomfret Street, Putnam, CT 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; and

**WHEREAS**, the Green Bank now seeks to provide a further \$2,350,000 to HCFM for a new total combined investment not to exceed \$4,700,000 (the "Benefit Assessment"), to finance the completion of the Project and get repaid over a longer period than was originally approved by the Deployment Committee, including an interest only period of approximately two (2) years and an amortization period of twenty-five (25) years.

**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 an amended Benefit Assessment in a total amount not to exceed one hundred percent of the combined Benefit Assessment amount with terms and conditions consistent with the memorandum submitted to the Board dated February 19, 2016, 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 February 26, 2016;

**RESOLVED**, that the Board direct staff, prior to December 31, 2016, to sell down the Green Bank's risk in the transaction to a capital provider, by not less than \$1,000,000 so that the maximum retained risk following such sell down will not exceed \$3,700,000.

**RESOLVED**, that before executing an amended Benefit Assessment, the President of the Green Bank and any other duly authorized officer of the Green Bank shall receive confirmation that the C-PACE transaction continues to meet the statutory obligations of the Act, including but not limited to the savings to investment ratio and lender consent requirements; 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 legal instrument.

**4. Adjournment**

**Upon a motion made by Reed Hundt and seconded by Commissioner Klee the meeting was adjourned at 5:17 p.m.**

Respectfully Submitted,

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Catherine Smith, Chair

DRAFT



# Memo

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

**From:** Bryan Garcia (President and CEO)

**Date:** April 15, 2016

**Re:** Approval of Funding Requests below \$300,000 – Update

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At the July 18, 2014 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 \$300,000 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 \$300,000 that were evaluated and approved. During this period, 2 projects were evaluated and approved for funding in an aggregate amount of approximately \$208,713. If members of the board would be interested in the internal documentation of the review and approval process Green Bank staff and officers go through, then please request it.

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**Project Name:** MFH Navigator Loan - Holinko Estates (Mansfield Housing Authority)

**Amount:** \$27,150

**Comprehensive Plan:** Multi-Family Housing

**Staff Request:**

Holinko Estates and South Eaglefield Rd are located in Storrs, CT, close to the University of Connecticut campus and are non-contiguous sites. Holinko Estates is an existing 35 unit affordable housing complex owned by the Mansfield Housing Authority. An additional 30 units of new affordable housing are planned on that site and 20+ more are planned on the South Eaglefield site.

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The project anticipates planning for the renovation of the 35 existing units with improvements to heating and cooling systems, energy efficient appliance updates and non-invasive and drought resistant landscaping and other improvements that may be identified in the study.

The project application also anticipates improving the energy efficiency of the design and construction of the 50+ new units to be built on the two sites. The intent is to integrate energy issues into the design of the new units by these studies. These issues include siting of the buildings, durability of the building envelope, heating and cooling systems and energy efficiency standards to be set (LEED, Enterprise etc.) A recent green design charrette was productive and a success.

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**Project Name:** Botticello Farms LLC - 224 Hillstown Road, Manchester

**Amount:** **\$181,563 + 10%**

**Comprehensive Plan:** **CPACE**

**Staff Request:**

**Description**

The property at 224 Hillstown Road is a working vegetable and flower farm located in Manchester, CT consisting of several buildings across 5 acres of land (the "Property"). The Property is owner-occupied by Botticello Farms LLC ("Botticello Farms"). The Property was purchased by its current owner, Henry Botticello, in 1989 though his vegetable growing business has existed on a smaller piece of land across the street since 1973.

The proposed investment is a C-PACE transaction under which the Connecticut Green Bank ("Green Bank") would provide construction financing (at a per annum 5.0% interest rate) and a 10-year term loan commitment (also at a per annum 5.0% interest rate), in the amount of **\$181,563** to support **59.8 kW of solar photovoltaic** renewable energy across three barns located on the Property.

The project's **SIR** over the financing term is **1.07**, with a SIR over the useful lifetime of measures of 2.14. The average DSCR is **6.20x**. With this C-PACE loan the **LiTV for the property will be 43.3%**; and as there is no existing mortgage, the LTV is 43.3% as well, below the underwriting guidelines of 80%. While the LiTV is higher than the 35% ceiling typically used for full underwritings, the elevated LiTV is acceptable due to the following mitigating factors<sup>1</sup>:

- 1) There is a long-term revenue contract with investment grade counterparty in place (e.g., REC contract);
- 2) DSCR is greater than or equal to 1.75x;
- 3) The ratio of total liabilities to total net worth is less than or equal to 1.5:1;
- 4) The property is and has been owner occupied for 10 years or more;

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<sup>1</sup> The mitigating factor of SIR value greater than 1.25x pertains to SIR calculated over the financing term, which in this case is 1.07x, rather than SIR over the useful life of measures.

5) The assessment term is 10 years or less.

It is important to note that, per the Green Bank's agreement with Hannon Armstrong, a transaction needs only 3 of 8 potential mitigating factors to qualify for an elevated LiTV of up to 65%. As the Property has 5 of 8 mitigating factors, Staff is comfortable proceeding with the elevated LiTV.

Staff has examined the financials of Botticello Farms and found it to be in good health with a positive EBITDA over the past two years of operations. It is worth noting that projected cash flow from the solar PV system and related incentives with respect to the debt service payments will only be positive in the first year given the savings profile and then marginally negative every year thereafter, averaging an annual deficit of approximately \$3,000. However the net cash flow from the solar PV over the term of the financing agreement is positive (as evidenced from a SIR > 1.0). Additionally, there is a 15-year ZREC contract in place producing more than \$6,000 annually which surpasses the term of this financing agreement. From a financial perspective, given the very high DSCR and long operating history of Botticello Farms, staff has confidence Botticello Farms will have sufficient cash flow to service the C-PACE Benefit Assessment.

The contractor for the project will be Earthlight Technologies, Inc. a family-owned and operated company founded in 2008 which provides turnkey solutions for energy conservation solutions.

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# Memo

**To:** Connecticut Green Bank Board of Directors  
**From:** Bryan Garcia (President and CEO)  
**Date:** April 15, 2016  
**Re:** Q3 Progress to Targets

The following memo outlines Connecticut Green Bank (CGB) progress to combined Q1, Q2, and Q3 goals for fiscal year 2016 as of March 31, 2016, the end of the third quarter. To date, the Connecticut Green Bank has invested \$46.8 million of its resources in FY 2016 to attract \$215.6 million of private capital resources – for a total investment through Q3 of FY 2016 of \$259.8 million.<sup>1</sup> Of the \$46.8 million of resources invested by the Connecticut Green Bank \$16.9 million was in grants,<sup>2</sup> \$2.6 million in credit enhancements, and \$27.2 million in financing.

## Statutory and Infrastructure Sector

The Statutory and Infrastructure sector is below its target for the first part of the year due to slower growth than anticipated in the Residential Solar Investment Program (RSIP). Given that we had set a high FY 2016 target of 90.0 MW due to the anticipated wind down of the federal ITC at the end of 2015 – which didn't occur, but was instead extended to 2022 – the market didn't grow as quickly as we would have thought. Despite slower than anticipated growth, in nine (9) months, the RSIP program has already delivered nearly the same amount (i.e., 47.3 MW) of residential solar PV deployment as was done in the entire FY 2015 period (i.e., 50.5 MW). Although the program is not hitting the targets, the market is still experiencing rapid growth.

The Anaerobic Digester and Combined Heat and Power programs have seven (7) approved projects that staff is working with the developers to close. These projects represent over \$82 million in total capital deployed, 10 MWs of clean energy deployed, and nearly 750,000 of MMBtus saved.

Table 1. Statutory and Infrastructure Sector Q3 Cumulative Progress to Targets

	# Projects		Capital Deployed		MW		MMBTU	
	Closed	Target	Closed	Target	Closed	Target	Closed	Target
CHP and AD	-	5	-	\$71,725,000	-	9.0	-	273,186
RSIP	6,133	9,500	\$198,635,863	\$319,284,439	47.3	71.0	153,483	298,467
<b>CGB Total</b>	<b>6,133</b>	<b>9,505</b>	<b>\$198,635,863</b>	<b>\$391,009,439</b>	<b>47.3</b>	<b>80.0</b>	<b>153,483</b>	<b>571,653</b>

<sup>1</sup> Including credit enhancements of \$2.6 million for IRBs (\$0.8 million) and LLRs (\$1.8 million)

<sup>2</sup> Of the \$16.9 million invested in grants, \$16.9 million was through the Residential Solar Investment Program. Per PA 15-194, all of the incentives and administrative costs provided through the RSIP will be recovered through the sale of Solar Home Renewable Energy Credits to the electric distribution companies for Class I RPS compliance.



## Residential Sector

Multifamily and Low Income Loans/Leases have both had slower timelines to launch products in the market, impacting projected volume. However, Multifamily has a robust deal pipeline from pre-development activity and targeted outreach events and community partnerships which should yield approvals in the coming quarters. The low income lease (PosiGen) launched its second of three planned community campaigns this past quarter, with the third campaign launching next month and additional community partnerships coming online in the faith community and with Operation Fuel.

Smart-E has not seen the growth that we anticipated in FY16. Table 3 outlines our Smart-E channels and anticipated volume. The CHIF/HES channel has significantly underperformed, despite significant amounts of work with the utilities to coordinate our programs and drive financing through the HES program. The HVAC channel is well below target primarily due to the competition in the market from the ratepayer-subsidized EnergizeCT Heating Loan (this product closed \$8 million in loans in the first 3 months of this year), however lower fuel oil prices and a mild winter have also contributed. The solar channel has felt the effects of the ITC uncertainty and the continued growth in the lease/PPA model versus ownership, although this channel is beginning to pick up a bit over the last few months.

As shown in the Market Transformation portion of Table 2, we are beginning to see results from prior product spin-offs to 100% private capital.

Table 2. Residential Sector Q3 Cumulative Progress to Targets

	# Projects		Capital Deployed		MW		MMBTU	
	Closed	Target	Closed	Target	Closed	Target	Closed	Target
Low Income Loans/Leases	136	423	\$4,158,840	\$9,875,000	0.9	2.3	3,021	10,601
Multifamily <sup>3</sup>	24	28	\$7,779,184	\$7,850,000	1.4	0.8	3,131	11,495
Smart-E	155	825	\$4,120,256	\$12,652,331	0.7	1.5	3,486	16,289
Solar Lease	473	451	\$17,341,000	\$16,000,000	3.8	3.5	12,465	14,845
<b>CGB Total</b>	<b>792</b>	<b>1,727</b>	<b>\$33,399,280</b>	<b>\$46,377,331</b>	<b>6.7</b>	<b>8.1</b>	<b>22,102</b>	<b>53,230</b>
DCU-Sungage (Solar PV Loan) <sup>4</sup>	156	-	\$5,813,621	-	0.6	-	1,826	-
Sunnova (Solar PV Lease) <sup>5</sup>	155	-	\$3,489,327	-	1.1	-	3,611	-
<b>Market Transformation &amp; CGB Total</b>	<b>1,013</b>	<b>1,727</b>	<b>\$42,702,228</b>	<b>\$46,377,331</b>	<b>8.4</b>	<b>8.1</b>	<b>27,540</b>	<b>53,230</b>

Table 3. Smart-E Channel Breakout

Channels	# Projects	
	Closed	Target
<b>Smart-E</b>	<b>155</b>	<b>825</b>
<i>CHIF/HES</i>	2	450
<i>Existing EE/HVAC</i>	68	175
<i>Solar (some with EE)</i>	85	200

<sup>3</sup> The process for collecting energy data for a portion of the multifamily portfolio is still being built so some savings and clean energy production is not reported here

<sup>4</sup> The follow-on product that graduated from the CT Solar Loan

<sup>5</sup> The follow-on product that replaced the CT Solar Lease

## Commercial and Industrial Sector

As in the residential sector, we see 100% private capital providers entering the market and driving growth. However, growth is less than planned for, especially for CGB funded projects. The C&I team is launching several initiatives to grow the pipeline of projects, including the manufacturing-focused Energy on the Line campaign and the contractor-focused Projected Accelerator Service. The team is also working to grow the market by bringing in more private capital providers, including Bank of America and the Sustainable Funding Energy Program for non-profit organizations.

In December, CGB closed on an agreement with Hannon Armstrong (NYSE: HASI) to provide up to \$100 million for C-PACE projects. The 10:1 leverage warehouse facility will allow CGB to continue to grow C-PACE while transitioning to a fully privately-funded market.

Table 4. Commercial and Industrial Q3 Cumulative Progress to Targets

	# Projects		Capital Deployed		MW		MMBTU <sup>6</sup>	
	Closed	Target	Closed	Target	Closed	Target	Closed	Target
CPACE								
<i>CGB*</i>	25	46	\$17,238,740	\$33,000,000	4.2	6.2	22,185	TBD
<i>Clean Fund<sup>7</sup></i>	1	-	\$8,337,732	-	-	-	23,601	-
<i>GreenWorks Lending<sup>8</sup></i>	12	-	\$5,416,684	-	1.0	-	4,359	-
Commercial Lease (Institutional Sector)	6	7	\$4,248,157	\$4,200,000	1.5	1.4	4,769	5,880
<b>Total</b>	<b>44</b>	<b>53</b>	<b>\$35,241,313</b>	<b>\$37,200,000</b>	<b>6.7</b>	<b>7.6</b>	<b>54,914</b>	<b>5,880</b>

\* Includes 8 Commercial leases using CPACE financing.

## Institutional Sector

The Institutional sector is below its targets due to continued delays in closing LBE projects. Approval of funding for a municipal project in the Town of Enfield failed at referendum in the November election, though the Town intends to seek approval through a special referendum in Spring 2016. The three active LBE projects at State agencies are still under active consideration.

Table 5. Institutional Sector Q3 Cumulative Progress to Targets

	# Projects		Capital Deployed		MW		MMBTU	
	Closed	Target	Closed	Target	Closed	Target	Closed	Target
Institutional Off-Credit ESA	-	1	-	\$500,000	-	-	-	14,375
LBE – Municipal	-	2	-	\$15,000,000	-	-	-	38,000
LBE – State	-	3	-	\$85,000,000	-	-	-	204,000
Solar Lease*	-	-	-	-	-	-	-	-
<b>CGB Total</b>	<b>-</b>	<b>5</b>	<b>-</b>	<b>\$100,500,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>256,375</b>

\*Commercial Solar Lease has been moved to the Commercial & Industrial sector.

<sup>6</sup> The process for collecting energy savings data for 3<sup>rd</sup> party transactions is still being built so savings are not reported here

<sup>7</sup> A standard offer provider approved to provide 100% of direct C-PACE financing

<sup>8</sup> A standard offer provider approved to provide 100% of direct C-PACE financing

## Connecticut Green Bank – Progress to Targets through Q3 of FY 2016

The following is a breakdown of total progress to targets through Q3 of FY 2016 for closed and completed projects (see Table 6).

Table 6. Q3 Cumulative Progress to Targets

	# Projects		Capital Deployed		MW		MMBTU	
	Closed	Target	Closed	Target	Closed	Target	Closed	Target
S&I	6,133	9,505	\$198,635,863	\$391,009,439	47.3	80	153,483	571,653
Residential	1,013	1,727	\$42,702,228	\$46,377,331	8.4	8.1	27,540	53,230
C&I	44	53	\$35,241,313	\$37,200,000	6.7	7.6	54,914	5,880
Institutional	-	6	-	\$100,500,000	-	-	-	256,375
<b>CGB/Market Transformation Total*</b>	<b>6,656</b>	<b>11,291</b>	<b>\$259,877,345</b>	<b>\$575,086,770</b>	<b>58.2</b>	<b>95.7</b>	<b>221,495</b>	<b>887,138</b>

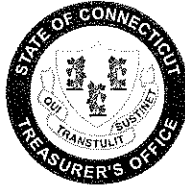
\* Adjusted to avoid double counting. (Excludes duplicates for RSIP projects using residential financing products, residential low income leases (Posigen) projects within RSIP and MFH using CPACE.)

It should be noted that 234 projects totaling \$132 million of investment and 12.6 MW of renewable energy and nearly 1.2 million MMBtu's have been approved and are in the pipeline. To continue to make progress on our annual target, the Connecticut Green Bank needs to continue to build its pipeline of transactions as well as move approved transactions to closed and completed before they count.

For comparison purposes, in FY 2015, there was \$361.0 million of approved, closed and completed projects<sup>9</sup> – of which \$296.2 million were closed and completed.

Since the inception of the Connecticut Green Bank in July of 2011 and through Q3 of FY 2016, there has been \$836.7 million of investment in clean energy through approved, closed and completed projects of the Connecticut Green Bank. We expect to hit \$1 billion in the summer of 2016!

<sup>9</sup> FY 2015 Comprehensive Annual Financial Report



DENISE L. NAPPIER  
TREASURER

State of Connecticut  
Office of the Treasurer

RICHARD D. GRAY  
DEPUTY TREASURER

February 12, 2016

*Submitted via [www.moody.com](http://www.moody.com)*

Mr. Henry Shilling  
Senior Vice President  
Moody's Investors Service  
7 World Trade Center at 250 Greenwich Street  
New York, NY 10007

**Re: Request for Comment: Green Bonds Assessment (GBA)  
Proposed Approach and Methodology**

Dear Mr. Shilling:

The Office of State Treasurer Denise L. Nappier manages all debt issuance of the State of Connecticut and oversees a debt portfolio of \$22 billion. I am writing to provide comments on Moody's Green Bond Assessment ("GBA") Proposed Approach and Methodology dated January 14, 2016. The Assessment seeks to evaluate, assess and score the management, administration, proceeds allocation and reporting for Green Bonds.

The State of Connecticut has been a national leader in issuing Green Bonds and has brought three separate Green Bonds to market since November 2014 for a total of \$375 million. As such, our office has first-hand experience with both the theory and the reality of issuing Green Bonds.

We commend Moody's for structuring its GBA scorecard off the Green Bond Principles ("GBP") that were developed and established in 2014 by a group of environmental finance experts. The GBP are voluntary, recommended guidelines that are well accepted worldwide and provide a strong starting point for any assessment program.

However, Moody's proposal applies overly stringent metrics for Green Bonds that go beyond the GBP and could actually have the unintended consequence of discouraging municipal issuers from implementing Green Bond programs. The imposition of these requirements could have a dampening impact on the development of the evolving Green Bond market.

In addition, it is doubtful that many of Moody's proposed rigid metrics are even important to the majority of Green Bond investors.

We understand the intention is to create a forward-looking opinion of a Green Bond issuer and its Green Bond offering. While many of the goals of the proposed analysis are well intended, I urge consideration of the following points:

- 1) Use of Proceeds - Moody's "Use of Proceeds" section defies logic. In order to be a Green Bond, proceeds must be used for GBP purposes. What is the point of even assessing a Green Bond if there is a category where only 25% of the proceeds are being used for environmentally friendly projects? Either an issuer is using proceeds for green purposes, consistent with the GBP or it is not. However, certainly allowing for a minor percentage of administrative or other associated costs might be important.
- 2) Organization - Moody's proposal applies a "cookie-cutter" approach to Green Bond personnel and staffing under the factor titled "Organization." But not all Green Bonds are the same, even for the same credit. For example, in Connecticut we have a dedicated debt manager who works closely with the Connecticut Department of Energy and Environmental Protection specifically for the Clean Water and Drinking Water State Revolving Fund Programs. However, should we choose to issue Green Bonds for other eligible GBP purposes, the same staffing regime may not apply. This could result in a dissimilar score for the same credit, or even within the same bond issue, if the different programs have differing assessment scores based on different oversight regimes, which could lead to market confusion and a lower value of any rating metric applied by Moody's.
- 3) Moody's proposed measurement and reporting of environmental impact would be a challenge for the many large, existing state infrastructure programs. In addition, the GBP recommend *expected* impact metrics not *actual* (ex-post). Ongoing reporting can raise costs and result in less issuance. For example, in Connecticut, Green Bond proceeds have, to date, been used to fund grants and loans for our Clean Water and Drinking Water State Revolving Fund Programs. These programs finance major multi-year projects and any one Green Bond issue will finance only a small portion of several large ongoing projects. Therefore, it would be a challenge to quantify the environmental impact of any particular Green Bond issue. However, this does not diminish the enormous beneficial environmental impacts these major State infrastructure programs can have and investors may be quite satisfied to understand the overall goals and intended results of these powerful programs. In addition, it is unclear how Moody's will evaluate an issuer on their reporting as any reporting will not occur for the first year; therefore how will Moody's weigh this as an assessment at the time of the bond issuance?
- 4) Because Moody's proposed assessment, weighting and scoring is much more stringent than the GBP, it could result in a low score that could be confusing and misinterpreted by investors and the marketplace, given an otherwise highly rated issuer.
- 5) The Assessment scale should be simplified and the "Poor" designation should be modified or eliminated. It would discourage new issuers from the natural growth of evolving a new program, as envisioned by the GBP. An alternative designation could be "Evolving" or "In Process." Furthermore, increased flexibility to reflect the diversity of the borrowers seeking to fund environmentally friendly projects within the Moody's assessment metrics could increase the value of Moody's in the marketplace to both issuers and investors.

Mr. Henry Shilling

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February 12, 2016

Finally, given that the GBA rating would have a cost over and above the basic credit rating from Moody's, and given that any significant pricing advantage for Green Bonds has yet to be established, there will also have to be a consideration of the benefits of securing such a rating and if so, a need to review competing services for quality and price.

I think our common industry goal should be to support best practices in the issuance of Green Bonds based on measures important to investors, which includes transparency and disclosure rather than a prescriptive checklist. This will allow the Green Bond market to evolve organically using the GBP rather than another set of highly theoretical and conservative assessments that could severely thwart the natural growth of Green Bonds in the marketplace.

Sincerely,



Richard D. Gray  
Deputy State Treasurer

845 Brook Street, Rocky Hill, CT 06067  
T 860.563.0015  
ctgreenbank.com



February 12, 2016

Attn: Henry Shilling, Sr. Vice President  
Moody's Investors Service, Inc.  
250 Greenwich Street  
New York, NY 10007

**RE: Request for Comment on Green Bonds Assessment Proposed Approach and Methodology**

To Moody's Investors Service:

The Connecticut Green Bank ("Green Bank") is pleased to offer the following input on Moody's proposed methodology for evaluating green bond issues. Throughout 2016 the Green Bank is developing its own capacity to issue green bonds to the market to raise capital for clean energy or environmentally-oriented projects and purposes within Connecticut. As such, we welcome the development of green bonds rating principles as well as evaluative methodologies and agree broadly with the five assessment factors specified.

### **Background and Goals of the Connecticut Green Bank**

The Green Bank was introduced by Governor Daniel P. Malloy and adopted by the Connecticut General Assembly with bipartisan support as an integral part of Public Act 11-80, "An Act Concerning the Establishment of the Department of Energy and Environmental Protection and Planning for Connecticut's Energy Future."

The goals of the Green Bank include:

1. Attracting and deploying private capital to finance the clean energy goals of Connecticut;
2. Developing and implementing strategies that bring down the cost of clean energy in order to make it more accessible and affordable to consumers; and
3. Reducing the market's reliance on grants, rebates, and other subsidies and moving it towards innovative low-cost financing of clean energy deployment.

The Green Bank was established to deploy more clean energy, at a faster rate, while using public resources responsibly. As the nation's first state-level "green bank," our mission is to support the Governor's and Connecticut General Assembly's energy strategies to achieve cheaper, cleaner, and more reliable sources of energy while creating jobs and supporting local economic development.

The Green Bank leverages the limited electric ratepayer resources it receives to attract multiples of private investment to scale up clean energy deployment in Connecticut. As a result of efforts since inception of the Green Bank, we are deploying more clean energy in our state than ever before – 169 MW in approved, closed or completed renewable and energy efficiency projects for a total of \$965 million in public and private investment. As an organization focused on public-private partnerships to scale up clean energy, the Green Bank is pleased to provide input on Moody’s Investors Service’s approach to Green Bonds Assessment.

## **Comment on Green Bonds Assessment Methodology**

Moody’s is providing a welcome service to the market in its development of a green bond assessment methodology, because the attendant ratings criteria will help market participants substantiate the desirable environmental attributes of an offering. In the Connecticut Green Bank’s case, our future bond indentures and bond issuance documents will focus on the environmentally beneficial investments we are making as outlined in our organization’s resolutions of purposes:

*“The Connecticut General Assembly has found and determined that stimulating, supporting and increasing the use of clean energy, investment in clean energy projects and sources, demand for clean energy, the development of technologies that support clean energy, and the development of the state’s energy-related economy are important state policy objectives. To achieve those objectives, the General Assembly, among other things, created the Connecticut Green Bank.*

*The purposes of the Green Bank are to achieve the foregoing objectives to the fullest extent authorized or permitted by Section 16-245n of the Connecticut General Statutes, as amended, or any other provisions of the Connecticut General Statutes pertaining to the responsibilities or activities of the Green Bank. Such purposes include but are not limited to: (1) implementing the Comprehensive Plan developed by the Green Bank pursuant to Section 16-245n(c) of the Connecticut General Statutes, as amended; (2) developing programs to finance and otherwise support clean energy investment in residential, municipal, small business and larger commercial projects, and such others as the Green Bank may determine; (3) supporting financing or other expenditures that promote investment in clean energy sources to foster the growth, development, and commercialization of clean energy sources and related enterprises; and (4) stimulating demand for clean energy and the deployment of clean energy sources within the state that serve end-use customers in the state.”*

As a state-created green bank, we are statutorily directed to support Connecticut’s assertive approach to the challenge of climate change, including through Connecticut’s Global Warming Solutions Act to reduce the emissions of greenhouse gases 80 percent below 2001 levels by 2050. This includes our robust efforts in deploying clean energy and shepherding through an increasing volume of clean energy transactions; it also includes our successes in creating economic development benefits from these projects, and in developing a workforce pipeline for green jobs. In short, the Green Bank is positioned to issue securities whose “green” attributes can be well credentialed.



For the Green Bank, the definition of clean energy is consistent with the Green Bond Principles, and includes:

*“Clean energy means solar photovoltaic energy, solar thermal, geothermal energy, wind, ocean thermal energy, wave or tidal energy, fuel cells, landfill gas, hydropower that meets the low-impact standards of the Low-Impact Hydropower Institute, hydrogen production and hydrogen conversion technologies, low emission advanced biomass conversion technologies, alternative fuels, used for electricity generation including ethanol, biodiesel or other fuel produced in Connecticut and derived from agricultural produce, food waste or waste vegetable oil, provided the Commissioner of Energy and Environmental Protection determines that such fuels provide net reductions in greenhouse gas emissions and fossil fuel consumption, usable electricity from combined heat and power systems with waste heat recovery systems, thermal storage systems, other energy resources and emerging technologies which have significant potential for commercialization and which do not involve the combustion of coal, petroleum or petroleum products, municipal solid waste or nuclear fission, financing of energy efficiency projects, projects that seek to deploy electric, electric hybrid, natural gas or alternative fuel vehicles and associated infrastructure, any related storage, distribution, manufacturing technologies or facilities and any Class I renewable energy source, as defined in section 16-1.”*

## **ORGANIZATION**

Entities that are set up to address environmental issues will as a matter of course direct capital raised toward environmental purposes. Therefore, the Green Bond Assessment should provide for the allowance of organizational exemptions for a period of time (e.g., three years) for this scorecard factor that are reinforced by a one-time upfront assessment of the sub-factor criteria (i.e., governance and organization structure, policies and procedures, personnel, investment criteria and measurable results, and external evaluations). Such allowance would permit organizations such as Green Banks to issue Green Bonds to establish their capital base and start the process of attracting and leveraging private capital for deployment into clean energy investments. The Green Bank provides the following documents as an example of an organization set-up to operate for the sole purpose of investing in environmentally beneficial clean energy projects:

- Resolutions of Purpose<sup>1</sup>
- Bylaws<sup>2</sup>
- Operating Procedures<sup>3</sup>
- Comprehensive Plan<sup>4</sup>
- Comprehensive Annual Financial Report<sup>5</sup>

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<sup>1</sup> [http://www.ctgreenbank.com/wp-content/uploads/2016/01/Financial-and-Gov.\\_-CT-Green-Bank-Resolution-of-Purpose.pdf](http://www.ctgreenbank.com/wp-content/uploads/2016/01/Financial-and-Gov._-CT-Green-Bank-Resolution-of-Purpose.pdf)

<sup>2</sup> [http://www.ctgreenbank.com/wp-content/uploads/2015/12/Green-Bank\\_BOD\\_Bylaw-Revised-101714.pdf](http://www.ctgreenbank.com/wp-content/uploads/2015/12/Green-Bank_BOD_Bylaw-Revised-101714.pdf)

<sup>3</sup> <http://www.ctgreenbank.com/wp-content/uploads/2015/12/Green-Bank-Operating-Procedures-REVISED-071814.pdf>

<sup>4</sup> [http://www.ctcleanenergy.com/Portals/0/CGB\\_FY15\\_and\\_FY16\\_Comprehensive%20Plan\\_071715\\_Final\\_Posted\\_Joint\\_Committee\\_101615.pdf](http://www.ctcleanenergy.com/Portals/0/CGB_FY15_and_FY16_Comprehensive%20Plan_071715_Final_Posted_Joint_Committee_101615.pdf)

<sup>5</sup> <http://www.ctgreenbank.com/wp-content/uploads/2015/12/CGB-finalized-financials.pdf>

If an organization can demonstrate its sole purpose to investing in environmentally beneficial projects, then consideration should be given to an initial multiyear organizational exemption, at an assessment of “5” for the Organization score, would be granted.

**USE OF PROCEEDS**

Again, as a matter of principle, if an organization’s sole purpose is to invest in environmentally beneficial project categories consistent with the Green Bond Principles – including renewable energy, energy efficiency, and clean transportation – then it is expected that the use of proceeds from a green bond will be used to invest in such projects. If a multiyear organizational exemption were to be granted for the Organization score, then consideration should be given to providing an assessment of “5” for the Use of Proceeds score to the bond issuance of that organization as 100 percent of the bond proceeds would be invested in eligible projects.

The Green Bank recommends these initial multiyear Organizational and Use of Proceeds exemptions because we want to facilitate the formation and capitalization of organizations fully committed to invest in environmentally beneficial projects while keeping transaction costs low for green bond classification. As one of our goals is to make clean energy more affordable and accessible to consumers, we feel it is important to keep transaction costs to a minimum wherever possible so that consumers can benefit from the fullest possible value of clean energy technology.

**DISCLOSURE ON THE USE OF PROCEEDS**

The Green Bank supports the criteria and sub-factors as provided by Moody’s.

**MANAGEMENT OF PROCEEDS**

The Green Bank supports the criteria and sub-factors as provided by Moody’s.

**ONGOING REPORTING AND DISCLOSURE**

The Green Bank supports the criteria and sub-factors as provided by Moody’s.

Thank you for your consideration of this input.

Sincerely,

A handwritten signature in blue ink, appearing to read "Bryan Garcia".

Bryan Garcia  
President and CEO

**Announcement: Moody's publishes methodology on Green Bonds Assessment**

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Global Credit Research - 30 Mar 2016

New York, March 30, 2016 -- Moody's Investors Service has published its Green Bonds Assessment (GBA) methodology, which offers a consistent, standardized and transparent framework for evaluating an issuer's approach for managing, administering, and allocating proceeds to and reporting on environmental projects financed by green bonds across various security types globally.

Specifically, the GBA methodology explains how Moody's evaluates a green bond based on five key factors: (i) organization, (ii) use of proceeds, (iii) disclosure on the use of proceeds, (iv) management of proceeds, and (v) ongoing reporting and disclosure on environmental projects financed or refinanced with such securities. Moody's defines green bonds as fixed-income securities -- both taxable and tax-exempt -- that raise capital for use in projects or activities with environmental benefits.

The methodology is intended to inform issuers, investors, financial intermediaries and other interested market participants about Moody's green bond assessment definitions and symbols, assessment process, information sources, the key factors and sub-factors, and how these are scored to derive a green bond assessment.

The methodology's publication follows a Request for Comment (RFC) period that ran between 14 January and 12 February 2016. This published version incorporates a number of revisions that reflect the feedback received.

The GBA methodology may be used to assess bonds issued by corporations, financial institutions, governments, supranational organizations, municipal bodies as well as other entities. Additionally, the methodology may be used to perform an assessment on project finance and structured finance transactions, such as asset backed securities.

As part of the assessment process, Moody's will score each bond issue on five key factors (along with their respective sub-factors), weighted to reflect their relative importance, to arrive at a composite grade.

The composite grade, in turn, will inform an overall assessment that runs from GB1 (Excellent) to GB5 (Poor).

The initial assessment of green bonds and their use of proceeds involves an examination of relevant governing documentation, regulatory filings, issuer reports and presentations, if any, and other publicly available information.

Information derived from these sources is complemented by direct engagement and dialogue with the issuer. GBAs are unmonitored but are expected to refresh annually based on receipt of an annual "use of proceeds" report from the issuer.

Moody's "Green Bond Assessment Methodology" is available at:  
[http://www.moodys.com/viewresearchdoc.aspx?docid=PBC\\_188333](http://www.moodys.com/viewresearchdoc.aspx?docid=PBC_188333).

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## METHODOLOGY (OTHER PERMISSIBLE SERVICES)

# Green Bonds Assessment (GBA)

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### Summary

This report sets out our methodology for assessing green bonds, which are fixed-income securities, both taxable and tax-exempt, that raise capital for use in financing or refinancing projects and or activities with specific climate or environmental sustainability purposes. The Green Bonds Assessment (GBA) provides an evaluation of the bond issuer's management, administration, allocation of proceeds to and reporting on environmental projects financed with the proceeds derived from green bond offerings.

Our assessment process will score each bond issue on five key factors (along with their respective sub-factors), weighted to reflect their relative importance, to arrive at a composite grade. The composite grade, in turn, will inform an overall assessment that runs from GB1 (Excellent) to GB5 (Poor). After a GBA is initially assigned, it may be refreshed periodically, based on information provided in the issuer's subsequently issued periodic reports.

### Introduction

Green Bond Assessments<sup>1</sup> are not credit ratings and they apply to bond issues rather than to the bond issuers. They are forward-looking opinions of the relative effectiveness of the issuer's approach for managing, administering, allocating proceeds to and reporting on environmental projects financed by green bonds. As such, GBAs assess the relative likelihood that bond proceeds will be invested to support environmentally beneficial projects as designated by the issuer. GBAs provide a relative assessment of green bonds with the intention of assisting investors in their evaluation of various bond offerings across the universe of Moody's rated bonds as well as non-Moody's rated bonds.

This assessment methodology article explains Moody's approach to assessing green bonds issued by corporations, financial institutions, governments, supranational organizations, municipals as well as other entities. Also included are project finance, as well as structured finance transactions, such as asset backed securities (ABS). This methodology is intended to inform issuers, investors, financial intermediaries and other interested market participants about Moody's GBA definitions and symbols, assessment process, information sources, the key factors and sub-factors, and how these are scored to derive a GBA.

The initial assessment of green bonds and their use of proceeds involves an examination of relevant offering documentation, regulatory filings, issuer reports and presentations, if any, as well as all other publicly available information. Information derived from these sources is informed by a direct engagement and dialogue with the issuer along with any applicable documents that may be supplied in the engagement process.

