CONNECTICUT GREEN BANK Board of Directors

Draft Minutes – Regular Meeting Friday, April 28, 2017

A regular meeting of the Board of Directors of the **Connecticut Green Bank (the "Green Bank")** was held on April 28, 2017 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 9:01 a.m.

Board members participating: Bettina Bronisz, State Treasurer's Office; Betsy Crum; Norma Glover (by phone); 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"); Gina McCarthy; Matthew Ranelli; Kevin Walsh (by phone); Tom Flynn (by phone).

Staff Attending: George Bellas, Joe Buonannata, Anthony Clark, Craig Connolly, Mackey Dykes, Brian Farnen, Bryan Garcia, Ben Healey (by phone), Dale Hedman, Bert Hunter, Andrea Janecko, Matt Macunas, Chris Magalhaes, Jane Murphy, Kerry O'Neill, Cheryl Samuels, Eric Shrago, Kim Stevenson, Fiona Stewart, Rudy Sturk, Mariana Trief (by phone) and Mike Yu.

Others Attending: Henry Link, Guy West and Pat Wrice.

2. Welcome New Members to the Board of Directors

Ms. Smith welcomed Betsy Crum and Gina McCarthy to their first meeting as members of the Connecticut Green Bank's Board of Directors. Ms. Smith then presented Ms. Wrice with an Official Proclamation from Governor Malloy recognizing her service to the Board. Members of the Board and Staff shared their thoughts and well wishes with Ms. Wrice.

3. Public Comments

There were no public comments.

4. Consent Agenda

Ms. Smith provided an overview of the consent agenda, which included the minutes from the March 10, 2017 special meeting, an update on the development of environmental impact metrics, and an update on the IT vendor management policy. She called for discussion and a vote on the items in the Consent Agenda.

Upon a motion made by Mr. Walsh, seconded by Mr. Harrity, the Board members voted in favor of adopting the Consent Agenda and Resolutions 1-3 as written. Ms. McCarthy and Ms. Crum abstained from voting due to not having been present for the previous Board of Directors meeting.

Resolution #1

Approval of the minutes from the Board of Directors Meeting for March 10, 2017

Resolution #2

WHEREAS, the Connecticut Green Bank and the Connecticut Department of Energy and Environmental Protection (DEEP) working with the U.S. Environmental Protection Agency (EPA) to assess the Avoided Emissions and Generation Tool (AVERT) to estimate emission benefits resulting from clean energy deployment;

WHEREAS, DEEP and the EPA have demonstrated support for the environmental emissions methodology; and

WHEREAS, the Audit, Compliance, and Governance Committee at a meeting on April 20, 2017, reviewed and now recommend that the Board of Directors approve through the Consent Agenda the proposed Connecticut Green Bank and DEEP Evaluation Framework – Societal Perspective – Environmental Benefit Methodology documentation;

NOW, therefore be it:

RESOLVED, that the Board of Directors approves the proposed Connecticut Green Bank and DEEP Evaluation Framework – Societal Perspective – Environmental Benefit Methodology documentation to be used for reporting, communication, and other purposes as deemed necessary.

Resolution #3

RESOLVED, that the Board of Directors of the Connecticut Green Bank hereby approves the proposed Vendor Management Policy.

5. Committee Recommendations and Updates

Audit, Compliance and Governance ("ACG") Committee

Mr. Ranelli and Mr. Bellas informed the Board that an audit of the financial statements of CT Solar Lease 2 LLC – the lease affiliate of the CT Green Bank – was recently completed for the year ended December 312016 and resulted in a clean audit report. The ACG Committee proposed that the Board approve the draft audited financial statements contingent upon no further adjustments or disclosures materially changing the financial position of CT Solar Lease 2 LLC as presented.

Upon a motion made by Ms. Crum, seconded by Ms. Bronisz, the Board members voted unanimously in favor of adopting Resolution #4, regarding the audited financial statements of CT Solar Lease 2 LLC, as written.

Resolution #4

WHEREAS, Article V, Section 5.3.1(ii) of the Connecticut Green Bank ("Green Bank") Operating Procedures requires the Audit, Compliance, and the Governance Committee (the "Committee") to meet with the auditors to review the annual audit and formulation of an appropriate report and recommendations to the Board of Directors of the Green Bank (the "Board") with respect to the approval of the audit report;

NOW, therefore be it:

RESOLVED, that the Board approves the proposed draft CT Solar Lease 2 LLC audited financial statements the year ended December 31, 2016 contingent upon no further adjustments to the financial statements or additional required disclosures which would materially change the financial position of CT Solar Lease 2 LLC as presented.

