

The Energy Resilience Bank (“ERB” or “Bank”) Staff held a stakeholder meeting on August 27, 2014 to review drafts of the New Jersey Energy Resilience Bank Grant and Loan Financing Program Guide (“Guide”) and the Water and Wastewater Treatment Facilities ERB Funding Guide (“Product”). Comments were solicited at the meeting during a question-and-answer period, and comments also were submitted in writing and via email to the Board of Public Utilities (“BPU”) between August 27, 2014, and September 5, 2014. All comments were reviewed and evaluated by ERB Staff. Summaries of the written comments are set forth below with responses from ERB Staff. A number of comments -- both from the stakeholder meeting and in the written submissions -- resulted in modifications to the Guide and Product.

As market demands evolve, technology advances, and the financial markets change, adjustments to the Guide and financing product documents are anticipated and stakeholder comment will continue to be a critical component to making modifications to the ERB going forward.

TRENTON BIOGAS

1. Requests recognition in the Guide that private-public partnership projects are a necessary component of the ERB program and seeks clarification of inclusion of these projects.

The ERB recognizes the role that public-private partnerships could play in the development of ERB-funded projects. ERB Staff are engaged in discussion with the US Department of Housing and Urban Development (HUD), which administers the Community Development Block Grant-Disaster Recovery (CDBG-DR) funding that capitalizes the Bank, in an attempt to gain additional project structuring flexibility that may permit the efficient integration of public-private partnerships into ERB projects.

2. Program criteria should encourage private-public partnerships that allow selection of alternatives.

Subject to the aforementioned discussion between ERB Staff and HUD regarding public-private partnerships and ERB projects, the Bank will consider whether to allow selection of alternatives as a component of its funding programs.

3. Requests recognition of the importance of projects outside of the nine most impacted counties.

In its March 5, 2013 Federal Register Notice, HUD required that no more than 20% of all CDBG-DR funds provided to New Jersey to support recovery may be used outside the nine most-impacted counties as determined by HUD. Because the State has oriented other CDBG-DR funding programs toward the nine most-impacted counties, up to 50% of ERB funds may be used for projects outside the nine most- impacted counties.

BLOOM ENERGY CORPORATION

4. Supports use of DER in resiliency.

The ERB is appreciative of your support.

5. Concern that there is no financing available for privately owned facilities that provide a public service and referenced the Federal policy on critical infrastructure and resiliency that focuses on sectors not ownership. Requests a parallel process be developed for the private sector critical facilities that are not constrained by federal requirements.

The ERB recognizes the challenges posed by the prohibition on ERB participation by privately-owned utilities and the requirement that the US Small Business Administration’s (SBA) “small business” definition must be applied to for-profit ERB applicant entities. These are conditions currently imposed by HUD, and the Bank is bound by them.

ERB Staff are engaged in discussion with HUD to try to gain flexibility on these requirements as they apply to ERB projects. Should HUD authorize additional project structuring flexibility, these requirements may be adjusted or removed in accordance with the parameters of HUD’s determination.

Any proposed project, if not eligible for financing under the ERB, can apply to New Jersey’s Clean Energy Program (“NJCEP”), either under the CHP/Fuel Cell program or the renewable program. While NJCEP approval

is not guaranteed, we encourage all entities that are not eligible for ERB funding to do so since with the federal investment tax credit and accelerated depreciation these private projects can have a significant return on the investment.

Finally, as the Bank grows and may attract private sector and other funding sources, it will continue to consider additional ways to address the needs of critical facilities. However, at this time, the Bank does not have the resources to create a parallel process for private sector critical facilities that will not implicate federal requirements.

ENERGENIC

- 6. Understands “islanding” and gave example of DCO/Energenic’s ability to serve facilities during Sandy.**
- 7. Expressed the need to leverage ERB funding with existing NJ OCE funding programs. It does not compete with the current OCE CHP program and resiliency adds costs to the main project. Programs such as this should be blended. Also argues that this will help bring private funding into the mix.**

The ERB is considering alternate approaches to funding options, such as avenues for private funding. Its primary function is to provide funding for “unmet” financing for the applicant, consistent with the federal requirements imposed on the use of CDBG-DR funds that capitalize the Bank. Additionally, applicants are encouraged to seek other possible sources of funding, including funding through State-run programs. ERB Staff may direct applicants to such potential additional funding sources as appropriate. However, federal requirements regarding the prohibition on any duplication of benefits when disbursing CDBG-DR funds create challenges for leveraging Bank funds with existing State programs, such as the OCE CHP program.

- 8. Not in support of the structuring of the 20% performance bonus grant, which eliminates eligibility for principal forgiveness in future years based on failure to meet the performance –based standards in a previous year.**

The ERB has considered stakeholder feedback that the proposed loan principal forgiveness terms are too stringent. In response, the ERB has made a minor, but important change to the Guide to allow a project that misses one or more years’ performance requirements to gain principal forgiveness in a year that it satisfies performance requirements as well as the prior year, if within the five-year principal forgiveness period.

- 9. Concern that scoring criteria should be focused more on maximizing coverage of critical facilities and not LMI; State and federal agencies (permitting, etc.) could delay projects and affect “Readiness to proceed” scores; CEEEP cost-benefit ratio should take into account “public health aspects”; “Most Impacted Community” score should attempt to reflect a more regional network goal as another storm would not necessarily impact/affect the same areas; increase the value of the “Criticality’ scoring metric.**

As a recovery program capitalized with CDBG-DR funds, the ERB’s scoring criteria must aggressively target the requirements HUD has imposed on New Jersey for the use of CDBG-DR funds in Sandy recovery. HUD requires that at least 50% of all CDBG-DR funds provided to New Jersey benefit low to moderate income (LMI) households, businesses and communities. As a result, like other CDBG-DR funded recovery programs, the Bank has prioritized LMI projects to be responsive to this federal requirement. Similarly, the federal Sandy Supplemental legislation requires the disbursement of all CDBG-DR funding before September 30, 2019, and threatens recapture of any funding not disbursed by that date. As a result, the Bank, like other Sandy recovery programs, emphasizes readiness to proceed as a relevant factor when scoring projects.

Regarding permitting, the ERB strongly recommends that submissions for such permits needed for projects not wait until an ERB application is approved or potentially even submitted. Potential applicants can meet with the New Jersey Department of Environmental Protection’s Office of Permit Coordination and Environmental Review (DEP’s ONE STOP permit coordination) for detailed information on all permits and timeframes. Additionally, ERB personnel will assist with shepherding such permits and required authorizations for approved applications.

ERB Staff understand the importance of recognizing public health benefits. However, Rutgers Center for Energy, Economics and Environmental Policy (CEEEP) DER Cost-Benefit Analysis (CBA) model was designed for evaluation of a project based on technical aspects and economics. The “Criticality” and “Most Impacted Communities” scoring metrics are a direct result of why the ERB was created and also reflect the funding mechanisms of the program. Note that the CEEEP CBA does include the value of avoided environmental impacts.

With regard to “Most Impacted Community” scoring, while facilities impacted by disasters other than Sandy are eligible for ERB funding, the additional emphasis on Sandy derived from this scoring factor is necessary to ensure compliance with federal regulations governing the use of CDBG-DR monies that fund the ERB. This includes the requirement regarding the overall percentage of CDBG-DR monies that must be expended within the nine most-impacted counties as determined by HUD and that all projects must have a “tie” to a qualifying disaster event.

10. Significant front-end costs for design, etc., are required and resiliency design/construction increases the overall project costs.

The ERB recognizes that there are significant front-end costs associated with resilient DER project development. While the ERB cannot advance funding to pay for eligible costs due to CDGB-DR requirements, it will reimburse such costs if the project is awarded ERB funding, thereby reducing their long-term burden.

11. No statements of qualifications or requirements for those responsible for maintenance and operation of the facilities over the 20 year loan term.