<sup>1</sup> A Green Bond Assessment is not a credit rating and is considered an Other Permissible Service (OPS).

The combined inputs are used to evaluate the transaction, via a scorecard, the details of which are set forth herein, and assign the GBA. GBAs are expressed using a five-point relative scale, ranging from GB 1 (Excellent) to GB5 (Poor). Once assigned and communicated to the issuer, the GBA is disseminated publicly via a press release distributed through various newswire services. It is also maintained on Moodys.com. This is followed by the publication of a Green Bond Assessment Report that is also available to investors on [www.moodys.com](http://www.moodys.com).

Once an assessment has been issued and published the assessment may be refreshed periodically to take into consideration the application of proceeds, reported progress against the initial plans for project investments and their environmental impacts, and continuing issuer disclosures, if any.

## Assessment Symbols and Scale

GBAs are forward-looking opinions on the relative effectiveness of the approach adopted by green bond issuers to manage, administer, allocate proceeds to and report on environmental projects financed with proceeds derived from green bond offerings. The GBAs are intended to offer investors a more granular transparent view into these practices across various issues.

### EXHIBIT 1

#### Assessment Scale and Definitions

Grade	Detail	Definitions
<b>GB1</b>	Excellent	Green bond issuer has adopted an excellent approach to manage, administer, allocate proceeds to and report on environmental projects financed with proceeds derived from green bond offerings. Prospects for achieving stated environmental objectives are excellent.
<b>GB2</b>	Very Good	Green bond issuer has adopted a very good approach to manage, administer, allocate proceeds to and report on environmental projects financed with proceeds derived from green bond offerings. Prospects for achieving stated environmental objectives are very good.
<b>GB3</b>	Good	Green bond issuer has adopted a good approach to manage, administer, allocate proceeds to and report on environmental projects financed with proceeds derived from green bond offerings. Prospects for achieving stated environmental objectives are good.
<b>GB4</b>	Fair	Green bond issuer has adopted a fair approach to manage, administer, allocate proceeds to and report on environmental projects financed with proceeds derived from green bond offerings. Prospects for achieving stated environmental objectives are fair.
<b>GB5</b>	Poor	Green bond issuer has adopted a poor approach to manage, administer, allocate proceeds to and report on environmental projects financed with proceeds derived from green bond offerings. Prospects for achieving stated environmental objectives are poor.

GBAs are expressed using a scale ranging from 1 (Excellent) to 5 (Poor) that encapsulates Moody's views, distilled from an evaluation of five broad factors that are weighted, as follows: Organization (15%), Use of Proceeds (40%), Disclosure on the Use of Proceeds (10%), Management of Proceeds (15%) and Ongoing Reporting and Disclosure (20%). Each factor is evaluated on the basis of various sub-factor considerations that are, in turn, scored.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on [www.moodys.com](http://www.moodys.com) for the most updated credit rating action information and rating history.

## Defining Green Bonds

Green bonds are defined as fixed-income securities, both taxable and tax-exempt, that raise capital for use in financing or refinancing projects and activities with specific climate or environmental sustainability purposes. These include debt obligations with direct recourse to issuers, project finance or revenue bonds,



with and without recourse to issuers, and securitizations collateralized by projects or assets whose cash flows provide the first source of repayment.

Regardless of structure, green bonds have generally been issued pursuant to a set of voluntary guidelines or framework known as the Green Bond Principles<sup>2</sup>. The Green Bond Principles include criteria for the use of proceeds, the issuer's process for project evaluation, the management of proceeds, and reporting on a periodic basis. That said, there are variations around the interpretation and application of the Green Bond Principles, including the potential use of and reliance upon internal or external assurances in the form of second-party reviews and consultation, audits and third-party certifications which are recommended but not mandated by the Green Bond Principles.

Under the auspices of the United Nations Framework Convention on Climate Change (UNFCCC), 196 nations were parties to the 12 December 2015 Paris Agreement, which aims to reduce greenhouse gas emissions to levels consistent with holding the increase in the global average temperature to well below 2° Celsius above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5° Celsius above pre-industrial levels. Meeting these targets will require an unprecedented allocation of capital, measured in trillions of dollars a year.

Green bonds have gained attention for their potential role in mobilizing capital toward environmental solutions. Capital market financing needs -- in combination with growing investor demand, standardization of offerings, and the issuance of benchmark-sized deals that are effectively priced, both investment grade and potentially speculative or non-investment grade -- are expected to lift green bond issuance in the years to come.

## Assessment Approach and Methodology

We use a scorecard with the following five factors. With the exception of Use of Proceeds, each factor is comprised of five sub-factors.

1. Organization
2. Use of Proceeds
3. Disclosure on the Use of Proceeds
4. Management of Proceeds
5. Ongoing Reporting and Disclosure

Each of the five factors is weighted, as follows: Organization (15%), Use of Proceeds (40%), Disclosure on the Use of Proceeds (10%), Management of Proceeds (15%) and Ongoing Reporting and Disclosure (20%).

Each of the five factors is scored on a scale from 1 to 5. For factors 1, 3, 4, and 5, scoring is based on the number of sub-factors for which the stated criteria are satisfied. For example, in order to achieve a factor score of 1 the criteria for all five sub-factors must be satisfied. In the same way, in order to achieve a score of 2, four of the five sub-factors must be satisfied, etc. In contrast, scoring for factor 2 is based on qualitative and quantitative gradations that are shown in the scorecard.

The numerical score for each factor is multiplied by the weight for that factor with the results then summed to produce a composite weighted-factor score. The composite weighted factor score is then mapped back

<sup>2</sup> Refer to The Green Bond Principles, <http://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/green-bonds/green-bond-principles/>

to an overall score using the legend below. Due to its over-arching importance, scores of 4 and 5 in the Use of Proceeds factor will cap the scorecard outcome and will generally cap the GBA grade at the corresponding levels, i.e. GB4 and GB5.

#### Weighted Score Legend

GB1	GB2	GB3	GB4	GB5
≤ 1.5	1.5 - 2.5	2.5 - 3.5	3.5 - 4.5	> 4.5

The scorecard is an important reference tool that can be used to approximate the GBA of green bond issuances in most cases, and it provides summarized guidance for the factors that are generally most important in assigning GBAs. However, the scorecard is a summary that does not include every potential consideration. The weights shown for each factor in the scorecard represent an approximation of their importance, but actual importance may vary substantially. Please see the section below titled Assumptions and Limitations, and Assessment Considerations That Are Not Covered in the Scorecard.

### Factor 1: Organization (15%)

**Key Considerations:** Most issuers of green bonds have a functionally oriented organization or unit and governance structure that relies on skilled dedicated or assigned personnel to set strategy and evaluate, qualify, select, and approve as well as monitor environmental projects and activities. The organization is aligned with the green bond issuance and it may rely on internal and/or external expertise as may be required.

We evaluate the organization's mission to set goals, develop a broad strategic framework for the deployment of green bond proceeds, evaluate, select and approve individual projects. This includes the organization's structure and decision-making process, its process for determining the eligibility of projects, as well as its framework for setting impact goals, measuring results relative to specific project-level objectives, and impact reporting.

We also consider the organization's engagements with or access to and/or consultation with internal or external environmental or related experts.

The sub-factors listed below frame our evaluation of the Organization factor. In scoring this factor, we attribute one point for meeting the criteria for each of the five sub-factors. For example, if the criteria for all five sub-factors are satisfied, the score for this factor would be "1" and if the criteria for three sub-factors are satisfied, the factor score would be "3".

Sub-Factor	1	2	3	4	5
	All 5 sub-factors	4 Sub-factors	3 Sub-factors	2 Sub-factors	1 Sub-factor or none
(1) Environmental governance and organization structure appears to be effective.					
(2) Policies and procedures enable rigorous review and decision making processes.					
(3) Qualified and experienced personnel and/or reliance on qualified third parties.					
(4) Explicit and comprehensive criteria for investment selection, including measurable impact results.					
(5) External evaluations for decision making in line with project characteristics.					

## Factor 2: Use of Proceeds (40%)

**Key Considerations:** The deployment of green bond proceeds will be evaluated pursuant to the issuer's adopted policies and in conjunction with the explicitly recognized eight broad potential eligible project categories in the Green Bond Principles that "aim to address key areas of concern such as climate change, natural resources depletion, biodiversity conservation and/or pollution." Our evaluation of these and any additional categories will be further informed by one or more robust and widely recognized green bond frameworks or taxonomies that qualify eligible projects targeted at mitigation or adaptation of climate change. Such taxonomies may also be considered relative to regulatory guidelines, to the extent these have been promulgated by regulatory bodies. In evaluating the use of proceeds, we will use Green Bond Principles, and we may use additional applicable sector and regional taxonomies. For clarity, a project would need to be consistent with all of the applicable taxonomies/principles.

While various taxonomies have been promulgated to-date, to our knowledge a singular comprehensive, robust and universally accepted catalogue of eligible green bond categories does not as yet exist. That said, a range of taxonomies to define eligible green projects have been established by various organizations. These range from the broad set of green bond categories adopted by the Green Bond Principles (listed in Exhibit 2) to some that are considered more robust or more scientifically oriented. These include the Climate Bond Initiative's Green Bonds Taxonomy, the International Finance Corporation's Definitions and Metrics for Climate-Related Activities and the OECD Green Bonds Taxonomy, to mention a few. In China recently, the Peoples Bank of China (PBoC) introduced yet another taxonomy into the recently issued Green Financial Bond Directive and other regulatory bodies may take similar actions. Some of these taxonomies are still in draft form while others, due to complexities, have not been completed in their entirety. There are also more narrowly based sets of criteria for defining some narrowly focused green projects. Examples of these include the Leadership in Energy and Environmental Design (LEEDS), Building Research Establishment Environmental Assessment Methodology (BREEAM), Global Real Estate Sustainability Benchmark (GRESB), Green Star or Energy Star, to mention just a few.

### EXHIBIT 2

#### The Green Bond Principles Categories of Potential Eligible Green Projects

- » Renewable energy
- » Energy efficiency (including efficient buildings)
- » Sustainable waste management
- » Sustainable land use (including sustainable forestry and agriculture)
- » Biodiversity conservation
- » Clean transportation
- » Sustainable water management (including clean and/or drinking water)
- » Climate change adaptation
- » Other<sup>3</sup>

Since the green bond market is in its early stages of development, green bond criteria are likely to continue to evolve over time, and additional classifications as well as refinements to classifications are expected to be promulgated. We can also envision some convergence around one or more taxonomies over time. We evaluate green bonds on the basis of taxonomies in effect at the time that the bonds are issued or reviewed. We recognize that the standards for what constitutes an environmentally sustainable project could change over time, for instance in light of new scientific understanding or new technologies. As a result, the definitions and parameters used to evaluate the Use of Proceeds factor could change accordingly. More specifically, our scoring for this factor and the overall assessment score of a particular bond issuance may be

<sup>3</sup> Investments that fall in the GBP "Other" category would generally be evaluated pursuant to one or more additional robust and widely recognized green bond frameworks.

revised owing solely to changes over time in the standards of what constitutes an environmentally sustainable project<sup>4</sup>.

The scoring for the Use of Proceeds factor will be based upon our qualitative and quantitative assessment of the issuer's adopted policies, the project's eligibility based on the categories established under the Green Bond Principles and any additional taxonomies that are applicable, as described above, and the percentage of proceeds invested in such project categories (or to be invested in a reasonable timeframe, per the issuer's stated plans).

For example, in order to achieve a score of 1, an amount equal to or greater than 95% of proceeds needs to be allocated to eligible project categories that are determined based on the issuer's adopted policies, the categories established under the Green Bond Principles, further informed by one or more robust and widely recognized green bond frameworks or taxonomies that qualify eligible projects, including any applicable regulatory guidelines. Similarly, a score of 3 corresponds to the allocation of 80% - <90% of proceeds allocated to eligible projects which are determined based on the same criteria.

Use of Proceeds scores of 4 and 5 will generally cap the GBA grade at the corresponding levels, i.e. GB4 and GB5.

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**Score Sub-Factor**

1	≥95% - 100% of proceeds allocated to eligible project categories that are determined based on the issuer's adopted policies and the categories established under the Green Bond Principles that will be further informed by one or more robust and widely recognized green bond frameworks or taxonomies that qualify eligible projects, including any applicable regulatory guidelines.
2	90% - <95% of proceeds allocated to eligible project categories that are determined based on the issuer's adopted policies and the categories established under the Green Bond Principles that will be further informed by one or more robust and widely recognized green bond frameworks or taxonomies that qualify eligible projects, including any applicable regulatory guidelines.
3	80% - <90% of proceeds allocated to eligible project categories that are determined based on the issuer's adopted policies and the categories established under the Green Bond Principles that will be further informed by one or more robust and widely recognized green bond frameworks or taxonomies that qualify eligible projects, including any applicable regulatory guidelines.
4	50% - <80% of proceeds allocated to eligible project categories that are determined based on the issuer's adopted policies and the categories established under the Green Bond Principles that will be further informed by one or more robust and widely recognized green bond frameworks or taxonomies that qualify eligible projects, including any applicable regulatory guidelines.
5	<50% of proceeds allocated to eligible projects that are determined based on the issuer's adopted policies and the categories established under the Green Bond Principles that will be further informed by one or more robust and widely recognized green bond frameworks or taxonomies that qualify eligible projects, including any applicable regulatory guidelines.

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### Factor 3: Disclosure on the Use of Proceeds (10%)

**Key Considerations:** The quality and transparency of project disclosures as well as project funding practices.

In addition to an assessment of the issuer's funding practices as well as investment time horizon for the allocation of bond proceeds, consideration of this factor will include the quality and transparency of

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<sup>4</sup> Hypothetically, the Use of Proceeds score for a particular bond issuance could be revised upward or downward over time even though the project itself was in all other respects unchanged and the proceeds were invested as expected, if the categories of eligible projects in the relevant taxonomy changed during that period. Changes in this factor score could impact the overall score as well as the assigned GBA. As example, we assume that there was a green bond taxonomy in the 1980s under which a power plant that utilized waste coal (which pollutes land and waterways) in a circulating fluidized bed boiler with low sulfur dioxide and nitrous oxide emissions was considered an eligible investment. If an issuer had sought a GBA for a 30 year bond solely used to finance such a project, the Use of Proceeds score could have been as high as 1. Decades later, when the standards for judgment would have placed greater weight on the project's carbon dioxide emissions, the same taxonomy might have excluded any coal-fired projects, such that the percentage of proceeds financing eligible projects would have been 0%. When the GBA was refreshed after the change in taxonomy, the Use of Proceeds factor would have been a 5, likely leading to an overall score and a GBA of 5.

disclosures provided in offering documents and/or any other available forms. These will be scored as indicated below:

Sub-Factor	1	2	3	4	5
	All 5 sub-factors	4 Sub-factors	3 Sub-factors	2 Sub-factors	1 Sub-factor or none
1. Description of green projects, including portfolio level descriptions, actual and/or intended.					
2. Adequacy of funding and/or strategies to complete projects.					
3. Quantitative and/or qualitative descriptions for targeted environmental results.					
4. Methods and criteria, both qualitative or quantitative, for calculating performance against targeted environmental results.					
5. Issuer relies on external assurances: Second party reviews, audits and/or third party certifications.					

#### Factor 4: Management of Proceeds (15%)

**Key Considerations:** Our evaluation focuses on practices and procedures applicable to the allocation and tracking of proceeds, temporary investment practices pending distribution or investment in eligible projects, as well as the robustness and clarity of proposed public disclosure methods around these processes. In the process, we positively consider any internal tracking methods that are reviewed or audited by an independent party, either within the broader organization or unit or via external third parties. These will be scored as indicated below:

Sub-Factor	1	2	3	4	5
	All 5 sub-factors	4 Sub-factors	3 Sub-factors	2 Sub-factors	1 Sub-factor or none
1. Bond proceeds are segregated and separately tracked on an accounting basis or via a method by which proceeds are earmarked.					
2. Application of proceeds is tracked by environmental category and project type.					
3. Robust process for reconciling planned investments against actual allocations.					
4. Clear eligibility rules for investment of cash balances.					
5. Audit by external organization or independent internal audit unit.					

#### Factor 5: Ongoing Reporting and Disclosure (20%)

**Key Considerations:** Transparency, quality and frequency of reporting and disclosure practices, as well monitoring methods.

At the time of issue, we evaluate the nature of expected periodic updates and their frequency – with regard to specific projects and the capital or amount invested in those projects – and which may be made available to investors via newsletters, website updates, or published financial reports. This is based on discussions with the issuer, and once issued, based on a combination of discussions with the issuer and a review of periodic reports that are actually issued.

In addition, our evaluation focuses on the issuer's expected disclosures regarding environmental impacts, including the adoption and reliance on objective metrics for measuring both positive and negative outcomes, if any, and/or qualitative descriptions.

Key considerations will be scored as indicated below:

Sub-Factor	1	2	3	4	5
	All 5 sub-factors	4 Sub-factors	3 Sub-factors	2 Sub-factors	1 Sub-factor or none
1. Reporting and disclosure post issuance provides/to be provided detailed and timely status update on projects.					
2. Ongoing annual reporting is expected over the life of the bond.					
3. Disclosures provide granular detail on the nature of the investments and their expected environmental impacts					
4. Reporting provides/to be provided a quantitative and/or qualitative assessment of the environmental impacts actually realized to-date.					
5. Reporting includes/to include quantitative and/or qualitative explanation of how the realized environmental impacts compare to projections at the time the bonds were sold.					

## Assumptions and Limitations, and Assessment Considerations That Are Not Covered in the Scorecard

The scorecard used in this methodology represents a decision to favor simplicity that enhances transparency and to avoid greater complexity that would enable the scorecard to map more exactly to actual GBAs. Accordingly, the five rating factors in the scorecard do not constitute an exhaustive treatment of all of the considerations that are important for GBAs. In addition, our assessments incorporate expectations for future performance – for instance, the ability of an issuer to deploy green bond funds in accordance with its plan. In some cases, our expectations for future performance may be informed by confidential information that we are unable to disclose. In other cases, we estimate future results based upon past performance, trends across the peer group, or other factors. In either case, predicting the future is subject to the risk of substantial inaccuracy.

Assumptions that may cause our forward-looking expectations to be incorrect include unanticipated changes in any of the following factors: the macroeconomic environment and general financial market conditions, disruptive technology, regulatory and legal actions.

## Other Assessment Considerations

GBAs may reflect a number of additional considerations. These include but are not limited to: our confidence level in an issuer's stated investment program, an issuer's corporate governance and financial controls, event risk (which may include mergers or other events that could cause an abrupt change in an issuer's environmentally sustainable investment strategy), and changes in market forces or regulations that have a material impact on investments and returns.

In addition, the relatively new nature of green investing could lead to rapid evolution in the sector. The character of green bond investments may in some circumstances be so unique that the scorecard may not adequately capture their aspects. Scientific study or other developments may lead to re-classifications regarding what constitutes a green bond investment, or such a change may be expected but not yet

implemented. These and other factors may cause a difference between the assigned GBA and the scorecard outcome.

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### Periodic Assessment Updates

Once an assessment has been issued and published via the issuance of a press release and research report, the assessment may be refreshed periodically to take into consideration the application of proceeds and to consider the environmental impacts of projects undertaken, based on issuer disclosures relative to the initial scorecard results. When assessments are refreshed, they will be based on the relevant taxonomies in place at that time.

Report Number: 188333

**Author**  
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# Memo

**To:** Connecticut Green Bank Board of Directors

**From:** Laura Fida, Senior Manager, Clean Energy Finance

**CC:** Bryan Garcia, President and CEO; Bert Hunter, EVP and CIO; Brian Farnen, General Counsel and CLO; George Bellas, VP of Admin and Finance; Ben Healey, Director, Clean Energy Finance

**Date:** April 15, 2016

**Re:** Reauthorization to Finance Outstanding CT Solar Loan Portfolio

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## Background

In November 2012, the Connecticut Green Bank (“Green Bank”) Board of Directors (the “Board”) approved the CT Solar Loan Program (the “Program”), under which the Green Bank – in partnership with Sungage Financial, Inc. (“Sungage”) – provided loans to Connecticut homeowners looking to finance residential solar PV systems. To seed an initial loan facility, the Green Bank provided \$1,500,000 of ratepayer funds, along with \$300,000 of repurposed ARRA-SEP funds for a loan loss reserve. Later, the Board authorized \$5 million to expand the Program’s warehouse facility, and then another \$5 million as the Program continued to see growing demand from CT homeowners.

In accordance with the Green Bank’s original design for the Program, as the warehouse facility grew in size, staff sought to secure a senior investor to finance a portion of the portfolio. As the Board is aware, in February 2014 the Green Bank entered into a Loan and Security Agreement with the crowdfunding firm Solar Mosaic, Inc. (“Mosaic”), which agreed to finance up to \$4 million of the first \$5 million in loans funded under the Program. Following a change in business direction, Mosaic later reduced its commitment to \$1.1 million, leaving the Green Bank with a higher unfinanced loan portfolio than expected.

## Success to Date

Overall, the Program has been highly successful, providing solar loans with a principal balance in excess of \$5 million to around 300 homeowners in Connecticut. Perhaps even more importantly, as a testament to the Program’s success, Sungage has “graduated” from the Program and gone on to raise \$100 million from the Massachusetts-based Digital Federal Credit Union (“DCU”) to expand its debt line for residential solar lending across Florida,

Massachusetts, New York, New Jersey, and Texas (in addition to continued activity in Connecticut, of course).

## Request

Taking into account the sell-down of over \$1 million of loans to Mosaic, as well as loan prepayments, the Green Bank currently has on its books approximately 160 performing loans, a portfolio with a total balance of around \$3.1 million outstanding.

On August 19, 2014 the Board authorized the Green Bank to finance a portion of Program loans via one or more senior investors no later than twelve (12) months from that date. Given that this twelve-month deadline expired on August 20, 2015, staff is now requesting reauthorization from the Board to allow the Green Bank to finance the Program's outstanding loan portfolio through the Reinvestment Fund ("TRF"), a community development financial institution with a mission to build wealth and opportunity for low-wealth people and places through the promotion of socially and environmentally responsible development.

Under the proposed arrangement with TRF, TRF will provide financing for approximately \$2,500,000 worth of outstanding loan value under the Program. The structure of the deal will be a mini-perm loan of 7 years, amortizing over a hypothetical 15-year period, at an interest rate of [redacted].

The signed TRF Commitment Letter including full details of the terms and conditions to this arrangement is available as an Appendix to this memorandum. Additionally, the financing documents between the Green Bank, CT Solar Loan I, LLC and Reinvestment Fund, Inc. are available upon request.

## Resolutions

**WHEREAS**, the Board of Directors (“Board”) of the Connecticut Green Bank (“Green Bank”) previously authorized the proper Green Bank officers to execute and deliver any contract or other legal instrument necessary to effect the acquisition of a portion of the CT Solar Loan program loan portfolio by one or more senior investors no later than twelve (12) months from August 19, 2014;

**WHEREAS**, a suitable senior investor was not identified within this twelve (12) month period; and

**WHEREAS**, a suitable investor has now been identified and is prepared to finance the remaining portfolio of loans.

Now, therefore be it:

**RESOLVED**, that the Board of Directors reauthorizes the proper Green Bank officers to execute and deliver any contract or legal instrument necessary to effect the acquisition or financing of a portion of the CT Solar Loan program loan portfolio substantially in accordance with the terms set forth in the memorandum submitted to the Board on April 15, 2016; 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 transaction.

Submitted by: Bryan Garcia, President and CEO; Bert Hunter, EVP and CIO; Ben Healey and Laura Fido, Clean Energy Finance

**Appendix to Item 7ai**  
**TRF Commitment Letter**

**[Redacted]**

[Redacted]

[Redacted]

[Redacted]

[Redacted]



[Redacted]

[Redacted]

[Redacted]



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# Program Update Memo

**To:** Connecticut Green Bank Board of Directors

**From:** Ben Healey, Director, Clean Energy Finance

**Cc:** Bryan Garcia, President & CEO; Bert Hunter, EVP & CIO;  
Brian Farnen, General Counsel & CLO;  
Kerry O'Neill, Managing Director of Residential Programs;  
Kim Stevenson, Assistant Director of Multifamily Programs

**Date:** April 15, 2016 (Revised April 20, 2016)

**Re:** Clarification of Authorization for Solarize SSHP Initiative with CHFA

---

## BACKGROUND

Per the memo attached hereto (dated October 9, 2015) and the accompanying resolutions adopted by the Board of Directors (the "Board") of the Connecticut Green Bank ("Green Bank") at its regular meeting of October 16, 2015, Green Bank staff has continued to work diligently with the Connecticut Housing Finance Authority ("CHFA") to close a transaction that will finance solar installations across a number of CHFA supported affordable housing properties throughout the state.

That transaction is now nearly ready to close, and pursuant to discussions with CHFA staff with respect to the final deal structure, Green Bank staff is seeking to clarify the authority granted by the Board to commit various Green Bank subsidiaries (including CEFIA Solar Services Inc. and CEFIA Holdings LLC) to support the transaction.

## PROPOSAL

In the "Proposed Solution" section of the October 9, 2015 memo, staff recommended the following approach to the Green Bank's support for this transaction:

*Green Bank provides defeasance reserve for Firststar Development to ensure sufficient cash flow during 5-yr pre-flip period (maintained at  $\geq$  one year of projected PPA revenues)*

Now, staff is instead recommending language to provide flexibility in negotiating the final workable solution as follows:

*CEFIA Solar Services Inc. and CEFIA Holdings LLC may provide credit enhancements sufficient to satisfy annual payment requirements to both Firststar Development and CHFA over the life of the CHFA loan*

## **RESOLUTIONS**

**WHEREAS**, the Board of Directors (the “Board”) of the Connecticut Green Bank (“Green Bank”) previously authorized a partnership with the Connecticut Housing Finance Authority (“CHFA”) to support properties in the State Sponsored Housing Portfolio (“SSHP”), and other properties of similar use and purpose, in going solar; and

**WHEREAS**, Green Bank staff is now requesting clarification with respect to the support that various Green Bank subsidiaries and affiliates can offer to ensure the success of that partnership;

**NOW**, therefore be it:

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer of the Green Bank, is reauthorized, on behalf of the Green Bank and all relevant subsidiaries and affiliates, to execute a loan agreement and ancillary documentation with CHFA with terms and conditions materially consistent with those presented in the memorandum to the Board dated October 9, 2015, as subsequently modified in the memorandum to the Board dated April 15, 2016 and revised April 20, 2015.

**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 legal instruments.

Submitted by: Bryan Garcia, President and CEO; Bert Hunter, EVP and CIO; Ben Healey, Director, Clean Energy Finance



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## Program Update Memo

**To:** Connecticut Green Bank Board of Directors

**From:** Ben Healey, Assistant Director

**Cc:** Bryan Garcia, President & CEO; Bert Hunter, EVP & CIO;  
Brian Farnen, General Counsel & CLO;  
Kerry O'Neill, Managing Director of Residential Programs;  
Kim Stevenson, Assistant Director of Multifamily Programs

**Date:** October 9, 2015

**Re:** Authorization for CEFIA Solar Services Inc. to Accept CHFA Loan for Solarize SSHP Initiative

---

### BACKGROUND

Over the past year, Connecticut Green Bank ("Green Bank") staff has worked diligently with our partners at the Connecticut Housing Finance Authority ("CHFA") to help affordable multifamily properties in the State Sponsored Housing Portfolio ("SSHP") go solar through a Solarize SSHP initiative. This effort has involved sourcing interested property owners; qualifying, selecting, and assigning local solar developers to each property; supporting each property in submitting and receiving ZREC awards from the utility companies; and crafting a financing solution that would enable these solar projects to proceed. It is for this last item that staff now comes to the Green Bank Board of Directors (the "Board of Directors") with request for an authorization to proceed.

There are more than a dozen affordable multifamily properties that are ready to move forward with solar installations through the Solarize SSHP initiative, including multiple municipal housing authorities, nonprofit providers, and owners of elderly congregate complexes. The Green Bank intends to finance these projects using our existing CT Solar Lease 2 ("SL2") program, under the carve-out provided in that facility for commercial-scale systems. However, as the Board of Directors will recall, that facility only allows for the financing of non-investment grade commercial credits with the use of C-PACE as a security and collection mechanism.

Unfortunately, due to CHFA bondholder restrictions, CHFA is not in a position to grant consent for the placement of a C-PACE Benefit Assessment Lien on each of these properties. Thus, working creatively with key CHFA personnel from the multifamily and finance teams, staff has come up with another solution to allow these projects to proceed within the context of SL2, whereby the Green Bank will still own and operate these solar assets on behalf of the affordable multifamily properties through a traditional Power Purchase Agreement ("PPA") structure.

## PROPOSED SOLUTION

- 1) Green Bank develops projects through its CEFIA Holdings LLC (“CEFIA Holdings”) subsidiary (as is customary of SL2 projects now), offering standard PPAs to all Solarize SSHP owners:
  - a. Property owners remain solely responsible for paying agreed price per kWh for 20 years
  - b. Green Bank provides – through existing third-party arrangement – O&M services, warranty management, and excess insurance for full 20 years
  - c. Property owners can buy out their PPAs at fair market value annually starting at each project’s 5th anniversary
- 2) CEFIA Holdings sells projects to CT Solar Lease 2 LLC vehicle (as is customary of SL2 projects now)
  - a. Firststar Development (U.S. Bank subsidiary) acts as tax equity provider ("Investor Member") and provides 35 cents on the dollar for each project
  - b. CEFIA Solar Services Inc. (Green Bank subsidiary and "Member Manager") provides remainder (with loan capital from CHFA as per the below)
- 3) CHFA issues Qualified Energy Conservation Bonds (“QECBs”) and uses proceeds to make loan to Member Manager after projects are substantially complete
  - a. CHFA loan carries 20-yr tenor and 2.50% (projected) interest rate per annum
  - b. Member Manager uses CHFA loan to provide 65 cents on the dollar to each project
  - c. With cash flows from projects financed (PPA revenue + ZREC income), Member Manager services CHFA debt
- 4) Green Bank amends agreements as necessary with existing SL2 partners
  - a. Green Bank provides defeasance reserve for Firststar Development to ensure sufficient cash flow during 5-yr pre-flip period (maintained at  $\geq$  one year of projected PPA revenues)
  - b. First Niagara (as lead lender in existing SL2 debt syndicate) provides carve-out so as not to take security interest in collateral package associated with SSHP projects (PPA revenues, equipment, ZREC income, etc.) – this allows for a straight pass-through of cash from CT Solar Lease 2 LLC to Member Manager to CHFA, minus preferred return to Firststar Development

The diagram on the following page further illustrates this proposed solution (with representative, rather than final, figures), which the CHFA Board of Directors has already approved (see **Exhibit A** for the September 24, 2015 memo from CHFA staff on this front) and which is currently in final documentation via a set of amendments with the SL2 debt and equity investors.

With Green Bank Board of Directors authorization, staff will move forward with executing this solution so that CEFIA Solar Services Inc. can accept these funds and the accompanying loan obligation from CHFA, and then use the proceeds to help deliver solar projects for over a dozen affordable multifamily properties around the state.



[Redacted]

## RESOLUTIONS

**WHEREAS**, the Connecticut Green Bank (“Green Bank”) has a mandate to deploy its resources to benefit all ratepayers, including affordable multifamily properties;

**WHEREAS**, households within affordable multifamily properties often bear a disproportionate burden of the state’s high energy costs as a percentage of their income;

**WHEREAS**, municipal housing authorities and nonprofit owners of affordable multifamily properties do not benefit from existing federal incentives for clean energy adoption, given that such incentives require tax liabilities to be of value;

**WHEREAS**, the Green Bank already offers the CT Solar Lease 2 (“SL2”) program, under which property owners can install a solar system via a lease or Power Purchase Agreement, and has established CEFIA Solar Services Inc. (“CSS”) to serve as the member manager of the tax equity fund through which such projects are financed;

**WHEREAS**, the Green Bank has partnered with the Connecticut Housing Finance Authority (“CHFA”) to support properties in the State Sponsored Housing Portfolio (“SSHP”), and other properties of similar use and purpose, in going solar; and

**WHEREAS**, the CHFA Board of Directors has authorized the issuance of Qualified Energy Conservation Bonds (“QECCBs”) for the purpose of funding a loan to CSS, the proceeds of which will help finance the installation of solar projects on affordable multifamily properties under the SL2 program;

**NOW**, therefore be it:

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer of the Green Bank, is authorized, on behalf of CSS and any other relevant Green Bank affiliate, to execute a loan agreement (the “Note”) and ancillary documentation with CHFA with terms and conditions materially consistent with those presented in the memorandum to the Board dated October 9, 2015.

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer of the Green Bank, is authorized, on behalf of CSS and any other relevant Green Bank affiliate, to execute amendments with all existing SL2 debt and equity investors to allow CSS to accept such a Note from CHFA.

**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 legal instruments.

Submitted by: Bryan Garcia, President and CEO; Bert Hunter, EVP and CIO; Ben Healey, Assistant Director, Clean Energy Finance

**Exhibit A**

REDACTED



## Memo

**To:** Connecticut Green Bank Board of Directors

**From:** Mike Yu, Senior Manager, Clean Energy Finance

**CC:** Bryan Garcia, President and CEO; Bert Hunter, EVP and CIO; Brian Farnen, General Counsel and CLO; Kerry O'Neill, Managing Director of Residential Programs; Ben Healey, Director of Clean Energy Finance

**Date:** April 15, 2016 (Revised April 20, 2016)

**Re:** Expansion and Extension of Solar Lease 2 Facilities with US Bank & First Niagara

---

At a special meeting of the Board of Directors of the Connecticut Green Bank ("Green Bank") held on June 26, 2013, the Green Bank Board of Directors (the "Board") approved resolutions for the CT Solar Lease 2 program ("Solar Lease 2"), a public private partnership between the Green Bank and private capital providers. Solar Lease 2 enables lease and power purchase agreement ("PPA") financing for residential and commercial scale solar PV systems in Connecticut installed by an array of independent contractors. The capital providers include U.S. Bank, the "Tax Equity Investor" providing \$23.6 million, and a syndicate of local and regional banks (the "Lenders"), led by First Niagara Financial Group and originally including Webster Bank, Liberty Bank and People's United Bank, who committed to providing \$26.7 million in debt. The Green Bank supports Solar Lease 2 by providing \$2,300,000 in subordinated debt, \$7,200,000 in sponsor equity and \$3,500,000 in loan loss reserves using repurposed ARRA-SEP funds (i.e., federal stimulus dollars.)

In 2015, the Board approved a number of modifications and amendments to the Solar Lease 2 program that allowed for more flexibility in financing commercial-scale projects. These changes included:

- An extension of the facility from July 1, 2015 to October 1, 2016;
- An increase in the allowed proportion of commercial projects within the portfolio, from 20% to 60%;
- The ability to finance projects under the Connecticut Housing Finance Authority state sponsored housing portfolio solar initiative using Qualified Energy Conservation Bonds; and

- The reduction of debt availability from \$26.7 million to \$24.0 million as Liberty Bank and People’s United Bank withdrew from their participation in the facility.