Mr. Ranelli and Mr. Bellas also informed the Board that the State audit for fiscal years 2014-2015 resulted in a favorable report with three minor areas to address, and that Staff has since implemented procedures to address the areas of concern and mitigate future issues.

Attorney Farnen updated the Board that Staff continues to monitor the current legislative session for potential impact on Green Bank-related programs. Ms. McCarthy requested additional background information from Attorney Farnen on the Green Bank's legislative priorities so that she can be brought up to speed.

6. Staff Transaction Recommendations and Updates

Infrastructure Sector Program Updates and Transaction Recommendations

Update on Progress to Targets

Mr. Shrago informed the Board that the Infrastructure Sector is behind on its anaerobic digestion ("AD") program goals, despite having four projects in approval status. Mr. Hedman noted that concerns with financing have slowed the progress of some projects, though Mr. Hunter noted that an AD facility in Southington is now online, which should help pave the way for future projects. Mr. Klee concurred with Mr. Hunter, adding that a product of farm AD projects in particular is something that can eventually be land applied. Mr. Harrity highlighted that AD projects have a greater social benefit than just creating electricity.

Regarding the Residential Solar Investment Program ("RSIP"), Mr. Shrago and Mr. Hedman noted that RSIP is also behind targets because some installers have slowed installations due to cash management issues, while others are building projects outside of RSIP – keeping the renewable energy credits ("RECs") and monetizing them in Massachusetts where they are worth more. Mr. Garcia explained that Renewable Portfolio Standards are regional, so it is not uncommon for a state to pay for projects that occur outside its borders, and that Connecticut has paid for projects from other states in the past as well, including biomass projects in Maine and New Hampshire. Ms. Smith requested that Staff provide more information on Connecticut projects that are being sold into out of state markets. Mr. Hedman replied Staff can view online which Connecticut facilities are approved and classified as Class 1 in Massachusetts, adding that there are currently about 450 such projects for residential solar PV.

Residential Solar Investment Program – PBI Commitment Payout

Mr. Yu presented the performance based incentive ("PBI") commitment payout initiative to the Board. He explained that PBIs are paid out quarterly over a six-year period to third-party owners of residential solar photovoltaic systems. For systems energized from 2015 through the beginning of 2017, the total PBI obligation totals about \$20 million. Mr. Yu explained that following up on strategic discussions with the Board in January, Staff is

proposing paying out up to \$5 million for the early termination of these PBIs, to be deployed through June 30, 2017. He added that Staff has notified and received initial interest from the top-5 (by volume) third-party owners, and that the proposed \$5 million allocation was assessed to not impact any other Green Bank program. Staff is proposing a "blind auction" through which the third-party owners can provide discounted rates off the incentive to have the PBI commitment paid out in advance of across the six-year period.

Mr. Hundt noted that the initiative appears to have changed since it was presented to the Deployment Committee and suggested that Staff determine a clearer objective. Mr. Hunter replied that because the Green Bank has had success over the beginning of 2017 investing funds in other projects and programs – this proposal being but one of several discussed with the Board in January to invest available cash resources – as a result, the unrestricted cash balance fell considerably. George Bellas, VP Finance and Administration for the Green Bank confirmed Mr. Hunter's assessment. Mr. Hunter requested guidance from the Board as to how Staff should proceed. Ms. McCarthy stated that Staff should provide the Board with additional background to address the open questions.

Following further discussion, Ms. Smith recommended that Staff return this initiative to the Deployment Committee for further consideration then report back to the Board at a future – or special – meeting. A vote was not held.

Residential Solar Investment Program – Steps 11 through 13

Mr. Garcia explained to the Board that RSIP is now at about 160 megawatts ("MW") of the 300 MW target of residential solar deployment by 2020, with over 100 MW coming after the launch of the Solar Home Renewable Energy Credit ("SHREC") in January 2015. He and Ms. O'Neill also highlighted the progress of RSIP for low-to-moderate income ("LMI") census tracts. Ms. O'Neill noted that about 3,800 LMI customers have gone solar and that while PosiGen Solar is the only installer taking advantage of the LMI incentive, they are not the only installer serving the market. She added that all installers have gotten the Green Bank's message that income does not correlate with credit.