In order to reduce the burden of requirements on applicants, the ERB chose not to impose separate standards for those responsible for maintenance and operation of the facilities over the term of the loan. Instead, the ERB offers an incentive in the form of performance-based loan forgiveness to strongly encourage efficient operation.

CLEAN ENERGY GROUP

12. Encourages use of “credit enhancement” to leverage private capital and other financing alternatives.

The ERB recognizes the value of credit enhancement in funding resilient DER projects. For simplicity, for its first funding product for WTP and WWTPs, the Bank is providing grant, forgivable loan and amortizing loan funding. However, over time the Bank contemplates providing credit enhancements such as loan guarantees to assist projects in securing financing.

13. Concern over the limitation placed on the ERB program for “solar + storage” technology while other DER is not capped. Specifically, it must be paired with other DERs and capacity may not be larger than the “host” facility. The \$2.5 million and \$250,000 per project cap is too low and “new solar generation” is not eligible for the program.

A number of commenters raised the issue of the caps placed on off grid inverters and battery storage and that “new” solar is not eligible for the ERB financing. Storage and the off-grid inverters are a relatively new DER technology and do not have the construction and operation track record of CHP and fuel cells. This is particularly the case as it relates to resiliency and operating the storage system as an emergency backup to address critical loads. While this DER technology is commercially available, there are very few operational sites throughout the US and currently no sites in New Jersey. Since the ERB is funded with State and Federal funds it is appropriate to set reasonable limits on the development and implementation of these new DER technologies. As the State gains experience from these installations, the ERB program can revisit this issue based on that track record.

“New” solar generation or new solar panels can be installed at any ERB eligible site. However, since the BPU has transitioned the cost of solar panels from rebates to the solar renewable energy certificate (SREC) financing programs and no longer provides rebates or grants for solar panels, this requirement is consistent with BPU policy for this DER technology. While off-grid inverters and battery storage could be financed through the SREC financing program, because they are a relatively new DER technology, it is appropriate to provide some incentive to assist in developing this market. Future analysis of these costs may result in changes to the ERB program for off-grid inverters and battery storage as that market develops.

With additional analysis of the inverter battery storage costs, the ERB team has increased the off-grid inverter and battery storage caps to \$500,000 per project and \$5 million total budget.

- 14. There are no restrictions placed on services such as grid service, renewable integration, ancillary services, load shifting, etc., provided by ERB systems but these services would not be included in the cost-benefit analysis. Please clarify what is included in the CBA calculations and how resiliency benefits are factored in.**

All the assumptions, costs and benefits of the Rutgers DER CBA model are available at <http://ceeep.rutgers.edu/combined-heat-and-power-cost-benefit-analysis-materials/>. The model does address some of the PJM revenue streams and can be easily modified to include other PJM revenue streams. Applicants can add these benefits in the analysis including the value of lost load since many of these benefits are market sector and customer specific and do not readily translate in a single assumption. The Guide requires that these potential revenues be described as part of the application.

Battery storage is a relatively new market to the PJM ancillary markets for voltage and VARs regulations and is not currently included in the model. The ERB team is working with Rutgers CEEEP to add this, as well as battery costs and benefits, to the model.

- 15. Please confirm that not all connected facilities need be classified as critical under a Microgrid project and what impact such non-critical facilities would have on the CB calculations.**

ERB Staff is working with HUD to assess whether non-critical facilities that happen to be connected to a microgrid project that includes a critical facility have any impact on eligibility for ERB funding. Additional information regarding the topic raised in this comment will be forthcoming.

- 16. Please clarify that 100% of unmet needs will be awarded under the program; with the exception of the electric storage.**

For those projects that qualify, up to 100% of unmet needs may be provided by the ERB, with the total amount of unmet needs determined by the federally required duplication of benefits and unmet needs analyses. Forty percent of this funding will be provided as an incentive (20% grant and 20% performance-based loan principal forgiveness) and 60% through an amortized loan. Section 1.3 of "ERB Financing Program Guide, Funding Round 1: Water and Wastewater Treatment Facilities" (Round 1 document) has been amended to clarify these terms.

- 17. Loan forgiveness eligibility is removed if performance goals are missed in one year. Can this be adjusted for loan forgiveness as a percentage each year over a set number of years?**

To address feedback received, the ERB has made a minor, but important change to the Guide to allow a project that misses one or more years' performance to gain principal forgiveness in a year that it satisfies performance requirements as well as the prior year, if within the five-year principal forgiveness period.

- 18. Include the amount of unmet funding required and/or leveraged funds in the scoring calculation.**

ERB Staff recognize the importance of leveraging other resources in order to realize critical recovery projects and make best use of limited funding. Based on a market analysis, it has been determined that imposing leverage as a scoring criterion for this first funding round focused on water and wastewater treatment facilities would be burdensome and ineffectual. As the ERB undertakes market analyses for other critical facility sectors and rolls out additional funding products, leverage is likely to be an important scoring criterion. To emphasize the ERB's interest in leveraging, language has been amended in Sections 4.2 and 4.3.3 of the Guide.

- 19. Please clarify how credits rated below AA or unrated will be tied to the prime interest rate – what will be the spread?**

To better explain how facilities' credit ratings will be used to determine interest rate and to more appropriately distinguish between investment-grade and below investment-grade credit rating, the ERB has clarified the Guide. The 2% fixed interest rate will be offered to BBB- and above rated facilities. Please see "ERB Financing Program Guide, Funding Round 1: Water and Wastewater Treatment Facilities", Section 1.3(1)(b).

SUNEDISON

- 20. Supports ERB program and the Round One target facilities.**

The ERB is appreciative of this support.

21. Concern over the funding limitation placed on the ERB program for “solar + storage” technology at \$2.5 million and \$250,000 per project cap. This will hinder the market. Requests that solar/storage be treated neutrally and similar to the other DER technologies eligible for the ERB program. At a minimum, raise the cap to 25% of the Round One funding.

The ERB recognizes that there is limited funding to the solar and storage portion of the program. In response to this, and similar comments, the aggregate limit for solar and storage for the first round has been increased to \$5 million, with an individual project cap of \$500,000.

BILL SUCH – OCEAN COUNTY UTILITY AUTHORITY

22. Regarding LMI and Readiness to Proceed scoring criteria, is the LMI requirement mandatory under the Robert T. Stafford Disaster Relief and Emergency Assistance Act or can other criteria be considered; what is the estimated timeframe from submission of an application to “closing”?

In the March 2013 Federal Register Notice, HUD required that at least 50% of all CDBG-DR funds allocated to New Jersey for recovery be used to benefit LMI households, businesses and communities. In Substantial Amendment No. 7 to New Jersey’s CDBG-DR Action Plan, this percentage was raised to target 60% for ERB. It is for this reason that the ERB emphasizes the targeting of program funding to projects qualifying as LMI.

The federal Sandy Supplemental legislation requires the disbursement of all CDBG-DR funding before September 30, 2019, and threatens recapture of any funding not disbursed by that date. As a result, the Bank, like other Sandy recovery programs, emphasizes readiness to proceed as a relevant factor when scoring projects.

The time from application to closing will be dependent on a variety of factors and is anticipated to be different for each applicant. First and foremost, the speed with which a project will progress is highly dependent on the thoroughness of the applicant in completing the application, providing all requested attachments, and responding expediently to any requests for additional information. Other factors such as the sophistication and extent of the project will also affect this timeframe. BPU and EDA expect their review and analysis to take approximately two months with an additional two-month board approval process, once a well-prepared, complete application is submitted. During and after the review and board approval processes, the required environmental reviews will be conducted, which also will impact this timeframe. Formal funding commitment and closing can only occur after environmental reviews are completed pursuant to federal law.

Importantly, the two-year requirement that equipment must be installed and operational stated in Section 4.3.1 of the Guide begins at closing. As noted above, a number of factors will affect when closing occurs.