Solar Lease 2 has been a programmatic success, and through March 2016 has resulted in nearly 1,200 residential systems representing more than 9.5 megawatts being approved by U.S. Bank, and nearly 7 megawatts of commercial-scale projects similarly approved. Factoring in 600 kilowatts of imminent commercial deals that will soon be submitted for U.S. Bank approval, Solar Lease 2 in its current state is fully funded, having utilized 99.5% of its available tax equity. Going forward, the Green Bank no longer plans to offer a residential solar lease, given the prevalence of private developers / financiers who have competitive offerings in the market. On the commercial side, however, it is clear that demand for the Green Bank’s lease and PPA financing remains robust. To that end, we expect to conduct an RFP for tax equity and debt capital in Q2 2016 to create a wholly new lease structure (“Solar Lease 3”), which staff will return to the Board for approval once it is more fully developed. However, it will be several months, at least, before Solar Lease 3 is fully functional, and in order to provide key strategic partners the funding necessary to commence time-sensitive transactions in the meanwhile, staff has asked U.S. Bank and First Niagara to increase their commitments to Solar Lease 2 by \$2.4 million and \$3.4 million, respectively. This increase in tax and debt capacity will allow for Solar Lease 2 to fund an additional 2.6 megawatts of transactions, allowing developers to bridge the gap between the end of Solar Lease 2 and the operationalization of Solar Lease 3. Additionally, in order to provide for adequate time for the incremental systems to be installed, U.S. Bank and First Niagara have signaled their willingness to extend their participation in Solar Lease 2 through Q1 2017.

<b>Entity</b>	<b>Current Commitment</b>	<b>Upsizing Request</b>	<b>Total Commitment</b>
Green Bank (CEFIA Solar Services)	\$22,637,869 <sup>(1)</sup>	\$1,800,000 <sup>(2)</sup>	\$24,437,869 <sup>(3)</sup>
US Bank (Firststar Development LLC)	\$23,659,490	\$3,400,000	\$26,059,490
First Niagara & Webster Bank	\$24,000,000	\$2,400,000	\$27,400,000

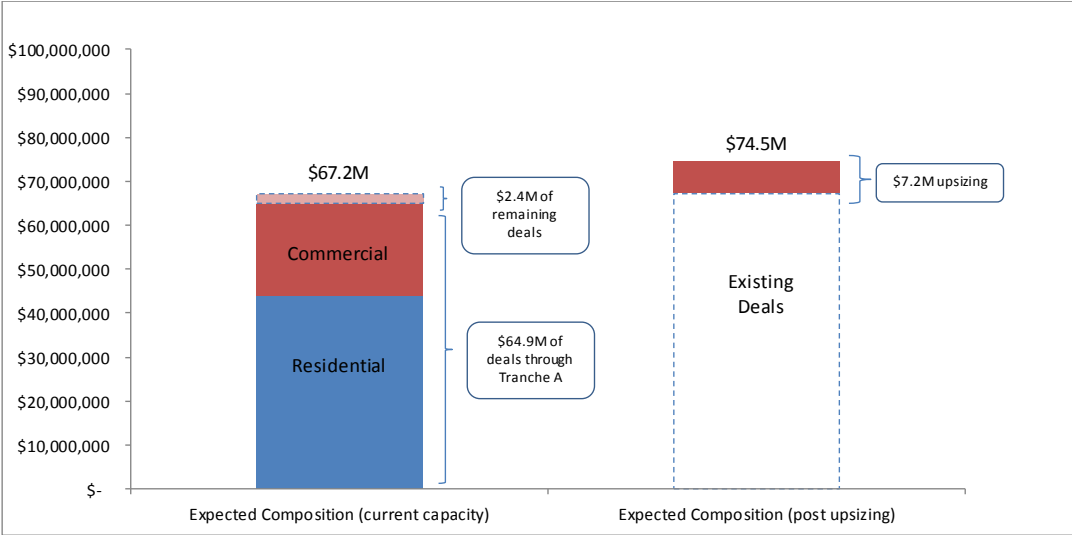
<sup>(1)</sup> \$22,637,869 is the gross sponsor equity investment commitment before reinvested proceeds from excess cash generated at CT Solar Lease 2 LLC. The net sponsor equity investment commitment(\*) is \$10,197,597 at March 31, 2016.

<sup>(2)</sup> \$1,800,000 is the gross sponsor equity investment commitment before reinvested proceeds from excess cash generated at CT Solar Lease 2 LLC. The estimated net sponsor equity investment commitment is \$1,300,000.

<sup>(3)</sup> \$24,437,869 is the gross sponsor equity investment commitment before reinvested proceeds from excess cash generated at CT Solar Lease 2 LLC. The net sponsor equity investment commitment is \$11,497,597.

(\*) The term “net sponsor equity investment commitment” is defined as (a) capital contributions by CEFIA Solar Services Inc. to CT Solar Lease 2 LLC LESS (b) cumulative net income of CEFIA Holdings LLC derived from its role as “Developer” for the CT Solar Lease 2 program.

**Solar Lease 2: Portfolio FMV Composition Before and After Requested Upsizing**



Accordingly, staff seeks approval of the Board to enter into amendments to the documentation previously approved by the Board in order to:

- Upsize the US Bank equity commitment by \$2.4 million;
- Upsize the lenders’ debt commitments by \$3.4 million;
- Upsize the Green Bank’s capital commitment by \$1.8 million; and
- Extend each facility through Q1 2017.

## Resolutions

**WHEREAS**, at a special meeting of the Board of Directors of the Connecticut Green Bank (“Green Bank”) held on June 26, 2013, the Green Bank Board of Directors (the “Board”) approved resolutions authorizing the creation of the CT Solar Lease 2 program (“Solar Lease 2”);

**WHEREAS**, the Green Bank intends to extend the commitment size and duration of the tax equity, credit facilities, and Green Bank participation supporting Solar Lease 2 as set forth in the memorandum submitted to the Board dated April 15, 2016 and revised April 20, 2016;

**NOW**, therefore be it:

**RESOLVED**, that the Green Bank Board of Directors (“Board”) authorizes the President of the Green Bank and any other duly authorized officer of the Green Bank, to execute and deliver amendments and other related documentation to extend the commitment size and duration of the tax equity, credit facilities, and Green Bank participation supporting Solar Lease 2 consistent with the memorandum submitted to the Board dated April 15, 2016 and revised April 20, 2016, 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 “sponsor equity commitment” for the CT Solar Lease 2 program for the purposes of Board authorization is defined as (a) capital contributions by CEFIA Solar Services Inc. to CT Solar Lease 2 LLC LESS (b) cumulative net income of CEFIA Holdings LLC derived from its role as “Developer” for the CT Solar Lease 2 program;

**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 legal instruments.

Submitted by: Bryan Garcia, President and CEO; Bert Hunter, EVP and CIO; Ben Healey, Director of Clean Energy Finance, and Mike Yu, Sr. Manager, Clean Energy Finance





# Memo

**To:** Connecticut Green Bank Board of Directors

**From:** Mariana C. Trief, Manager, Clean Energy Finance

**CC:** Bryan Garcia, President and CEO; Bert Hunter, EVP and CIO; Brian Farnen, General Counsel and CLO; Ben Healey, Director, Clean Energy Finance

**Date:** April 15, 2016 (REVISED April 20, 2016)

**Re:** Project Update for 193kW Hydroelectric Facility in Meriden, CT

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## Background and Purpose

On February 26, 2016 staff brought forward to the Connecticut Green Bank (“Green Bank”) Board of Directors (the “Board”) a proposal (see Exhibit A) for the Green Bank to provide both construction financing and term financing through the issuance of New Clean Renewable Energy Bonds (“CREBs”) which would also require the Green Bank to subsequently own a 193kW hydroelectric facility in Meriden, CT (the “Project”). The Board approved the proposal and authorized:

- i) construction financing in an amount not to exceed \$3.1 million,
- ii) a working capital guaranty in an amount not to exceed \$300,000 to New England Hydropower Company (“NEHC”), the project developer, under the Green Bank’s existing working capital facility partnership with Webster Bank; and,
- iii) term financing based on the following prerequisites:
  - a. issuing CREBs in an amount not to exceed \$3,100,000; and,
  - b. securing the issuance utilizing the Special Capital Reserve Fund (“SCRF”) subject to further Board approval.

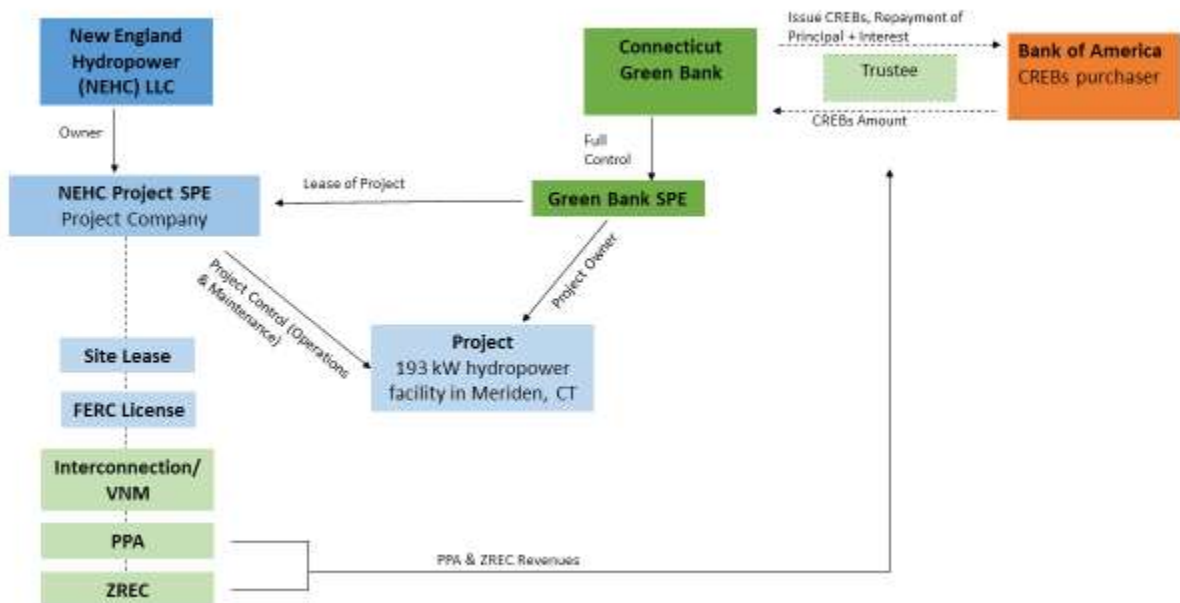
Since the Board’s approval, staff has continued to advance towards the issuance of CREBs and, in parallel, the developer has continued to make progress on the Project. The purpose of this memo is to share with the Board details about the progress that has been achieved to date on both of these fronts and request authorization for an increase in the working capital amount that the Green Bank may guaranty.

## Ownership Structure

Green Bank staff has been working with outside counsel Shipman & Goodwin (CREBs bonding and project finance counsel) and Day Pitney (hydro regulatory counsel) to polish the structure presented to the Board and ensure it meets requirements imposed by both the CREBs financing structure and the Federal Energy Regulatory Commission (“FERC”) license for the hydropower facility, while at the same time limiting the Green Bank’s potential liability. The structure is presented as a figure below, and the main items are described hereafter:

- NEHC will establish a Project entity: Hanover Pond Hydro LLC (“Project Company”), wholly owned by NEHC, which will bear the Project’s development and construction risks.
- Upon construction completion, the Green Bank will purchase the Project assets (assembled equipment, powerhouse, rights to Renewable Energy Credits (“RECs”) generated by the facility etc.) from NEHC’s Project Company through funds derived from the issuance of CREBs and thereafter retain ownership of the Project assets, as required by CREBs through a Green Bank Special Purpose Entity (“SPE”). The Green Bank will have full control over the proposed Green Bank SPE.
- The Green Bank SPE will lease the Project back to NEHC’s Project Company, granting NEHC full control over the Project as required by the FERC license. NEHC’s Project Company will be responsible for the operation of the Project and for any issues that arise (including environmental and any catastrophic events) and indemnify the Green Bank if any issues arise. NEHC’s obligations under the lease will be secured by a security interest against all assets of the lessee (which would include the Power Purchase Agreement with the City of Meriden (“PPA”), the 15-year Zero Emission Renewable Energy Credits (“ZREC”) Contract, interconnection agreements, licenses, etc.) and the proceeds thereof and a guaranty by NEHC secured by a pledge of the NEHC’s ownership interest in the lessee (the NEHC Project Company). As part of that collateral package, the Green Bank would also require the Project Company to cause the City of Meriden to direct all of the PPA revenues and Eversource to direct all of the ZREC revenues to the trustee for the CREBs (or alternatively an account pledged to the CREBs trustee).
- The PPA, ZREC, FERC license and Site Lease with the City of Meriden will remain at the NEHC Project Company, thereby limiting the Green Bank’s liability as it relates to those agreements. In the event of default by the NEHC Project Company, agreements will be assigned to the Green Bank SPE or to another entity selected by the Green Bank.

**Hydropower Facility Structure**



### *CREBs Update*

Below are the main updates and progress on the CREBs financing.

**Bond Indenture:** A *draft* bond indenture has been prepared by Shipman & Goodwin and is presented to the Board as Exhibit B. The indenture has already been shared with the Office of the Treasurer and preliminary comments have been discussed. A final draft based on comments from the Office of the Treasurer and on final negotiation with Banc of America Public Capital Corp (“Bank of America”) along with an opinion of self-sufficiency will be presented to the Board, for approval before execution.

**CREBs Allocation:** Under the CREBs program, qualified issuers need to apply, on a rolling basis, for volume-cap application. Once granted a volume-cap allocation, applicants have 180 days from the date of the allocation letter to issue the proposed bonds. If they are not issued during that time, they will be treated as forfeited and revert to the IRS for reallocation. The Green Bank’s CREBs application for the Project is substantially complete and ready for submission; however, staff has purposefully not submitted the application yet, as it needs to be timed so that CREBs can be issued after the Project has completed construction and within the 180 days after the allocation.

**Bank of America Diligence:** Bank of America has continued its diligence on the Project and technology. Diligence meetings with NEHC, the developer, and an engineer from a global water and natural resources firm that had previously performed extensive diligence work on the Project and the Archimedes Screw Generator (“ASG”) technology have all been positive to date.

### *Construction Finance and Working Capital*

Rather than having the Green Bank provide the construction finance for the project, as had originally been conceived and approved by the Board, the Green Bank has engaged two local banks that have shown an interest in providing construction finance with a Green Bank guaranty. Staff is confident that this is a better path than having the Green Bank provide the construction finance directly for the following reasons: i) it supports private sector participation and improves local banks’ familiarity with small hydro projects; and, ii) it limits the Green Bank’s involvement with the Project prior to CREBs allocation, thereby avoiding potential CREBs reimbursement issues. It is in the interest of the Green Bank to issue CREBs once the Project is operational to avoid bond repayment obligations during construction but before revenue is being generated by the Project.

NEHC and the Green Bank are negotiating final guaranty requirements, terms, and timing with the two potential local banks that have shown interest in providing construction finance. In this regard, staff requests a modification to the approval granted in resolutions passed at a special meeting of the Board held on February 26, 2016 to specifically permit the Green Bank to issue the guaranty for construction finance instead of a loan by the Green Bank as originally contemplated by staff and approved by the Board. In the meanwhile, staff is requesting an increase in an amount not to exceed \$600,000 (total) in the working capital guaranty to NEHC under the Green Bank’s existing working capital facility partnership with Webster Bank, in order to avoid delays in the Project’s construction schedule as NEHC simultaneously works to close the construction finance loan from one of the two local banks. An increase to NEHC in the working capital line from Webster will allow them to make payments to long lead-time suppliers without having to wait for the construction finance loan to close. This will enable the construction to take place as scheduled, without delays, during the low-flow summer season, so that the Project can meet interconnection deadlines. As part of this effort to keep everything moving forward in advance of closing on final construction financing, the Green Bank will also provide a guaranty to Spaans Babcock (the ASG equipment supplier) upon the execution of that contract (since the Green Bank will be the eventual owner of the ASG under CREBs regardless), which – in addition to keeping the Project on schedule – will ensure

better payment terms as well as a retention payment to be released at the end of the equipment's warranty period.

### ***Construction Update***

NEHC has requested a change in the Project's general contractor to Bancroft Contracting Company ("Bancroft") because the Project's size is a better fit for Bancroft's hydropower business. Bancroft is a general contracting company founded in 1977 and headquartered in western Maine. It has annual revenues greater than \$25 million, of which around 40% are in the hydro space. Bancroft's bonding capacity exceeds \$50 million, well beyond the budget and scope of this project.

Bancroft has extensive experience, with over 30 projects in the hydro space completed since 2000. Notable clients include Brookfield Renewables, NextEra Energy, Green Mountain Power, First Light Power and ENEL (a list of notable projects and pictures is presented in Exhibit C). These projects have ranged from under \$100,000 to \$4.7M, with the majority being in the \$1.5M-\$3.0M range. Overall, Bancroft has demonstrated extensive hydro experience in the northeast, and the Project is well within their capabilities, as confirmed by staff diligence.

On the equipment side, the contract for the purchase of the ASG, the hydro generating equipment to be used in the Project, has been reviewed by the Green Bank and is close to being executed. Given the manufacturing lead time for the ASG, the equipment purchase agreement needs to be executed before the end of the month, and NEHC needs to provide the deposit, with funding from the extended working capital request above, to avoid installation delays.

### **Conclusion**

The Project is continuing to progress, and staff expects construction to begin and advance so that the Project's virtual net metering deadline is met without any issues or delays. Staff will continue to update the Board as milestones are completed, and will come back to the Board with a final bond indenture for Board approval when appropriate.

## 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 and (3) Green Bank’s Comprehensive Plan for Fiscal Years 2015 and 2016 (the “Comprehensive Plan”), Green Bank continuously aims to drive private capital investment into clean energy projects;

**WHEREAS**, pursuant to the development of a small hydroelectric facility at the Hanover Pond Dam on the Quinnipiac River in Meriden (“Project”), on February 26, 2016 the Green Bank Board of Directors (the “Board”) authorized:

- i) construction financing in an amount not to exceed \$3.1 million,
- ii) a working capital guaranty in an amount not to exceed \$300,000 to New England Hydropower Company (“NEHC”), the project developer, under the Green Bank’s existing working capital facility partnership with Webster Bank; and,
- iii) term financing based on the following
  - a. the issuance of New Clean Renewable Energy Bonds (“CREBs”) in an amount not to exceed \$3,100,000, and
  - b. securing the issuance of CREBs utilizing the Special Capital Reserve Fund (“SCRF”) subject to further Board approval; and

**WHEREAS**, Green Bank staff now recommends that the Board authorize an increase in the working capital guaranty afforded to NEHC in connection to the Project under the Green Bank’s existing working capital facility partnership with Webster Bank; and

**WHEREAS**, Green Bank staff now recommends the Green Bank to issue a guaranty to a third party lender for construction finance for the Project instead of a loan by the Green Bank as originally contemplated by staff and authorized by the Board on February 26, 2016.

**NOW**, therefore be it:

**RESOLVED**, that the Green Bank may increase the amount of its working capital guaranty under the Green Bank’s existing working capital facility partnership with Webster Bank, for draws made by NEHC solely in connection with this Project and in an amount not to exceed \$600,000 and may issue a guaranty to a third party lender for construction finance for the Project as more completely described in a memorandum to the Board of Directors dated April 15, 2016 and as revised on April 20, 2016;

**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 legal instruments.

Submitted by: Bryan Garcia, President and CEO; Bert Hunter, EVP and CIO; Ben Healey and Mariana C. Trief, Clean Energy Finance.

**193 kW Hydroelectric Project**  
**Hanover Pond Dam**  
**Quinnipiac River – City of Meriden**  
Investment Memorandum & Due Diligence Package  
February 19, 2016 – Board of Directors



**Document Purpose:** This document contains background information and due diligence on the Hanover Pond Dam 193 kW Hydroelectric Project and the stakeholders involved: Spaans Babcock, PC Construction, New England Hydropower Company, LLC, Potential Energy Projects Ltd., Banc of America Public Capital Corp., the City of Meriden, and Eversource. This information is provided to the 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.

# Memo

**To:** Connecticut Green Bank Board of Directors

**From:** Mariana C. Trief, Manager, Clean Energy Finance

**CC:** Bryan Garcia, President and CEO; Bert Hunter, EVP and CIO; Brian Farnen, General Counsel and CLO; Ben Healey, Director, Clean Energy Finance

**Date:** February 19, 2016

**Re:** Financing for 193kW Hydroelectric Facility through New Clean Renewable Energy Bonds

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## Investment Summary

Staff is bringing forward a proposal for the Green Bank to finance through construction, and subsequently own, a 193kW hydroelectric facility in Meriden, CT. The Green Bank's investment would not exceed \$3.1 million, which would be repaid via New Clean Renewable Energy Bonds ("CREBs") upon project completion. This financing opportunity comes to the Green Bank as the result of a Connecticut Clean Energy Fund ("CCEF") approved Operational Demonstration ("Op Demo") project with New England Hydropower Company, LLC ("NEHC"). The original intent of the Op Demo loan to NEHC was to: i) establish a faster and lower cost permitting process for small-hydro installations in Connecticut; and ii) enable adoption and build customer and investor confidence in the United States of a technology well-demonstrated in Europe: the Archimedes Hydro Screw Generator ("ASG"). The success of this first NEHC project (the "Project") at the Hanover Pond in Meriden will advance both of those goals and deploy a new and significant "run of river" hydroelectric resource in the state. The ASG generates low-cost, reliable, and environmentally sound clean energy and, with successful deployment, offers the opportunity to capture significant hydro potential at scale (both for new hydro developments and by retrofitting existing hydro sites with expiring FERC licenses) with competitive costs and low environmental impact.

By combining the successful implementation of ASG technology with CREBs – a long-term financing solution that leverages federally supported low-cost private capital for clean energy projects – the Green Bank is structuring a financing model that can be replicated across a spectrum of additional projects within the state.

## Background and Purpose

On January 8, 2011, the Technology Innovation Committee of the predecessor organization to the Connecticut Green Bank ("Green Bank"), the CCEF, approved Op Demo funding, in an amount not to exceed \$500,000, for NEHC for the early-stage development purposes noted above. Utilizing \$412,500 in Op Demo funding that NEHC has received to date, along with ~\$300,000 raised from private investors, NEHC is currently finalizing the development of its first small-scale hydropower

project in the State of Connecticut: a 193 kW hydroelectric facility at the Hanover Pond Dam on the Quinnipiac River in the City of Meriden (see Exhibit 1 for a locational map and site layout for the Project). The focus of this memorandum is only for the purpose of proposing to the Green Bank Board of Directors the Meriden project – though it should be noted that successful development of the Project is expected to enable development of two additional projects that NEHC is advancing: i) a 678 kW hydroelectric facility in Collinsville, CT; and, ii) a 118 kW hydroelectric facility in Eagleville, CT.

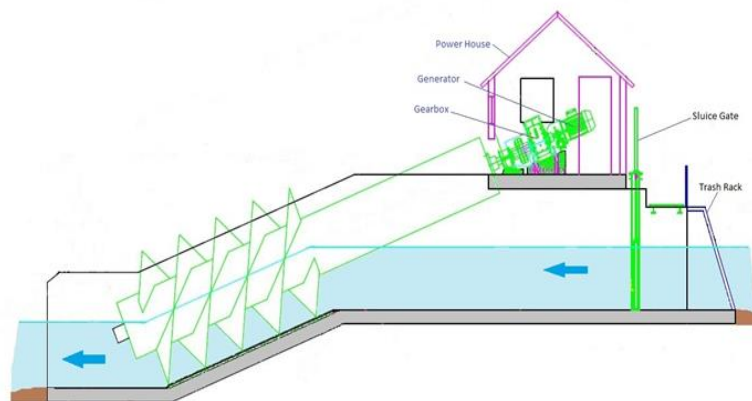
## Archimedes Screw Generation Technology

The ASG technology proposed for the Project is manufactured by Spaans Babcock, a Netherlands-based company founded in 1895 that designs, produces and installs equipment for wastewater treatment plants, water management and power generation. Spaans Babcock has been involved in the hydroelectric space since 2006 and since then has deployed approximately 100 ASGs around the world, with the majority installed in Europe. Spaans Babcock's main manufacturing facility is in Europe, with an office in Canada that oversees sales, contracting, project management, installation and commissioning of projects in North America. Engineers from Spaans Babcock will be onsite in Meriden for the installation of the Project's ASG.

Advantages of the ASG include the following:

- High efficiency;
- Operational under “low head” conditions (“head” is the vertical distance between the intake of the ASG and the outlet at the base (outlet) of the ASG);
- Fish friendly, as fish can pass through the screw unharmed. The U.S. Fish and Wildlife Service and the National Marine Fisheries Service have supported the technology;
- Highly reliable and long lived due to low rotational frequency;
- Low maintenance costs;
- Relatively simple installation, with the actual screw installed in one day; and,
- Functional as a “run-of-river” installation, without disrupting water flows required to maintain the components, functions, processes, and resilience of aquatic ecosystems.

As shown in the picture below, the screw and casing are part of a trough that supports the system. The civil works for the installation are minimal, and the installation of the screw itself is performed in only one day.





## Hanover Pond Project

### Site Overview (from Dam Inspection Report to DEEP – October 2014)

Hanover Pond Dam, owned and operated by the City of Meriden, is a concrete and earthen embankment dam located on the Quinnipiac River. The dam was reconstructed in 2005-2006. The dam has a length of about 400 feet and a maximum height of about 25 feet. A concrete gate chamber at the right (looking downstream) end of the spillway provides controls for the four 48"x54" outlet sluice gates, which discharge through the right training wall. The right training wall is a Denil fish way. Hanover Pond itself has a surface area of 76 acres and a tributary watershed of 95 square miles.

The dam is a Hazard Classification "C" (from "AA" being the least hazard potential to "C" being the highest), which means (according to DEEP regulations) that the dam is a high hazard potential dam which, if it were to fail, could result in any or all of the following:

- (i) Probable loss of life;
- (ii) Major damage to habitable structures, residences, hospitals, convalescent homes, schools, etc.;
- (iii) Damage to main highways (greater than 1500 vehicles per day of average daily traffic); and
- (iv) Great economic loss.

It should be noted that this hazard classification is not derived from, nor has any bearing on, the structural integrity of the dam itself, but rather is due to the significant amount of property and improvements located downstream of the dam that would be endangered if the dam were ever compromised.

(See photographs of site area in Exhibit 1c)

### Key Milestones – Achieved and Projected

By employing the ASG, the Project at Hanover Pond will generate an estimated 925,000 kilowatt hours (kWh) of zero emissions renewable energy annually. The following summarizes the Project milestones NEHC has achieved to date:

- Executed 20-year Power Purchase Agreement ("PPA") with the City of Meriden, which will benefit from the electricity generated by the hydroelectric facility through the state's Virtual Net Metering ("VNM") program. The term of the PPA can be extended twice, each time for an additional 10 years, for a complete 40-year term;
- Executed 15-year Zero Emission Renewable Energy Credits ("ZREC") Contract with Eversource;
- Executed Site Lease with the City of Meriden ;
- Received environmental support for the Hanover Pond project from U.S. Fish and Wildlife Service and the National Marine Fisheries Service;

- Submitted all compliance requirements to the Federal Energy Regulatory Commission (“FERC”) for the license, with final approval expected soon; and
- Completed consultation and gained approval from key stakeholders including the State Historic Preservation Office (“SHPO”), local Native American tribes, and all non-FERC federal and state agencies.

Though tremendous progress has been completed to date, the following key milestones remain to be completed:

- Final design and city permits, expected by the end of March 2016;
- Federal Energy Regulatory Commission (FERC) License – all compliance requirements have been submitted and final approval is expected by the end of March 2016;
- Interconnection approval from Eversource – System Impact Study already submitted;
- Construction finance and long term financing arrangements (the purpose of staff’s proposal herein); and
- Construction, which includes equipment order/delivery, site mobilization, installation and interconnection. Site mobilization is expected to begin in April 2016 and the Commercial Operation Date (“COD”) is expected by early October 2016.

### **Financing Arrangements**

In October 2015, NEHC reached out to the Green Bank to request Project-specific financing support, including construction financing (in contrast to the corporate investment made by CCEF/Green Bank via the Op Demo program). Over the past several months, the Green Bank has explored numerous financing options in concert with the NEHC team, including – most promisingly – working with a local lender who offered NEHC a term sheet for debt financing for the Project. However, this offer turned out not to be viable because of the higher cost of capital and shorter term debt financing from the local bank, as well as the fact that the offer only covered ~40% of the Project costs and required substantial additional equity. In addition, the bank offer included non-negotiable guaranty requirements. A comparison of the CREBs terms compared to those of the debt financing from the local bank is presented in Exhibit 2. Other local lenders decided not to pursue this opportunity due to unfamiliarity with hydro financing and the Project’s small size; therefore, Green Bank staff sought an alternative option in order to finance the Project over a longer term, at a low cost of capital, and without the need for a new injection of equity.

Specifically, Green Bank staff has been exploring the opportunity to provide construction financing using the Green Bank’s balance sheet, followed by takeout through CREBs term financing. Such a structure would allow the Green Bank to overcome the market’s perceived unfamiliarity with hydro financing and the Project’s capital cost size constraint by leveraging NEHC’s development efforts with federally supported low-cost private capital. The CREBs are to be issued by the Green Bank and purchased by a financial institution in an arrangement that could serve as a potential model for providing low-cost, long-term financing for other clean energy projects in Connecticut. Financing the Project through CREBs, as further described in this memo, also provides a viable mechanism for the Green Bank to recover the \$412,500 in funds invested to date via the Op Demo funding (together with an additional \$87,500 that NEHC is entitled to draw under the terms of the Op Demo loan), which would otherwise prove quite challenging to recoup given the highly concessionary terms that were offered under that early stage development program.

Under CREBs financing, the Green Bank will be required to own the facility. Notwithstanding the requirement under Federal regulations for the Green Bank to own the ASG and related Project assets, as will be evidenced in the proposal, staff has structured the investment to limit the Green Bank's ownership risk substantially to the equipment, hydro performance and off-taker (i.e., City of Meriden) payment risks. Thus, for example, the risk associated with the dam's hazard classification, resulting from its upstream proximity to economic activity, will remain with the City of Meriden and should not transfer to the Green Bank as a result of the Green Bank owning the Project assets.

## CREBs

CREBs may be used by certain entities – primarily in the public sector – to finance Qualified Renewable Energy Facilities (“QREFs”). The following summarizes the CREBs financing structure and main requirements:

- The CREBs program was created under the Energy Tax Incentives Act of 2005 and is administered by the Internal Revenue Service (“IRS”). The latest IRS announcement reports a \$600 million volume cap remaining for CREBs. Through CREBs, the federal government lowers the cost of debt by either a tax credit to bondholders in lieu of interest payments from the issuers or (as in the structure agreed with the CREBs purchaser) a direct subsidy to the issuer. When the subsidy goes directly to the issuer (as is contemplated for this financing), the issuer receives from the U.S. Treasury the lesser of the actual taxable rate of the bonds or 70% of the Tax Credit Rate as of the Bond Sale Date (see *CREBs Mechanics* diagram below for more information)<sup>1</sup>.
- Qualified issuers of CREBs include: (a) public power providers; (b) cooperative electric companies; (c) governmental bodies (including States, or any political subdivisions thereof, or Indian Tribal Governments); (d) clean renewable energy bond lenders; and (e) not-for-profit electric utilities that have received loans or loan guarantees under the Rural Electrification Act. The Green Bank qualifies as a “governmental body” and is eligible to issue CREBs.
- As contemplated in this initial instance, the Green Bank would issue CREBs to fund this Project as a general obligation of the Green Bank (backed by the Special Capital Reserve Fund (“SCRF”)), and would therefore be obligated to repay bondholders regardless of the Project's performance. The use of the SCRF is necessary to achieve a 20 year maturity for the CREBs (available only to “AA”-rated issuers), and to drive pricing (that is, the interest rate) down to levels available to the CREBs purchaser's most creditworthy issuers. Green Bank bonds (i.e., CREBs under the current proposal) secured by the SCRF require amongst other things (1) State of Connecticut Office of Policy and Management approval; (2) an opinion of sufficiency as set forth in the Connecticut General Statutes (“CGS”); and (3) approval by the Office of the State Treasurer and other documentation required under the CGS.
- QREFs generally include the following types of facilities operated to produce electricity: (a) wind facilities; (b) biomass facilities; (c) geothermal and solar energy facilities; (d) small irrigation power facilities; (e) landfill gas facilities and trash combustion facilities; (f) *qualified*

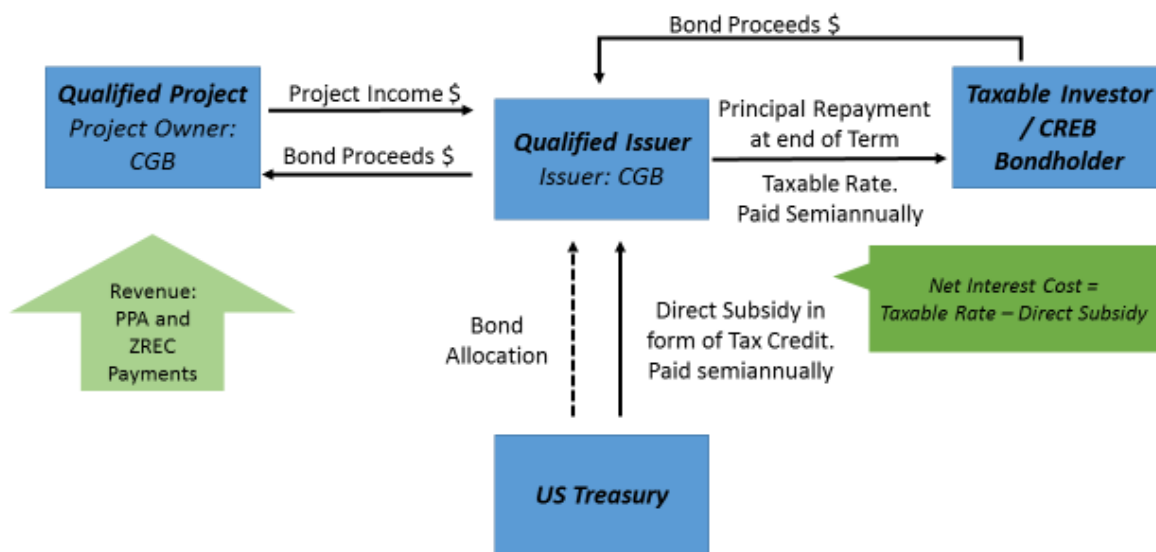
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<sup>1</sup> Note: Budget Control Act of 2011 included automatic across-the-board spending reductions – referred to as sequestration. Federal subsidies on CREBs are not deemed to be exempt from sequestration which is presently 6.8% for FY2016. Accordingly, federal subsidies for CREBs will be reduced by 6.8% and could vary in future years (as levels required under sequestration increase or decrease). These reductions do not change the analytical conclusions of staff.

hydroelectric facilities; and (g) marine and hydrokinetic renewable energy facilities. The Project is a qualified hydroelectric facility.

- CREBs require a federal allocation. The Green Bank is currently completing the required application and expects to submit it to the Internal Revenue Service as soon as an agreement in principle is reached with the CREBs purchaser, which staff expects to obtain by the end of March. The not-to-exceed amount of \$3,100,000 in federal allocation the Green Bank is requesting is well below the current Published Volume Cap Limit of \$85,637,877.92 for the period commencing January 1, 2016 and well within the overall Volume Cap Availability for projects owned by governmental bodies of \$428,189,389 as of January 1, 2016.