Mr. Garcia noted for the Board that Connecticut's solar incentive is lower than those of Massachusetts, New Jersey, and New York, but that we are comparable to our neighbors in terms of installed watts per capita. He said that despite businesses wanting to move to operate in states where incentives are higher, Connecticut is working to encourage installer partnerships and promote deeper energy savings – adding that Connecticut is

the only state that requires a home energy audit as part of its residential solar PV incentive program.

Ms. Smith remarked on the importance of Connecticut maintaining an appropriate balance of lowering incentives but also progressing with regards to volume and scale. Mr. Harrity noted that the general perception since the 2016 election appears to be that solar still has both economic and social value.

Mr. Garcia provided a brief update on recent PURA dockets, including the aggregation for SHRECs.

Mr. Garcia proposed Steps 11, 12 and 13 of the RSIP and LMI incentives to the Board. Regarding the LMI, Mr. Garcia highlighted that as it moves out of pilot and into a market segment, Staff continues to work with their utility counterparts to align on financing programs with their offerings. Mr. Garcia, Ms. O'Neill and Mr. Hedman also discussed the Grid Mod / Climate Change pilot under RSIP, describing the importance of making home energy improvements – like going solar alongside renewable heating and cooling and electric vehicles - and socializing the benefits with battery backup systems.

Following further discussion, Ms. Smith called for a motion to vote.

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

Resolution #6

WHEREAS, Public Act 15-194 "An Act Concerning the Encouragement of Local Economic Development and Access to Residential Renewable Energy" (the "Act") requires the Connecticut Green Bank ("Green Bank") to design and implement a Residential Solar Photovoltaic ("PV") Investment Program ("Program") that results in no more than three-hundred (300) megawatts of new residential PV installation in Connecticut before December 31, 2022 and creates a Solar Home Renewable Energy Credit ("SHREC") requiring the electric distribution companies to purchase through 15-year contracts the Renewable Energy Credits ("RECs");

WHEREAS, as of March 21, 2017, the Program has thus far resulted in nearly one-hundred and sixty megawatts of new residential PV installation application approvals and completions in Connecticut;

WHEREAS, pursuant to Conn. Gen Stat. 16-245a, a renewable portfolio standard was established that requires that Connecticut Electric Suppliers and Electric

Distribution Company Wholesale Suppliers obtain a minimum percentage of their retail load by using renewable energy;

WHEREAS, real-time revenue quality meters are included as part of solar PV systems being installed through the Program that determine the amount of clean energy production from such systems as well as the associated RECs which, in accordance with Public Act 15-194 will be sold to the Electric Distribution Companies through a master purchase agreement entered into between the Green Bank, Eversource Energy, and United Illuminating, and approved by the Public Utility Regulatory Authority;

WHEREAS, pursuant to the Act, the Green Bank has prepared a declining incentive block schedule ("Schedule") that offers direct financial incentives, in the form of the expected performance based buy down ("EPBB") and performance-based incentives ("PBI"), for the purchase or lease of qualifying residential solar photovoltaic systems, respectively, fosters the sustained orderly development of a state-based solar industry, and sets program requirements for participants, including standards for deployment of energy efficient equipment as a condition for receiving incentive funding;

WHEREAS, pursuant to the Act, to address willingness to pay discrepancies between communities, the Green Bank will continue to provide additional incentive dollars to improve the deployment of residential solar PV in low to moderate income communities.

WHEREAS, pursuant to the Act, to address sustained orderly development of a state-based solar industry, the proposed grid modernization and climate change pilot will provide incentives for solar PV to offset the additional energy load from clean energy sources and storage needs.

WHEREAS, pursuant to Section 16-245(d)(2) of the Connecticut General Statutes, a Joint Committee of the Energy Conservation Management Board and the Connecticut Green Bank was established to "examine opportunities to coordinate the programs and activities" contained in their respective plans (i.e., Conservation and Load Management Plan and Comprehensive Plan);

WHEREAS, the Global Warming Solutions Act of 2008 requires Connecticut to reduce its greenhouse gas emissions by 80 percent from 2001 levels by 2050, all the while transportation and the thermal heating and cooling of buildings representing the largest emitting sectors;

WHEREAS, residential solar PV can provide cleaner, cheaper, and more reliable sources of energy for electric vehicles and renewable thermal technologies while creating jobs and supporting local economic development;

WHEREAS, the Deployment Committee has reviewed and recommends that the Board approves of the Schedule of Incentives as set forth in Tables 5, 6, and 7 of the memo dated April 28, 2017 20.0 MW from Step 11, 20.0 MW from Step 12, and 20.0 MW from Step 13.