These timeframes should provide applicants sufficient time to complete their projects. A hypothetical approval, closing and principal forgiveness timeframe is provided below.

Hypothetical Timeline

- 2015 – Application submission, review and board consideration, and permits completed
- 2015/16 –Funding closing, work starts, equipment purchased, grant and loan disbursement for reimbursement of equipment purchase and capital purposes
- 2017 - Work continues, interest paid on any loan funding disbursed
- 2018 - Work completed (within 2 years from closing)
- 2019 (Sept 30) - HUD funding commitment expires
- 2019 - 2023 - Assessment of performance for principal forgiveness
- 202x – Loan closeout based on term established at approval

23. Is there flexibility regarding the ASHRAE Level III audit requirement? Can prior facility audits be complied and submitted in place?

There is no flexibility of the requirement of an energy audit prior to application. However, in recognition of the cost of performing an American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Level III audit, the ERB has lowered the level required to Level II. This audit may be performed by a DPMC classified energy audit professional or through the BPU’s Clean Energy Program, Local Government Energy

Audit (LGEA) resources. Information on LGEAs provided free of charge can be obtained at <http://www.njcleanenergy.com/commercial-industrial/programs/local-government-energy-audit/local-government-energy-audit>. The ERB also will accept prior audits, provided that they have been done under the LGEA program or by a DPMC classified energy audit professional. For a prior audit, the ERB will also require updated facility information to confirm that no physical changes have occurred to the buildings/structures.

24. Is the Section 4.3.1 HUD Requirement regarding equipment installation and operational status within two years in contradiction with the Readiness to Proceed scoring criteria?

The Section 4.3.1 HUD Requirement is not in direct contradiction with the Readiness to Proceed scoring criterion. As a requirement, all projects must adhere to the two-year timeframe from closing for equipment to be installed and operational, subject to applicable extensions. The Readiness to Proceed scoring criterion is not a threshold requirement, but instead is a way to prioritize projects that demonstrate the ability to be completed earlier.

25. Consideration should be given to allow other cost-benefit models beyond the CEEEP method defined in the Guide.

The ERB has determined at this time that the Rutgers CEEEP method is the best fit for NJ modeling. Other programs utilizing different models are based upon “national” information and do not necessarily reflect actual market conditions here in New Jersey. Moreover, it is important to apply a consistent methodology in order to evaluate all projects fairly.

26. Will the determination of what constitutes a facility’s “critical load” be left up to the applicant and their professional staff?

It will be the applicant's responsibility to provide this information as part of the application and ensure that it is consistent with NJDEP's guidance and regulations. The ERB, as part of the feasibility study and initial discussions with the applicant will work with the applicants to assist the applicant in developing the appropriate sizing of the facility to ensure the full critical load is addressed on a case by case basis.

27. Regarding 4.4.1 Eligible Project Costs, storage of fuel and biogas, consider modifying the statement to acknowledge that efficiency can be increased based on the fluctuations in production within the digester.

The storage of renewable biogas is not expressly prohibited by the Guide, as is the cost for the storage of fossil fuels. The overall project would have to be technically efficient and cost effective.

28. The ERB program should acknowledge redundancy for systems to allow full load requirements. The example given is installing two CHP units, each capable of carrying full electrical and thermal load in the event one unit is out of service or fails.

The ERB will consider whether redundancy of full load requirements and the installation of a typical N+1 system is appropriate, given limitations on available program funding. At this time, funding to install redundant systems is not envisioned by the ERB.

29. Avoid using ambiguous and indirect benefits, such as reduce greenhouse gas, elimination of water discharge, in the final economic evaluation of a project.

The CEEEP CBA model does provide for the overall benefit of avoided environmental costs, mainly driven by the avoided air emission costs. These environmental cost analyses are well established and all the assumptions are available on the Rutgers CEEEP website: <http://ceep.rutgers.edu/combined-heat-and-power-cost-benefit-analysis-materials/>.

SOLAR GRID STORAGE

30. Supports ERB program and its inclusion of PV with storage. PV + storage can be quickly deployed, cover critical loads indefinitely, are 100% renewable with no fuel requirements, support the current PV efforts of NJ, and provide other benefits to ratepayers, as DR and grid support services.

The ERB is appreciative of this support.

31. Concern over the funding limitation placed on the ERB program for “solar + storage” technology at \$2.5 million and \$250,000 per project cap.

The ERB recognizes that there is limited funding to the solar and storage portion of the program. In response to this, and similar, comments, the aggregate limit for solar and storage for the first round has been increased to \$5 million, with an individual project cap of \$500,000.

32. Consider criteria weighting value of a renewable fuel.

The ERB considered other scoring criteria but decided to focus the final criteria listed in the ERB Guide on key HUD requirements and desired resiliency outcomes.

33. Keep the application simple and the process transparent and provide timely funding.

The ERB will strive to keep the application process as simple as possible while requesting the necessary information to allow a complete and thorough review and determination of program eligibility, and to satisfy HUD’s regulatory requirements, which will be routinely monitored by HUD. Please note however that a Local Government Energy Audit (LGEA) performed by the Clean Energy Program or ASHRAE Level II energy audit conducted by a DPMC-classified energy audit professional will be required prior to applying to the ERB Program, though a previously-completed LGEA or ASHRAE Level II audit conducted by a DPMC classified energy auditor may be acceptable, as described above.

In addition, applicants are strongly encouraged to meet with the staff of DEP’s Office of Permit Coordination and Environmental Review (DEP’s One Stop Permit Coordination) Program to identify any required permitting for the proposed project. The applicant will be kept informed as to their status throughout the review process. Funding will be disbursed based on the applicant meeting specified milestones. Please also see the response to Question 22.

Regarding transparency, project approvals are made at public meetings, and project summaries are made public at that time. The ERB contemplates making available a running list of project approvals on its website which may aid prospective applicants to learning from the experience of other projects. Of course, any information will only be made publicly available subject to national and state security concerns being adequately addressed.

BERGEN COUNTY UTILITIES AUTHORITY

34. Suggests including caps for the other technologies similar to the “solar + storage”. Would a \$65 million project take the “solar + storage” funding away?

Solar plus storage caps were imposed because of the uncertainty of the types of projects and limitations of the current technology. The ERB currently envisions the solar/battery systems as being coupled with another DER. As such, the ERB does not envision that most projects will be solar/storage only. Additionally, there are several other funding programs in the State for solar. As to a single project absorbing all available funding for this sector, the ERB does not expect this to occur. ERB has not imposed a general per project limit to avoid placing artificial limitations on projects that may need 100% “unmet need” funding from the ERB.

35. Concern over the funding limitation placed on the ERB program for “solar + storage” technology at \$2.5 million and \$250,000 per project cap.

Please see response to the Clean Energy Group in Question 13.

36. What is the HUD LMI objective and does it apply to WWPCPs?

In the March 2013 Federal Register Notice, HUD required that at least 50% of all CDBG-DR funds allocated to New Jersey for recovery be used to benefit LMI households, businesses and communities. It is for this reason that the ERB emphasizes the targeting of program funding to projects qualifying as LMI.

The LMI National Objective has two components applicable to ERB, area benefit and employment creation, only one of which must be satisfied to meet the National Objective. For an ERB project to satisfy the LMI National Objective for area benefit, 51% or greater of its service area must cover LMI areas. (In certain instances, a lower percentage may be applied.) For employment creation, 51% of new permanent full-time equivalent (FTE) jobs must be created, not jobs resulting from project construction. For further information regarding LMI National Objectives please see the Chapter 3 link at the following web address:

http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/library/stateguide. Section 4.3.1 of the Program Guide has been amended to include this web link.