### CREBs Mechanics



## Proposed Financing

Assuming the Board approves the Green Bank's participation in the Project, Green Bank staff recommends providing interim, construction financing followed by long-term, low-cost financing through the issuance of CREBs, and, as required by Federal regulations, ownership of the ASG and related Project assets.

Staff proposes providing financing for construction in an amount not to exceed \$2,900,000 during the construction period expected to take place between April and October of 2016, as well as for certain pre-construction expenditures (such as progress/advance payments for equipment, legal, engineering and other project development expenditures). The Green Bank would then convert its debt financing to full equity ownership of the project upon COD, since Green Bank ownership is required by Federal regulations in order to make use of CREBs as the long-term financing mechanism. Since the construction loan is being taken out by the Green Bank's ownership of the facility at completion (by the aforementioned conversion of the construction loan into equity ownership, which in turn is financed through the CREBs issuance), there is no need for an interest rate on the loan, as that would simply represent the Green Bank charging interest to itself.

It should be further noted that at COD, the expectation is that the Green Bank will pay a developer fee to NEHC, out of bond proceeds, for a) the Project's ongoing use of the FERC license and b) the transfer of all other Project assets including the PPA, ZREC and VNM agreements. In the interim, Green Bank staff is recommending that NEHC avail itself of working capital through the Green Bank's existing partnership with Webster Bank (in an amount not to exceed \$300,000), in order to maintain NEHC's focus on the Project rather than raising new corporate equity. Proceeds from NEHC's developer fee would then be used to repay the working capital loan to Webster Bank. To that end, staff is looking for approval from the Board of Directors to provide the Green Bank's standard guaranty for any NEHC draws under that facility.

Upon COD, the issuance of CREBs would allow for the repayment of the Green Bank's construction loan (and conversion to equity) through a low-cost, long-term financing mechanism that would in turn be repaid from the Project's cash flows over a 20 year period. Staff recommends a strategic selection of Banc of America Public Capital Corp ("Bank of America") as the CREBs purchaser for this project. Bank of America has extensive energy and tax credit bond financing expertise, and has indicated its interest in financing the Project as well as future renewable energy projects via CREBs – thus making it an ideal partner, in alignment with the Green Bank's vision for a scalable financing solution. Bank of America has provided indicative pricing and terms to the Green Bank for the Project, including an interest rate buy-down, exclusive to Bank of America, as explained below. Although these terms are indicative (i.e., not yet final), the most relevant points for the Green Bank are as follows:

- Bank of America term investment (not to exceed): \$3,100,000 (inclusive of issuance fees and other transaction costs and thus higher than the not-to-exceed construction financing amount of \$2.9 million)
- Indicative effective interest rate of 1.67%. The interest rate buy-down program from the Connecticut Public Utilities Regulatory Authority ("PURA") will be applied during the first 10 years of the program, lowering the net effective interest rate to 1.07% for the entire 20-year CREBs term (assuming the entire CREBs issuance qualifies for the buy-down)
- Tenor: 20 years
- Security: Full amount of the CREBs repayment to Bank of America to be backed by the SCRF, plus the typical project finance collateral package (assignment of contracts, permits, revenues, warranties, security interest in all equipment, etc.)

The Green Bank has already engaged Shipman & Goodwin ("Shipman") as bond counsel, and Shipman has confirmed the Green Bank is qualified to issue CREBs and is in the process of drafting the accompanying indenture for the Bond issuance and opinion on self-sufficiency. Green Bank staff has also confirmed with our General Counsel the Green Bank's ability to own the Project, as required by CREBs, and has confirmed with outside counsel (Day Pitney) that the Green Bank (together with NEHC) can comply with the relevant Federal, state and independent system operator ("ISO-NE") requirements.

## **Risk**

The maximum exposure (excluding the Green Bank's prior Op Demo commitment at the NEHC corporate level) will be an amount not to exceed \$3,100,000, inclusive of a minimum capital reserve required for SCRF in an amount not to exceed \$250,000 (one year of "maximum annual debt service") based on the indicative pricing provided by Bank of America. Any construction financing that the Green Bank may provide in advance of takeout via term financing would be repaid by the

CREBs issued to Bank of America, so this construction financing would not result in any exposure greater than the amount noted immediately above.

The following summarizes the key risk factors and mitigating factors associated with the proposed transaction:

**Construction and performance risk:**

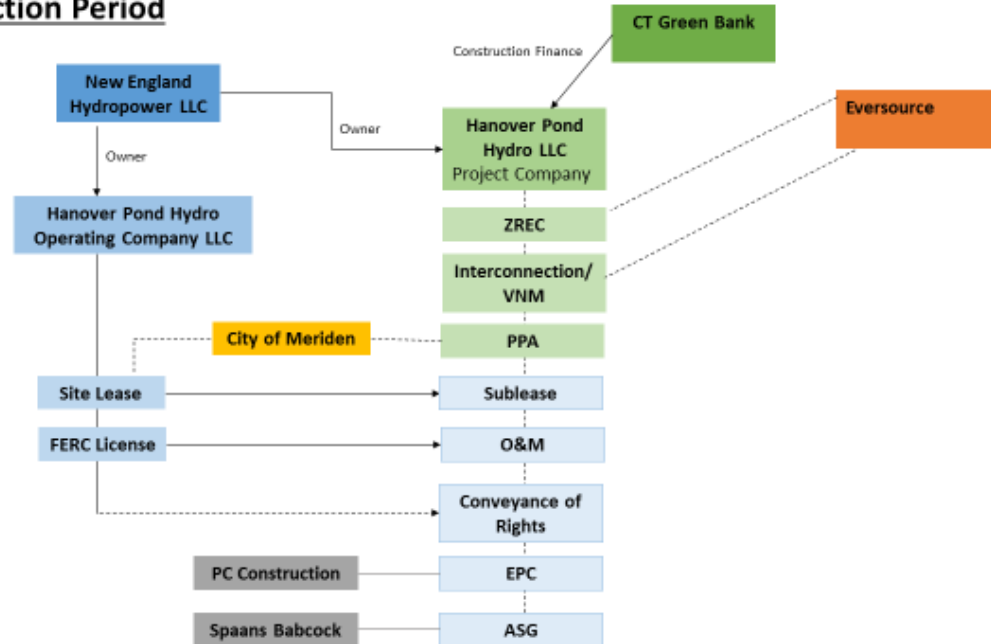
As described in greater detail in the “Project Partners” section, the parties involved in the Project include accomplished engineers, developers, project managers and owners of hydro facilities who, between them, have experience with hydro projects locally and with the technology internationally. Fuss and O’Neill, a civil and environmental engineering firm with FERC qualified personnel based out of Trumbull, Connecticut, will be executing the Project’s detailed designs in accordance with FERC requirements. PC Construction, the Project’s general contractor, has extensive hydro experience in the Northeast, and the Project is well within their capabilities, as confirmed by staff diligence.

The construction work plan is attached in Exhibit 3. From a construction complexity perspective, no new impoundment will be created as part of the Project, and construction will take place between May and October of 2016 during low-flow summer conditions. Though PC Construction does not have previous experience installing the ASG technology, they have experience with other technologies such as Francis and Kaplan turbines that require putting the pieces of the turbine together in the field. The ASG technology requires a relatively simple installation, compared to these other technologies, with the equipment designed and delivered as an assembly that easily fits together. The ASG will be installed in one day, under the supervision of an engineer from Spaans Babcock.

With regard to the impact of the construction and installation on the integrity of existing water retention structures, PC Construction anticipates this to be minimal. After a thorough engineering analysis from Fuss & O’Neill, they believe that any impacts can be greatly mitigated. One potential impact could be at the tailrace with the interface of the existing fish ladder. PC Construction is mitigating this risk by including sheeting at this location in order not to undermine the existing fish ladder structure. The other area of impact could be where they will have to cut the existing retaining wall for the connection to the intake channel. While this will need more engineering analysis from Fuss & O’Neill during the final design stage, PC Construction believes they have sufficient cost in their design development estimate to cover this item. Staff will ensure that Fuss & O’Neill will confirm that the construction will not impact the integrity of the retaining wall in any material way.

As depicted in the figure below, NEHC will establish a Project entity: Hanover Pond Hydro LLC (“Project Company”), wholly owned by NEHC during construction and installation that will bear the construction risks. To further mitigate any potential construction risks, the Green Bank’s Construction Finance Agreement will include review of milestones from an independent engineer prior to each disbursement and require PC Construction to be fully bonded and insured.

## Construction Period



## **Operational Risk:**

The dam is in good condition and should not pose operational risks. The dam's status was confirmed by an inspection that took place in October 8, 2014 by Tata & Howard, under the supervision of engineers from CT DEEP, and the inspection report found the concrete training walls and fish way to be in good condition.

Spaans Babcock, established more than a century ago, is a leading manufacturer and supplier of Archimedean Screw Pumps and Generators. The technology's simple design, open structure and slow rotation speed makes it a heavy duty screw with minimal wear that operates for years without material downtime. This is confirmed by Spaans Babcock's parts replacement schedule based on data from warranty and spares replacement performed along with data from 100+ years of running Archimedes screws in the waste water and pumping business. This same data was used to draw up the Project's maintenance repair budget.

The Green Bank will enter into an operations and maintenance contract with NEHC to ensure the ASG and all associated facility equipment is operating appropriately. NEHC will perform monthly site inspections and will remotely monitor the Project 24 hours a day, seven days a week, using several types of sensors. Water level sensors will monitor upstream and downstream water levels. If an abnormal condition occurs, an automatic alarm notification will be sent to the site operator. Tachometers will monitor the rotational speed of the turbine, and this information will be available to the remote site operator at all times during Project operations. There will also be automatic controls monitoring the electrical output to the grid. If an electrical problem is detected, a failsafe brake attached to the high-speed shaft of the gearbox will activate, halting the rotation of the screw. Simultaneously, a failsafe hydraulic pressure system will close the sluice gates, which have a "pressure release" mechanism in case anything should be caught in the gate. Remotely accessible security cameras will also be installed and monitored.

The Green Bank, in consultation with Shipman, is also developing the structure portrayed in the Regulatory and Compliance section below to limit the Green Bank's potential regulatory and compliance risks, along with operational risks and liabilities.

### **Regulatory and Compliance:**

The Project qualifies for a 10-MW exemption by FERC<sup>2</sup> - the U.S. Federal agency with jurisdiction over hydroelectric licensing. The FERC exemption is required to construct, operate, and maintain a non-federal hydroelectric project. Licenses may be issued for up to 50 year terms and must be renewed at the end of each term. Licensees must have all the real property interests or an option to obtain the interests in any non-federal lands, which for the Project have been secured via the Site Lease with the City of Meriden. The Project's application for the FERC exemption and compliance requirements including Final General Design Drawings have been submitted and final approval is expected by the end of March 2016. Once approved, the Project's construction, operation and maintenance must remain in compliance with the terms and conditions of the exemption, as well as those determined appropriate by a number of entities including the United States Fish and Wildlife Service, the National Marine Fisheries Service, CT DEEP and the City of Meriden. A complete list of approvals required for the Project from these different entities is presented in Exhibit 4.

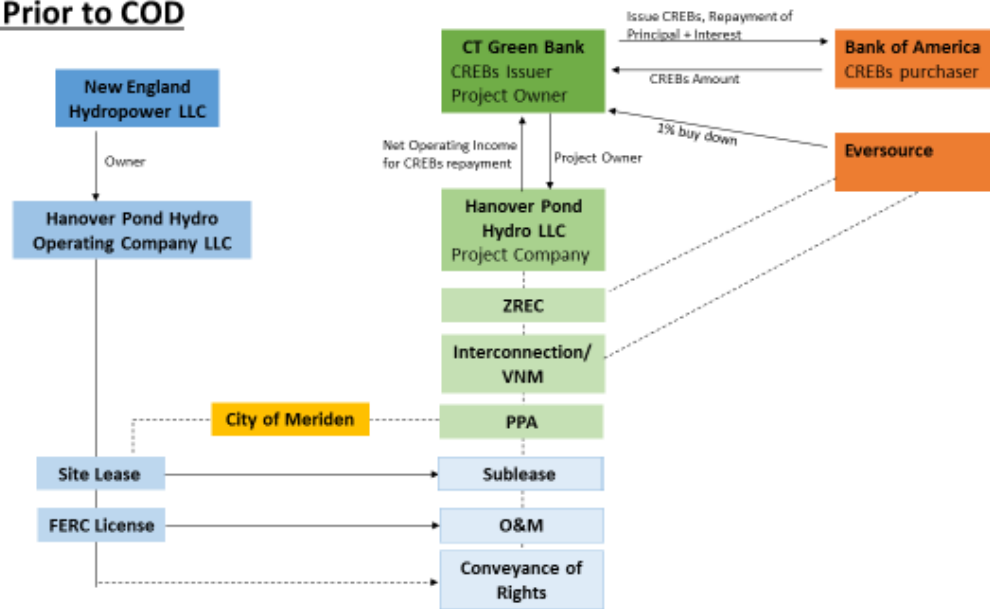
From a documentation perspective, the following contractual structure intends to limit the Green Bank's potential operational, regulatory and compliance risks under the FERC license and Site Lease with the City of Meriden while at the same time retaining Green Bank ownership of the ASG and Project assets as required by CREBs financing. Under this structure – as depicted in the figure below – the FERC license, Site Lease and potentially other Project assets will be assigned to a new entity, Hanover Pond Hydro Operating Company LLC (“Operating Company”). The legal structure is yet to be fully formalized, but the objective is to have NEHC as the sole member of the Operating Company with the Green Bank having step-in rights in case of a default on the part of NEHC. The Green Bank will continue to own the portions of the Project required to meet CREBs regulations, but all equipment will be operated and maintained by the Operating Company under contract to satisfy the requirements under the FERC license (whereby the Licensee needs to hold necessary project control). Similarly, the Project Company will sign a sublease agreement with the Operating Company solely for the portion of the property under the Site Lease required for the Project's operation. The proposed structured intends to limit the Green Bank's liabilities under the FERC license as well as the Site Lease with the City of Meriden.

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<sup>2</sup> An “exemption”, notwithstanding the common understanding of this word, is a simplified form of the more complex FERC licensing process.



## Upon or Prior to COD



### **Flow shortfall:**

A shortfall in water flow could reduce the expected energy generation from the turbine. Generation estimates used in the feasibility study are based on 84 years of water flow data at the Hanover Pond, and the developers have worked with Spaans Babcock to size the Project appropriately for that flow. Climate change is expected to increase frequency, duration and intensity of storm precipitation and therefore the estimated flows at Hanover Pond. Data at the dam confirms around a 9% increase in water flow in the most recent 30 year period, compared to the 84 years of data. Additionally, although performance risk (water flow) is real, so long as the Project performs within a reasonable range of water flow expectations based on the 84 years of data, the highly secure and contracted cash flows associated with the Project (i.e. a credit-worthy off-taker in the City of Meriden and a ZREC contract with Eversource) reduce potential revenue risks. The PPA is structured so that the City of Meriden's obligation to pay is based on the actual receipt of output. The Project owner does not have any obligations or penalties if there is a shortfall in the amount of electricity generated. The PPA establishes the price of electricity over a 20 year period with a fixed 2% escalator starting in year 4. The PPA has a provision whereby if retail rates fall by 0.5% the PPA's escalator is reduced by 0.5%; however, this same provision does not allow for the escalator to fall below 1.5% (that is, the annual escalator after year 4 will never be less than 1.5%). The PPA schedule is presented in Exhibit 5. The term of the PPA can be extended twice, each time for an additional 10 years; for a complete 40-year term, with similar extensions of the other agreements (site lease with Meriden, O&M agreement, etc., being extended in lock step).

### **Environmental and Social Risk:**

Minimizing potential environmental risks was a key criterion in the selection of the project site and technology for the Project. The oil inside the ASG's hydraulic power pack and lower bearing is environmentally friendly ECO oil. The lower bearing is not greased or oil fed by a pump and piping system, with no threat of leakage or any other defect on the pump system reducing the risk of failure or environmental risk. The ASG's coating is of marine quality, non-abrasive and

environmentally friendly, commonly used to protect steel parts for a very long time even in harsh environments.

The existing dam is in good condition, as it was recently rebuilt in 2005-2006, and no new impoundment or permanent alteration of pre-existing surface elevations of Hanover Pond will be created as part of the Project. Aside from the direct, short-term and temporary disturbance at the Project site during construction, land use will remain unaffected. Further, the Project will not generate any point source discharges and will not produce any significant storm water runoff. Once in operation, the Project will be run-of-river, meaning water levels within Hanover Pond will not change as a result of Project operations. The Project has been designed to protect and maintain fish way elements to enhance fish passage at the dam. Fish friendly elements incorporated in the design include 9-inch spacing in the trash rack requested by CT DEEP to minimize crowding during downstream migration and a fish way attraction channel directing fish to the entrance of the fish way. Information about the project was submitted to SHPO and the following Tribal Nations identified by SHPO: the Mashantucket Pequot Tribal Nation and the Mohegan Tribe. SHPO indicated that no previously recorded archaeological resources that could pose a potential risk to the site's historic preservation are located on the Project site. NEHC has worked in close collaboration and consultation with additional local and federal entities including CT DEEP, the City of Meriden, the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service to ensure environmental and all other required regulations are met and potential areas of sensitivity are addressed.

**Change in VNM Regulations:**

The PPA includes provisions so that if there were to be a change in VNM regulations, which staff believes a low risk, especially for existing projects, the parties will agree to use best efforts to restore the economic benefits of the PPA as originally intended.

**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?*

The project is projected to generate 921,421 kWh of electricity, annually. Given an investment not to exceed \$3,100,000, the following summarizes the objective function for the life of the project.

	20 year PPA	30 Year PPA (1 Extension)	40 Year PPA (2 Extensions)
kBtu:	62,831,867	94,247,800	125,663,734
Ratepayer funds at Risk (not to exceed):	\$3,100,000	\$3,100,000	\$3,100,000
kBtu / ratepayer dollar at risk	20.27	30.40	40.54

## Capital Expended

*How much of the ratepayer and other capital that Green Bank manages is being expended on the project?*

Total capital expended would be an amount not to exceed \$3,100,000, inclusive of a minimum capital reserve required for SCRF in an amount not to exceed \$250,000.

## Key Project Partners

*New England Hydropower Company, LLC*

New England Hydropower Company, LLC is an energy company that builds, owns, operates and manages small-scale hydropower works using legacy dams throughout New England and the United States. NEHC was awarded Op Demo funding from the CCEF in 2011 and since then has identified and performed feasibility studies for 10 small hydro projects with a total capacity of 3.8 MW in the Northeast; three of these (including the Project described in this memo) are located in Connecticut. NEHC has an exclusive relationship with Spaans Babcock as its supplier for the ASG in the Northeast.

*Spaans Babcock*

Spaans Babcock is a Dutch company founded in 1895. Its main manufacturing facility, with over 150 employees, is in the Netherlands, and they have an office in Canada overseeing sales, contracting, project management, installation and commissioning of projects in North America. Spaans Babcock has been involved in the hydroelectric space since 2006, and since then has deployed approximately 100 ASGs around the world, with the majority of these installed in Europe. As part of its diligence, Green Bank staff plans to speak to owners of Spaans Babcock wastewater treatment equipment in the U.S. to confirm the technology is reliable, efficient, easy to install and requires minimal maintenance. Moreover, Spaans Babcock is a shareholder of NEHC, ensuring their further alignment with the Project's success.

*PC Construction*

NEHC evaluated three potential engineering, procurement, and construction ("EPC") companies for this project: PC Construction, GEI Consultants and D A Collins. PC Construction was chosen given the firm's size, competitive pricing, and experience with hydro. Founded in 1958, PC Construction is headquartered in Vermont with a network of offices in Florida, Georgia, Maine, New York, and North Carolina, and numerous project offices along the east coast. PC Construction's annual revenue is in excess of \$500 million. As a sizable firm, PC's bonding capacity exceeds \$125 million per project; aggregate capacity exceeds \$700 million. PC Construction has extensive experience in the hydro space, with specific experience in hydro power generation projects including dam and spillway improvements, penstock and pipeline replacements, turbine upgrades and replacements, as well as specialized mechanical systems such as large generators. PC Construction has enjoyed a 30-year collaboration with Green Mountain Power ("GMP"), a major utility in Vermont, beginning with the construction of the Bolton Falls Hydroelectric Plant in 1985. Diligence has confirmed that PC Construction Company has the company resources, financial capacity, and highly qualified, experienced construction professionals to effectively manage and complete projects safely, within budget, and on time. Exhibit 6 presents corporate information about PC Construction and representative hydro projects undertaken by PC Construction.

*Fuss and O'Neill*

Fuss and O'Neill is an east coast full-service, multi-discipline engineering, planning, hydrology and environmental firm serving public and private sectors for more than 85 years. Headquartered in Manchester, CT and founded in 1924, the company has grown to include six regional offices and about 270 employees. Its professional staff maintains licenses and certifications across a wide range of engineering, planning, landscape architecture, design build, scientific, hydrology and manufacturing disciplines, including FERC qualified engineers. Fuss and O'Neill's qualified personnel will perform the Project's detailed designs in accordance with FERC requirements

#### *Potential Energy Projects Ltd.*

Potential Energy Projects is a UK pioneer in the implementation of Spaans Babcock's ASG, having installed and operated more than 10 projects in the UK. It is approved by the UK Department of Energy and Climate Change as Hydro Installers under the Micro-generation Certification Scheme. Potential Energy is a shareholder of NEHC and leverages its UK experience with the technology in the Project's design, installation and operation.

#### *Interstate Electrical Services Corporate*

Found in 1966 and headquartered in Massachusetts, Interstate Electrical Services Corporate ("Interstate Electric") is one of the largest electrical construction / electrical services contractors in New England. Interstate offers a wide array of electrical construction and specialty services across the corporate, institutional, educational, life sciences and health care spectrum throughout New England. Interstate Electric will design and perform the electric wiring and installation, including interconnection to the utility.

#### *Banc of America Public Capital Corp ("Bank of America")*

Banc of America Public Capital Corp. operates as a subsidiary of Bank of America, National Association and provides finance, leasing and lending services. It has extensive energy and tax credit bond financing expertise, especially in Connecticut as the Direct Purchaser of Qualified Energy Conservation Bonds ("QECBs") recently issued by the Connecticut Housing Finance Authority ("CHFA"). Further, Bank of America has sole responsibility for administering PURA's interest rate buydown program, which will be applied to the proposed CREBs<sup>3</sup>. Bank of America has expressed interest in financing the second 678 kW hydroelectric facility in Collinsville, CT, as well, once this second project's predevelopment activities have been completed.

## **Financial Statements**

### *How is the project investment accounted for on the balance sheet and profit and loss statements?*

The proposed construction financing will result in a decrease in Unrestricted Cash on the Green Bank's balance sheet and an equivalent increase in promissory notes receivable. The issuance of CREBs for the purpose of building and owning the Project will result in an increase in the Green Bank's Capital Assets (Noncurrent Assets) in an amount not to exceed \$3,100,000 on the Green Bank's balance sheet and an equivalent increase in Long-Term Debt. Ownership of the Project will result in an increase in "other assets" and a reduction in promissory notes receivable (i.e., this is the conversion of the construction loan receivable into ownership of the ASG and related Project assets). The minimum reserve required for SCRF in an amount not to exceed \$250,000 will decrease unrestricted cash and increase restricted cash.

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<sup>3</sup> <http://www.energizect.com/sites/default/files/C%26I%20financing%20options%20v1.pdf>

## Financial Metrics

The table below summarizes the Project's sources and uses of funds. The proposed CREBs amount will ensure full financing for the Project at a very low cost of capital without requiring any additional equity from the Green Bank.

Sources of Funds	
Green Bank Op Demo Funding	\$450,000 <sup>4</sup>
NEHC Investors	\$292,809
CREBs	\$2,750,000
<b>Total</b>	<b>\$3,492,809</b>
Uses of Funds	
Project Costs (Permitting, Equipment, EPC)	\$3,098,649
CREBs Issuance Fees	\$102,255
Developer Fee	\$291,905
<b>Total</b>	<b>\$3,492,809</b>

The highly secure and contracted cash flows associated with the Project (i.e. a credit-worthy off-taker in the City of Meriden (Fitch: "AA-") and a ZREC contract with Eversource) along with 85% of net annual projected free cash flows that will be kept on reserve will ensure the Green Bank has sufficient annual cash flows from the Project to allow for appropriate coverage of the annual CREBs payment. The Green Bank will guarantee the CREBs payment and will hold a minimum capital reserve required for SCRF equal to one year of the maximum CREBs debt service payment, an amount not to exceed \$250,000, before calling on the SCRF. Again, the use of the SCRF as a credit enhancement (as required by Bank of America, the CREBs purchaser), to be called upon only after full recourse to the Green Bank, is necessary to achieve a 20-year maturity and low interest rate. Regardless, this is truly a "belt and suspenders" approach, as Green Bank incremental funding in the future is highly unlikely given the sufficient cash flow generated by the project. Through CREBs financing, the Green Bank will be able to finance the project at a low cost of capital as well as recover CREBs issuance and other development fees along with previously committed Op Demo funding, in addition to generating a sound return on investment to be employed in future Green Bank projects.

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<sup>4</sup> Of the total Op Demo commitment of \$500,000, only \$450,000 will be spent on the Project, as NEHC used \$50,000 exploring another site that was determined not to be viable

CREBs Amount	\$ 2,750,000
Effective Interest Rate	1.67% <sup>5</sup>
SCRF Reserve	\$162,937
Average DSCR	1.430

Year	5	10	15	20	30	40	Total
PPA Revenue	636,011	685,964	757,360	836,187	1,942,525	2,367,927	7,225,974
REC Revenue	322,497	322,497	276,426	92,142	-	-	1,013,563
Capacity Revenue	92,640	92,640	92,640	92,640	-	-	370,560
PURA Subsidy	85,333	85,333	-	-	-	-	170,666
Recurring Expenses	(260,687)	(242,189)	(247,183)	(254,183)	(537,598)	(595,267)	(2,137,108)
NOI	875,794	944,246	879,243	766,786	1,404,927	1,772,659	6,643,655
Reserve	80,036	317,834	522,773	202,982	-	-	-
CADS (NOI + Reserve)	955,831	1,262,080	1,402,016	969,767	1,404,927	1,772,659	-
CREBs Payment	(814,683)	(814,683)	(814,683)	(814,683)	-	-	(3,258,732)
Cash Flow	141,148	447,397	587,333	155,084	1,404,927	1,772,659	4,508,548
Reserve	(119,975)	(380,287)	(499,233)	(131,822)	-	-	(1,131,317)
Distributable Cash Flow (Cash Flow - Reserve)	21,172	67,110	88,100	23,263	1,404,927	1,772,659	3,377,230
Cumulative Distributable Cash Flow	21,172	88,282	176,382	199,644	1,604,571	3,377,230	3,377,230
DSCR - CADS/CREBs Annual Payment	1.17	1.55	1.72	1.19	N/A	N/A	

<sup>5</sup> 1.67% is the net effective interest rate of the CREBs alone. However, the “all-in” effective rate, inclusive of the PURA buy down, will be 1.07%.

## Strategic Selection

Staff believes the issuance of CREBs for the Project fits well within the requirements for a Strategic Selection as defined in Section XII of the Green Bank's Operating Procedures:

- **Special Capabilities:** While Bank of America is not alone in its extensive energy and tax credit bond financing expertise, the firm does have a uniquely deep understanding of QECBs, a similar bond structure, issued by CHFA here in Connecticut, including an upcoming round of QECBs to support the CHFA / Green Bank Solarize State Sponsored Housing Portfolio ("SSHP") initiative. Moreover, Bank of America has sole responsibility for administering PURA's interest rate buydown program, which staff anticipates will lower the cost of capital for this Project by 100 basis points during the first 10 years of the Project.
- **Uniqueness:** the Project is the first of its kind in the United States (although well established in Europe), with minimal off-taker risk, which is unable to secure low-cost and long-term financing through traditional sources. The nature of the Project, including its proven technology and highly secure and contracted cash flows (PPA and ZREC), provides an excellent opportunity to learn about the CREBs structure so that it can be employed as a low-cost source of capital for other renewable energy projects in the state. Further, NEHC is well known to the Green Bank given the company's participation in CCEF's Op Demo Program.
- **Strategic Importance:** Attracting a \$3,100,000 CREBs allocation for the proposed 193 kW Hydroelectric facility from the US Treasury and mobilizing this low-cost capital structure is a valuable opportunity for the Green Bank to deploy low-cost financing for renewable energy projects that often face difficulties in getting financed by employing the CREBs structure. This structure can potentially be a good fit for solar PV projects in state and municipal buildings, of which Green Bank staff has collaboratively identified over \$80 million in potential opportunities with the Board of Regents and CT Technical High School System. Further, the Project serves as a proof of concept for other small hydro opportunities throughout the state.
- **Urgency and Timelines:** The ZREC, VNM, and PPA contracts for the Projects are already signed, and delays could reduce the potential revenue for the Project. Securing financing now is critical for the project to get placed in service by the end of the 2016 construction season.
- **Multiphase Project:** This project can serve as an important building block in the above-mentioned strategic priority to replicate the CREBs financing structure for other renewable energy opportunities throughout the state.

## Conclusion

With support from CCEF's Op Demo loan, NEHC has advanced the Project such that it is now ready for financing, and once successfully completed, it will provide a more affordable, cleaner source of energy for the City of Meriden. Further, it will serve as a pilot for other small-scale hydropower projects in Connecticut including a 678 kW facility which is already in the development process (in Collinsville) and a third potential project in Eagleville, CT. CREBs financing offers an attractive low-cost, long-term financing opportunity for the Project, as well as for additional renewable energy projects throughout the state. It also allows the Green Bank to make a sound return on investment and effectively recover funds awarded through the Op Demo program to NEHC. Green Bank staff believes the approach outlined in this memo is both practicable and will lead to programmatic success as the Green Bank works to further support clean energy upgrades for State and municipal properties. Accordingly, staff recommends approval by the Board per the resolutions attached.



## 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 and (3) Green Bank’s Comprehensive Plan for Fiscal Years 2015 and 2016 (the “Comprehensive Plan”), Green Bank continuously aims to develop financing tools to further drive private capital investment into clean energy projects;

**WHEREAS**, New England Hydropower Company, LLC (“NEHC”) has used previously committed Operational Demonstration funding from the Connecticut Clean Energy Fund, Green Bank’s predecessor organization, to develop a small hydroelectric facility at the Hanover Pond Dam on the Quinnipiac River in Meriden (“Project”) and has requested financing support from the Green Bank, including working capital during project development;

**WHEREAS**, Banc of America Public Capital Corp (“Bank of America”) has extensive energy and tax credit bond financing expertise and has indicated interest in financing the Project as well as future renewable energy projects via New Clean Renewable Energy Bonds (“CREBs”).

**WHEREAS**, the Green Bank would be considered a Qualified Issuer and Qualified Owner under CREBs, and the Project would qualify as a Qualified Renewable Energy Facility (as all of those terms are defined under regulations issued by the Internal Revenue Service);

**WHEREAS**, Green Bank staff recommends that the Green Bank Board of Directors (“Board”) approve of construction financing using ratepayer capital and the subsequent issuance of CREBs, in an amount to exceed \$3,100,000 along with allocating the minimum capital reserve required for the use of the Special Capital Reserve Fund (“SCRF”), in an amount not to exceed \$250,000, as a strategic selection and award because of the special capabilities of Bank of America to provide capital at attractive rates for tax credit bond financing, the uniqueness of the Project, and the strategic innovation associated with securing the Green Bank’s first CREBs allocation.

**NOW**, therefore be it:

**RESOLVED**, that the Green Bank Board of Directors hereby approves an appropriation and bond authorization of \$3,100,000 for construction and financing costs for the Project, including costs associated with ownership of the Project (as required under CREBs regulations), as a strategic selection and award pursuant to Green Bank Operating Procedures Section XII; and

**RESOLVED**, that the Green Bank may extend a working capital guaranty, under the Green Bank’s existing working capital facility partnership with Webster Bank, to draws made by NEHC solely in connection with this Project and in an amount not to exceed \$300,000;

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer is authorized to proceed with the prerequisites to the issuance of CREBs in an amount not to exceed \$3,100,000 with terms and conditions consistent with the memorandum submitted to the Board dated February 19, 2016, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 270 days from the date of authorization by the Board of Directors, provided that staff will submit for Board approval all resolutions required to approve all relevant documentation (such as an indenture of trust) required for the actual issuance of bonds;

**RESOLVED**, that the Green Bank Board of Directors hereby declares the Green Bank's official intent that payment of Project construction and financing 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 proceeds of the CREBs financing in an amount not to exceed \$3,100,000; and

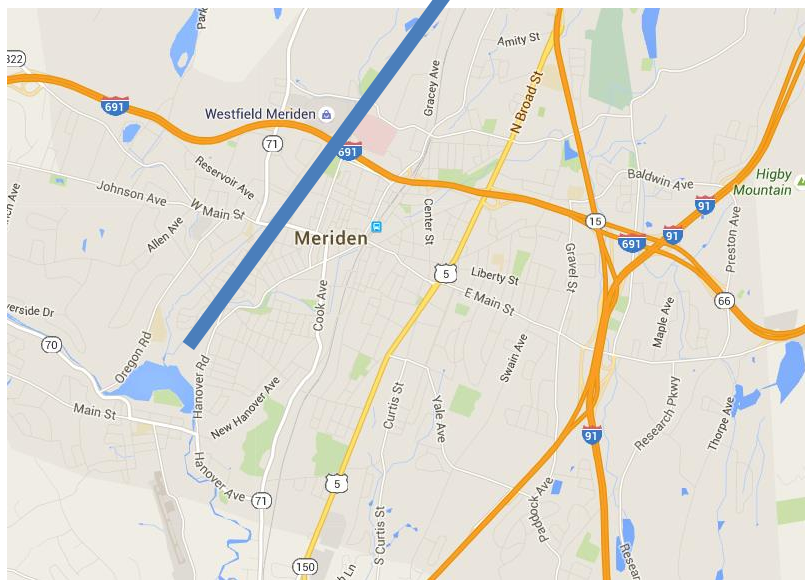
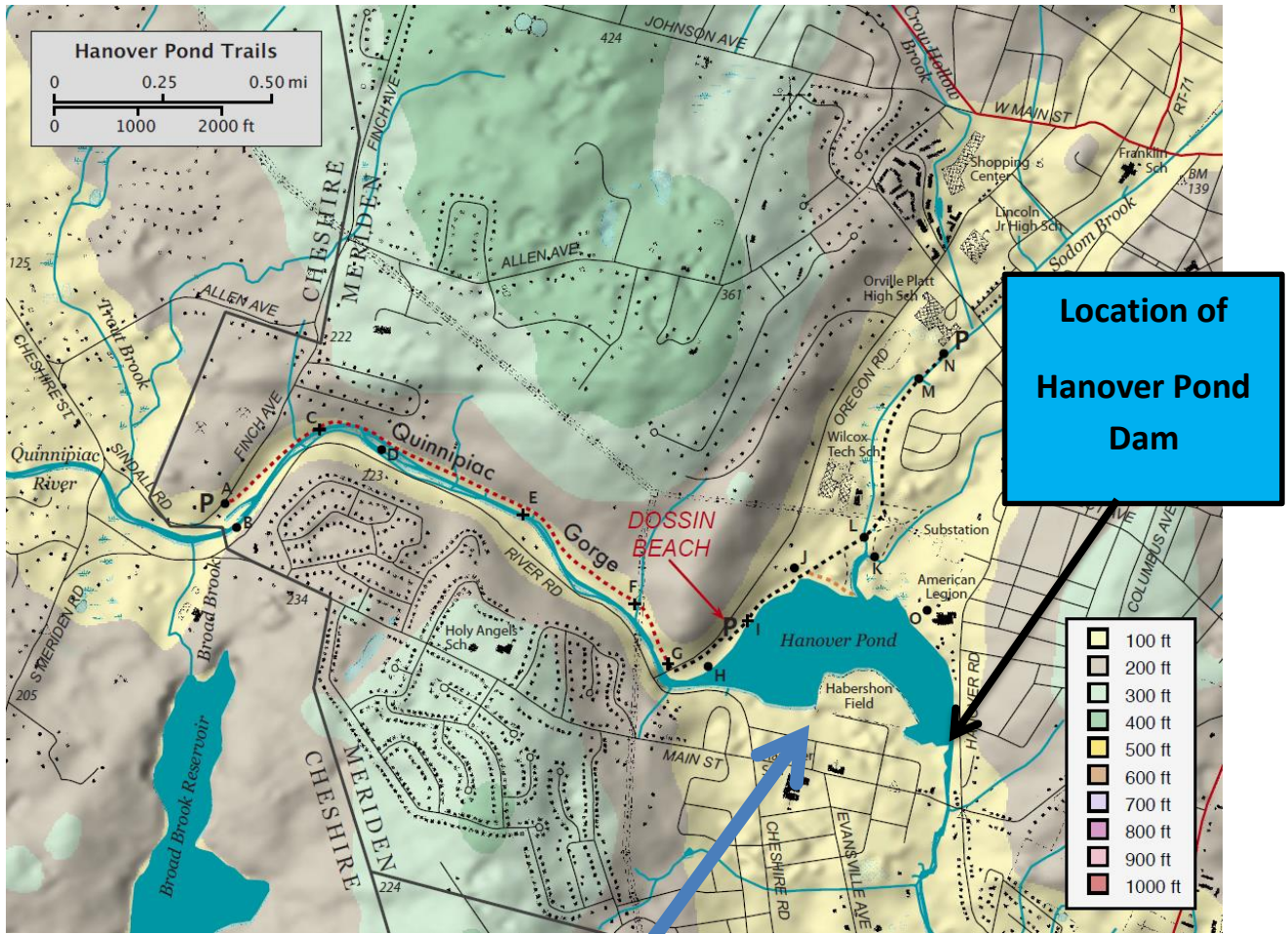
**RESOLVED**, that the President of the Green Bank and any other duly authorized officer is authorized to take appropriate actions to secure the issuance of CREBs utilizing the SCRF, provided the Green Bank complies with all statutory requirements for the SCRF, which will require among other things (1) State of Connecticut Office of Policy and Management approval, (2) an opinion of sufficiency as set forth in the Connecticut General Statutes ("CGS"), and (3) approval by the Office of the State Treasurer and other documentation required under the CGS; 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 legal instruments.