NOW, therefore be it:

RESOLVED, that the Board, including the Commissioner of the Department of Energy and Environmental Protection, approves of the Schedule of Incentives as set forth in Tables 5, 6 and 7 of the memo dated April 28, 2017 20.0 MW from Step 11, 20.0 MW from Step 12, and 20.0 MW from Step 13.

Commercial, Industrial and Institutional Sector Program Updates and Transaction Recommendations

Update on Progress to Targets

Mr. Shrago noted that the sector is currently slightly behind target due to longer than expected timelines for some projects. Mr. Dykes explained to the Board that the Energy on the Line program currently has 20 projects in its pipeline; however, Staff is having to become involved in projects much earlier on than in traditional C-PACE transactions.

Meriden Hydropower Project

Ms. Trief updated the Board on the Hanover Pond hydropower project in Meriden. She noted that the project has reached substantial completion and is currently operational; and, that in February 2017 the Green Bank issued its first Green Bond - \$2.9 million in Clean Renewable Energy Bonds ("CREBs") for the project. Staff is requesting an increase to the initial Board-approved budget amount of \$1.4 million to \$1.9 million from the Green Bank's balance sheet, due to the potential for an increase in project costs.

Ms. Bronisz asked if the additional funds could be bonded rather than come from the Green Bank's balance sheet. Mr. Hunter replied that the Green Bank had already reached the limit on CREBs, but has balance sheet funds available.

Note: Ms. Smith departed the meeting; Mr. Klee assumed the chairmanship.

With no further discussion, Mr. Klee called for a motion to vote.

Upon a motion made by Mr. Harrity, seconded by Ms. Bronisz, the Board members voted in favor of adopting Resolution #7, the increase in approved Green Bank balance sheet funds for the Hanover Pond Hydro Project, as written. Mr. Ranelli abstained.

Resolution #7

WHEREAS, the Green Bank Board of Directors (the "Board"), at its February 26, April 22, June 22, July 6, July 22, October 21, and December 16, 2016 meetings (the

"Prior Meetings") authorized the following elements of the development of a small hydroelectric facility at the Hanover Pond Dam on the Quinnipiac River in Meriden ("Project"):

- i) A guaranty to a third-party lender for construction financing in an amount not to exceed \$3.9 million,
- ii) Funding from the Green Bank's balance sheet in an amount not to exceed \$1,400,000,
- iii) A working capital guaranty in an amount not to exceed \$600,000 for the benefit of New England Hydropower Company ("NEHC"), the project developer, with a 24-month maturity under the Green Bank's existing working capital facility partnership with Webster Bank;
 - iv) Term financing based on:
 - Proceeding with the conditions precedent to the issuance of New Clean Renewable Energy Bonds ("CREBs") in an amount not to exceed \$3,100,000 within 405 days of the original date of authorization by the Board of Directors (that is, February 26, 2016); and,
 - ii. Securing the issuance utilizing the Special Capital Reserve Fund ("SCRF") subject to further Board, Office of the Treasurer, and Office of Policy and Management approval;
- v) A minimum debt service reserve fund required for the SCRF in an amount not to exceed \$300,000;
- vi) The creation of a Special Purpose Entity to be wholly owned by the Green Bank, to own, operate, and manage the Project, as required by CREBs regulations;
- vii) The official intent that payment of Project construction and financing costs may be paid from temporary advances of other available funds and that such advances shall be reimbursed from the proceeds of the CREBs financing; and
- viii) A loan to CGB Meriden Hydro LLC (the "Borrower"), a wholly-owned subsidiary of the Green Bank, for its purchase of the Project, as referred to and pursuant to a Loan Agreement, by and between the Green Bank and the Borrower (the "Loan Agreement");

WHEREAS, staff has determined that the Project has and may incur additional costs and that the economics of the Project are still viable, notwithstanding these additional costs, as more fully explained in a memorandum to the Board dated April 21, 2017;

NOW, therefore be it:

RESOLVED, that the Green Bank is authorized to provide funding from the Green Bank's balance sheet to the Project in an amount not to exceed \$1,900,000 (previously approved at the not to exceed amount of \$1,400,000); and

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

DEEP Microgrid Program - CT Green Bank Financing

Mr. Clark provided the Board with an overview of the DEEP Microgrid Program and presented Staff's recommendation to support the program over fiscal years 2018 and 2019 in the form of term loans not to exceed \$5 million in aggregate and supported by DEEP loan loss reserve funds.