There is no exemption of the requirement that all CDBG-DR-funded projects must meet a National Objective. This includes water and wastewater treatment plants. However, an ERB project that does not meet one of the components of the LMI National Objective may satisfy this requirement by meeting the urgent need National Objective, and information about that objective is available on HUD's website. Disaster recovery-related urgent need equates to physical damage to the facility. Together, these documents the ERB goal is to provide 60% of its \$200 million of CDBG-DR funds to benefit LMI communities and individuals.

Although the ERB has latitude to add additional requirements, it is prohibited from removing these criteria from the program. Therefore, while incorporation of an LMI scoring criterion was at ERB's discretion, it is tied to federal requirements to which the State must adhere. For this reason, the LMI Objective is applicable to water and wastewater treatment facilities under the ERB Program.

37. Please define "indirect impacts" for the purposes of evaluation?

As a result of recent clarification from HUD, indirect impact may include the following two circumstances: (1) where area flooding and/or loss of power from a qualifying disaster prevented facilities from being able to treat wastewater which caused there to be a release of sewage/storm water into the surrounding waterways, causing environmental damage; and (2) where area flooding and/or loss of power from a qualifying disaster prevented facilities from operating and being able to treat drinking water. Applicants seeking an acknowledgment of an indirect impact also must demonstrate that the project is supporting revitalization of the community in which it is located.

Applicants claiming other indirect impacts may qualify, though determination will be made on a case-by-case basis, and will likely involve consultation with HUD. While there is no guarantee that they will be eligible, applicants proposing these projects are encouraged to apply.

38. It appears that the ERB only funds 40% of a project and the remaining 60% is funded by the applicant. Is that correct?

No. For publicly owned facilities, the ERB can fund a total of 100% of the applicant's unmet funding need. Please see response to Clean Energy Program in Question 16, for more information.

39. Can the 40% funded be combined with other BPU/state funding or other sources of public funding?

To clarify, for publicly owned facilities, 100% of the applicant's unmet need will be funded. Applicants may be permitted to utilize other sources of public funding, subject to the federally required duplication of benefits/unmet need analysis.

40. Is the ASHRAE Level III audit a condition of funding instead of a pre-application requirement for funding since many authorities already have efficiency and performance studies – but not to that level?

The ERB now requires an ASHRAE Level II audit. Please see response to Ocean County Utility Authority in Question 23 and Solar Grid Storage in Question 33.

41. The NJDEP requirement for SCR use with Biogas could impact annual performance goals of units due to maintenance and downtime. It could also hinder the use of anaerobic digesters.

The minimum annual performance necessary for loan forgiveness will be determined by the project's design and proposed operation. The design and operation of the equipment must comply with all applicable statutory and regulatory requirements, including air pollution control. As part of the air permitting process, DEP requires all new and modified sources of air pollution to document that the equipment is equipped and operated with advances in the art of air pollution control. Part of this analysis should include anticipated operating and maintenance of the equipment, including downtime, which in turn should be included as part of the design specification.

42. Would facilities that took in extra sludge to compensate for other facilities that were impacted by Sandy be considered for the program?

Under the current federal regulatory framework, determination of whether these types of “indirect impacts” would render an applicant eligible to receive CDBG-DR funding will need to be made on a case-by-case basis, and would likely involve direct consultation with HUD. These projects are encouraged to apply even though there is no guarantee that they will be deemed eligible.

43. Concern over how a facility is determined to have been directly or indirectly impacted by Sandy.

Please see the response to Question 37. For a facility to be deemed to have been “directly impacted” by Sandy, the applicant would need to demonstrate that the facility was physically damaged by Sandy, or another qualifying disaster. There is a minimum damage threshold of \$5,000.

44. The two-year completion requirement after ‘closing’ may be too restrictive as permitting, approvals and force majeure events may impact the projects.

Please note that the two-year requirement that equipment must be installed and operational stated in Section 4.3.1 of the Guide, begins at closing. The formal funding commitment and closing will not occur until all environmental reviews have been completed. As noted in the response to Question 22 above, a number of factors will affect when closing occurs, and as a result, closing may take place sometime from the date of application. These timeframes should provide applicants sufficient time to complete their projects.

The ERB has incorporated two possible six-month extensions of the two-year timeframe under circumstances where the project documents that significant progress has been made to date and that there were unforeseen reasons for the delay that were not known at the time of the award. The extension of the principal deferral will only be granted if the project documents that there were unforeseen reasons for the delay that were not known at the time of the award.

45. Support the inclusion of retrofit projects for existing DER systems.

The ERB is appreciative of this support.

46. Add “once fully constructed and operational” after “of any year” to the language of section 1.3 Financial Product Terms. (1.b.i.2, page 3)

Thank you for the comment. This edit has been incorporated into the Guide.

47. Concerned that 1st year performance goal failures will impact over 5 years. Suggest using several years in a rolling average of data in determining the amount of principal forgiveness.

Please see response to Energenic in Question 8.

48. The BCUA should receive the highest weight for impacted communities as it serves all impacted communities in Appendix B.

Such a determination would be made by ERB Staff at the time of the application and based on the Guide and Product evaluation process.

49. It would be beneficial to certain types of facilities, like the BCUA, to add more weight to the scoring base on impacted communities since these types of facilities may not achieve the required score of 55 or higher.

The scoring criteria for the ERB products must take into consideration the broadest needs of the types of facilities it anticipates serving. Accordingly, ERB Staff has carefully considered many factors in establishing the scoring system and does not believe at this time that this criterion should be changed.

50. It is too restrictive to deny applications that did not meet the minimum score of 55 a chance to resubmit an application in future rounds.

The text in section 1.2 of the Round 1 funding document has been modified to acknowledge that future changes to the program could affect scoring of a previously-rejected project and to acknowledge changed circumstances of a project which also could affect its score.

PASSAIC VALLEY SEWERAGE COMMISSION

51. Can the 5 year principal forgiveness performance measure be modified to address the forfeiture of forgiveness for all years following the missed goal?

Please see response to Energenic in Question 8.

52. Can the 2% fixed rate be expanded to A rated or better applicants? If not, could credit enhancements be offered at the 2% rate?

Please see response to Clean Energy Group in Question 19 regarding how credit ratings affect interest rates. As to credit enhancements, the ERB recognizes the value of credit enhancement in funding resilient DER projects, and contemplates in the future providing such facilities as loan guarantees to assist projects in securing financing.

53. The two year completion requirement after ‘closing’ may be too restrictive as permitting, approvals and design may impact the project timelines. Can special consideration be given to projects over a scope threshold such as \$10 million?

Please see response to SunEdison in Question 22. With regard to special consideration for projects over \$10 million, based on the explanation provided in Question 22, at this time, the ERB does not foresee a need to offer special consideration for projects exceeding a certain threshold.

54. Will there be time extensions granted for the completion of the ASHRAE Level III audits?

The audit requirement is now for an ASHRAE level II audit. Please see response to Ocean County Utility Authority in Question 23 for more information. The energy audit should be completed before a project submits an application, so completion of the audit does not implicate post-application timeframes in the Guide or Product.

55. What opportunities will be given for first round projects that could not be completed in the 2 year timeframe due to permitting, approvals, regulatory issues, etc.? Will they be given 2nd chance before the program is expanded to other critical facilities?

Please note that the two-year requirement that equipment must be installed and operational stated in Section 4.3.1 of the Guide, begins at closing. The formal funding commitment and closing will not occur until all environmental reviews have been completed. As noted in Question 22 above, a number of factors will affect when closing occurs, and as a result, closing may take place sometime from the date of application. These timeframes should provide applicants sufficient time to complete their projects.

Additionally, it is the goal of the ERB to develop a revolving loan fund that will provide financing for more than just one round in each market sector. In addition to the \$200 million in CDBG-DR funding, the BPU has committed \$150 million for ERB financing over the next 4 years to assist in recapitalizing the ERB funds. The ERB is also looking to provide credit enhancement as the bank develops, which will allow for stretching the initial funding for more projects, and ERB Staff are evaluating other potential funding streams to capitalize the Bank.