Submitted by: Bryan Garcia, President and CEO; Bert Hunter, EVP and CIO; Ben Healey and Mariana C. Trief, Clean Energy Finance.

# Exhibit 1A: 193 kW Hydroelectric Project - Hanover Pond Dam

## Site Overview



**Exhibit 1b: 193 kW Hydroelectric Project - Hanover Pond Dam**  
**Location of Archimedes Screw Generator**



**Exhibit 1c: 193 kW Hydroelectric Project - Hanover Pond Dam**  
**Additional Site Photographs**



No. 1 Overview of dam from left abutment.



No. 2 Overview of dam from downstream.



No. 3 Ogee spillway 60 feet long (Spillway No. 1) at the right training wall.



No. 4 Looking from the right at the broadcrested concrete weir center spillway section (Spillway No. 2) 147 feet in length.



No. 7 Outlet structure through the right training wall below the fishway.



No. 8 Sluice gate operators at the inlet/outlet structure at the right training wall.



No. 9 Fishway along the right training wall.



No. 10 Upstream end of fishway at the right training wall.





No. 11 Downstream embankment of dam at the right side.

Exhibit 2: Comparison between Debt from Local Bank and CREBs

	<b>CREBs</b>	<b>Local Bank</b>
Financed Amount	\$2,750,000	\$1,148,141
Effective Interest Rate (post subsidy)	1.67% <sup>6</sup>	7.00%
Term (years)	20	15
Average DSCR	1.408	1.337
Additional Equity Requirement	-	\$1,309,954

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<sup>6</sup> As previously noted, 1.67% is the net effective interest rate due to the CREBs alone, which is the “above the line” rate. However, the “all-in” effective rate, inclusive of the PURA buy down, will be 1.07%.

**WORKING DRAFT DATED 4/11/16**

**INDENTURE OF TRUST**

Between

**THE CONNECTICUT GREEN BANK**

And

**U.S. BANK NATIONAL ASSOCIATION**

**as Trustee**

**Dated as of \_\_\_\_\_, 2016**

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## **INDENTURE OF TRUST**

THIS INDENTURE OF TRUST (the "Indenture") dated as of \_\_\_\_\_, 2016 is made by and between the Connecticut Green Bank (the "Green Bank"), and U.S. Bank National Association (the "Trustee"), a national banking association authorized to exercise corporate trust powers:

WHEREAS, the Green Bank is established and created as a body politic and corporate constituting a public instrumentality and political subdivision of the State of Connecticut (the "State"); and

WHEREAS, pursuant to Title 16 of the Connecticut General Statutes (the "Act"), the Green Bank is authorized to support financing or other expenditures that promote investment in clean energy sources, and to enter into contracts with private sources to raise capital for such purposes; and

WHEREAS, pursuant to the Act, the Green Bank is authorized from time to time to issue negotiable bonds for any corporate purpose, as shall be authorized by resolution of the members of the Green Bank's Board of Directors (the "Board"); which resolution may contain provisions for the Green Bank to pledge all or any part of the revenues from the Project or any revenue-producing contract or contracts to secure the payment of the bond; and

WHEREAS, pursuant to the Act, at the discretion of the Green Bank, any bonds may be secured by a trust agreement by and between the Green Bank and a corporate trustee, which trust agreement may secure said bonds by a pledge or assignment of any revenues to be received, any contract or proceeds of any contract, or any other property, revenues, moneys or funds available to the Green Bank for such purpose; and

WHEREAS, the Green Bank has determined to authorize the issuance of its Clean Renewable Energy Bonds (the "Bonds"), in one or more series, and to use the proceeds derived from the sale thereof to carry out its corporate purposes under the Act and the Connecticut General Statutes.

NOW, THEREFORE, THIS INDENTURE WITNESSETH, that to secure the payment of principal of, redemption premium, if any, and interest on the Bonds according to their true intent and meaning, and all other amounts due from time to time under this Indenture, including those due to the Trustee, to secure the performance and observance of all of the covenants, agreements, obligations and conditions contained in the Bonds and in this Indenture, and to declare the terms and conditions upon and subject to which the Bonds are and are intended to be issued, held, secured and enforced and in consideration of the premises and the acceptance by the Trustee of the trusts created herein and of the purchase and acceptance of the Bonds by the Bondholders and for other good and valuable consideration, the receipt of which is acknowledged, the Green Bank has executed and delivered this Indenture and absolutely and irrevocably grants, bargains, sells, conveys, releases, pledges and assigns to the Trustee and to its successors in trust, on the basis set forth herein, and its and their assigns, all right, title and interest of the Green Bank in and to the Trust Estate as defined in Article I;



TO HAVE AND TO HOLD all in singular the Trust Estate, whether now owned or hereafter acquired, unto the Trustee and its successors and assigns forever, SUBJECT, HOWEVER, IN ALL CASES to the application thereof for the purposes and on the terms and conditions hereafter set forth in this Indenture;

IN TRUST, NEVERTHELESS, under and subject to the terms and conditions as hereinafter set forth for:

- (a) The equal and proportionate benefit, security and protection of all present and future owners of Bonds authorized to be issued pursuant to this Indenture,
- (b) the enforcement of the payment of the principal of, redemption premium, if any, and interest on the Bonds, and all other amounts due from time to time under this Indenture, including those due to the Trustee, when payable, according to the true intent and meaning thereof and of this Indenture, and
- (c) security for the performance and observance of and compliance with the covenants, agreements, obligations, terms and conditions of this Indenture and contracts entered into by the Green Bank in connection with the issuance of the Bonds,

in each case, without preference, priority or distinction, as to lien or otherwise except as provided herein, of any one Bond over any other by reason of designation, number, date of the Bonds or of authorization, issuance, sale, execution, authentication, delivery or maturity thereof, or otherwise, so that each Bond and all Bonds shall have the same right, lien and privilege under this Indenture and shall be secured equally and proportionately by this Indenture, it being intended that the lien and security of this Indenture shall take effect from the date hereof, without regard to the date of the actual issue, sale or disposition of the Bonds, as though upon that date all of the Bonds were actually issued, sold and delivered to purchasers for value.

PROVIDED, HOWEVER, that upon satisfaction of and in accordance with the provisions of Section 1201, the rights assigned hereby shall cease, terminate and be void to the extent described therein, otherwise such rights shall be and remain in full force and effect;

PROVIDED, FURTHER, that the pledge of the right, title and interest of the Green Bank in and to the Trust Estate is given subject to the right of the Green Bank to issue additional Bonds secured on a parity basis with the Bonds by the Trust Estate; and

It is declared that all Bonds issued under and secured by this Indenture are to be issued, authenticated and delivered, and that all Revenues assigned or pledged hereby are to be dealt with and disposed of under, upon and subject to, the terms, conditions, stipulations, covenants, agreements, obligations, trusts, uses and purposes provided in this Indenture; and the Green Bank has agreed and covenanted, and agrees and covenants with the Trustee and with each and all holders of Bonds, as follows:

## **ARTICLE I**

### **DEFINITIONS AND INTERPRETATION**

Section 101. Definitions. In this Indenture the following terms shall have the following meanings unless the context otherwise requires:

"Account" shall mean one of the special accounts created and established pursuant to this Indenture.

"Accountant" shall mean an independent certified public accountant (or a firm thereof) of recognized standing, selected by the Green Bank and may be the accountant regularly auditing the books of the Green Bank.

"Accrued Aggregate Debt Service" shall mean, as of any time, Aggregate Annual Debt Service accrued or to accrue and unpaid through the end of such time period.

"Additional Bonds" shall mean one or more series of Bonds other than the Initial Bonds, issued by the Green Bank for the Project, as authorized by this Indenture.

"Aggregate Annual Debt Service" shall mean for any Fiscal Year as of any date of calculation, the sum of the Debt Service for all Bonds Outstanding during such Fiscal Year.

"Annual Project Budget" shall mean the annual budget of the Project, as amended or supplemented, adopted or in effect for a particular Fiscal Year, as provided in Section 710 hereof.

"Authorized Representative" shall mean the President or such other person or persons so designated by resolution of the Green Bank, unless a different official is designated herein or in a Supplemental Indenture to perform the act or sign the document in question.

"Bond" or "Bonds" shall mean Clean Renewable Energy Bonds consisting of the Initial Bonds and any Additional Bonds issued under this Indenture .

"Bond Counsel's Opinion" shall mean an opinion signed by Shipman & Goodwin LLP or by any other attorney or firm of attorneys of nationally recognized standing in the field of law relating to revenue bonds of quasi-public agencies, selected by the Green Bank.

"Bond Payment Date" shall mean with respect to the Bonds issued or incurred hereunder, such date on which interest on a Principal Installment shall be due and payable thereon according to the terms of the Bonds as provided in this Indenture or in a Supplemental Indenture.

"Bondholder", "owner" or "holder" or words of similar import shall mean, when used with reference to a Bond, the person in whose name the Bond is registered.

"Bylaws" shall mean the bylaws of the Green Bank, as amended from time to time.

"Capital Costs" shall mean and include all costs of acquisition, construction or completion of any part of the Project, including Costs of Issuance of any Bonds issued to provide funds to pay the cost thereof, the costs of any demolitions or relocations necessary in connection

therewith and any extensions, renewals, replacements, equipment, alterations, improvements, additions, machinery and equipment, betterments, paving, grading, excavation, blasting or removals and of all or any property, rights, easements and franchises deemed by the Green Bank to be necessary or useful or convenient therefor and may include, to the extent properly attributable to such acquisition, construction and completion:

(a) obligations incurred for labor and materials and payments made to contractors, builders and materialmen in connection with construction or acquisition of any part of the Project, and for the restoration of property damaged or destroyed in connection with such construction;

(b) fees and expenses of any Fiduciary during construction, payments, taxes or other governmental charges lawfully levied or assessed during construction or on any property acquired, and premiums for insurance (if any) during such construction or acquisition;

(c) fees and expenses for studies, surveys and reports, engineering, borings, testings, estimates of costs and revenues, preparation of plans and specifications and inspecting or supervising construction or acquisition, as well as for the performance of all other duties of engineers or architects in connection with the acquisition, construction, extension, renewal or improvement of the Project or required by this Indenture;

(d) expenses of administration properly chargeable to the acquisition, construction, reconstruction, renewal, extension, or improvement of the Project, including legal expenses and fees, financing charges, costs of audits and fiscal advice and all other items of expense not elsewhere in this definition specified, incident to the acquisition, construction, reconstruction, renewal, extension or improvement of the Project, including the acquisition of real estate, franchises and rights-of-way therefor, including abstracts of title and title insurance, and including interest accruing on any Series of Bonds to and including the date one year after the completion of any improvement of the Project financed by such Series of Bonds or Capitalized Interest, if so provided in this Indenture or in a Supplemental Indenture authorizing such Series, and any charges of the Trustee and Paying Agents with respect to the payment of such interest;

(e) the cost and expense of acquiring by purchase or condemnation or by leasing such property, lands, rights-of-way, franchises, easements, and other interest in land as may be deemed necessary or convenient for the acquisition, construction or completion of any part of the Project and options and partial payments thereon, and the amount of any damages incident to or consequent upon the same; and

(f) any obligation or expense heretofore or hereafter expended or incurred by the Green Bank and any amounts heretofore or hereafter advanced by the Green Bank for any of the foregoing purposes.

"Capitalized Interest" shall mean, for any particular Series of Bonds, that portion, if any, of the proceeds thereof which is required by the Supplemental Indenture authorizing such Series of Bonds to be deposited in a sub-account established for such Series of Bonds in the

Capitalized Interest Account in the Debt Service Fund, for the purpose of funding the payment of a portion of the interest on the Bonds of such Series.

"Capitalized Interest Account" shall mean the Account by that name established in the Debt Service Fund pursuant to Section 502(c) hereof.

"Certificate" shall mean, as the context indicates, either (i) a signed document attesting to or acknowledging the matters therein stated or setting forth matters to be determined pursuant to this Indenture, (ii) the report of an Accountant as to an audit or compliance called for by this Indenture, or (iii) any report of the Consulting Engineer as to any matter called for by this Indenture.

"Code" shall mean the Internal Revenue Code of 1986, as amended.

"Common Account" shall mean the Common Account established in the Special Capital Reserve Fund pursuant to Section 502(b) hereof.

"Connecticut General Statutes" shall mean the General Statutes of Connecticut, Revision of 1958, as amended.

"Construction Fund" shall mean the Construction Fund established pursuant to Section 502(a) hereof.

"Costs of Issuance" shall mean all items of expense, directly or indirectly payable or reimbursable and related to authorization, sale and issuance of Bonds, including but not limited to printing costs, costs of preparation and reproduction of documents, filing and recording fees, initial fees and charges of any Fiduciary or issuer of any Credit Facility, legal fees and charges, fees and disbursements of consultants and professionals, costs of credit ratings, fees and charges for preparation, execution, transportation and safekeeping of Bonds, costs and expenses of refunding, premiums for the insurance of the payment of the Bonds and any other cost, charge or fee in connection with the original issuance of Bonds.

"Debt Service" for any Fiscal Year or part thereof shall mean, as of any date of calculation and with respect to any Series of Bonds, an amount equal to the sum of (i) interest payable during such Fiscal Year or part thereof on Bonds of such Series, except to the extent that such interest is to be paid from amounts representing (A) Capitalized Interest and (B) investment (but not reinvestment) earnings on the Debt Service Fund or Special Capital Reserve Fund if such amounts shall have been invested in Investment Securities and the amount of such investment earnings taken into account may determine precisely, and (ii) the Principal Installments of the Bonds of such Series payable during such Fiscal Year or part thereof. Such interest and Principal Installment for such Series shall be calculated on the assumption that no Bonds of such Series Outstanding at the date of calculation will cease to be Outstanding except by reason of the payment thereof upon stated maturity or upon mandatory redemption by application of Sinking Fund Installments.

"Debt Service Fund" shall mean the Debt Service Fund established pursuant to Section 502(a) hereof.

"Defeasance Obligations" shall mean (A) any bonds or other obligations which as to principal and interest constitute direct obligations of, or are guaranteed by, the United States of America, including obligations of any agency thereof or corporation which has been or may hereafter be created pursuant to an act of Congress as an agency or instrumentality of the United States of America to the extent unconditionally guaranteed as to timely payment of principal and interest by the United States of America or (B) any other receipt, certificate or other evidence of an ownership interest in obligations or in specified portions thereof (which may consist of specified portions of the interest thereon) of the character described in subclause (A).

"Depository" shall mean any Qualified Public Depository as defined in Section 36a-330 of the Connecticut General Statutes, or a bank or trust company which otherwise meets the requirements of Section 7-402 of the Connecticut General Statutes with respect to the deposit of public funds, as selected by the Green Bank as a depository of moneys to be held under the provisions of this Indenture.

"Depository Institution" shall mean The Depository Trust Company, a limited purpose trust company organized under the laws of the State of New York or any other depository institution appointed by the Green Bank to act as depository for Bonds in connection with a book-entry-only system of distributing Bonds.

"Disbursement Request" shall mean the written request signed by an Authorized Representative of the Green Bank and required to be delivered pursuant to Section 503 hereof to effect disbursements from the Construction Fund.

"Event of Default" shall mean any event specified in Section 1001 hereof.

"Fiduciary" shall mean the Trustee or any Paying Agent or Depository.

"Fiscal Year" shall mean the fiscal year of the Green Bank.

"Fund" shall mean any fund established pursuant to Section 502 hereof.

"General Fund" shall mean the General Fund established pursuant to Section 502.

"Green Bank" shall have the meaning set forth in the recitals to this Indenture.

"Indenture" shall mean this Indenture of Trust as the same may be amended or supplemented by a Supplemental Indenture as permitted hereby.

"Initial Bonds" shall mean the Bonds of the Green Bank, (Series 2016 A Bonds), authorized and issued pursuant to Section 205 hereof.

"Interest Payment Date" shall mean a date on which an interest payment is due.

"Investment Securities" shall mean and include any of the securities and investments permitted under Section 7-400 of the Connecticut General Statutes and any other investment permitted by any provision of the Connecticut General Statutes for the Green Bank.

“Net Income” shall mean Revenues less Operating Expenses.

"Notice" shall mean written notice given by a party or its legal counsel, and shall be deemed sufficient and properly given (i) when personally delivered, or (ii) upon delivery by United State Express Mail or similar overnight courier service which provides evidence of delivery, or if refused upon the first date of attempted delivery, or (iii) when three (3) days have elapsed after its transmittal by registered or certified mail, postage prepaid, return receipt requested, or (iv) by facsimile.

"Operating Expenses" shall mean all reasonable or necessary current expenses of maintaining, repairing, operating and managing the Project.

"Operating Fund" shall mean the Operating Fund established pursuant to Section 502(a) hereof.

"Outstanding", when used with reference to Bonds, shall mean, as of any date, all Bonds theretofore or thereupon being authenticated and delivered under this Indenture except:

- (a) any Bonds cancelled by the Trustee at or prior to such date;
- (b) any Bond (or portion thereof) for the payment or redemption of which there shall be set aside and held in trust hereunder either:
  - (i) moneys in an amount sufficient to pay when due the Principal Installments or Redemption Price thereof, together with all interest accrued or to accrue on each Interest Payment Date to the maturity or redemption date,
  - (ii) Defeasance Obligations in such principal amounts, of such maturities, bearing such interest and otherwise having such terms and qualifications, as are necessary to provide moneys (whether as principal or interest) in an amount sufficient to pay when due the Principal Installments or Redemption Price thereof, together with all interest accrued or to accrue on each Interest Payment Date to the maturity or redemption date, or
  - (iii) any combination of (i) and (ii) above,

and, if such Bond or portion thereof is to be redeemed, for which notice of redemption has been given as provided in Article VI, or the applicable Supplemental Indenture, or provision satisfactory to the Trustee has been made for the giving of such notice;

- (c) any bond in lieu of or in substitution for which other Bonds have been authenticated and delivered; and
- (d) any Bond deemed to have been paid as provided in Section 1201(b).

"Paying Agent" shall mean any paying agent for the Bonds of any Series, and its successor or successors and any other person which may at any time be substituted in its place pursuant to this Indenture.

"President" shall mean the President or any Interim President of the Green Bank appointed in accordance with the Green Bank's Bylaws.

"Principal Installment" shall mean, as of any date of calculation and with respect to any Series, so long as any Bonds thereof are Outstanding, (i) the principal amount of Bonds of such Series due (or so tendered for purchase or payment) on a certain future date for which no Sinking Fund Installments have been established, or (ii) the unsatisfied balance of any Sinking Fund Installments due on a certain future date for Bonds of such Series, or (iii) if such future dates coincide as to different Bonds of such Series, the sum of such principal amount of Bonds and of such unsatisfied balance of Sinking Fund Installments due on such future date.

"Principal Payment Date" shall mean a date upon which a Principal Installment is due.

"Project" shall mean construction and financing of the Hanover Pond Dam Project.

"Record Date" shall mean, unless otherwise determined by a Supplemental Indenture for a particular Series of Bonds or by the Trustee upon the occurrence of an Event of Default, the fifteenth day or last business day of any calendar month proceeding the month in which there occurs a Bond Payment Date.

"Redemption Price" shall mean, when used with respect to a Bond or portion thereof, the principal amount thereof plus the applicable premium, if any, payable upon redemption thereof pursuant to the terms of this Indenture or a Supplemental Indenture.

"Refunding Bond" shall mean any Bond authenticated and delivered on original issuance pursuant to Section 206 or Section 207 for the purpose of refunding any Outstanding Bonds, or thereafter authenticated and delivered in lieu of or substitution for such Bond pursuant to this Indenture.

"Revenue Fund" shall mean the Revenue Fund established pursuant to Section 502(a).

"Revenues" shall mean all payments, charges, rents, fees, and other realized income derived or to be derived from or for the ownership, operation, use or services of the Project, including all investment proceeds and proceeds of business interruption insurance received by the Green Bank (other than the proceeds of insurance with respect to damage or destruction of all or any portion of the Project), but does not include (i) any amounts received or receivable from the State or United States (or any agency of either thereof) or from any source as or on account of a grant or contribution for or with respect to the (a) construction, acquisition, improvement, extension, renewal, or other development of any part of the Project or (b) the financing of any of the foregoing, or (ii) any amounts received by or paid by the Green Bank under the terms of any grant agreement with the State or the United States (or any agency of either thereof) and which are received by or paid to the Green Bank under such grant agreement in relation to the Project.

"Series" or "Series of Bonds" shall mean all of the Bonds authenticated and delivered on original issuance, identified pursuant to Section 204 hereof and any Supplemental Indenture authorizing such Bonds as a separate Series of Bonds, and any Bonds thereafter authenticated and delivered in lieu of or in substitution therefor pursuant to this Indenture regardless of variations in maturity, interest rate or other provisions.

"Series 2016 A Bonds" shall mean the Series of Bonds so designated and issued pursuant to Section 205.

"Sinking Fund Installment" shall mean, as of any particular date of calculation, the amount required by this Indenture or a Supplemental Indenture to be paid on a future date for the retirement of Outstanding Bonds which are stated to mature subsequent to such future date, but does not include any amount payable by reason only of the maturity of a Bond.

"Special Capital Reserve Fund" or "SCRF" shall mean one or more reserve funds created and established by the Green Bank and into which the Green Bank may pay into such special capital reserve funds (1) any moneys appropriated and made available by the State for the purposes of such special capital reserve funds, (2) any proceeds of the sale of notes or bonds, to the extent provided in the resolution of the Green Bank authorizing the issuance thereof, and (3) any other moneys which may be made available to the Green Bank for the purpose of such special capital reserve funds from any other source or sources.

"Special Capital Reserve Fund Requirement" shall mean as of any date of calculation, an amount equal to the maximum amount of Principal Installments and interest maturing and becoming due in the calendar year in which such computation is made on in any single succeeding calendar year, on Outstanding Bonds.

"State" shall mean the State of Connecticut.

"Supplemental Indenture" shall mean a written agreement of the Green Bank authorizing the issuance of a Series of Bonds and/or otherwise amending or supplementing this Indenture, adopted in accordance with Article VIII hereof.

"Tax Regulatory Agreement" shall mean an agreement, certificate or other document entered into by the Green Bank for purposes of maintaining the exemption of the interest on such Series of Bonds from gross income for purposes of the Code.

"Trust Estate" shall mean all Revenues, Funds, Accounts, moneys, securities and any other collateral pledged pursuant to Section 501 hereof (other than the Rebate Fund and the Operating Fund) and subject to the continuing lien of this Indenture.

"Trustee" shall mean U.S. Bank National Association and its successor or successors and any other person which may at any time be substituted in its place pursuant to this Indenture.

Section 102. Interpretation. (a) In this Indenture, unless the context otherwise requires:



(1) Articles and Sections referred to by number shall mean the corresponding Articles and Sections of this Indenture.

(2) The terms "hereby", "hereof", "herein", "hereunder" and any similar terms, as used in this Indenture, refer to this Indenture, and the term "hereafter" shall mean after, and the term "heretofore" shall mean before, the date of this Indenture.

(3) Words of the masculine gender shall mean and include correlative words of the feminine and neuter genders and words importing the singular number shall mean and include the plural number and vice versa.

(4) Words importing persons shall include firms, associations, partnerships (including limited partnerships), trusts, corporations and other legal entities, including public bodies, as well as natural persons.

(5) Words importing the redemption or redeeming or calling of a Bond for redemption do not include or connote the payment of such Bonds at its stated maturity or the purchase of such Bond.

(6) Any headings preceding the texts of the several Articles and Sections of this Indenture, and any table of contents or marginal notes appended to copies hereof, shall be solely for convenience of reference, and shall not constitute a part of this Indenture, nor shall they affect its meaning, construction or effect.

(7) This Indenture shall be governed by and construed in accordance with the applicable laws of the State.

(8) The date upon which any Sinking Fund Installment is required to be paid pursuant to this Indenture or a Supplemental Indenture authorizing the issuance and delivery of Bonds shall be deemed to be the date upon which such Sinking Fund Installment is payable and the Outstanding Bonds to be retired by application of such Sinking Fund Installment shall be deemed to be the Bonds entitled to such Sinking Fund Installment.

(9) Wherever in this Indenture reference is made to Bonds being "tendered for purchase or payment" such reference shall also include Bonds tendered to any person designated in a Supplemental Indenture to receive such tenders.

(10) Any reference to the payment of a Bond shall be a reference to the payment of the Principal Installments or Redemption Price thereof and interest thereon.

(b) Nothing in this Indenture expressed or implied is intended or shall be construed to confer upon, or to give to, any person, other than the Green Bank, the Fiduciaries, and the Bondholders any right, remedy or claim under or by reason of this Indenture of any covenant, condition or stipulation thereof. All the covenants, stipulations, promises and agreements herein contained by and on behalf of the Green Bank, shall be for the sole and exclusive benefit of the Green Bank, the Fiduciaries and the Bondholders.

(c) If any one or more of the covenants or agreements provided herein on the part of the Green Bank or any Fiduciary to be performed should be contrary to law, then such covenant or covenants or agreement or agreements, shall be deemed separable from the remaining covenants and agreements hereof and shall in no way affect the validity of the other provisions of this Indenture or of the Bonds.

## ARTICLE II

### AUTHORIZATION AND ISSUANCE OF BONDS

Section 201. Authorization of Indenture. This Indenture is entered into pursuant to the authority granted to the Green Bank by the Act and the Bylaws. The Green Bank has ascertained and hereby determines and declares that execution of this Indenture is necessary to carry out its purposes under the Act, that each and every act, matter, thing or course of conduct as to which provision is made herein is necessary in order to carry out and effectuate the corporate purposes of the Green Bank in accordance with the Act and the Bylaws and to exercise the powers given thereby, and that each and every covenant or agreement herein contained and made is necessary, useful or convenient in order to better secure the Bonds and the contracts or agreements necessary, useful and convenient to carry out and effectuate its purposes under the Act.

Section 202. Indenture to Constitute Contract. In consideration of the purchase and acceptance of the Bonds by those who shall hold the same from time to time, the provisions of this Indenture shall constitute a contract among the Green Bank, the Trustee, the holders from time to time of the Bonds and, to the extent set forth in a Supplemental Indenture authorizing the issuance of Additional Bonds, the holders of such Additional Bonds. The pledge hereof and the provisions, covenants and agreements herein set forth to be performed by or on behalf of the Green Bank shall be for the equal benefit, protection and security of the holders of any and all such Bonds each of which, regardless of the time or times of its issue or maturity, shall be of equal rank without preference, priority or distinction over any other thereof except as expressly provided in this Indenture and, to the extent set forth in a Supplemental Indenture authorizing the issuance of Additional Bonds, the holders of such Additional Bonds.

Section 203. Authorization of Bonds; Obligation of Bonds.

(a) The aggregate principal amount of the Bonds which may be executed, authenticated and delivered under this Indenture is not limited except as provided in this Indenture or as may be limited by law. In order to provide sufficient funds for the purposes of financing the Project or for the purpose of refunding any Bonds or any bonds, notes or other obligations issued by the Green Bank for the purposes of financing the Project, Bonds of the Green Bank are hereby authorized to be issued from time to time without limitation as to amount except as herein provided or as may be limited by law and such Bonds shall be issued subject to the terms, conditions and limitations established in this Indenture or any Supplemental Indenture.

(b) The Bonds issued hereunder shall be payable solely out of the Revenues and other receipts, funds and moneys pledged therefor pursuant to this Indenture and are secured by the liens created hereby, including the Trust Estate. The Bonds shall not be obligations of the Green Bank nor the State, except as provided in this Indenture. The Bonds shall not constitute

indebtedness of the Green Bank or the State within the meaning of any statutory or constitutional provision. Neither the faith and credit nor the taxing power of the Green Bank or the State is pledged to pay the Bonds.

(c) The Bonds issued pursuant to this Indenture shall be special, limited obligations of the Green Bank and shall not be payable from nor charged upon any funds other than Revenues or other receipts, funds or moneys pledged therefor pursuant to this Indenture, nor shall the Green Bank be subject to any liability thereon except to the extent of such Revenues or other receipts, funds and moneys pledged therefor pursuant to this Indenture. The issuance of Bonds pursuant hereto shall not directly or contingently obligate the Green Bank to make any additional appropriation for their payment. The Bonds shall not constitute a charge, lien or encumbrance, legal or equitable, upon any property of the Green Bank, other than Revenues or other receipts, funds or moneys pledged therefor as provided in this Indenture. The substance of such limitation shall be plainly stated on the face of each Bond.

Section 204. Issuance and Delivery of the Initial Bonds. There are hereby authorized to be issued under this Indenture the Initial Bonds in an aggregate principal amount not in excess of \$3,350,000 as follows: Connecticut Green Bank Clean Renewable Energy Bonds (Hanover Pond Dam Project), Series 2016 A Bonds, dated, bearing interest and maturing, subject to prior optional [and mandatory sinking fund] redemption and having the other details, as follows:

(a) The 2016 Series A Bonds shall be dated their date of delivery, mature on the dates, and bear interest at the rates of interest (calculated on the basis of a 360-day year consisting of twelve 30-day months) on the unpaid balance from their date, payable semiannually on each Interest Payment Date, as follows:

<u>Maturity Date</u>	<u>Principal Amount</u>	<u>Interest Rate</u>	<u>Interest Payment Date</u>
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(b) The 2016 Series A Bonds shall be issued in fully registered form, without coupons, registered in the name of Depository Institution, and be in the denominations of \$5,000 or increments thereof. Unless the Green Bank shall otherwise direct, the 2016 Series A Bonds shall be numbered R-1 upward consecutively in the order of issuance.

(c) Subject to the provisions of the Indenture, the form of the 2016 Series A Bonds and the Trustee's certificate of authentication shall be substantially in the form of bond in Exhibit B with such changes as are required hereby.

(d) The 2016 Series A shall be secured by the Special Capital Reserve Fund approved by the State, pursuant to Section 208 hereof.

(e) The 2016 Series A Bonds shall be subject to redemption, as follows:

(i) Optional Redemption. The 2016 Series A Bonds are subject to optional redemption prior to maturity, as follows:

(ii) Mandatory Sinking Fund Redemption. The 2016 Series A Bonds are subject to mandatory sinking fund redemption from moneys in the Debt Service Fund on \_\_\_\_\_ in the principal amounts specified below, plus accrued interest thereon as follows:

The Trustee shall cause to be deposited in the 2016 Series A Debt Service Account, in accordance with Section 505 of the Indenture, an amount sufficient to pay Sinking Fund Installments, and the Trustee shall redeem or pay from the 2016 Series A Debt Service Account (subject to any crediting of such Sinking Fund Installments in accordance with Section 506 of the Indenture) 2016 Series A Bonds as follows:

<u>Year</u>	<u>Sinking Fund Installment</u>	<u>Year</u>	<u>Sinking Fund Installment</u>
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\* Final maturity.

(f) In accordance with Sections 502(d) and (e) of the Indenture, the following additional Funds and Accounts are established in connection with the issuance of the 2016 Series A Bonds:

(i) in the Construction Fund, the 2016 Series A Construction Account;

(ii) in the Debt Service Fund, the 2016 Series A Debt Service Account;

and

(iii) in the Special Capital Reserve Fund, the 2016 Series A Account; and

(g) (i) The net proceeds of the 2016 Series A Bonds shall be deposited into the 2016 Series A Construction Account.

(ii) Green Bank monies in the amount of \$\_\_\_\_\_ shall be deposited into the 2016 Series A Bonds Special Capital Reserve Fund Account.

Section 205. Authorized Purposes of Additional Bonds. Additional Bonds may be authenticated and delivered from time to time in accordance with the provisions of this Article for any one or more of the following purposes:

(1) To provide for any Capital Costs with respect to the Project; or

- (2) To pay or refund any Outstanding Bonds.