With no further discussion, Mr. Klee called for a motion to vote.

Upon a motion made by Ms. Crum, seconded by Mr. Ranelli, the Board members voted unanimously in favor of adopting Resolution #8, the allocation of \$5 million in Green Bank funds to support the financing of DEEP Microgrid Program projects, as written.

Resolution #8

WHEREAS, in accordance with (1) the statutory mandate of the Connecticut Green Bank ("Green Bank") to foster the growth, development, and deployment of clean energy sources that serve end-use customers in the State of Connecticut, (2) the State's Comprehensive Energy Strategy ("CES") and Integrated Resources Plan ("IRP"), and (3) Green Bank's Comprehensive Plan for Fiscal Years 2017 and 2018 (the "Comprehensive Plan") in reference to the CES and IRP, Green Bank continuously aims to develop financing tools to further drive private capital investment into clean energy projects;

WHEREAS, pursuant to Green Bank's and Department of Energy and Environmental Policy (DEEP's) shared desire to support microgrids in a programmatic, efficient, and scalable effort, Green Bank Microgrid Program Funds, supported by loan loss reserve funding from DEEP, have the potential to maximize the amount of private capital leveraged into microgrid projects per limited public dollars at risk, resulting in a greater ability to develop and finance eligible projects.

WHEREAS, staff recommends support for the Green Bank Microgrid Program in the form of term loans not to exceed \$5,000,000 in aggregate and supported by DEEP Loan Loss Reserve funds:

WHEREAS, Green Bank staff recommends that the Green Bank Board of Directors ("Board") approve an allocation of \$5,000,000 (over FY2018 and FY2019 to finance microgrid projects as an expansion of the Green Bank's previous efforts to support microgrid development in the state.

NOW, therefore be it:

RESOLVED, that the Green Bank Board of Directors hereby approves the allocation not to exceed \$5,000,000 for the Microgrid Program as described in the memorandum to the Board dated April 21, 2017; and

RESOLVED, that the President of the Green Bank and any other duly authorized officer is authorized to take appropriate actions to make the term loan funding available to Microgrid Program applicants; and

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

Residential Sector Program Updates and Transaction Recommendations

Mr. Shrago explained that the Residential sector is on target to exceed its targets due to an expansion of the HVAC channel and the onboarding of Capital for Change as a lender for the Smart-E Loan product. Ms. O'Neill echoed Mr. Shrago's comment and added that both PosiGen and the Multifamily programs are on track to exceed targets as well. She noted that the Multifamily pre-development loan gives great technical assistance to underserved markets and that the benefits of these programs are now becoming more noticeable.

7. Other Business

Mr. Garcia reported to the Board that Staff, through the leadership of Matt Macunas, has built a partnership with Nissan through an unsuccessful DOE grant last fall. Through this partnership, Nissan will now offer a \$10,000 point of sale discount to 12 dealerships in the Hartford area for their Leaf product. The Green Bank is supporting this effort as a marketing partner, focused on residential solar PV customers, fleets and staff of the City of Hartford, towns of East Hartford and West Hartford, and potentially the State of Connecticut.

Mr. Garcia also highlighted that the Green Bank is a finalist for Harvard University's "Innovations in American Government Awards." The Green Bank is one of 11 finalists out of a pool of over 550 applicants, and the only finalist representing the energy, environment and transportation sector.

Lastly, Mr. Garcia noted for the Board that a report on Solarize and several reports on renewable thermal technologies are included in their information packets – examples of the great results of the Green Bank's research partnerships with Yale University. These reports will be presented at the next meeting of the Board.

Mr. Harrity informed the Board that an event recognizing Worker Memorial Day would be held later that day in Hartford to recognize fallen workers and noted that Mr. Klee is the keynote speaker.

Mr. Klee concluded the meeting by noting that there are many exciting things happening industry, and once again welcomed Ms. McCarthy and Ms. Crum to the Connecticut Green Bank's Board of Directors.

8. Adjourn: Upon a motion made by Ms. Bronisz, seconded by Mr. Harrity, the Board voted unanimously in favor of adjourning the April 28, 2017 meeting at 11:10 a.m.

Respectfully Subn	nitted,
Rob Klee, Vice Chairp	erson