NJ LEAGUE OF MUNICIPALITIES

56. The proposed scoring system is appropriate.

Thank you for your comment.

57. Please clarify the language regarding unmet funding needs and any duplication of benefits analysis.

The ERB will examine all the funding sources for each project as compared to the total project cost and determine if there is an unmet funding need in accordance with HUD rules and guidance. It will also determine if there are certain types of funding sources such as State-provided funding, other federal funding and insurance which have or are supporting the recovery needs of the project to determine if the ERB funding is duplicating the benefits of any of these other sources. The ERB will reduce its funding until any duplication of benefits is eliminated and until only the unmet need is funded, subject to the other terms of the program. The ERB will fund up to 100% of this unmet need. Please see response to Clean Energy Group in Question 16 for more information.

For further information on the calculation of unmet needs consistent with federal requirements, please see HUD's Federal Register Notice dated November 16, 2011.

58. Believe that the 20 year loan based on useful life of the major assets is appropriate and they cite NJSA and municipal law to support this decision.

Thank you for your comment.

59. This will benefit municipalities with low income housing and town centers. But the league is concerned about the funds available for such tier IV projects and therefore urges the ERB to solicit applications for such projects as soon as possible.

The ERB is mindful of the concern for “running out” of funding and is doing all that it can to ensure that the intended sectors receive appropriate funding, regardless of what order funding products are offered. Notably, additional state funding, in the form of SBC funds, is also committed to the Bank, the Bank is working to garner private sector support. ERB funding also is intended to revolve so it can be used for future projects.

ENERGY MANAGEMENT, INC

60. Extension of ERB goals should be to prioritize those critical facilities which make the greatest contribution to statewide response capability.

ERB Staff agree with this comment. By selecting water and wastewater treatment facilities as the first sectors to be funded through the ERB, and by including hospitals in the next funding product, the ERB is addressing the immediate health and safety needs of a broad number of New Jersey’s residents.

61. Do projects on federal facilities qualify for ERB funds?

Due to the current regulatory framework, it is currently not clear whether ERB funding can be used to assist federal facilities to recover from a qualified disaster and make resilient DER improvements. Projects to be undertaken on such facilities will need to be considered on a case-by-case basis, with direct input from HUD.

62. Allow projects which would impact several of the key ERB target markets in a single application in the first round of funding.

Extensive economic analysis was conducted on the costs of installing the resilient DER system improvements at water and wastewater facilities in order to determine the size of the incentive needed for this sector’s product. Similar analyses will need to be conducted to determine the size of other sectors’ funding product(s).

63. Expand the list of impacted communities listed in Appendix B to include those municipalities with “major damage” sustained in other eligible disasters listed in Appendix A.

While facilities impacted by disasters other than Sandy are eligible for ERB funding, the additional emphasis on Sandy derived from this scoring factor is necessary to ensure compliance with federal regulations governing the use of CDBG-DR monies, including the requirement regarding the overall percentage of CDBG-DR monies that must be expended within the nine most-impacted counties as determined by HUD.

64. Clarify the criteria for “Most Impacted Communities” set forth in Section 1.2 No. 4 of the Scoring Criteria.

The criteria for determining the score for Most Impacted Communities is based on whether the facility serves municipalities listed in Appendix B. This appendix lists the communities that, based on FEMA data, had the largest combined number of primary homes and rental units that sustained at least \$8,000 of physical damage (i.e., “major” damage).

As stated above, while the program is open to critical facilities that were damaged in certain storms other than Sandy, targeting a scoring criterion toward Sandy damage is responsive to other requirements governing the use of CDBG-DR funds that capitalize the Bank, including the requirement that at least 80% of all CDBG-DR funds provided to New Jersey for recovery must be expended within the nine counties “most-impacted” by Sandy, as determined by HUD.

65. Clarify the eligibility of reciprocating engine or microturbine installations for which there is no steam host and thus CHP is not applicable.

If these types of units are being used solely as an emergency backup system and stand-alone then they do not qualify for the program.

MORGAN LEWIS (ON BEHALF OF EDCS)

66. EDCs believe it is important to all participants in the ERB program to understand and follow each EDC's interconnection process. Customer should submit its application early in the design phase of the project, to confirm that the proposed system will be compatible with the EDC's infrastructure.

ERB Staff agree with this comment and encourage applicants to start this process as early as possible. This coordination can be done in the early stages of the project design. Section 5.1 of the Program Guide has been amended to request that applicants meet with their EDC prior to applying to ERB for funding.

67. The value of the Program Guide could be enhanced by encouraging applicants to consult with their local EDC early in the application process.

Please see response to Question 66.

68. The EDCs are concerned about the leap taken in the Program Guide, when discussing microgrids, to using imprecise descriptions of potential configurations that may be eligible for ERB funding- but may not be consistent with existing law or regulation.

ERB Staff disagree that there is a "leap" taken in the Guide when discussing microgrids. The specific configuration of a planned DER microgrid will vary from project to project on a case-by-case basis. A microgrid can have three basic configurations as follows:

1. The DER microgrid facility itself as one building with one meter or in a campus-type setting that may be served by one meter;
2. The DER microgrid facility is a net metering configuration that is also defined as behind the meter (BTM); or
3. An advanced microgrid is where more than one building/facility with more than one meter is connected to the DER Technology.

The DER microgrid can be developed for continuous operation 24 hours a day and seven days a week or limited to supplying power when there is a grid outage. The microgrid can supply either solely electricity or solely thermal energy as steam and chilled water or both thermal energy and electricity. The Guide described a DER microgrid but not the microgrid configuration or the energy supplied by the DER microgrid. That would be the applicant's decision as the project is designed. All such projects or DER microgrid configurations and their overall energy supply, must be consistent with all applicable federal, State and local statutes and regulations.

It will be the applicant's responsibility to ensure that all permits and approvals are acquired and all applicable permit requirements are met.

69. Disclaimer should be added: *"Nothing contained in this Program Guide is intended to promote project configurations that are, or may be, inconsistent with existing law or regulation. Applicants should consult with appropriate energy and legal advisors and with their local EDC regarding the operational and legal feasibility of proposed project configurations."*

BPU and EDA as public entities are prohibited from funding projects which are illegal or violate any existing law or regulation. While this requirement was expressed in the Guide, an additional disclaimer has been added to Section 4.3.2.

70. Clarify that applicants must adhere to applicable EDC tariffs and work with EDCs on other important project components such as interconnectivity. Raised concerns regarding net metering and potential loss of revenues from incorporation of DER technologies at critical facilities.

All applicants will be required to adhere to applicable EDC tariffs and will be encouraged to contact the EDCs early in the application process to fully understand the requirements for interconnection and charges. The existing tariff and specific guidelines for each EDC must be followed by the applicant, especially on interconnection matters. Net-metering concerns must be addressed by the Board and the EDCs if concerns arise. Regarding the concern over erosion of revenue, such concerns can be brought to the attention of the BPU in the form of a rate case.

71. EDCs believe more DER behind-the-meter based would lead to further EDC revenue erosion which will eventually need to be recovered from the EDC's remaining ratepayers.

Under the proposal, these facilities will continue to pay capacity and standby charges and will therefore contribute to upkeep of the distribution system while reducing the need for additional investment in infrastructure that might otherwise be required to service this load. ERB Staff will monitor this issue on an ongoing basis.

CLEAN ENERGY STATES ALLIANCE

72. Credit enhancement would be a good way to leverage more private capital. CESA encourages the inclusion of this and other alternative financing strategies in the ERB.

Please see response to Clean Energy Group in Question 12.

73. Solar+ storage systems are limited in a number of ways. CESA sees no advantage in preemptively limiting its use, capping its eligibility for awards, and applying other restrictions that are not likewise applied to other technologies. ERB should allow the market to decide which technologies and combinations provide the best solution for each eligible facility.