Section 206. Authorization of Additional Bonds. Additional Bonds shall be issued only after their authorization by a Supplemental Indenture, adopted by the Green Bank and specifying, as the purpose for which such Bonds are to be issued, one or more of the purposes authorized by Section 205, and shall further specify:

- (1) The principal amount of such Additional Bonds;
- (2) The date or dates of such Additional Bonds and of the maturity thereof;
- (3) The rate or rates of interest to be borne by such Additional Bonds, or the manner of determining such rates; and
- (4) Such redemption and other provisions, if any, as may be applicable to such Additional Bonds and are not inconsistent with this Indenture.

Section 207. Execution, Authentication and Delivery of Additional Bonds. Additional Bonds authorized in accordance with Section 206 shall from time to time be executed, authenticated and, delivered by the Green Bank to the Trustee as provided in the Supplemental Indenture authorizing the issuance of such Additional Bonds.

Section 208. Conditions Precedent to Delivery of Additional Bonds. No Additional Bonds shall be delivered upon original issuance except upon satisfaction of the conditions set forth in Sections 206 and 207 and the delivery to the Trustee of the following:

- (1) A Certificate of an Authorized Officer of the Green Bank, dated as of the date of delivery of the Additional Bonds, stating in effect that:
  - (A) all conditions precedent provided for in this Indenture or any Supplemental Indenture relating to the issuance of the Additional Bonds have been satisfied;
  - (B) the Revenues estimated to be received with respect to the Project, together with amounts in Funds established pursuant to this Indenture and any Supplemental Indenture and any other moneys received or estimated to be received by the Green Bank from, and available or to be made available (as evidenced by attached documents and instruments) to the Green Bank for the Project by the State, the United States of America or any other specified source, shall be sufficient to pay the reasonable and necessary Operating Expenses estimated to be incurred during the period the Bonds, including such Additional Bonds, are to be Outstanding and all Principal Installments of and interest on the Bonds.
- (2) An opinion of Bond Counsel, dated as of the date of such delivery of the Additional Bonds, to the effect that:
  - (A) such Additional Bonds have been duly authorized by a Supplemental Indenture adopted in accordance with Article VIII and are to be issuable for a specified purpose or purposes referred to in Section 206;

(B) the principal amount thereof, together with the principal amount of all bonds, notes and other obligations of the Green Bank theretofore authorized and unissued and theretofore issued and outstanding, will not exceed in aggregate principal amount any limitation thereon imposed by law or (to the knowledge of such Bond Counsel) otherwise;

(C) the provisions of the Act providing for the restoration of the Special Capital Reserve Fund to an amount equal to the Special Capital Reserve Fund Requirement have not been validly repealed or amended in a manner inconsistent with this Indenture; and

(D) in connection with a delivery of such Additional Bonds issued for a purpose authorized by Section 205, the pledge created or authorized by this Indenture validly extends to all Revenues attributable to the Project in the manner provided by Section 501 and without giving rise to a violation of the provisions of Article VII.

(3) An Accountant's Certificate, dated as of the date of such delivery of the Additional Bonds, setting forth the Debt Service for each Fiscal Year to the stated maturity of the Bonds, after giving effect to the issuance of such Additional Bonds and application of the proceeds thereof in accordance with this Indenture, as supplemented by the Supplemental Indenture authorizing the issuance of such Additional Bonds.

(4) The amount, if any, necessary to increase the amount in the Special Capital Reserve Fund to the Special Capital Reserve Fund Requirement on all Bonds Outstanding (except Bonds not secured by a pledge of the Special Capital Reserve Fund) as of the time immediately after such delivery.

#### Section 209. Conditions Precedent to Delivery of Refunding Bonds.

(a) One or more Series of refunding Bonds may be issued pursuant to this Indenture at any time to refund any Outstanding Bonds provided that (i) average annual Debt Service on such Series of Refunding Bonds shall not exceed the average annual Debt Service on the Bonds to be refunded and (ii) the maximum Debt Service in any Fiscal Year on such Series of Refunding Bonds shall not exceed the maximum Debt Service in any Fiscal Year on the Bonds to be refunded, all as shown in a Certificate signed by an Authorized Representative of the Green Bank and delivered to the Trustee prior to the authentication and delivery of such Series of Refunding Bonds. Refunding Bonds shall be issued in a principal amount sufficient, together with other moneys available therefor, to accomplish such refunding and to make the deposits in the Funds and Accounts required by the provisions of the Supplemental Indenture authorizing such Bonds. Refunding Bonds that do not meet the requirements of this Section 207(a) may be issued by meeting the requirements of Section 206(d) and (e).

(b) All Refunding Bonds of a Series issued under this Indenture shall be executed by the Green Bank for and delivered to the Trustee and thereupon shall be authenticated by the Trustee and delivered to a Depository Institution or upon the Green Bank's order, but only upon the receipt by the Trustee (in addition to the documents required by Section 206(a), (b) and (c) and of evidence of the Green Bank's meeting either the requirements of subsection (a) of this Section 207 or subsection (d) and (e) of Section 206) of:

(i) irrevocable instructions to the Trustee, satisfactory to it, to give due notice of redemption of all the Bonds to be redeemed on a redemption date or dates specified in such instructions;

(ii) if the Bonds to be refunded are not to be redeemed within the next succeeding sixty (60) days, irrevocable instructions to the Trustee, satisfactory to it, to give due notice of any refunding of such Bonds on a specified date prior to their maturity, as provided in Article VI and Section 1201;

(iii) either (A) moneys (which may include all or a portion of the proceeds of the Refunding Bonds to be issued) in an amount sufficient to effect payment of the Principal Installments and the applicable Redemption Price, if any, of the Bonds to be refunded, together with accrued interest on such Bonds to the maturity or redemption date thereof, as the case may be, or (B) Defeasance Obligations in such principal amounts, of such maturities, bearing such interest and otherwise having such terms and qualifications and any moneys, as shall be necessary to comply with the provisions of Section 1201, which Defeasance Obligations and moneys shall be held in trust and used only as provided in Section 1201; and

(iv) such further documents and moneys as are required by the provisions of Article XII or any Supplemental Indenture adopted pursuant to Article VIII.

Section 210. Special Capital Reserve Fund.

(a) In connection with the issuance of any Bonds hereunder, the Green Bank may create and establish one or more Special Capital Reserve Fund (SCRF) providing (i) for the payment of the principal of and interest, when due, on Bonds secured by such SCRF as such payments become due, or (ii) the purchase of Bonds and the payment of any redemption premium required to be paid when such Bonds are redeemed prior to maturity.

(b) No Bonds secured by a Special Capital Reserve Fund shall be issued to pay Project costs unless the Green Bank is of the opinion and determines that the revenues from the Project shall be sufficient to (1) pay the principal of and interest on the Bonds issued to finance the Project, (2) establish, increase and maintain any reserves deemed by the Green Bank to be advisable to secure the payment of the principal of and interest on such Bonds, (3) pay the cost of maintaining the Project in good repair and keeping it properly insured, and (4) pay such other costs of the Project as may be required.

(c) No Bonds secured by a Special Capital Reserve Fund shall be issued by the Green Bank until and unless such issuance has been approved by the Secretary of the Office of Policy and Management or his or her deputy. Any such approval by the secretary pursuant to this subsection shall be in addition to (1) the otherwise required opinion of sufficiency by the Green Bank set forth in subsection (b) of this Section, and (2) the approval of the State Treasurer or the Deputy State Treasurer and the documentation by the Green bank otherwise required under subsection (a) of Connecticut General Statutes Section 1-124. Such approval may provide for the waiver or modification of such other requirements of this subsection as the secretary

determines to be necessary or appropriate in order to effectuate such issuance, subject to all applicable tax covenants of the Green bank and the State.

### **ARTICLE III**

#### **GENERAL TERMS AND CONDITIONS OF BONDS**

Section 301. Authorization. The Bonds issued hereunder shall be special limited obligations of the Green Bank and shall be payable solely out of Revenues and other receipts, funds and moneys pledged therefor pursuant to the Indenture and shall be secured by the liens created thereby, including the lien on the Trust Estate. The Bonds shall not constitute indebtedness of the Green Bank or the State within the meaning of any statutory or constitutional provision. Neither the faith and credit nor the taxing power of the State is pledged to pay the Bonds. The Bonds of each Series shall contain or have endorsed thereon a statement to the effect that neither the faith and credit nor the taxing power of the Green Bank or the State is pledged to pay the Bonds, that neither the Green Bank nor the State shall be liable thereon, except as provided in this Indenture that such Bond shall not constitute indebtedness of the Green Bank or the State within the meaning of any statutory or constitutional provision and may contain or have endorsed thereon such other provisions, specifications and descriptive words not inconsistent with the provisions of this Indenture as may be necessary or desirable to comply with custom or otherwise as may be determined by the Green Bank prior to delivery thereof.

Section 302. Place and Medium of Payment; Form. Unless otherwise determined by a Supplemental Indenture authorizing a particular Series of Bonds, each Bond shall be payable at the designated corporate trust office of the Trustee and any Paying Agent appointed or provided for such Bond, in any coin or currency of the United States of America which at the time of payment is legal tender for the payment of public and private debts. The Bonds of each Series shall be issued in the form of fully registered bonds without coupons payable to a named person or registered assigns; provided, however, if the Green Bank shall deliver or cause to be delivered to the Trustee an opinion of Bond Counsel to the effect that the issuance of a Series of Bonds, the interest on which is intended on the date of issuance thereof to be excluded from gross income for federal income tax purposes, in coupon form payable to bearer will not adversely affect the exclusion of such interest from gross income for federal income tax purposes, the Green Bank may adopt a Supplemental Indenture also providing for the issuance of Bonds in coupon form payable to bearer, together with such modifications to this Indenture as are necessary and appropriate for such Series of Bonds. The Green Bank may provide in an applicable Supplemental Indenture the issuance of one or more Series of Bonds in book-entry form, together with such modifications to this Indenture as are necessary and appropriate for such Series of Bonds.

Section 303. Payment of Interest. Interest on Bonds of each Series shall be payable, in the manner provided herein or in the Supplemental Indenture authorizing the issuance of such Series, to the person in whose name such Bonds are registered, as shown on the registry books of the Green Bank kept for such purpose at the office of the Trustee, at the close of business on the Record Date.



Section 304. Interchangeability of Bonds. Upon surrender thereof at the designated corporate trust office of the Trustee, and registrar, with a written instrument of transfer satisfactory to the Trustee, duly executed by the registered owner or his duly authorized attorney, Bonds may, at the option of the owner thereof and upon payment by such owner of any charges which the Trustee may make as provided in Section 306, be exchanged for an equal aggregate principal amount of Bonds of the same Series and maturity, of any of the authorized denominations.

Section 305. Negotiability, Transfer and Registry.

(a) The transfer of each Bond shall be registerable only upon the books of the Green Bank, which shall be kept for that purpose at the designated corporate trust office of the Trustee, by the owner thereof in person or by his attorney duly authorized in writing, upon surrender thereof together with a written instrument of transfer satisfactory to the Trustee duly executed by such owner or his duly authorized attorney. Upon such registration of transfer, the Green Bank shall issue in the name of the transferee a new Bond or Bonds of the same aggregate principal amount, Series and maturity as the surrendered Bond.

(b) The Green Bank and each Fiduciary may deem and treat the person in whose name any Bond shall be registered upon the books of the Green Bank as the absolute owner thereof, whether such Bond shall be overdue or not, for the purpose of receiving payment of, or on account of, the principal or Redemption Price of such Bond and for all other purposes and such payments shall be valid and effectual to satisfy the discharge the liability upon such Bond to the extent of the sum or sums so paid and neither the Green Bank nor any Fiduciary shall be affected by any notice to the contrary. The Green Bank agrees, to the extent allowed by applicable law, to indemnify and save each Fiduciary harmless from and against any and all loss, cost, charge, expense, judgment or liability incurred by it, acting in good faith and without negligence under this Indenture, in so treating any such registered owner.

Section 306. Regulations with Respect to Exchanges and Transfers. In all cases in which the privilege of exchange Bonds or the registration of transfer Bonds is exercised, the Green Bank shall execute and the Trustee shall authenticate and deliver Bonds in accordance with the provision of this Indenture. All Bonds surrendered in such exchanges or registrations of transfer shall forthwith be canceled by the Trustee. For every such change or the registration of transfer of bonds whether temporary or definitive, the Green Bank or the Trustee may, as a condition precedent to the privilege of making such change or transfer, made a charge sufficient to reimburse it for any tax, fee or other governmental charge required to be paid with respect to such exchange or transfer.

Section 307. Bonds Mutilated, Destroyed, Stolen or Lost. In any case any Bond shall become mutilated or be destroyed, stolen or lost, the Green Bank shall execute, and thereupon the Trustee shall authenticate and deliver a new Bond of like Series, maturity and principal amount as the Bond so mutilated, destroyed, stolen or lost, in exchange and substitution for such mutilated Bond, upon surrender and cancellation of such mutilated Bond, or in lieu of and substitution for the Bond destroyed, stolen or lost, upon filing with the Trustee evidence satisfactory to the Green Bank and the Trustee that such Bond has been destroyed, stolen or lost and proof of ownership thereof, and upon furnishing the Green Bank and the Trustee with

indemnity satisfactory to them and complying with such other reasonable regulations as the Green Bank and the Trustee may prescribe and paying such expenses as the Green Bank and Trustee may incur. All Bonds so surrendered to the Trustee shall be canceled by it. Any such new Bonds issued pursuant to this Section in substitution for Bonds alleged to be destroyed, stolen or lost shall constitute original additional contractual obligations on the part of the Green Bank, whether or not the Bonds so alleged to be destroyed, stolen or lost be at any time enforceable by anyone, and shall be equally secured by and entitled to equal and proportional benefits with all other Bonds issued under this Indenture.

Section 308. Preparation of Definitive Bonds, Temporary Bonds.

(a) Until the definitive Bonds of any Series are prepared, the Green Bank may execute, in the same manner as is provided in Section 310, and, upon the request of the Green Bank, the Trustee shall authenticate and deliver, in lieu of definitive Bonds, but subject to the same provisions, limitations and conditions as the definitive Bonds except as to the denominations thereof and as to interchangeability and registration of the transfer of Bonds, as permitted by law, one or more temporary Bonds substantially of the tenor of the definitive Bonds in lieu of which such temporary Bond or Bonds are issued in such denominations as may be authorized by the Green Bank, and with such omissions, insertions and variations as may be appropriate to temporary Bonds. The Green Bank at its own expense shall prepare and execute and, upon the surrender therefor of such temporary Bonds the Trustee shall authenticate and, without charge to the holder thereof, deliver in exchange therefor, definitive Bonds of the same aggregate principal amount, Series and maturity as the temporary Bonds surrendered. Until so exchanged the temporary Bonds shall in all respects be entitled to the same benefits and security as definitive Bonds authenticated and issued pursuant to this Indenture.

(b) If the Green Bank shall authorize the issuance of temporary Bonds in more than one denomination, the holder of any temporary Bond or Bonds may, at his option, surrender the same to the Trustee in exchange for another temporary Bond or Bonds of like aggregate principal amount, Series and maturity of any other authorized denomination or denominations, and thereupon the Green Bank shall execute and the Trustee shall authenticate and, in exchange for the temporary Bond or Bonds so surrendered and upon payment of the taxes, fees and charges provided for in Section 308, shall deliver a temporary Bond or Bonds of like aggregate principal amount, Series and maturity in such other authorized denomination or denominations as shall be requested by such holder.

(c) All temporary Bonds surrendered in exchange either for another temporary Bond or Bonds or for a definitive Bond or Bonds shall be forthwith canceled by the Trustee.

Section 309. Execution and Authentication.

(a) After their authorization, Bonds of a Series may be executed by or on behalf of the Green Bank and delivered to the Trustee for authentication. The Bonds shall be executed in the name and on behalf of the Green Bank by the manual or facsimile signature of the Authorized Representative of the Green Bank and the corporate seal of Green Bank (or a facsimile thereof) shall be thereunto affixed, imprinted, engraved or otherwise reproduced

thereon, and attested by the manual or facsimile signature of the clerk of the Green Bank, or in such other manner as may be required by law. In case any one or more of the officers or employees who shall have signed or sealed any of the Bonds shall cease to be such officer or employee before the Bonds so signed and sealed shall have been actually delivered, such Bonds may, nevertheless, be delivered as herein provided, and may be issued as if the person who signed or sealed such Bonds had not ceased to hold such offices or be so employed. Any Bond of a Series may be signed and sealed on behalf of the Green Bank by such persons as at the actual time of the execution of such Bond shall be duly authorized to hold the proper office in or employment by the Green Bank, although at the date of the Bonds of such Series such person may not have been so authorized to have held such office or employment.

(b) The Bonds of each Series shall bear thereon a certificate of authentication, in the form set forth in the form of Bonds, executed manually by the Trustee. No Bond shall be entitled to any right or benefit under this Indenture or shall be valid or obligatory for any purpose until such certificate of authentication shall have been duly executed by the Trustee. Such certificate of the Trustee upon any Bond executed on behalf of the Green Bank shall be conclusive evidence that the Bond so authenticated has been authenticated and delivered under this Indenture and that the owner thereof is entitled to the benefits hereof.

Section 309. Depository Institution.

(a) The Green Bank may by a Supplemental Indenture designate a Depository Institution to be the registered owner of all or any Series of Bonds.

(b) Any Depository Institution may at any time resign or be discharged. Upon the resignation or discharge of the Depository Institution, the Green Bank and the Trustee will find a new Depository Institution or make arrangements to provide certificated Bonds to the beneficial owners of such Bonds as of the date of resignation or discharge or such earlier date as is practicable, in any case as determined on the records of the Depository Institution. Neither the Green Bank nor the Trustee shall have any responsibility for errors, negligence or malfeasance of the Depository Institution.

(c) As long as there shall be a Depository Institution for a Series of Bonds, all Bonds of such Series shall be registered on the registration books of the Green Bank in a name or names designated by such Depository Institution, who shall for all purposes of this Indenture be the registered owner of such Bonds. As long as there shall be a Depository Institution with respect to a Series of Bonds, with respect to such Bonds:

- (1) All payments of interest, principal, redemption price and purchase price made by the Trustee shall be delivered only to the registered owner.
- (2) All notices delivered by the Green Bank or the Trustee pursuant to this Indenture shall be delivered only to the registered owner.
- (3) Subject to the provisions of any Supplemental Indenture concerning the rights of a Bond insurer, all rights of Bondholders under this Indenture, including without limitation voting rights, rights to approve, waive, or

consent, rights to transfer and exchange Bonds, and rights to tender Bonds and elect not to tender Bonds shall be rights of the registered owner.

(d) Neither the Green Bank nor the Trustee shall be liable or responsible because of a failure by the Depository Institution to perform any act, discharge any duties, execute any tenders or make any payments, in each case with respect to the beneficial owners, except to the extent the Green Bank or the Trustee as applicable, is liable or responsible under this Indenture to the registered owner.

## **ARTICLE IV**

### **APPLICATION OF BOND PROCEEDS**

Section 401. Application of Bond Proceeds; Deposits to the Special Capital Reserve Fund.

(a) The proceeds (including accrued interest) from the sale of the Bonds of any Series shall be applied simultaneously with the delivery of such Bonds for the purposes of making deposits in the Funds and Accounts, as shall be provided by this Indenture or any Supplemental Indenture authorizing such Series and all amounts not otherwise deposited shall be deposited in the Construction Fund; provided, however, that in the case of Refunding Bonds, all such amounts not otherwise deposited shall be applied to the refunding purposes thereof in the manner provided in such Supplemental Indenture.

(b) Proceeds of the sale of a Series of Bonds may be deposited in the Special Capital Reserve Fund as provided in this Indenture or in a Supplemental Indenture pertaining to such Series of Bonds. The amount, if any, necessary to make the amount on deposit in the Special Capital Reserve Fund equal to the Special Capital Reserve Fund Requirement, after giving effect to the issuance of a Series of Bonds, shall be funded from Revenues. Unless a later date is specifically provided by a Supplemental Indenture and the State consents to such later date and the terms of such funding (such State consent shall only be needed with respect to Bonds secured by a SCRF), the Special Capital Reserve Fund Requirement for a Series of Bonds shall be fully funded not later than the date of issuance of any other Bond issued pursuant to the terms of this Indenture.

## **ARTICLE V**

### **FUNDS AND ACCOUNTS**

Section 501. The Pledge Effected by this Indenture. All Bonds issued pursuant to this Indenture shall be special, limited obligations of the Green Bank. Pursuant to the Granting Clauses set forth herein, the Green Bank has pledged the Trust Estate as security for the payment of the Bonds and the performance of any other obligation of the Green Bank under this Indenture or any Supplemental Indenture, in accordance with the terms and the provisions of this Indenture, subject only to the provisions of this Indenture permitting the application thereof for or to the purposes and on the terms and conditions herein set forth. As provided by this Indenture, the Revenues, moneys, securities and other funds so pledged and then or thereafter received by the Green Bank shall immediately be subject to the lien of such pledge without

physical delivery thereof or further act and the lien of such pledge and obligation to perform the contractual provisions herein contained, shall be valid and binding as against all parties having claims of any kind in tort, contract or otherwise against the Green Bank, irrespective of whether such parties have notice thereof.

Section 502. Establishment of Funds and Accounts.

(a) The following Funds are hereby established:

- (1) Construction Fund
- (2) Revenue Fund
- (3) Debt Service Fund
  - (a) Interest Account
  - (b) Principal Installment Account
- (4) Operating Fund
- (5) Special Capital Reserve Fund
- (6) General Fund

(b) In addition to the Accounts established in subsections (a) above, the Trustee shall, at the written request of the Green Bank, establish within any Fund held by the Trustee such Accounts as shall be designated in the written instructions of an Authorized Representative of the Green Bank and shall in like manner establish within any Account such subaccounts for the purposes of such Accounts as shall be so designated.

(c) In addition to the Funds and Accounts established above, the Trustee shall, at the written request of the Green Bank, establish a Rebate Fund and Accounts therein, to the extent so provided in a Supplemental Indenture, into which Rebate Fund and Accounts the Green Bank shall be required to deposit the amount of any earnings under this Indenture required to be rebated to the United States. Amounts on deposit in the Rebate Fund and Accounts therein shall be invested and applied by the Trustee as provided in a Supplemental Indenture.

(d) Unless otherwise expressly provided in this Indenture, all of the Funds and Accounts, except the Operating Fund, shall be held by the Trustee.

Section 503. Construction Fund.

(a) There shall be deposited from time to time in the Construction Fund any amount required to be deposited therein pursuant to this Indenture and any Supplemental Indenture and any other amounts received and determined to be deposited therein from time to time which are not otherwise required to be applied in accordance with this Indenture.

(b) Amounts in the Construction Fund shall be expended only (i) to pay Capital Costs of the Project for which such account was established or (ii) to the extent that the amounts in any other Fund or Account are insufficient or unavailable therefor, to pay the principal of and interest on the Bonds when due, but in the case of this clause (ii), only in the event that there shall have been filed with the Trustee (a) a Certificate of an Authorized Representative of the Green Bank in form and substance satisfactory to the Trustee stating that the Revenues expected to be received thereafter together with such other specified amounts as are expected to be made available therefor by the Green Bank will be sufficient to pay in full all Outstanding Bonds when and as the same shall become due in accordance with their terms and in reasonable detail, the basis for such certification, and (b) an opinion of counsel satisfactory to the Trustee that such payment will not result in a violation of any existing law.

(c) The Green Bank shall submit on a monthly basis to the Trustee a Disbursement Request setting forth the amount and, in reasonable detail, itemizing the Capital Costs of the Project expenses to be paid in the following month from the Account in the Construction Fund established for the Project, together with a Certificate of an Authorized Representative of the Green Bank identifying such Disbursement Request and stating that the amount to be withdrawn pursuant to such requisition is a proper charge thereon. The Trustee shall thereafter advance to the Green Bank at the beginning of each month the amount shown in such Disbursement Request. The Green Bank may at any time or from time to time as necessary submit to the Trustee a supplemental Disbursement Request and Certificate of an Authorized Representative in conformity with the foregoing requirements to revise a previously submitted Disbursement Request, and upon receipt thereof the Trustee shall promptly advance to the Green Bank the amount specified in such supplemental Disbursement Request. All moneys so received by the Green Bank shall be applied to the payment of the Capital Costs of the Project for which such moneys were disbursed.

(d) The Trustee shall, upon written instruction of an Authorized Representative of the Green Bank, transfer any amount of the proceeds of Bonds remaining in the Construction Fund to the Special Capital Reserve Fund for such Series of Bonds to the extent of any deficiency in the Special Capital Reserve Fund Requirement for such Series of Bonds, but only upon receipt of the Certificate of an Authorized Representative stating that all Capital Costs theretofore incurred in connection with the Project have been paid or duly provided for. In lieu of making such transfers, the Green Bank may, by delivering to the Trustee written instructions of any Authorized Representative, direct the Trustee to apply such amounts to the redemption of Bonds in accordance with the provisions of Article VI.

(e) Notwithstanding anything in this Indenture to the contrary, the disbursement procedure relating to the Construction Fund can be varied for the Project as may be provided in any Supplemental Indenture that relates to the Bonds issued for the Project.

Section 504. Revenue Fund. Subject to Section 517 hereof, the Green Bank shall cause all Revenues received by it to be paid to the Trustee who shall promptly upon receipt deposit the same in the Revenue Fund. There shall also be deposited in the Revenue Fund all other amounts required by this Indenture to be so deposited. Subject to Section 517 hereof, on the third business day preceding the end of each month, the Trustee shall, from the amounts in the Revenue Fund, make the following deposits in the following order of priority:

FIRST: to the Operating Fund, the amount set forth in a Certificate of an Authorized Representative of the Green Bank as being necessary to provide for (taking into account amounts on deposit therein and expenses incurred and unpaid for the current month) the payment of the next succeeding month's Operating Expenses;

SECOND: to the Interest Account in the Debt Service Fund, the amount necessary to make the payment of interest on the Bonds on the next Interest Payment Date;

THIRD: to the Principal Installment Account in the Debt Service Fund, the amount necessary to make the next Principal Installment on the next Principal Payment Date.

FOURTH: from the balance, if any, remaining after making the deposits required by paragraphs FIRST, SECOND and THIRD, to the Special Capital Reserve Fund, the amount, if any, necessary to make the total on deposit in the Special Capital Reserve Fund Requirement;

FIFTH: from the balance, if any, remaining after making the deposits required by paragraphs FIRST, SECOND, THIRD and FOURTH to the Rebate Fund, if any, the amount, if any, set forth in a Certificate of an Authorized Representative of the Green Bank as being required to be deposited in such Fund thereunder in accordance with this Indenture, a Supplemental Indenture or a Tax Regulatory Agreement;

FIFTH: from the balance, if any, remaining after making the deposits required by paragraphs FIRST, SECOND, THIRD, FOURTH and FIFTH, to the General Fund, the balance.

Section 505. Debt Service Fund.

Subject to Section 517 hereof:

(a) The Trustee shall for each Series of Bonds Outstanding, pay from the moneys or deposits in the respective Debt Service Account for such Series of Bonds (i) on each Bond Payment Date, (1) the amounts required for the payment of the Principal Installments (including any Sinking Fund Installments), if any, due on such date and (2) the amounts required for the payment of interest due on such date, provided that with respect to any Series of Bonds for which amounts have been deposited in a Capitalized Interest Account, the unexpended balance in such account shall be applied to pay interest on such Series of Bonds prior to use of other amounts in the Debt Service Fund for such purpose, and (ii) on any redemption date or date of purchase, the amounts required for the payment of accrued interest on Bonds to be redeemed or purchased on such date unless the payment of such accrued interest shall be otherwise provided.

(b) The amounts accumulated in the Debt Service Fund for each Sinking Fund Installment may, and if so directed in writing by an Authorized Representative of the Green Bank shall be applied (together with amounts with respect to interest on the Bonds for which such Sinking Fund Installment was established) by the Trustee prior to the forty-fifth day

preceding the due date of such Sinking Fund Installment to the purchase of Bonds of the Series and maturity for which such Sinking Fund Installment was established, at prices (including any brokerage and other charges) not exceeding the Redemption Price payable for such Bonds when such Bonds are redeemable by application of such Sinking Fund Installment plus unpaid interest accrued to the date of purchase, such purchases to be made by the Trustee as directed in writing by an Authorized Representative of the Green Bank.

(c) Upon the purchase of any Bond pursuant to subsection (b) of this Section, an amount equal to the principal amount of the Bond so purchased or redeemed shall be credited toward the next Sinking Fund Installment thereafter to become due and the amount of any excess of the amounts so credited over the amount of such Sinking Fund Installment shall be credited against future Sinking Fund Installments in direct chronological order.

(d) As soon as practicable after the forty-fifth day preceding the due date of any such Sinking Fund Installment, the Trustee shall proceed to call for redemption, pursuant to Section 603, on such due date, Bonds of the Series and maturity for which such Sinking Fund Installment was established in such amount as shall be necessary to complete the retirement of the principal amount specified for such Sinking Fund Installment of the Bonds of such Series and maturity. The Trustee shall so call such Bonds for redemption whether or not it then has moneys in the Debt Service Fund sufficient to pay the applicable Redemption Price thereof on the redemption date. The Trustee shall apply to the redemption of the Bonds on each such redemption date, the amount required for the redemption of such Bonds.

#### Section 506. Operating Fund.

Subject to Section 517 hereof:

(a) Amounts credited to the Operating Fund shall be applied by the Green Bank, from time to time, to the payment of Operating Expenses in accordance with the Annual Budget.

(b) Amounts credited to the Operating Fund which the Green Bank at any time determines to be in excess of an amount equal to the unpaid Operating Expenses for such Fiscal Year shall be applied to make up any deficiencies in the following funds and accounts in the order stated: the Debt Service Accounts on a pro rata basis; the Special Capital Reserve Fund. Any balance of such excess not so applied shall be transferred by the Green Bank to the Trustee for credit to the General Fund.

(c) If and to the extent provided in a Supplemental Indenture authorizing Bonds of a Series, amounts from the proceeds of such Bonds may be credited to the Operating Fund and set aside therein as specified in the Supplemental Indenture for any purpose of such Fund.

(d) Any amount remaining on deposit in the Operating Fund on the last day of each Fiscal Year (except any reserves for Operating Expenses, if any) shall be transferred by the Green Bank to the Trustee for deposit in the Revenue Fund.



Section 507. Special Capital Reserve Fund. (a) Upon the delivery of any Bonds, the Green Bank shall pay to the Trustee from the proceeds of such Bonds or otherwise, the sum of money, if any, necessary to increase the amount in the Special Capital Reserve Fund to the Special Capital Reserve Fund Requirement.

(b) The Green Bank shall pay to the Trustee upon receipt thereof any moneys allotted and paid to the Green Bank by the State pursuant to the Act for the purpose of restoring the Special Capital Reserve Fund to the amount of the Special Capital Reserve Fund Requirement and other moneys paid by the State for inclusion therein.

(c) All sums paid by the Green Bank to the Trustee as provided in this Section shall be deposited by the Trustee into and credited to the Special Capital Reserve Fund.

(d) If at any time any interest on Bonds or principal or Redemption Price of Bonds or any Sinking Fund Installment with respect to Bonds has become due and payable and payment thereof in full has not been made or provided for, the Trustee shall forthwith withdraw from the Special Capital Reserve Fund an amount which together with other amounts available for such payment shall be sufficient to provide for such payment in full and apply the amount so withdrawn to such payment.

(e) In the case of any purchase, redemption in whole or in part, or payment of principal at maturity, of any Bonds, the Green Bank may direct the Trustee to apply moneys in the Special Capital Reserve Fund to the payment of the principal or Redemption Price of and interest on the Bonds being paid or redeemed up to the amount by which such amounts in the Special Capital Reserve Fund exceed the Special Capital Reserve Fund Requirement after giving effect to such purchase, redemption or payment.

(f) On December 1 of any year if:

- (1) the amount in the Special Capital Reserve Fund exceeds the Special Capital Reserve Fund Requirement, and
- (2) all withdrawals from the Special Capital Reserve Fund provided for in subsections (b) and (d) have been made, the Trustee shall withdraw the excess from the Special Capital Reserve Fund and deposit the amount so withdrawn into the Revenue Fund.

(g) Amounts in the Special Capital Reserve Fund may, and at the discretion of the Green Bank shall, be invested in Investment Securities maturing not later than seven years from the date of such investment.

Section 508. General Fund. (a) The Trustee shall, on each Bond Payment Date, apply moneys credited to the General Fund in the following amounts: (i) on a pro rata basis, to the Debt Service Fund the amount, if any, necessary (or all the moneys in the General Fund if less than the amount necessary) to make up any deficiency in the amount required to be on deposit in such Fund and (ii) to the Special Capital Reserve Fund the amount, if any, necessary (or all the moneys in the General Fund if less than the amount necessary) to make up any deficiency in the amount required to be on deposit in such Fund. Such transfer shall be made notwithstanding any

other provisions of this Indenture requiring deposits in such Funds. Moneys remaining on deposit in the General Fund after the transfers set forth in this Section may also be transferred by the Trustee to the Green Bank, at the direction of the Green Bank, to pay Operating Expenses or for any other lawful purpose related to the Project, including but not limited to, the funding of a capital fund from which the Green Bank may pay for capital improvements to the Project, Rebate Amounts pursuant to any Tax Regulatory Agreement or to reimburse the Green Bank for expenses relating to the Green Bank; following any such transfer, the moneys transferred shall not be considered pledged moneys hereunder.

Section 509. Depositaries.

(a) All moneys or securities held by the Trustee under the provisions of this Indenture (other than moneys or securities on deposit in the Rebate Fund and the Operating Fund) shall constitute trust funds and the Trustee may, and shall, if directed in writing by an Authorized Representative of the Green Bank, deposit such moneys or securities with one or more Depositaries in trust for the Trustee. All moneys or securities deposited under the provisions of this Indenture with the Trustee or any Depositary shall be held in trust and applied only in accordance with the provisions of this Indenture, and each of such Funds established by this Indenture shall be a trust fund for the purposes thereof. The Green Bank and the Trustee shall instruct each Depositary that any moneys or securities credited to a Fund or an Account (other than moneys or securities on deposit in the Rebate Fund and the Operating Fund) hereunder which are deposited with such Depositary shall be identified to be part of such Fund or Account and subject to the pledge in favor of the Trustee created under this Indenture. Prior to the first deposit of any moneys or securities with each Depositary, the Green Bank and the Trustee shall obtain from such Depositary its agreement to serve as agent of the Trustee in holding such moneys or securities in trust in favor of the Trustee and the contract or other written instrument between the Green Bank and such Depositary governing the establishment and operation of such account shall provide that the moneys or securities from time to time deposited with such Depositary shall be held by such Depositary as such agent in trust in favor of the Trustee; provided that, except as otherwise expressly provided herein, the Green Bank shall be permitted at any time to make withdrawals from and write checks or other drafts against any account held by the Green Bank and established with such Depositary and apply the same for the purposes specified in this Indenture and, subject to Section 515 hereof, the Green Bank shall be permitted to invest amounts in any such account in Investment Securities.

(b) Each Depositary holding moneys or securities in trust for the Trustee shall be willing and able to accept the office on reasonable and customary terms and authorized by law to act in accordance with the provisions of this Indenture.

(c) (Intentionally left blank.)

(d) Moneys and securities credited to any Fund or Account may be commingled with moneys and securities credited to other Funds or Accounts for the purposes of establishing checking or other bank accounts for purposes of investing funds or otherwise, provided, however, the Trustee, and the Green Bank shall at all times maintain or cause to be maintained accurate books and records reflecting the amounts credited to the respective Funds and Accounts held by them. All withdrawals from any commingled moneys or securities shall

be charged against the proper Fund or Account and no moneys shall be withdrawn from commingled moneys if there is not on credit to the Fund or Account to be charged sufficient funds to cover such withdrawal.

Section 510. Deposits.

(a) All Revenues and other moneys held by any Depository under this Indenture may be invested in demand deposits or time deposits, if and as directed in writing by the Green Bank, provided that such deposits shall permit the moneys so held to be available for use at the time when needed. All such moneys deposited with a Fiduciary, acting as a Depository, may be invested by the commercial banking department of any Fiduciary which shall honor checks and drafts on such deposits with the same force and effect as if it were not such Fiduciary. All moneys held by any Fiduciary, as such, may be invested by such Fiduciary by its banking department in deposits demand or, if and to the extent directed by the Green Bank and acceptable to such Fiduciary, in time deposits, provided that such moneys on deposit be available for use at the time when needed. Such Fiduciary shall allow and credit on such moneys such interest, if any, as it customarily allows upon similar funds of similar size and under similar condition or as required by law.

(b) All moneys deposited with the Trustee and each Depository shall be credited to the particular Fund or Account to which such moneys belong.

Section 511. Investment of Certain Funds.

(a) Moneys held in the Funds and Accounts established hereunder shall be invested and reinvested by the Trustee or the Authorized Representative of the Green Bank as applicable, to the fullest extent practicable in Investment Securities which mature not later than at such times as shall be necessary to provide moneys when needed for payments to be made from such Funds and Accounts. The Trustee shall make all such investments of moneys held by it in accordance with written instructions from any Authorized Representative of the Green Bank such instructions to specify the particular investment to be made. In making any investment in any Investment Securities with moneys in any Fund or Account established under this Indenture, an Authorized Representative may, and may instruct the Trustee to, combine such moneys with moneys in any other Fund or Account, but solely for purposes of making such investment in such Investment Securities.

(b) Interest (net of that which represents a return of accrued interest paid in connection with the purchase of any investment) and other investment earnings (but not profits or losses) on any moneys or investments in the Funds and Accounts, other than the Construction Fund and the Special Capital Reserve Fund, shall be paid into the Revenue Fund as and when received. Interest (net of that which represents a return of accrued interest paid in connection with the purchase of any investment) and other investment earnings (but not profits or losses) on any moneys or investments in (i) the Special Capital Reserve Fund shall be paid into the Debt Service Fund, as provided in Section 509(b), and (ii) the Construction Fund shall be held in the Construction Fund (unless otherwise specified in the applicable Supplemental Indenture).

(c) All Investment Securities acquired with moneys in any Fund or Account, including the Operating Fund, shall be held by the Trustee in pledge or by a Depository as agent in pledge in favor of the Trustee in accordance with Section 514 hereof.

(d) Nothing in this Indenture shall prevent any Investment Securities acquired as investments for Funds or Accounts held under this Indenture from being issued or held in book-entry form on the books of the United States Treasury.

Section 512. Valuation and Sale of Investments. Obligations purchased as an investment of moneys in any Fund or Account created under the provisions of this Indenture shall be deemed at all times to be a part of such Fund or Account and any profit realized from the liquidation of such investment shall be credited to such Fund or Account and any loss resulting from the liquidation of such investment shall be charged to such Fund or Account.

In computing the amount in any Fund or Account created under the provisions of this Indenture for any purpose provided in this Indenture, obligations purchased as an investment of moneys therein shall be valued at the cost of such obligations or the market value thereof, whichever is lower; provided, however, that in the case of obligations scheduled to mature, or subject to redemption at the option of the holder, in ten (10) years or less, such Investment Securities shall be valued at amortized cost. The accrued interest paid in connection with the purchase of any obligation shall be included in the value thereof until interest on such obligation is paid. Such computation shall be made not less than ten days prior to July 1 of each year and on the date of the refunding of any Bonds and at such other times as the Green Bank shall determine or as may be required by this Indenture.

Except as otherwise provided in this Indenture, the Trustee shall sell at the best price obtainable by it, or present for redemption, any obligation so purchased as an investment whenever it shall be requested in writing by an Authorized Representative of the Green Bank so to do. Whenever it shall be necessary in order to provide moneys to meet any payment or transfer from any Fund or Account held by the Trustee, the Trustee shall sell at the best price obtainable by it or present for redemption such obligation or obligations designated by an Authorized Representative of the Green Bank necessary to provide sufficient moneys for such payment or transfer; provided, however, that if the Green Bank fails to provide such designation promptly after request thereof by the Trustee, the Trustee may in its discretion select the obligation or obligations to be sold or presented for redemption. The Trustee shall not be liable or responsible for any loss, fee, tax or other charge resulting from the making of any such investment, reinvestment or the sale of any obligation in the manner provided above.

Section 513. Flow of Funds Prior to Event of Default; Financial and Other Reporting.

Notwithstanding the provisions of Sections 504 through 507 hereof, so long as no Event of Default hereunder shall have occurred and be continuing, the Green Bank may, in lieu of the requirements of Sections 504 through 507, maintain control and possession of the Revenue Fund, the Operating Fund and the Rebate Fund (if any) and make the transfers required hereunder. While the Green Bank maintains control of the Revenue Fund, all Revenues shall be transferred to the Revenue Fund as soon as practicable and shall not be used for any purpose prior to their transfer to the Revenue Fund.

(a) While the Green Bank maintains control of the Revenue Fund and the Operating Fund, the Green Bank shall deliver to the Trustee on or before the last day of each month, an accounting of all Revenues received by the Green Bank during the preceding month.

(b) The Green Bank shall provide before March 1st of each year financial statements audited by an Accountant of all of its Revenues, expenses and accounts for the preceding Fiscal Year which shall be prepared in accordance with the provisions of generally accepted accounting principles related to accounting, auditing and financial reporting.

(c) The Green Bank shall deliver to the Trustee on or before the last business day of each March, June, September and December, a certificate of an Authorized Representative indicating that it has complied with each of the foregoing conditions for the preceding three months.

(d) The Trustee may, upon becoming aware of a failure of the Green Bank to comply with any of the above-referenced conditions, which determination of noncompliance shall be in its sole, absolute discretion, give notice to the Green Bank that each shall comply with the provisions of this Section 517 which compliance shall commence as soon as practicable but no later than thirty (30) days after receipt thereof by the Green Bank.

## ARTICLE VI

### REDEMPTION OF BONDS

The provisions contained in the following Sections of this Article VI are applicable to each Series of Bonds, except as may be otherwise set forth in a Supplemental Indenture authorizing any such Series of Bonds.

Section 601. Privilege of Redemption and Redemption Price. Bonds subject to redemption prior to maturity shall be redeemable, upon published notice as provided in this Article, at such times, at such Redemption Prices and upon such terms as may be specified in the Supplemental Indenture.

Section 602. Redemption at the Election of the Green Bank. In the case of any redemption of Bonds otherwise than as provided in Section 603, the Green Bank shall give written notice to the Trustee of the election so to redeem, of the redemption date, of the Series, of the principal amounts of the Bonds of each maturity of such Series to be redeemed (which Series, maturities and principal amounts thereof to be redeemed shall be determined by the Green Bank in its sole discretion, subject to any limitations with respect thereto contained in any Supplemental Indenture authorizing a Series of Bonds) and whether such notice and such redemption are unconditional or, if permitted by the applicable Supplemental Indenture, conditional on funds being available on the redemption date to pay the Redemption Price. Such notice shall be given at least forty-five days prior to the redemption date.

Section 603. Redemption Other Than at Green Bank Election. Whenever by the terms of this Indenture or a Supplemental Indenture, Bonds of a Series of a particular maturity are

required to be redeemed otherwise than at the election of the Green Bank, the Trustee shall select the Bonds to be redeemed, give the notice of redemption and apply the moneys available therefor to redeem on the redemption date at the Redemption Price therefor, together with accrued interest to the redemption date, all of the Bonds of the Series and maturity to be redeemed.

Section 604. Selection of Bonds to be Redeemed. In the event of redemption of less than all the Outstanding Bonds of like Series and maturity, the Green Bank, subject to any agreement with a Depository Institution, shall select, in such manner in its discretion as it shall deem appropriate and fair, the numbers of the Bonds to be redeemed. For the purposes of this Section, Bonds which have theretofore been selected for redemption shall not be deemed Outstanding.

Section 605. Notice of Redemption. The Trustee shall give notice, in the name of the Green Bank, of the redemption of such Bonds, which notice shall specify the Series and maturities of the Bonds to be redeemed, the redemption date and the place or places where amounts due upon such redemption will be payable and, if less than all of the Bonds of any like Series and maturity are to be redeemed, the numbers, CUSIP numbers or other distinguishing marks of such Bonds so to be redeemed. Such notice shall further state whether the notice and the redemption are unconditional or conditional; if unconditional, that on such date there shall become due and payable upon each Bond to be redeemed the Redemption Price thereof, together with interest accrued to the redemption date; if conditional, that on such date that, if there shall be sufficient funds available to effect such redemption on the redemption date, there shall become due and payable upon each Bond to be redeemed the Redemption Price thereof, together with interest accrued to the redemption date, and, in either case, that if there shall be sufficient funds available to effect such redemption on the redemption date, then from and after such date interest thereon shall cease to accrue and be payable. The Trustee shall mail a copy of such notice by first class mail, postage prepaid, not less than thirty days before the redemption date, to the owners of the Bonds which are to be redeemed, at their last addresses appearing upon the registry books.

Section 606. Payment of Redeemed Bonds. Irrevocable notice having been given in the manner provided in Section 605, the Bonds so called for redemption shall become due and payable on the redemption date so designated at the Redemption Price, plus interest accrued and unpaid to the redemption date, and, upon presentation and surrender thereof at the office specified in such notice such Bonds shall be paid at the Redemption Price plus interest accrued and unpaid to the redemption date. If, on the redemption date, moneys for the redemption of all the Bonds of any like Series and maturity to be redeemed together with interest to the redemption date, shall be held by the Trustee as to be available therefor on said date and if notice of redemption shall have been given as aforesaid, then, from and after the redemption date interest on the Bonds of such Series and maturity so called for redemption shall cease to accrue and become payable. If said moneys shall not be so available on the redemption date, such Bonds or portions thereof shall continue to bear interest until paid at the same rate as they would have borne had they not been called for redemption.

## ARTICLE VII

## PARTICULAR COVENANTS

The Green Bank, as applicable, covenants and agrees with the Trustee and the holders of the Bonds as follows:

Section 701. Payment of Bonds. The Green Bank shall duly and punctually pay or cause to be paid, solely from the Trust Estate pledged hereunder for such payments, the Principal Installment or Redemption Price of every Bond and the interest thereon and the principal of and interest and redemption premium on any Parity Indebtedness, at the dates and places and in the manner stated in the Bonds and such Parity Indebtedness.

Section 702. Offices for Servicing Bonds. The Green Bank shall at all times maintain an office or agency where Bonds may be presented for registration, transfer or exchange, and where notices, presentations and demands upon the Green Bank in respect of the Bonds or of this Indenture may be served. The Green Bank hereby appoints the Trustee as its agent to maintain such office or agency for the registration, transfer or exchange of Bonds and for the service of such notices, presentations and demands upon the Green Bank.

Section 703. Further Assurance. At any and all times, the Green Bank shall, so far as each may be authorized by law, pass, make, do, execute, acknowledge and deliver, all and every such further resolutions, acts, deeds, conveyances, assignments, transfers and assurances as may be necessary or desirable for the better assuring, conveying, granting, pledging, assigning and confirming all and singular, the rights, assets, revenues and other moneys, securities, funds and property hereby pledged or assigned, or intended so to be, or which the Green Bank, may become bound to pledge or assign.

Section 704. Power to Issue Bonds and Pledge Revenues. The Green Bank is duly authorized under all applicable laws to authorize and issue the Bonds. The Green Bank is duly authorized to execute and enter into this Indenture and to pledge the Revenues and assets purported to be pledged and assigned hereby in the manner and to the extent herein provided. Except to the extent permitted under this Indenture, the Revenues and assets so pledged and assigned are and will be free and clear of any pledge, lien, charge or encumbrance thereon or with respect thereto prior to, or of equal rank with, the pledge created hereby and all corporate or other action on the part of the Green Bank to that end has been and will be duly and validly taken. The Bonds are and will be the valid and legally enforceable obligations of the Green Bank in accordance with their terms and the terms of this Indenture. The Green Bank shall at all times, to the extent permitted by law, defend, preserve and protect the pledge of the Revenues and other assets, including rights herein pledged and assigned under this Indenture and all the rights of the Bondholders under this Indenture against all claims and demands of all persons whomsoever.

Section 705. Tax Covenants.

(a) The Green Bank shall not permit at any time or times any of the proceeds of the Bonds or any other funds of the Green Bank to be used directly or indirectly to acquire any securities or obligations the acquisition of which would cause any Bond, the interest on which

was intended on the date of issuance thereof to be excluded from gross income for federal income tax purposes, to be an "arbitrage bond" as defined in Section 148 of the Code.

(b) The Green Bank shall not, except as permitted in a Supplemental Indenture with respect to a Series of Bonds authorized thereby, permit at any time or times any proceeds of any Series of Bonds or any other funds of the Green Bank to be used, directly or indirectly, in a manner which would result in the loss of the exclusion of interest on any Bond from gross income for federal income tax purposes, the interest on which was intended on the date of issuance of such Bond to be excluded from gross income for federal income purposes, or the loss of a tax credit allowable to the Bondholders, if such Bonds are issued as tax credit bonds.

Section 706. Accounts and Periodical Reports and Certificates. The Green Bank shall keep or cause to be kept proper books of record and account (separate from all other records and accounts) in which complete and correct entries shall be made of its transactions under this Indenture and which, together with all other books and papers of the Green Bank, shall at all reasonable times be subject to the inspection of the Trustee, the State or the representative, duly authorized in writing, of the holder or holders of not less than 25% in principal amount of the Bonds then Outstanding.

Section 707. Indebtedness and Liens.

(a) The Green Bank shall not issue any bonds, notes or other evidences of indebtedness, other than the Bonds, secured by a pledge of or other lien or charge on the Revenues and shall not create or cause to be created any lien or charge on such Revenues or on any amounts held by any Fiduciary, under this Indenture; but this Section shall not prevent the Green Bank from issuing notes payable from the proceeds of Bonds or bonds or notes or other obligations for the corporate purposes of the Green Bank payable out of, or secured by a pledge of, Revenues to be derived on and after such date as the pledge of the Revenues provided in this Indenture shall be discharged and satisfied as provided in Section 1201.

(b) The Green Bank covenants that it will not sell or otherwise dispose of or encumber the Project or any part thereof. The Green Bank may, however, from time to time, sell any machinery, fixtures, apparatus, tools, instruments or other movable property if the Green Bank shall determine that such articles are no longer needed or no longer useful in connection with the construction or the maintenance and operation of the Project, and the proceeds thereof shall be applied to the replacement of the properties so sold or disposed of or to the improvement of any remaining properties or shall be deposited to the credit of such Fund as the Green Bank may determine. The Green Bank may from time to time sell or otherwise dispose of or encumber any real estate owned by it as the Green Bank shall determine is not needed or serves no useful purpose in connection with the maintenance and operation of the Project. The proceeds of any sale or other disposition of real estate shall be deposited as hereinabove provided for the proceeds of the sale or disposal of movable property. The Green Bank may lease, or grant easements, franchises or concessions for the use of, any part of the Project not needed or required for the maintenance and operation thereof, and the net proceeds of any such lease or concession shall be deposited as received to the credit of the Revenue Fund.



(c) The Green Bank covenants that that it will have upon any purchase or acquisition by it of lands, property, rights, rights of way, easements, franchises or interests in or relating to lands purchased with moneys in the Construction Fund for the use of the Project either (i) good and marketable title to the surface rights in, or perpetual easements or title or rights sufficient for the needs and purposes of the Project over such lands, free from all liens, encumbrances and defects of title except liens, encumbrances or defects of title which do not have a materially adverse effect upon the Green Bank's right to use such lands or properties for the purposes intended or which have been adequately guarded against by a bond or other form of indemnity, or (ii), if such payment be a deposit in court in any proceeding to acquire any interest in or relating to lands by condemnation or a payment for an option to purchase or for a quitclaim deed or a lease or a release or on a contract to purchase or is otherwise for the acquisition of a right or interest in lands less than a fee simple or a perpetual easement, or if such payment be a part payment for any such purpose, it will obtain either the written approval of the acquisition of such lesser right or interest or of such deposit or part payment signed by counsel for the Green Bank, or, in lieu of such opinion, a firm undertaking by a reputable title insurance company to issue its title insurance policy and a written opinion of counsel for the Green Bank stating that any objections or exceptions to be noted therein are not of a material nature.

Section 708. Special Capital Reserve Fund.

(a) The Green Bank shall at all times maintain the Special Capital Reserve Fund pursuant to Section 507 and do and perform or cause to be performed each and every act and thing with respect to the Special Capital Reserve Fund provided to be done or performed by or on behalf of the Green Bank or the Trustee under the terms and provisions of this Indenture or of the Act.

(b) In order to better secure the Bonds and to make such Bonds more marketable and to maintain in the Special Capital Reserve Fund the Special Capital Reserve Fund Requirement and in compliance with the Act, prior to December first, annually, the Green Bank shall deposit into the Special Capital Reserve Fund, the balance of which has fallen below the Special Capital Reserve Fund Requirement, the full amount required to meet the Special Capital Reserve Fund Requirement, as available to the Green Bank from any resources of the Green Bank not otherwise pledged or dedicated to another purpose. On or before December first, annually, but after the Green bank has made such required deposit, the State shall deem to be appropriated from the general fund of the State such sums, if any, as shall be certified by the chairperson or vice-chairperson of the Green Bank to the Secretary of the Office of Policy and Management, the State Treasurer and the joint standing committees of the General Assembly having cognizance of matters relating to finance, revenue and bonding and energy, as necessary to restore each such Special Capital Reserve Fund to the amount equal to the Special Capital Reserve Fund Requirement, and such amounts shall be allotted and paid to directly to the Trustee for deposit into and credit to the Special Capital Reserve Fund.

(c) Subject to any agreement or agreements with Bondholders, any amount or amounts allotted and paid to the Green Bank pursuant to this Section 708 shall be repaid to the State from moneys of the Green Bank at such time as such moneys are not required for any other of the Green Bank's corporate purposes, and in any event shall be repaid to the State on the date one year after all Bonds theretofore issued, together with interest on such Bonds, with interest on

any unpaid installments of interest and all costs and expenses in connection with any action or proceeding by or on behalf of the Bondholders thereof, are fully met and discharged.

Section 709. General. The Green Bank shall do and perform or cause to be done and performed all acts and things required to be done or performed by or on behalf of them under the provisions of the Act, the Bylaws and this Indenture in accordance with the terms of such provisions.

Section 710. Green Bank Annual Project Budget.

(a) The Green Bank shall, on or before June 30, in each Fiscal Year, adopt and file with the Trustee, a copy of the Annual Project Budget, duly certified by an Authorized Representative of the Green Bank to be in compliance with the provisions of this Indenture, each applicable Supplemental Indenture and the Act, showing the estimated Operating Expenses (including Aggregate Annual Debt Service), capital requirements and Revenues for the ensuing Fiscal Year, together with any other information required to be set forth therein by this Indenture. Such Annual Project Budget may set forth such additional information as the Green Bank may determine.

(b) If for any reason the Green Bank shall not have adopted the Annual Budget before such June 30, the Annual Budget for the then current Fiscal Year shall be deemed to be the Annual Project Budget for the ensuing Fiscal Year until a new Annual Project Budget is adopted.

(c) The Green Bank may at any time adopt an amended Annual Project Budget for the then current or ensuing Fiscal Year, but no such amended Annual Project Budget shall supersede any prior Annual Project Budget until the Green Bank shall have filed with the Trustee and the Green Bank a copy of such amended Annual Project Budget.

Section 711. Agreement of the Green Bank. The Green Bank agree that will not in any way impair the rights and remedies of Bondholders, until the Bonds, together with the interest thereon, and all costs and expenses in connection with any action or proceeding by or on behalf of such holders, are fully met and discharged.

Section 712. Maintenance of the Project. The Green Bank covenants that it will establish and enforce reasonable rules and regulations governing the use of the Project and the operation thereof, that it will at all times maintain the Project or cause the Project to be maintained in good repair and in sound operating condition and will make or cause to be made all necessary repairs, renewals and replacements, and that it will comply and cause compliance with all valid acts, rules, regulations, orders and directions of any legislative, executive, administrative or judicial body applicable to the Project. Nothing in this Indenture shall prevent the Green Bank from transferring, to the extent permitted by law, the day-to-day operations of the Project to another entity or any program that would be carried out by the Green Bank; provided that the Green Bank shall cause such other entity to undertake such operations or programs so that the Green Bank does not violate the terms of this Indenture and so that the Green Bank is not rendered unable to observe their covenants under this Indenture.

Section 713. Payment of Lawful Charges. The Green Bank further covenants that, from the Revenues, they will pay all municipal or governmental charges lawfully levied or assessed upon the Project or any part thereof or upon any Revenues when the same shall become due, that it will duly observe and comply with all valid requirements of any municipal or governmental Green Bank relative to the Project, and that, from the Revenues, it will pay or cause to be discharged, or will make adequate provisions to satisfy and discharge, within sixty (60) days after the same shall accrue, all lawful claims and demands for labor, materials, supplies or other objects which, if unpaid might by law become a lien upon the Project or any part thereof or the Revenues; provided, however, that nothing contained in this Section shall require the Green Bank to pay or cause to be discharged, or make provision for, any such lien or charge so long as the validity thereof shall be contested in good faith and by appropriate legal proceedings.

Section 714. Insurance. The Green Bank covenants that it will maintain the Project fully insured, or cause to be insured, with one or more responsible insurance companies authorized and qualified under the Connecticut General Statutes to assume the risk thereof, and/or through self insurance, all as shall be approved by an independent insurance consultant acceptable to the Trustee, such insurance to cover such properties belonging to the Project as are customarily insured, and against loss or damage from such causes as are customarily insured against by other public instrumentalities engaged in similar activities.

All insurance policies shall be to the extent practicable for the benefit of the Green Bank, the Trustee (on behalf of all Bondholders) and other interested parties, as their interests may appear, shall be made payable to the Green Bank and shall be deposited with the Green Bank. The proceeds of any and all such insurance shall be deposited by the Green Bank in the name of the Green Bank with a Depositary.

The Green Bank covenants that, immediately after any loss or damage to any properties of the Project resulting from any cause, whether or not such loss or damage shall be covered by insurance, the Green Bank will cause its engineers to prepare plans and specifications for repairing, replacing or reconstructing (either in accordance with the original or a different design) the damaged or destroyed property, and that it will forthwith commence or cause to be commenced and diligently prosecute or cause to be diligently prosecuted the repair, replacement or reconstruction of the damaged or destroyed property unless it shall determine that the repair, replacement or reconstruction of such property is not essential to the efficient operation of the Project.

Except as provided in the foregoing paragraph, the proceeds of all insurance referred to in this Section shall be available for, and shall to the extent necessary be applied to, the repair, replacement or reconstruction of the damaged or destroyed property, and shall be paid out in the same manner hereinabove provided for payments from the Construction Fund. If such proceeds are more than sufficient for such purpose, the balance remaining shall be deposited to the credit of the Debt Service Fund, the Special Capital Reserve Fund or the Operating Fund as directed by the Green Bank. If such proceeds shall be insufficient for such purposes, the deficiency may be supplied out of moneys in the General Fund.

Section 715. State Not to Impair Obligations of Green Bank. The State does hereby pledge to and agree with the Bondholders of Bonds issued under this Indenture pursuant to the

Act, and with those parties who may enter into contracts with the Green Bank or its successor agency pursuant to the Act, that the State will not limit or alter the rights vested in the Green Bank until such Bonds, together with the interest thereon, are fully met and discharged and such contracts are fully performed on the part of the Green Bank, provided nothing contained in this Section shall preclude such limitation or alteration if and when adequate provisions shall be made by law for the protection of the Bondholders described in this Section or those entering into such contracts with the Green Bank.

## **ARTICLE VIII**

### **SUPPLEMENTAL INDENTURES**

Section 801. Supplemental Indentures Without Consent of Bondholders. Notwithstanding any other provisions of this Article VIII, the Green Bank and the Trustee may at any time or from time to time enter into a Supplemental Indenture supplementing this Indenture or any Supplemental Indenture so as to modify or amend such indentures, for one or more of the following purposes:

To add to the covenants and agreements of the Green Bank contained in this Indenture or any Supplemental Indenture, other covenants and agreements thereafter to be observed relative to the acquisition, construction, reconstruction, renovation, equipment, operation, maintenance, development or administration of any project under the Act or relative to the application, custody, use and disposition of the proceeds of the Bonds; or

To confirm, as further assurance, any pledge under and the subjection to any lien on or pledge of the Revenues created or to be created by this Indenture or a Supplemental Indenture; or

To cure any ambiguity, supply any omission, or cure or correct any defect or inconsistent provision in this Indenture; or

To grant to or confer on the Trustee for the benefit of the Bondholders any additional rights, remedies, powers, Green Bank, or security which may lawfully be granted or conferred and which are not contrary to or inconsistent with this Indenture as theretofore in effect; or

To amend any provisions of this Indenture if, prior to the execution of any such amendment there shall be delivered to the Trustee a Bond Counsel's Opinion to the effect that such amendment will not have a material adverse effect on the security, remedies or rights of the Bondholders.

Section 802. Supplemental Indentures With Consent of Bondholders.

(a) At any time or from time to time but subject to the conditions or restrictions contained in this Indenture and each Supplemental Indenture, a Supplemental Indenture may be entered into by the Green Bank and the Trustee amending or supplementing this Indenture, any Supplemental Indenture or any of the Bonds or releasing the Green Bank from any of the obligations, covenants, agreements, limitations, conditions or restrictions therein

contained. However, no such Supplemental Indenture shall be effective unless such Supplemental Indenture is approved or consented to by the Bondholders, obtained as provided in Article IX, of at least a majority in aggregate principal amount of all Outstanding Bonds affected thereby. In computing any such required percentage there shall be excluded from such consent, and from such Outstanding Bonds, any such Outstanding Bonds owned or held by or for the account of the Green Bank.

(b) Notwithstanding the provisions of paragraph (a) of this Section, except as provided in Section 803, no such modification changing any terms of redemption of Bonds, due date of principal of or interest on Bonds or making any reduction in principal or Redemption Price of and interest on any Bonds shall be made without the consent of the affected Bondholder.

(c) Notwithstanding any other provisions of this Section, no Supplemental Indenture shall be entered into by the Green Bank and the Trustee, except as provided in Section 803, reducing the percentage of consent of Bondholders required for any modification of this Indenture or any Supplemental Indenture or diminishing the pledge of the Revenues securing the Bonds.

(d) The provisions of paragraph (a) of this Section shall not be applicable to Supplemental Indentures adopted in accordance with the provisions of Section 801.

Section 803. Supplemental Indentures By Unanimous Action. Notwithstanding anything contained in the foregoing provisions of this Article, the rights and obligations of the Green Bank and of the owners of the Bonds and the terms and provisions of this Indenture, any Supplemental Indenture or the Bonds may be modified or amended in any respect upon the execution and delivery of a Supplemental Indenture by the Green Bank and the Trustee with the consent of the holders of all the Outstanding Bonds affected by such modification or amendment, such consent to be given as provided in Article IX.

Section 804. General Provisions.

(a) This Indenture shall not be modified or amended in any respect except as provided in and in accordance with and subject to the provisions of this Article and Article Nothing in this Article or Article a contained shall affect or limit the right or obligation of the Green Bank and the Trustee to make, do, execute, acknowledge or deliver any Indenture, act or other instrument pursuant to the provisions of Section 703 or the right or obligation of the Green Bank to execute and deliver to any Fiduciary any instrument which elsewhere in this Indenture it is provided shall be delivered to said Fiduciary.

(b) Any Supplemental Indenture referred to and permitted or authorized by Sections 801 and 802 may be executed and delivered by the Green Bank and the Trustee without the consent of any of the Bondholders, but shall become effective only on the conditions, to the extent and at the time provided in said Sections, respectively. The copy of every Supplemental Indenture filed with the Trustee shall be accompanied by a Bond Counsel's Opinion stating that such Supplemental Indenture has been duly and lawfully delivered in accordance with the provisions of this Indenture, is authorized or permitted by this Indenture, and is valid and binding upon the Green Bank.

(c) The Trustee is hereby authorized to enter into any Supplemental Indenture referred to and permitted or authorized by Section 801, 802 or 803 and to make all further agreements and stipulations which may be therein contained, and the Trustee, in taking such action, shall be fully protected in conclusively relying on an opinion of counsel (which may be a Bond Counsel's Opinion) that such Supplemental Indenture is authorized or permitted by the provisions of this Indenture.

(d) No Supplemental Indenture shall change or modify any of the rights or obligations of any Fiduciary without its written consent thereto.

## **ARTICLE IX**

### **AMENDMENTS**

Section 901. Consent of Bondholders. When the Green Bank and the Trustee enter into a Supplemental Indenture making a modification or amendment permitted by and requiring the consent of the Bondholders pursuant to the provisions of Section 802, such Supplemental Indenture shall take effect when and as provided in this Section. Upon the execution of such Supplemental Indenture, a copy thereof, certified by an Authorized Officer of the Green Bank, shall be filed with the Trustee for the inspection of the Bondholders affected. A copy of such Supplemental Indenture (or summary thereof) together with a request to such Bondholders for their consent thereto in form satisfactory to the Trustee, shall be mailed or caused to be mailed by the Green Bank to such Bondholders. Such Supplemental Indenture shall not be effective unless and until there shall have been filed with the Trustee the written consents of the percentages of owners of Outstanding Bonds in accordance with Section 802. Each such consent shall be effective only if accompanied by proof of ownership of the Bonds for which such consent is given. A certificate or certificates by the Trustee, which shall be placed on file, that it examined such proof and that such proof is sufficient, shall be conclusive that the consents have been given by the owners of the Bonds described in such certificate or certificates of the Trustee. Any consent shall be binding upon the owner of the Bonds giving such consent and on any subsequent owner of such Bonds (whether or not such owner has notice thereof) unless such consent is revoked in writing by the owner of such Bonds giving such consent or a subsequent owner by filing revocation with the Trustee prior to the date when the notice hereinafter in this Section provided for is first given. The fact that consent has not been revoked may likewise be proved by a certificate of the Trustee which shall be placed on file. At any time after the owners of the required percentage of Bonds shall have filed their consent to any Supplemental Indenture a notice shall be given or caused to be given to such Bondholders by the Green Bank by mailing such notice to such Bondholders (but failure to mail such notice shall not prevent such Supplemental Indenture from becoming effective and binding as herein provided). The Green Bank shall file with the Trustee, proof of giving such notice. Such notice shall state in substance that any Supplemental Indenture (which may be referred to as an indenture executed by and between the Green Bank and the Trustee on a stated date, a copy of which is on file with the Trustee) has been consented to by the owners of the required percentage of Bonds and shall be effective as provided in this Section. A record, consisting of the papers required or permitted by this Section to be filed with the Trustee, shall be proof of the matters therein stated. Upon such notice, such Supplemental Indenture making such amendment or modification shall become

effective and conclusively binding upon the Green Bank, the Trustee, and the owners of all Bonds.

Section 902. Exclusion of Bonds. Bonds owned or held by or for the account of the Green Bank shall not be deemed Outstanding Bonds for the purpose of any consent or other action or any calculation of Outstanding Bonds provided for in Article VIII, and shall not be entitled to consent or take any other action provided for in Article VIII. At the time of any consent or other action taken under Article VIII, the Green Bank shall furnish the Trustee a certificate signed by an Authorized Officer upon which the Trustee may conclusively rely, describing all Bonds so to be excluded.

Section 903. Notation on Bonds. Bonds authenticated and delivered after the effective date of any action taken as in Article VIII or this Article provided may, and, if the Trustee so determines, shall bear a notation by endorsement or otherwise in form approved by the Green Bank and the Trustee as to such action, and in that case upon demand of the holder of any Bond Outstanding at such effective date and presentation of his Bond for the purpose at the designated office of the Trustee or upon any registration of transfer or exchange of any Bond Outstanding at such effective date, suitable notation shall be made on such Bond or upon any Bond issued upon any such registration of transfer or exchange by the Trustee as to any such action. If the Green Bank or the Trustee shall so determine, new Bonds so modified as in the opinion of the Trustee and the Green Bank to conform to such action shall be prepared, authenticated and delivered, and upon demand of the holder of any Bond then Outstanding shall be exchanged for Bonds of the same Series and maturity then Outstanding, upon surrender of such Bonds with all unpaid coupons, if any, appertaining thereto.

## **ARTICLE X**

### **REMEDIES ON DEFAULT**

Section 1001. Events of Default. If one or more of the following events (in this Indenture called "Events of Default") shall occur:

(1) a default in the due and punctual payment of a Principal Installment or the Redemption Price of any Bond when and as the same shall become due and payable, whether at maturity or upon call for redemption, or otherwise; or

(2) a default in the due and punctual payment of any installment of interest on any Bond, when and as such interest installment shall become due and payable; or

(3) an event of default of the Green Bank shall occur on any Parity Indebtedness or under any documents relating to such Parity Indebtedness; or

(4) default by the Green Bank in the performance or observance of any other of its covenants, agreements or conditions in this Indenture, any Supplemental Indenture or the Bonds, and such default shall continue for a period of thirty days after the giving of written notice thereof stating that such notice is a "Notice of Default" to the

Green Bank by the Trustee or to the Green Bank and to the Trustee by the State or the holders of not less than a majority in principal amount of the Bonds Outstanding; or

(5) if the Green Bank shall (i) apply for or consent to the appointment of a receiver, trustee or liquidator of all or a substantial part of the Project; (ii) be unable, or admit in writing its inability to pay debts as they mature; (iii) file a petition, arrangement, reorganization, or the like under any insolvency or bankruptcy law, or the adjudication as a bankrupt or the making of an assignment for the satisfaction, settlement or delay of debt or the appointment of a receiver of all or any part of its properties; or (iv) take any action for the purpose of effecting any of the foregoing,

then, upon the happening and continuance of any Event of Default, the Trustee may, and upon the written request of the holders of not less than a majority in principal amount of the Bonds Outstanding the Trustee shall, in any such case, unless the principal of all the Bonds then Outstanding shall already have become due and payable, declare the principal of all the Bonds then Outstanding, and the interest accrued thereon, to be due and payable immediately, and upon any such declaration the same shall become and be immediately due and payable, anything in this Indenture or in any of the Bonds contained to the contrary notwithstanding. The right of the Trustee to make any such declaration as aforesaid, however, is subject to the condition that if, at any time after such declaration, but before the Bonds shall have matured by their terms, all overdue installments of principal and interest upon the Bonds, together with the reasonable and proper charges, expenses and liabilities of the Trustee, and all other sums then payable by the Green Bank under this Indenture (except the interest accrued since the next preceding interest date on, the Bonds due and payable solely by virtue of such declaration) shall either be paid by or for the account of the Green Bank or provision satisfactory to the Trustee shall be made for such payment, and all defaults under the Bonds or under this Indenture (other than the payment of principal and interest due and payable solely by reason of such declaration) shall be made good or be secured to the satisfaction of the Trustee or provision deemed by the Trustee to be adequate shall be made therefor, then and in every such case the holders of a majority in principal amount of the Bonds Outstanding, by written notice to the Green Bank and to the Trustee, may rescind such declaration and annul such default in its entirety, or, if the Trustee shall have acted without a direction from the holders of the Bonds as aforesaid at the time of such request, and if there shall not have been theretofore delivered to the Trustee written direction to the contrary by the holders of a majority in principal amount of the Bonds then Outstanding, then any such declaration shall ipso facto be deemed to be rescinded and any such default and its consequences shall ipso facto be deemed to be annulled, but no such rescission and annulment shall extend to or affect any subsequent default or impair or exhaust any right or power consequent thereon.