Please see response to Clean Energy Group in Question 13.

74. It would be helpful if the Program Guide were more explicit about what will be included in cost effectiveness calculations, and how resiliency benefits will be determined.

The details on the assumptions in the Rutgers CEEEP DER CBA can be found at <http://ceep.rutgers.edu/combined-heat-and-power-cost-benefit-analysis-materials>. Among other things, the model provides for both the additional cost of the DER microgrid resiliency components and the benefits of the avoided cost of lost load as an input by the applicant.

75. Would a microgrid connecting two eligible critical facilities be considered the same as a microgrid connecting two eligible facilities and a third non-eligible facility?

Please see response to Clean Energy Group in Question 15.

76. Clarify in the Program Guide that awards will meet 100% of unmet need.

Please see response to Clean Energy Group in Question 16.

77. Loan forgiveness should be based on percentages and performance goals.

ERB Staff agree with this comment, and 20% of any award is provided in the form of performance-based loan forgiveness. Please see response to Clean Energy Group in Question 17.

78. It would be helpful to include the amount of unmet need, the amount of leveraged funds, or both as elements of the scoring process.

Please see response to Clean Energy Group in Question 18.

79. Clarification is needed as to what is expected to be the anticipated spread over or under prime.

Please see response to Clean Energy Group in Question 19.

NEW JERSEY FUTURE

80. Endorses the ERB program goals.

Thank you for the comment and for your support for the program and its goals.

81. The program, as designed, will not meet its goals of making energy infrastructure more resilient to future storms and other emergencies.

Thank you for this comment, but the ERB Staff disagrees. Based on extensive analysis and discussion that took place during the design of this program, this program represents an effective means of achieving the State's resiliency goals as outlined in Substantial Amendment No. 7 to New Jersey's CDBG-DR Action Plan. Moreover, ERB projects must comply with applicable federal requirements in HUD's November 2013 Federal Register

Notice, which focus on resiliency, among other things. The resilience of the actual infrastructure was, and is, being addressed by the EDCs under separate filings to the Board.

82. NJ Future does not find that the Program Guide meets the claims set forth in the State Action Plan.

Thank you for your comment, but the ERB Staff disagrees. The Guide is consistent with Substantial Amendment No. 7 to New Jersey's CDBG-DR Action Plan.

83. The Guide lacks adequate guidance for applicants on resiliency standards.

As stated in Section 4.3.2 of the Guide, the eligible project must be black start capable, islandable from the grid and should be capable of sustaining the critical load for 24 hours per day over a seven-day period.

84. The guidelines do not specify which of the four sea-level-rise scenarios in the NOAA tool to use, nor do they reconcile the NOAA projections with those of the Rutgers Climate Institute.

The NOAA tool is not intended to be regulatory but instead a tool to assist in planning and design. It is the intention of the ERB to work with the applicant to aid in their development of the most effective and efficient project design. Setting one scenario in the face of changing conditions, data and models would not be responsible. As such, the model, calculators and maps are designed to help decision makers in scenario planning, not to replace that process by referencing one exclusive set of preferences. Consistently, as stated in Substantial Amendment No. 7 to New Jersey's CDBG-DR Action Plan, in selecting projects the ERB will consider efficacy and cost-effectiveness by assessing multiple flood and sea-level rise scenarios.

NOAA, FEMA and the Army Corps, as well as other federal and state agencies that helped develop the maps and calculator recommend that the tools be considered in long-term planning related to the siting and construction of long lived critical infrastructure , but state that the use of the tools is not required. Notably, NOAA states that lower rise scenarios may be appropriate where there is a high tolerance for risk and that high risk scenarios should be considered in situations where there is little tolerance for risk. The DER technologies, location and risk profile of a project cannot be determined before a project is in the feasibility stage. At that point, the ERB will work with the applicant on the specific project.

85. The guidelines require applicants to construct projects "above FEMA's best available data for base flood elevations plus any additional requirements that may be imposed by federal, state, or local ordinance, statute or regulation," but do not specify what these might be.

The ERB will work with applicants to ensure that the most up-to-date FEMA base flood elevation maps are used in the design, construction and operation of a given project at the time of the application FEMA BFE levels may change in the future and the ERB will address those changes with the applicant at the time an application is submitted. In addition, the design requirements for any project are based on the overall life cycle of the project.

Each type of DER project will have a different overall lifecycle and therefore a different risk threshold that will dictate the overall design to specifically address this provision. The Guide has been revised to clarify this point. Among other things, as stated in Substantial Amendment No. 7 to New Jersey's CDBG-DR Action Plan, in selecting projects the State will consider efficacy and cost-effectiveness by assessing multiple flood and sea-level rise scenarios.

86. The guidelines do not specify the planning horizon to use when considering future risks from sea level rise and storm surge.

Please see response to Question 85.

87. The Program Guide offers no guidance on how an applicant should integrate the risk of flooding from storm surge with sea-level-rise projections and maps.

Please see response to Questions 84 and 85.

88. The draft Program Guide falls behind state of the art efforts to assure resilience in the face of flooding.

Please see response to Question 84 and 85.

89. Program Guide should be revised before adoption in order to:

a. Require, as an interim step, that all project applications use a minimum design standard of BFE+3 for tidally influenced areas, and of BFE+2 for non-tidally influenced areas. (Note that Base Flood Elevations are a shorthand means of integrating risks from storm surge and sea-level rise.) Define, as an interim step, “major installations” to include new power plants, including CHP plants, and require for such major installations a more detailed site-specific analysis that considers likely storm surge and a range of design elevations from BFE+3 to BFE+5.

Initially, all ERB projects must meet applicable resiliency standards set forth in HUD’s November 2013 Federal Register Notice, as incorporated in Substantial Amendment No. 7 to New Jersey’s CDBG-DR Action Plan.

The ERB will work with applicants during the feasibility stage to determine the most appropriate design standards at the time consistent with the requirements imposed by HUD. It also should be noted that this program is not a state regulatory program in which the state sets a standard and expects the applicant or permittee to meet the standard at their costs. If the facility is required to build to BFE+3 or BFE+5, that will be reflected in the total cost of the project and will be built into the overall grant, principal loan forgiveness and low interest long term loan.

b. Establish a climate hardening advisory group that would include members from the NJDEP, the Rutgers Climate Institute, the Columbia Climate Change Law Center, the New Jersey Association of Floodplain Managers and appropriate engineering professionals, to establish more robust and thorough risk assessment guidelines for applicants and to review criteria for ERB staff, both to ensure resilience and increase certainty in the application process. The State of New Jersey should incorporate the refined guidelines into the program guide by December 2014.

Thank you for your comment. However, this is beyond the scope of this program.

c. To commit to reviewing and updating the risk assessment guidelines on a five-year timeframe.

Thank you for your comment. However, this is beyond the scope of this program. The ERB will continue to evaluate the available data to update the Guide as needed. As noted above in Question 89a, it is in the best interest of the program to ensure that facilities operate over the long term.

SHORELINE ENERGY ADVISORS, LLC

90. If resiliency is the primary objective, and funds for the program are limited, a natural gas fueled reciprocating engine or combustion turbine, with storable liquid fuel such as diesel or propane, is the simplest, cheapest and certainly the most commercially proven alternative available to achieve those objectives.

Thank you for the comment. However, the goal of the ERB is to utilize renewable and/or efficient generation to support resilience and sustainability. Backup generators are specifically not included under the program guidelines. Such resources may be available through other State or local programs.

91. Although the environmental aspects of these alternatives are valuable policy objectives, we would question whether they should be included in this program, whose stated objective seems to be fail-safe power at all times for facilities that are deemed to be critical to the public good.

As stated above, the goal of the ERB is to utilize renewable generation to support resilience and sustainability. The criteria are also responsive to the various federal regulations and requirements governing CDBG-DR funding, and coincide with the State’s Energy Master Plan.

92. The program seems to be silent on whether the infrastructure installed under the program is to cover power needs 24/7/365 or only a component of loads.

As stated in General Requirements of the Guide, the eligible projects must be capable of sustaining “critical load” for 24 hours per day over a seven day period. It will be the applicant's responsibility to provide this information as part of the application and ensure that it is consistent with NJDEP's guidance and regulations. The ERB, as part of the feasibility study and initial discussions with the applicant will work with the applicants to assist the applicant in developing the appropriate sizing of the facility to ensure the full critical load is addressed on a case by case basis..

93. May want to consider ways of lowering the “capacity” component of these plants, perhaps by using excess electric generating capacity to service related non-critical loads which can be curtailed in periods of emergency.

The capacity requirements under the program speak to maintaining critical load, but do not limit the capacity of the new equipment to only this function, with the exception of the solar + storage installations. The applicant will determine the capacity requirements which will be reviewed by ERB Staff.

94. Should generation assets be included in the program at all or should dollars from the program be limited to distribution related investments to provide islanding and black start.

The goal of the ERB is to foster DER in the form of renewable generation alternatives that would sustain critical facilities during an extended outage or emergency event, as was the case in Superstorm Sandy. The program focus on islanding and black-start furthers this goal.

95. If resiliency and speed to development are objectives of the program, the EDA and BPU may want to consider offering priority to projects which provide the sought after level of resiliency without having to make investment in generation.

The primary objective of the ERB is to foster DER in the form of renewable and/ or efficient generation alternatives that would sustain critical facilities during an extended outage or emergency event, as was the case in Superstorm Sandy.

96. The EDA and BPU should reconsider its discouragement of storable fuel, perhaps accepting some percentage of generation as diesel or propane.

Thank you for the comment. However, diesel and propane generation sources in the form of emergency backup are not eligible under this program at this time.

97. ERB should reconsider the definition of facilities that are deemed to be critical, particularly those dealing with the colleges and universities or multi-family housing unless those facilities can truly be used as emergency shelters.

While the priority and consideration of facilities targeted under this program are always under consideration, based on extensive market analysis, it is the view of ERB Staff that the current listing of eligible facilities is a reasonable starting point and follows the goals and objectives of the program.

TOWNSHIP OF MIDDLETOWN SEWERAGE AUTHORITY

98. It is the Authority's understanding that the BPU/utility companies prohibit interconnections between bio-gas generated from a wastewater digester and natural gas piping. Has the Energy Resiliency Bank worked with the BPU to address this?

Yes, the ERB, in conjunction with both BPU and NJEDA, continues to work to seek out innovative solutions to the various regulatory challenges that may potentially impact some ERB applicants.

99. Air permitting of a co-gen system through NJDEP is generally onerous and time consuming. In consideration of ERB project deadlines and possibility of losing funds, does the ERB have any indication from DEP about streamlining the permitting process or making it more compatible with ERB goals?

DEP is working to coordinate expeditious permit review for the ERB. Currently, there is a general permit for CHP technology less than or equal to 65 MMBTU/hr combusting gaseous or liquid fuels that can be obtained online.

Further, there is nothing that precludes a potential ERB customer from submitting an air permit application or having an air permit pre-application meeting with DEP's ONE STOP permit coordination office prior to submitting an ERB application. The timeframe for design, construction and installation including acquisition of all permits will be part of the evaluation to finance a project.

100. Section 1.3, Part 1.b(i) provides 20% principal forgiveness for projects that meet performance goals over a five year period. How will the goals be developed for a given project?

The performance for each project will be based on the design submitted and the project that is approved for financing by the ERB.

101. Other State financing programs (i.e. NJ Environmental Infrastructure Trust) have provided non-performance

based grants/principal forgiveness for projects. Although the grant and principal forgiveness are each proposed to be 20%, the grant has greater value than principal forgiveness. Principal forgiveness conditional on performance creates uncertainty on the Applicant's end.

It is important that the projects financed with state and federal funds actually perform and operate to the level committed to in the applicant's design. This principal forgiveness financing structure is similar to a number of BPU performance-based incentive programs.

102. Can ERB financing/grants be used in combination with other financing/grant programs such as the NJ Environmental Infrastructure Trust, FEMA Hazard Mitigation Grant Program and NJ Clean Energy Program?

The NJBPU has approved the recapitalization of the ERB with societal benefits charge (SBC) Clean Energy Trust Funds of up to \$150 million over four years, in accordance with statutory requirements. Since the BPU funds will be used to incentivize combined heat and power (CHP), fuel cells (FC) and storage projects the NJBPU Clean Energy Program CHP/FC, Renewable Energy Incentive Program (REIP) for biogas and storage are not available to be combined with the ERB grant and loan since in some cases the NJBPU SBC Clean Energy Trust funds may be the majority of funds in a project.

Other NJBPU Clean Energy program rebates for energy efficiency including the Local Government Energy Audit, Direct Install, Pay for Performance, Large Energy Users Program or Smart Start can be combined with the ERB grants and loan. The ERB strongly encourages any potential facility to implement the maximum amount of energy efficiency. In addition, the applicant may decide to combine the ERB grants and loan with an Energy Saving Investment Program (ESIP) financing for the larger energy efficiency projects at a facility.

The grants and financing from the NJ Environmental Infrastructure Trust or FEMA Hazard Mitigation Grant Program may be available on a case-by-case basis depending on their uses within a project. It should be noted that the HUD ERB funds are available for the unmet needs of a projects and the availability of other funds may reduce the HUD financing portion of a project pursuant to the federally required duplication of benefits analysis.

103. If a proposed bio-gas fueled co-gen system can generate 50%-75% of a facility's critical load, can a fossil fueled emergency generator be used to generate the remaining critical load and address ERB's requirement for a system that provides full resiliency?

Yes, but emergency standby or back-up generator would not be part of the ERB program and would not be available to receive any grant or loan from the ERB. Nevertheless, such standby or back-up generation could be used to calculate the requirement to supply all critical load for a seven-day period.

STANDARD SOLAR

104. I am curious if some clarification could be made about solar PV systems. If I understood some points correctly, it seems that solar PV is an eligible technology for the funding program but only the microgrid-specific components would be eligible for funding. Exactly what components/equipment and scopes of installation would be eligible for this program? My understanding so far, although I need to read the program guide closely is the following:

Funded: materials and labor related to microgrid capable inverters, battery storage system, battery management system, SCADA system, critical load panels, interconnection and integration of microgrid system.

Not Funded: materials and labor related to solar panels, racking structure, sub-array combiner boxes

Please see response to Clean Energy Group in Question 13 and the components that are eligible for the ERB grant/loan under section 4.4.1 Eligible Project Costs.

105. What is the reason for parsing out only the micro-grid components of solar PV systems for funds? Is it due to other funding opportunities available to solar such as SRECs, ITC, accelerated depreciation that are not available to other technologies? Please let me know if I am misunderstanding this program or any of the details. I am also unclear about overall project costs such as permitting, site work, civil engineering work,

construction mobilization costs. Would these need to be separated as well so that only the proportion of those costs related to micro-grid components would be funded?

Please see response to Clean Energy Group in Question 13 and the components that are eligible for the ERB grant and loan under section 4.4.1 Eligible Project Costs.

HACKENSACK UMC AT PASCACK VALLEY

106. Can you tell me what defines a small business? We are interested in participating in this initiative but I am not sure if we are eligible as we are a for profit institution.

The definition of a "small business" is governed by the US Small Business Administration (SBA) through a detailed size standard using the North American Industrial Classification System (NAICS), average three-year annual receipts and/or number of employees. To find the standard applicable to a particular facility by its NAICS, and other information regarding the small business definition, the applicant should visit the following webpage on the SBA website, <http://www.sba.gov/content/small-business-size-standards>. Section 4.3.1 of the Program Guide has been amended to provide this information.