#### Section 1002. Accounting and Examination of Records After Default.

(a) The Green Bank covenants that if an Event of Default shall have happened and shall not have been remedied, the books of record and account of the Green Bank shall at all times be subject to the inspection and use of the Trustee and of its agents and attorneys.

(b) The Green Bank covenants that if an Event of Default shall happen and shall not have been remedied, the Green Bank, upon demand of the Trustee, will account, as if



they were the trustee of an express trust, for all Revenues and other moneys, securities and funds pledged or held under this Indenture for such period as shall be stated in such demand.

Section 1003. Application of Revenues and Other Moneys After Default.

(a) The Green Bank covenants that if an Event of Default shall occur and shall not have been remedied, the Green Bank, upon demand of the Trustee, shall pay over or cause to be paid over to the Trustee (i) forthwith, any moneys, securities and funds then held by the Green Bank or a Depositary in any Fund or Account established under this Indenture (other than the Rebate Fund and the Operating Fund), and (ii) as promptly as practicable after receipt thereof, the Revenues. Amounts on deposit in the Special Accounts of the Special Capital Reserve Fund shall be applied solely to the Series of Bonds for which such Special Account was established and such Bonds shall not be entitled to amounts on deposit in the Common Fund of the Special Capital Reserve Fund.

(b) During the continuance of an Event of Default, unless otherwise directed (with respect to order) by the owners of a majority in principal amount of the Bonds at the time Outstanding, the Trustee shall apply such Revenues and the income therefrom as follows and in the following order:

(1) to the payment of the reasonable and proper charges and expenses of the Trustee and any trustee for Parity Indebtedness;

(2) to the payment of the interest and principal or Redemption Price then due on the Bonds, as follows:

(i) unless the principal of all of the Bonds shall be due and payable,

First: To the payment to the persons entitled thereto of all installments of interest then due in the order of the maturity of such installments, and, if the amount available shall not be sufficient to pay in full any installment or installments maturing on the same date, then to the payment thereof ratably, according to the amounts due thereon, to the persons entitled thereto, without any discrimination or preference; and

Second: To the payment to the persons entitled thereto of the unpaid principal or Redemption Price of any Bonds which shall have become due, whether at maturity or by call for redemption, in the order of their due dates, and, if the amount available shall not be sufficient to pay in full all the Bonds due on any date, then to the payment thereof ratably, according to the amounts of principal or Redemption Price due on such date, to the persons entitled thereto, without any discrimination or preference.

(ii) If the principal of all of the Bonds shall be due and payable, to the payment of the principal and interest then due and unpaid upon the Bonds

without preference or priority of principal over interest or of interest over principal, or of any installment of interest over any other installment of interest, or of any Bond over any other Bond, ratably, according to the amounts due respectively for principal, interest and net interest on notional amounts, to the persons entitled thereto, without any discrimination or preference.

(c) if and when all overdue installments of interest on all Bonds, together with the reasonable and proper charges and expenses of the Trustee and any trustee for Parity indebtedness, and all other sums payable by the Green Bank under this Indenture, including the principal and Redemption Price of and accrued unpaid interest on all Bonds and Parity Indebtedness which shall then be payable by declaration or otherwise, shall either be paid by or for the account of the Green Bank, or provision satisfactory to the Trustee shall be made for such payment, and all defaults under this Indenture or the Bonds shall be made good or secured to the satisfaction of the Trustee or provision deemed by the Trustee to be adequate shall be made therefor, the Trustee shall pay over to the Green Bank all such Revenues then remaining unexpended in the hands of the Trustee (except Revenues deposited or pledged, or required by the terms of this Indenture to be deposited or pledged, with the Trustee), and thereupon the Green Bank and the Trustee shall be restored, respectively, to their former positions and rights under this Indenture, and all Revenues shall thereafter be applied as provided in Article V. No such payment over to the Green Bank by the Trustee or resumption of the application of Revenues as provided in Article V shall extend to or affect any subsequent default under this Indenture or impair any right consequent thereon.

#### Section 1004. Proceedings Brought by Trustee.

(a) If an Event of Default shall occur and shall not have been remedied, then and in every such case, the Trustee, by its agents and attorneys, if the Trustee shall deem it advisable, may proceed to protect and enforce its rights and the rights of the holders of the Bonds under this Indenture forthwith by a suit or suits in equity or at law, whether for the specific performance of any covenant herein contained, or in aid of the execution of any power herein granted, or for an accounting against the Green Bank as if it were the trustee of an express trust, or in the enforcement of any other legal or equitable right as the Trustee, being advised by counsel, shall deem most effectual to enforce any of its rights or to perform any of its duties under this Indenture.

(b) All rights of action under this Indenture may be enforced by the Trustee without the possession of any of the Bonds or the production thereof at the trial or other proceedings, and any such suit or proceedings instituted by the Trustee shall be brought in its name.

(c) The holders of a majority in principal amount of the Bonds at the time Outstanding, may direct by instrument in writing the time, method and place of conducting any proceeding for any remedy available to the Trustee, or exercising any trust or power conferred upon the Trustee, provided that the Trustee shall have the right to decline to follow any such direction if the Trustee shall be advised by counsel that the action or proceeding so directed may not lawfully be taken, or if the Trustee in good faith shall determine that the action or proceeding

so directed would subject the Trustee to personal liability or be unjustly prejudicial to the Bondholders not parties to such direction.

(d) Upon commencing a suit in equity or upon other commencement of judicial proceedings by the Trustee to enforce any right under this Indenture, the Trustee shall be entitled to exercise any and all rights and powers conferred in this Indenture and provided to be exercised by the Trustee upon the occurrence of an Event of Default; and, as a matter of right against the Green Bank, without notice or demand and without regard to the adequacy of the security for the Bonds, the Trustee shall, to the extent permitted by law, be entitled to the appointment of a receiver of the moneys, securities and funds then held by the Green Bank in any Fund or Account established under this Indenture (other than the Rebate Fund and the Operating Fund) and, subject to application of the Revenues, with all such powers as the court or courts making such appointment shall confer; but notwithstanding the appointment of any receiver, the Trustee shall be entitled to retain possession and control of and to collect and receive income from, any moneys, securities and funds deposited or pledged with it under this Indenture or agreed or provided to be delivered or pledged with it under this Indenture.

(e) Regardless of the happening of an Event of Default, the Trustee shall have the power to, but (unless requested in writing by the holders of a majority in principal amount of the Bonds then Outstanding, and furnished with security and indemnity satisfactory to it) shall be under no obligation to, institute and maintain such suits and proceedings as it may be advised shall be necessary or expedient to prevent any impairment of the security under this Indenture by any acts which may be unlawful or in violation of this Indenture, and such suits and proceedings as the Trustee may be advised shall be necessary or expedient to preserve or protect its interests and the interests of the Bondholders.

#### Section 1005. Restriction on Bondholders' Action.

(a) No holder of any Bond shall have any right to institute any suit, action or proceeding at law or in equity for the enforcement of any provision of this Indenture or the execution of any trust under this Indenture or for any remedy under this Indenture, unless such holder shall have previously given to the Trustee written notice of the happening of an Event of Default, as provided in this Article, and the holders of at least a majority in principal amount of the Bonds then Outstanding shall have filed a written request with the Trustee, and shall have offered it reasonable opportunity, either to exercise the powers granted in this Section or to institute such action, suit or proceeding in its own name, and unless such holders shall have offered to the Trustee adequate security and indemnity against the costs, expenses and liabilities to be incurred therein or thereby, and the Trustee shall have refused to comply with such request within a reasonable time; it being understood and intended that no one or more holders of Bonds shall have any right in any manner whatever by his or their action to affect, disturb or prejudice the pledge created by this Indenture, or to enforce any right under this Indenture, except in the manner therein provided; and that all proceedings at law or in equity to enforce any provision of this Indenture shall be instituted, had and maintained in the manner provided in this Indenture and for the equal benefit of all holders of the Outstanding Bonds.

(b) Nothing in this Indenture or in the Bonds contained shall affect or impair the obligation of the Green Bank, which is absolute and unconditional, to pay at the respective dates of maturity and places therein expressed the principal of and interest on the Bonds to the respective holders thereof from the Trust Estate, or affect or impair the right of action, which is also absolute and unconditional, of any holder to enforce such payment of this Bond. Notwithstanding the preceding sentence and anything in this Indenture or in the Bonds contained, the Green Bank shall not be required to advance any moneys derived from any source other than the Revenues and assets pledged under this Indenture for any of the purposes in this Indenture mentioned whether for the payment of the principal of or the Redemption Price, if any, or interest on the Bonds or for any other purpose of this Indenture.

Section 1006. Remedies Not Exclusive. No remedy by the terms of this Indenture conferred upon or reserved to the Trustee or the Bondholders is intended to be exclusive of any other remedy, but each and every such remedy shall be cumulative and shall be in addition to every other remedy given under this Indenture or existing at law or in equity or by statute on or after the date of adoption of this Indenture.

Section 1007. Effect of Waiver and Other Circumstances.

(a) No delay or omission of the Trustee or of any Bondholder to exercise any right or power arising upon the happening of an Event of Default shall impair any right or power or shall be construed to be a waiver of any such default or to be an acquiescence therein; and every power and remedy given by this Article to the Trustee or to the Bondholders may be exercised from time to time and as often as may be deemed expedient by the Trustee or by the Bondholders.

(b) Prior to the declaration of maturity of the Bonds as provided in Section 1201, the holders of a majority in principal amount of the Bonds at the time Outstanding, or their attorneys-in-fact duly authorized, may on behalf of the holders of all of the Bonds waive any past default under this Indenture and its consequences, except a default in the payment of interest on or principal or Redemption Price of the Bonds. No such waiver shall extend to any subsequent or other default or impair any right consequent thereon.

Section 1008. State Right to Act. With respect to any right of the Trustee to take action pursuant to this Article X of this Indenture, the Trustee or the State (acting through the office of the State Treasurer) may act, at the option of the State, so long as any Bonds are secured by a SCRF; otherwise the State shall be deemed to have given its right to act to the Trustee.

## **ARTICLE XI**

### **CONCERNING FIDUCIARIES**

Section 1101. Trustee; Appointment and Acceptance of Duties

By its execution hereof, U.S. Bank National Association shall have signified its acceptance of the duties and obligations imposed upon it by this Indenture, but only subject to the terms and conditions set forth in this Indenture.

Section 1102. Paying Agents; Appointment and Acceptance of Duties

(a) Subject to the provisions of Section 517 and Section 709, the Trustee is hereby appointed Paying Agent for the 2016 Series A Bonds. The Green Bank may appoint one or more Paying Agents for the Bonds of any Series in the Supplemental Indenture, and the Green Bank may at any time or from time to time appoint one or more other Paying Agents in the manner and subject to the conditions set forth in Section 1113 for the appointment of a successor Paying Agent. The Trustee may be appointed a Paying Agent.

(b) Each Paying Agent shall dignify its acceptance of the duties and obligations imposed upon it by this Indenture by executing and delivering to the Green Bank and to the Trustee a written acceptance thereof.

Section 1103. Responsibilities of Fiduciaries. The recitals of fact in this Indenture and in the Bonds contained shall be taken as the statements of the Green Bank and no Fiduciary assumes any responsibility for the correctness of the same. No Fiduciary makes any representations as to the validity or sufficiency of this Indenture or of any Bonds issued thereunder or in respect of the security afforded by this Indenture, and no Fiduciary shall incur any liability in respect thereof. The Trustee shall, however, be responsible for its representation contained in its certificate on the Bonds. No Fiduciary shall be under any responsibility or duty with respect to the issuance of the Bonds for value or the application of the proceeds thereof or the application of any moneys paid to the Green Bank or for any losses incurred upon the sale or redemption of any securities purchased for or held in any Fund or Account under this Indenture. No Fiduciary shall be under any responsibility or duty with respect to the application of any moneys paid to any other Fiduciary. No Fiduciary shall be liable in connection with the performance of its duties under this Indenture except for its own willful misconduct, gross negligence or default. The Trustee, prior to the occurrence of an Event of Default and after the curing of all Events of Default which may have occurred, undertakes to perform such duties and only such duties as are specifically set forth in the Indenture and no implied covenants or obligations shall be read into this Indenture against the Trustee.

Section 1104. Evidence on which Fiduciaries May Act.

(a) Each Fiduciary shall be protected in acting upon any notice, resolution, request, consent, order, certificate, report, opinion, bond, or other paper or document believed by it to be genuine, and to have been signed or presented by the proper party or parties. Each Fiduciary may consult with counsel of its selection, who may or may not be of counsel to the Green Bank, and the opinion of such counsel shall be full and complete authorization and protection in respect of any action taken or suffered by such Fiduciary under this Indenture in good faith and in accordance therewith.

(b) Whenever any Fiduciary shall deem it necessary or desirable that a matter be proved or established prior to taking or suffering any action under this Indenture, such matter (unless other evidence in respect thereof be therein specifically proscribed) may be deemed to be conclusively proved and established by a Certificate of an Authorized Representative of the Green Bank, as the case may be, and such Certificate shall be full warrant for any action taken or suffered in good faith under the provisions of this Indenture upon the faith thereof; but in its

discretion the Fiduciary may in lieu thereof accept other evidence of such fact or matter or may require such further or additional evidence as it may deem reasonable.

(c) Except as otherwise expressly provided in this Indenture, any request, order, notice or other direction required or permitted to be furnished pursuant to any provision thereof by the Green Bank to any Fiduciary shall be sufficiently executed if executed in the name of the Green Bank, as applicable, by an Authorized Representative.

Section 1105. Compensation. The Green Bank shall pay each Fiduciary from time to time such compensation as shall be agreed in writing for all services rendered under this Indenture, and also all reasonable expenses, charges, counsel fees and other disbursements, including those of its attorneys, agents, and employees, incurred in and about the performance of their powers and duties under this Indenture. To the extent permitted by law, the Green Bank further agree to indemnify and save each Fiduciary harmless against any liabilities which it may incur in the exercise and performance of its powers and duties hereunder and which are not due to its willful misconduct, gross negligence or bad faith. The provisions of this Section shall survive the termination of this Indenture.

Section 1106. Certain Permitted Acts. Any Fiduciary may become the owner of any Bonds or any other obligations of the Green Bank with the same rights it would have if it were not a Fiduciary. To the extent permitted by law, any Fiduciary may act as Depositary for, and permit any of its officers or directors to act as a member of, or in any other capacity with respect to, any committee formed to protect the rights of Bondholders or the holders of any other obligations of the Green Bank or to effect or aid in any reorganization growing out of the enforcement of the Bonds or any other obligations of the Green Bank or this Indenture, whether or not any such committee shall represent the holders of a majority in principal amount of the Bonds then Outstanding.

Section 1107. Resignation of Trustee. The Trustee may at any time resign and be discharged of the duties and obligations created by this Indenture by giving not less than sixty days' written notice to the Green Bank and publishing notice thereof, specifying the date when such resignation shall take effect, once in each week for two successive calendar weeks in an Authorized Newspaper, and such resignation shall take effect upon the day specified in such notice unless no successor Trustee shall have been appointed by the Green Bank or the Bondholders as provided in Section 1109, in which event such resignation shall take effect immediately on the appointment of such successor.

Section 1108. Removal of Trustee. The Trustee may be removed at any time by an instrument or concurrent instruments in writing, filed with the Trustee, and signed by the holders of a majority in principal amount of the Bonds then Outstanding or their attorneys-in-fact duly authorized. The Green Bank may remove the Trustee at any time, except during the existence of an Event of Default, for such cause as shall be determined in the sole discretion of the Green Bank, by filing an instrument signed by an Authorized Representative of the Green Bank; provided, however, that the diligent pursuit of its responsibilities shall not be cause for the removal of the Trustee by the Green Bank.

Section 1109. Appointment of Successor Trustee

(a) In case at any time the Trustee shall resign or shall be removed or shall become incapable of acting, or shall be adjudged a bankrupt or insolvent, or if a receiver, liquidator or conservator of the Trustee, or its property, shall be appointed, or if any public officer shall take charge or control of the Trustee, or of its property or affairs, a successor may be appointed by the holders of a majority in principal amount of the Bonds then Outstanding, by an instrument or concurrent instruments in writing signed and acknowledged by such Bondholders or by their attorneys-in-fact duly authorized and delivered to such successor Trustee, notification thereof being given to the Green Bank and the predecessor Trustee; but (unless a successor Trustee shall have been appointed by the Bondholders as aforesaid) the Green Bank by a duly executed written instrument signed by an Authorized Representative shall forthwith appoint a Trustee to fill such vacancy until a successor Trustee shall be appointed by the Bondholders as authorized in this Section. Any successor Trustee appointed by the Green Bank shall, immediately and without further act, be superseded by a Trustee appointed by the Bondholders.

(b) If in a proper case no appointment of a successor Trustee shall be made pursuant to the foregoing provisions of this Section within forty-five days after the Trustee shall have given to the Green Bank written notice as provided in Section 1107 or after a vacancy in the office of the Trustee shall have occurred by reason of its removal or its inability to act, the Trustee or the holder of any Bond may apply, at the expense of the Green Bank, to any court of competent jurisdiction to appoint a successor Trustee. Said court may thereupon, after such notice, if any, as such court may deem proper and prescribe, appoint a successor Trustee.

(c) Any Trustee appointed under the provisions of this Section in succession to the Trustee shall be a bank or trust company organized under the laws of any state or a national banking association, and having a capital and surplus aggregating at least \$50,000,000 if there be such a bank or trust company or national banking association willing and able to accept the office on reasonable and customary terms and authorized by law to perform all the duties imposed upon it by this Indenture.

Section 1110. Transfer of Rights and Property to Successor Trustee. Any successor Trustee appointed under this Indenture shall execute, acknowledge and deliver to its predecessor Trustee, and also to the Green Bank, an instrument accepting such appointment, and thereupon such successor Trustee, without any further act, deed or conveyance, shall become fully vested with all moneys, estates, properties, rights, powers, duties and obligations of such predecessor Trustee, with like effect as if originally named as Trustee; but the Trustee ceasing to act shall nevertheless, on the written request of the Green Bank, or of the successor Trustee, upon payment of its charges hereunder, execute, acknowledge and deliver such instruments of conveyance and further assurance and do such other things as may reasonably be required for more fully and certainly vesting and confirming in such successor Trustee all the right, title and interest of the predecessor Trustee in and to any property held by it under this Indenture, and shall pay over, assign and deliver to the successor Trustee any money or other property subject to the trusts and conditions herein set forth. Should any deed, conveyance or instrument in writing from the Green Bank be required by such successor Trustee for more fully and certainly vest in and confirm to such successor Trustee any such estates, rights, powers and duties, any and all such deeds, conveyances and instruments in writing shall, on request, and so far as may be authorized by law, be executed, acknowledged and delivered by the Green Bank. Any such successor Trustee shall promptly notify any Paying Agent of its appointment as Trustee.

Section 1111. Merger or Consolidation. Any company into which any Fiduciary may be merged or converted or with which it may be consolidated or any company resulting from any merger, conversion or consolidation to which it shall be a party or any company to which any Fiduciary may sell or transfer all or substantially all of its corporate trust business, provided such company shall be a bank or trust company organized under the laws of any state of the United States or a national banking association and, in the case of any successor Trustee, shall meet the requirements of paragraph (c) of Section 1109 and in the case of a successor Paying Agent, shall meet the requirements of paragraph (a) of Section 1113, and shall be authorized by law to perform all the duties imposed upon it by this Indenture, shall be the successor to such Fiduciary without the execution or filing of any paper or the performance of any further act.

Section 1112. Adoption of Authentication. In case any of the Bonds contemplated to be issued under this Indenture shall have been authenticated but not delivered, any successor Trustee may adopt the certificate of authentication of any predecessor Trustee so authenticating such Bonds and deliver such Bonds so authenticated; and in case any of the said Bonds shall not have been authenticated, any successor Trustee may authenticate such Bonds in the name of the predecessor Trustee, or in the name of the successor Trustee, and in all such cases such certificate shall have the full force which it is anywhere in said Bonds or in this Indenture provided that the certificate of the Trustee shall have.

Section 1113. Resignation or Removal of Paying Agent and Appointment of Successor.

(a) Any Paying Agent may at any time resign and be discharged of the duties and obligations created by this Indenture by giving at least sixty days' written notice to the Green Bank, the Trustee, and the other Paying Agents. Any Paying Agent may be removed at any time by an instrument filed with such Paying Agent and the Trustee and signed by the Green Bank. Any successor Paying Agent shall be appointed by the Green Bank and (subject to the requirements of Section 1102) shall be a bank or trust company organized under the laws of any state of the United States or a national banking association, having a capital and surplus aggregating at least \$50,000,000, and willing and able to accept the office on reasonable and customary terms and authorized by law to perform all the duties imposed upon it by this Indenture.

(b) In the event of the resignation or removal of any Paying Agent, such Paying Agent shall pay over, assign and deliver any moneys held by it as Paying Agent to its successor, or if there be no successor, to the Trustee. In the event that for any reason there shall be a vacancy in the office of any Paying Agent, the Trustee shall act as such Paying Agent.



## ARTICLE XII

### MISCELLANEOUS

#### Section 1201. Defeasance.

(a) If the Green Bank shall pay or cause to be paid to the holders of all Bonds then Outstanding, the Principal Installments and interest and Redemption Price, if any, to become due thereon, at the times and in the manner stipulated therein and in this Indenture, then at the option of the Green Bank, expressed in an instrument in writing signed by an Authorized Representative of each and delivered to the Trustee, the covenants, agreements and other obligations of the Green Bank to the Bondholders shall be discharged and satisfied. In such event, the Trustee shall, upon the request of the Green Bank, execute and deliver to the Green Bank all such instruments as may be desirable to evidence such discharge and satisfaction and the Fiduciaries shall pay over or deliver to the Green Bank all moneys, securities and funds held by them pursuant to this Indenture which are not required for the payment or redemption of Bonds not theretofore surrendered for such payment or redemption.

(b) Bonds for the payment or redemption of which moneys shall have been set aside and shall be held in trust by the Trustee (through deposit by the Green Bank of funds for such payment or redemption or otherwise) at the maturity or redemption date thereof shall be deemed to have been paid within the meaning and with the effect expressed in paragraph (a) of this Section. Subject to the provisions of subsection (c) of this Section, all Outstanding Bonds shall prior to the maturity or redemption date thereof be deemed to have been paid within the meaning and with the effect expressed in subsection (a) of this Section if (i) in case any of said Bonds are to be redeemed on any date prior to their maturity, the Green Bank shall have given to the Trustee irrevocable instructions accepted in writing by the Trustee to provide notice as provided in Article VI notice of redemption of such Bonds (other than Bonds which have been purchased by the Trustee at the direction of the Green Bank as hereinafter provided prior to the provision of such notice of redemption) on said date, (ii) there shall have been deposited with the Trustee either moneys in an amount which shall be sufficient, or Defeasance Obligations the principal installments of and/or the interest on which when due, without reinvestment, will provide moneys which, together with the moneys, if any, deposited with the Trustee at the same time, shall be sufficient, in the opinion of a nationally recognized firm of independent certified public accountants, to pay when due the Principal Installments or Redemption Price, if applicable, and interest due and to become due on said Bonds or prior to the redemption date or maturity date thereof, as the case may be, and (iii) in the event said Bonds are not to be redeemed within the next succeeding 60 days, the Green Bank shall have given the Trustee in form satisfactory to it irrevocable instructions to provide notice to the holders of such Bonds that the deposit required by (ii) above has been made with the Trustee and that said Bonds are deemed to have been paid in accordance with this Section 1201 and stating such maturity or redemption date upon which moneys are to be available for the payment of the Principal Installments or Redemption price, if applicable, on said Bonds (other than Bonds which have been purchase by the Trustee at the direction of the Green Bank as hereinafter provided prior to the provision of the notice of redemption referred to in clause (i) hereof). The Trustee shall, as and to the extent necessary, apply moneys held by it pursuant to this Section 1201 to the retirement of said Bonds in the manner provided in this Indenture.

The Trustee shall, if so directed by the Green Bank (x) prior to the maturity date of Bonds deemed to have been paid in accordance with this Section 1201 which are not to be redeemed prior to their maturity date or (y) prior to the provision of the notice of redemption referred to in clause (i) above with respect to any Bonds deemed to have been paid in accordance with this Section 1201 which are to be redeemed on any date prior to their maturity, apply moneys deposited with the Trustee in respect of such Bonds and redeem or sell Defeasance Obligations so deposited with the Trustee and apply the proceeds thereof to the purchase of such Bonds and the Trustee shall immediately thereafter cancel all such Bonds so purchased; provided, however that the Trustee shall receive an Accountant's Certificate showing that the moneys and Defeasance Obligations remaining on deposit with the Trustee after the purchase and cancellation of such Bonds shall be sufficient to pay when due the Principal Installment or Redemption Price, if applicable, and interest due or to become due on all Bonds, in respect of which such moneys and Defeasance Obligations are being held by the Trustee on or prior to the redemption date or maturity date thereof, as the case may be and a Bond Counsel's Opinion to the effect that such redemption or sale of such Defeasance Obligations will not adversely affect the exclusion of the interest on such Bonds from gross income for federal income tax purposes and that such redemption or sale otherwise complies with the provisions of this Indenture. The directions given by the Green Bank to the Trustee referred to in the preceding sentence shall also specify the portion, if any, of such Bonds so purchased and cancelled to be applied against the obligation of the Trustee to pay Bonds deemed paid in accordance with this Section 1201 upon their maturity date or dates and the portion, if any, of such Bonds so purchased and cancelled to be applied against the obligation of the Trustee to redeem Bonds deemed paid in accordance with this Section 1201 on any date or dates prior to their maturity. In the event that on any date as a result of any purchases and cancellations of bonds as provided in this Section 1201 the total amount of moneys and Defeasance Obligations remaining on deposit with the Trustee under this Section 1201 is in excess of the total amount which would have been required to be deposited with the Trustee on such date in respect of the remaining Bonds in order to satisfy clause (ii) of this subsection (b) of Section 1201, the Trustee shall, if requested by the Green Bank, pay the amount of such excess to the Green Bank free and clear of any lien or pledge securing said Bonds or otherwise existing under this Indenture. Except as otherwise provided in this subsection (b) of Section 1201 and subsection (c) of this Section 1201, neither Defeasance Obligations nor moneys deposited with the Trustee pursuant to this Section nor principal or interest payments on any such Defeasance Obligations shall be withdrawn or used for any purpose other than, and shall be held in trust for, the payment of the principal or Redemption Price, if applicable, and interest on said Bonds; provided that any cash received from such principal or interest payments on such Defeasance Obligations deposited with the Trustee, (A) to the extent such cash will not be required at any time for such purpose, shall be paid over to the Green Bank as received by the Trustee, free and clear of any trust, lien or pledge securing said Bonds or otherwise existing under this Indenture, and (B) to the extent such cash will be required for such purpose at a later date, shall, to the extent practicable, be reinvested at the written direction of an Authorized Representative of the Green Bank in Defeasance Obligations maturing at times and in amounts sufficient to pay when due the principal or Redemption Price, if applicable, and interest to become due on said Bonds on or prior to such redemption date or maturity date thereof, as the case may be, and interest earned from such reinvestments shall be paid over to the Green Bank, as received by the Trustee, free and clear of any lien or pledge securing said Bonds or otherwise existing under this Indenture.

(c) Anything in this Indenture to the contrary notwithstanding, any moneys held by a Fiduciary in trust for the payment and discharge of any of the Bonds which remain unclaimed for two years after the date when such Bonds have become due and payable, either at their stated maturity dates or by call for earlier redemption, if such moneys were held by the Fiduciary at such date, or for two years after the date of deposit of such moneys if deposited with the Fiduciary after the said date when such Bonds become due and payable, shall, at the written request of the Green Bank, be repaid by the Fiduciary to the Green Bank, as its absolute property and free from trust, and the Fiduciary shall thereupon be released and discharged with respect thereto and the Bondholders shall look only to the Green Bank for the payment of such Bonds.

Section 1202. Evidence of Signatures of Bondholders and Ownership of Bonds.

(a) Any request, consent, revocation of consent or other instrument which this Indenture may require or permit to be signed and executed by the Bondholders may be in one or more instruments of similar tenor, and shall be signed or executed by such Bondholders in person or by their attorneys-in-fact appointed in writing. Proof of the execution of any such instrument, or of an instrument appointing any such attorneys, shall be sufficient for any purpose of this Indenture (except as otherwise therein expressly provided) if made in any manner satisfactory to the Trustee. Proof of the holding of Bonds on any date shall be provided by the registration books of the Green Bank maintained by the Trustee

(b) Any request or consent by the owner of any Bond shall bind all future owners of such Bond and any Bond issued in exchange therefor in respect of anything done or suffered to be done by the Green Bank of any Fiduciary in accordance therewith.

Section 1203. Moneys Held for Particular Bonds. The amounts held by any Fiduciary for the payment due on any date with respect to particular Bonds shall, on and after such date and pending such payment, be set aside on its books and held in trust by it for the holders of the Bonds entitled thereto.

Section 1204. Preservation and Inspection of Documents. All documents received by any Fiduciary under the provisions of this Indenture shall be retained in its possession and shall be subject at all reasonable time to the inspection of the Green Bank, any other Fiduciary, and any Bondholder and their agents and their representative, any of whom may make copies thereof.

Section 1205. Parties Interested Herein. Nothing in this Indenture expressed or implied is intended or shall be construed to confer upon, or to give to, any person or corporation, other than the Green Bank, the Fiduciaries, and the holders of the Bonds, any right, remedy or claim under or by reason of this Indenture of any covenant, condition or stipulation thereof; and all covenants, stipulations, promises and agreements in this Indenture contained by and on behalf of the Green Bank shall be for the sole and exclusive benefit of the Green Bank, the Fiduciaries, and the holders of the Bonds.

Section 1206. No Recourse on the Bonds. No recourse shall be had for the payment of the principal of or interest on the Bonds or for any claim based thereon or on this Indenture against any member or officer of the Green Bank or any person executing the Bonds, or any employee or agent of the foregoing.

Section 1207. Successors and Assigns. Whenever in this Indenture the Green Bank is named or referred to, it shall be deemed to include its successors and assigns and all the covenants and agreements in this Indenture contained by or on behalf of the Green Bank shall bind and inure to the benefit of their respective successors and assigns whether so expressed or not.

Section 1208. Severability of Invalid Provisions. If any one or more of the covenants or agreements provided in this Indenture on the part of the Green Bank or any Fiduciary to be performed should be contrary to law, then such covenant or covenants, agreement or agreements, shall be deemed severable from the remaining covenants and agreements, and shall in no way affect the validity of the other provisions of this Indenture.

Section 1209. Payments on Saturdays, Sundays and Holidays. In any case where the date of any payment required to be made under this Indenture shall be a Saturday or a Sunday or shall be, at the place designated for such payment a legal holiday or a day on which banking institutions are Green Bank by law to close, then such payment shall not be made on such date but shall be made on the next succeeding business day not a Saturday, Sunday or a legal holiday or a day upon which banking institutions are authorized by law to close with the same effect as if made on such prior date.

Section 1210. Effective Date. This Indenture shall take effect upon its execution by the Authorized Representative of the Green Bank.

Section 1211. Notice. All notices required by this Indenture shall be sent to the Green Bank, the Trustee and to the State at the addresses below. Such addresses may be amended from time to time without any amendment to this Indenture by delivery of a notice to the other parties listed in this section.

If to the Green Bank:

Connecticut Green Bank  
845 Brook Street  
Rocky Hill, CT 06067  
Attn: Bryan Garcia, President

If to the Trustee:

U.S. Bank National Association  
Corporate Trust  
225 Asylum Street, 23<sup>rd</sup> Floor  
Hartford, CT 06103

If to the State:

Office of the Treasurer  
55 Elm Street, 6th Floor

Hartford, Connecticut 06106  
Attn: Assistant Treasurer for Debt Management

**[Remainder of page intentionally left blank]**

**SIGNATURE PAGE**

IN WITNESS WHEREOF, the President of the Connecticut Green Bank, and the Trustee, in acceptance of the trusts created hereunder, has caused this Indenture to be signed in its corporate name by its officer thereunder duly authorized, all as of the day and year first written above.

**THE CONNECTICUT GREEN BANK**

BY: \_\_\_\_\_  
Bryan Garcia  
*President*

**U.S. BANK NATIONAL ASSOCIATION**

BY: \_\_\_\_\_  
\_\_\_\_\_  
Its: \_\_\_\_\_

**EXHIBIT A**

**FORM OF DISBURSEMENT REQUEST (GENERAL)**

STATEMENT NO. \_\_\_\_\_ REQUESTING DISBURSEMENT OF FUNDS  
FROM THE CONSTRUCTION FUND UNDER THE INDENTURE OF TRUST

Project: \_\_\_\_\_  
\_\_\_\_\_

Pursuant to Section 503 of the Indenture, the undersigned Authorized Representative of the Green Bank hereby requests and authorizes U.S. Bank National Association, as Trustee to pay to the Green Bank or to the person(s) listed on Schedule A-1 attached hereto out of the moneys on deposit in the Construction Fund the aggregate sum of \$\_\_\_\_\_ to pay such person(s) or to reimburse the Green Bank, as indicated on such Schedule, for Capital Costs of the Project set forth in the Supplemental Indenture.

In connection with the foregoing, the undersigned hereby certifies that:

- (a) Each item for which disbursement is requested hereunder is properly payable out of the Construction Fund in accordance with the terms and conditions of the Indenture and none of such items has formed the basis for any disbursement heretofore made from the Construction Fund; and
- (b) This Disbursement Request and all attachments hereto, including Schedule A-1, shall be conclusive evidence of the facts and statements set forth herein and shall constitute full warrant, protection and Green Bank to the Trustee for its actions taken pursuant hereto.

Capitalized terms used herein and not otherwise shall have the respective meanings accorded such terms in the Indenture.

This \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
Authorized Representative

**SCHEDULE A-1**

**DISBURSEMENT SCHEDULE**

TO STATEMENT NO. \_\_\_\_\_ REQUESTING DISBURSEMENT OF FUNDS  
FROM CONSTRUCTION FUND PURSUANT TO SECTION 503 OF THE INDENTURE OF  
TRUST

**PAYEE**

**AMOUNT**

**PURPOSE\***

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\*If disbursement is to pay Costs of Issuance, identify specific costs to be paid.



**EXHIBIT B**  
[FORM OF BOND]