ATLANTIC CITY MUNICIPAL UTILITY AUTHORITY

107. We are proceeding with a project that wishes to apply for ERB support for battery storage and inverter components to enable a solar array to "blackstart." Can our project receive a waiver of the energy audit requirement to apply for these ancillary components?

No, ensuring that applicant facilities are fully energy efficient is an important component of providing financing through the ERB.

ONFORCE SOLAR

108. While I applaud the mission of the ERB, it seems that the inability of facilities to gain funding for PV components as part of an islanding power production system (PV + battery backup) is very restrictive. This term restricts the PV/battery backup solution to only those facilities which currently have solar PV.

The ERB program requirements do not restrict the grant and loan to facilities that currently have solar. A facility can install a new solar system financed through other means which could include the New Jersey SREC financing program. The ERB would provide a grant and loan for that portion of the solar projects that includes the off-grid inverter and battery storage consistent with the cost categories listed in Section 4.4.1 Eligible Project Costs.

109. Can you explain the reasoning behind this ruling?

Please see response to Clean Energy Group in Question 13.

110. Also, what if any alternatives did the ERB team discuss for those facilities which want to combine solar with battery backup, but do not currently have a PV system in place? – Would the answer be a separate agreement for a PV PPA with the facility coupled with ERB funding for the battery/microgrid components?

There is an existing financing system for PV. The ERB would fund the incremental additional cost (which is more costly) of the resiliency components.

CONCORD ENGINEERING

111. The Energy Resiliency Bank should focus on the total financial need of the host site for developing resilient power. The proposed structure does address the single largest obstacle that projects face by offering not just a grant or forgivable loan but the balance of the necessary financing. The proposed 20 year term and 2% financing will enable projects to achieve positive cash flow from the beginning of commercial operation and through the life of the project.

Thank you for your comment. In addition, the ERB wishes to clarify that the referenced term is the useful life of the majority of assets up to 20 years, and a higher interest rate for projects that either have a lower bond rating or are unrated.

112. We would recommend that the ERB provide 100% grants to upgrade facilities existing onsite generation to

meet resiliency islanding and black start capabilities. This would be equitable considering that those facilities have already made the investment in their plants for onsite generation. These projects can be in the \$3 to \$30 million dollar cost range which could rapidly deplete the available funds.

Thank you for the comment, but the ERB has decided to develop a revolving loan structure that provides for more use of these limited funds. A simple grant program would be limited in scope and effect and not meet the goals set forth in Substantial Amendment No. 7 to New Jersey's CDBG-DR Action Plan.

113. Similarly the potential to coordinate with the Environmental Infrastructure Trust (EIT) funds could also expand the reach of the ERB. In the case of the EIT the ERB could provide grant and forgivable loans and use the EIT to provide the balance of project funding. The EIT itself may need modest support if it would be necessary to buy down their interest rate to be equal to that offered by the ERB.

As noted in the Guide, the ERB will closely coordinate with EIT in evaluating projects. Where the project scope goes beyond ERB eligible costs, the project may consider whether to pursue EIT-only funding or a combination of EIT and ERB funding.

114. Water treatment facilities typically have no significant thermal energy needs so excluding distributed generation makes it unlikely they will be able to meet the efficiency requirement which then limits them to storage and possibly fuel cells. In these cases natural gas I.C. engines with emissions controls and linked to PJM DR can be economically attractive and still improve overall efficiency as they would only operate when the grid is on peak and suffering higher than normal transmission losses 10-20% on top of running the most inefficient peaking units.

The ERB will continue to review this issue, but the current program is for CHP, fuel cell and battery storage. While resiliency is the major objective of the ERB, the provision for a backup or standby generator is a requirement of an applicant's DEP permits, and the ERB will not be funding the implementation of permit requirements. The resiliency that ERB projects will be designed to achieve exceeds the requirements set forth in the DEP permits.

115. Regarding storage we would recommend that this include a requirement for sufficient MWh to operate the facility for sufficient time to contribute to real resiliency. In most cases to approach enough MWh to be significant would be enormously costly. If instead the storage project could be defined to provide limited MWh but would coordinate with onsite generation it would enable the site PV to contribute power without being disruptive to operating stability and thereby extend the fuel resources needed to operate in the event of a power failure. This would require more sophisticated controls but provide a significant benefit. Allowing the necessary controls and integration to be included in the ERB funded project would enable the adoption of this technology.

The Guide provides for storage systems to be combined with other backup or standby generation. It is also recognized that just relying on battery storage for the facility's full resiliency requirement would be exceedingly cost prohibitive at present. In addition it is a relatively new technology which is why the ERB has established a reasonable per project cap and total budget.

116. To enable multi user applications the BPU should adopt rules that define the provision of emergency power as being exempt from utility franchise restrictions and allowing a direct wire connection from an onsite generator to nearby critical facilities. This would need to include appropriate safeguards similar to emergency generator transfer trip devices to prevent back feeding power onto utility lines which would be a safety hazard.

The issues raised by this comment are beyond the scope of the ERB Guide and Product; further, the rules recommended by the commenter may be outside the authority granted to the Board. Staff will recommend that the Board direct staff to initiate a stakeholder process on issues related to the provision of emergency power, including power to critical facilities, and report back to the Board on whether statutory and/or regulatory changes are necessary and, if so, with recommended statutory and/or regulatory provisions.

NY/NJ BAYKEEPER

117. The plan briefly states on pages 10 and 13 that the facility must include an evaluation of its vulnerabilities to

sea level rise and suggests the use of the NOAA sea level rise tool. This requirement should be more highly emphasized and must be enforced.

Thank you for the comment, but with regard to the emphasis of sea level rise considerations in the Guide, in the view of ERB Staff the Guide, as worded, is sufficient. Sea Level Rise (SLR) and Storm Surge (SS) components are incorporated into the Guide in two places, Sections 4.1 ERB Program & Eligibility Requirements and 4.3.1 HUD Requirements. Section 4.1 states that the risks of SLR should be addressed at a project's design and feasibility stage. Section 4.3.1 sets forth that projects must be designed to be appropriately resilient to potential flooding and SS.

With regard to the enforcement of measures to mitigate sea level rise, all projects must conform to the FEMA requirements in place at the time ERB projects are undertaken. However, the Guide recognizes that flood elevation maps and corresponding construction heights have been in a state of fluctuation following Superstorm Sandy. As such, the ERB directs applicants on appropriate project design. The program also balances the uncertainty in this field by providing operational flexibility so that the program and applicants can adjust to potential, future changes to flood, sea level rise, storm surge and construction requirements issued by federal, state or local authorities.

118. Also, the program should include more detailed requirements such as the level of sea level rise evaluated and the inclusion of storm surge analysis along with sea level rise. The applicant should be required to evaluate their vulnerability at the level of sea rise anticipated for the entire life of the facility. In addition to the NOAA sea level rise tool, NJ Flood Mapper should also be recommended as it includes storm surge impact predictions (<http://njfloodmapper.org/>).

Please see response to New Jersey Future in Questions 84 and 85.

119. The ERB would benefit from creating a data sharing site where prospective applicants could share information on what has and hasn't worked for them. This site should showcase innovative technologies, such as the biogas powered generators used by Bergen County Utilities Authority. In this way best practices can be promoted and mistakes that were made in the past can be avoided.

Project approvals are made at public meetings, and accordingly project summaries are made public at that time. The ERB contemplates making available a running list of project approvals on its website which may aid prospective applicants to learning from the experience of other projects. Of course, any information will only be made publicly available subject to national and state security concerns being adequately addressed.

Additionally, ERB Staff plan to provide significant technical assistance to program applicants, and expect that that technical assistance will also be an important mechanism in identifying and utilizing best practices.