



STATE OF NEW JERSEY  
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[www.nj.gov/bpu/](http://www.nj.gov/bpu/)

MISCELLANEOUS

IN THE MATTER OF THE NEW JERSEY ENERGY RESILIENCE BANK – PROGRAM GUIDE, CHALLENGE PROCESS AND BUDGET EXTENSION	)	PRESENTATION OF CHALLENGE PROCESS, BUDGET FOR APPROVAL, REVISIONS
	)	DOCKET NO. QO14060626
IN THE MATTER OF THE NEW JERSEY ENERGY RESILIENCE BANK – WATER AND WASTEWATER TREATMENT FACILITIES FINANCIAL PRODUCT	)	REVISION
	)	DOCKET NO. QO14091018

**Party of Record:**

**Michele Brown, Chief Executive Officer, New Jersey Economic Development Authority**

**BY THE BOARD:**

This Order memorializes action taken by the New Jersey Board of Public Utilities ("Board" or "BPU") at its October 22, 2014 public meeting where the Board, pursuant to the Subrecipient Agreement ("SRA") entered into with the New Jersey Economic Development Authority ("EDA") in August 2014, adopted the New Jersey Energy Resilience Bank ("ERB", "Bank" or "Program") second level review process ("Challenge"), the 2014-2015 budget for the ERB program ("Budget"), the facility/entity application process ("Application"), additional comments and responses from the August 27, 2014 stakeholder meeting that were not addressed, revisions to the Guide and Product made after approval by the Board which are part of the documents approved by the EDA Board on October 14, 2014, and the initiation of a stakeholder process regarding emergency power and utility franchise restrictions.

## **Background and Procedural History**

In the aftermath of Superstorm Sandy, the federal government issued a disaster declaration for the State that enabled New Jersey individuals and certain entities to access specified federal programs. The federal government also enacted the Disaster Relief Appropriations Act of 2013 on January 29, 2013. The law appropriated additional funding through the Community Development Block Grant Disaster Recovery ("CDBG-DR") program for communities that experienced natural disasters during 2011, 2012 or 2013. On May 30, 2014, Housing and Urban Development ("HUD") approved Amendment Number Seven to the Action Plan, including funding for the New Jersey ERB. Amendment Number Seven to the Action Plan outlined two main goals for the ERB: to provide financial and technical assistance for individual projects that will enhance resiliency and to further develop a market that would encourage additional investments in energy resilience projects. Discussions with Board and EDA Staff, with input from the Department of Community Affairs and the Governor's Office of Recovery and Rebuilding, culminated in the development and execution of a Subrecipient Agreement between EDA and BPU, which sets forth the respective duties and responsibilities of each agency in connection with the joint development and implementation of the ERB. The BPU and the EDA approved the Subrecipient Agreement on August 18, 2014 and August 19, 2014, respectively.

At its September 30, 2014 meeting, the Board adopted the New Jersey Energy Resilience Bank Grant and Loan Financing Program Guide ("Guide") and Financing Program ("Product") for the Water and Waste Water Treatment Facilities ("WWWWTF") sector.

At the September 30, 2014 meeting, the Board additionally directed Staff to present the Challenge process required under the SRA, the ERB Budget as required under the SRA and the Application for entities applying to the ERB in the WWWTF sector.

## **Challenge Process**

The Challenge, or second review process, has been developed in the event that an application is deemed ineligible during one or both of the technical or financial reviews. This process affords the applicant an opportunity to contest an initial determination by ERB staff with an additional review of the merits of an application by an impartial staff member. Upon completion of the Challenge, the draft document was posted to the BPU website on October 7, 2014. Stakeholders were invited to comment on the Challenge by close of business on October 10, 2014. The notice was also emailed to a large and varied assortment of relevant NJCEP list serves including the Energy Efficiency Committee, the Renewable Energy Committee, the Combined Heat and Power ("CHP") / Fuel Cell Work Group, the Biopower Work Group and the Storage Work Group. Stakeholders were instructed to submit all questions and comments on the Challenge through the BPU comment email address. There were no written comments received from stakeholders.

Upon completion of the comment/response period the Challenge was finalized by ERB Staff. The proposed Challenge is attached to this Order as Exhibit A. A summary of the Challenge's contents is as follows:

ERB Staff will be in continued contact with the applicant during review of an application from the technical or financial aspects. If during the review process, ERB Staff determines that the application does not meet the ERB program requirements, the applicant will be notified and can withdraw the application. If the applicant disagrees with the ERB Staff assessment, which would be submitted in writing, the applicant can request a formal letter summarizing

the reasons for such a conclusion by ERB Staff. If the Applicant is still not satisfied, they have the option to file a formal challenge of the findings. The Challenge by an applicant will be directed to the EDA or BPU based on the anticipated project funding source and whether the assessment of ineligibility was based on the financial or technical review respectively. A challenge to the technical review must be submitted by the applicant within 30 days of the date of the explanatory letter. In the event of a challenge to the technical review, the Board President will appoint a BPU employee as the hearing officer who will perform a review of the record and consult with technical experts. The hearing officer will then submit their findings to the applicant and ERB technical staff. This report of findings will be advisory only and ERB technical staff will be required to notify the applicant if the hearing officer's report will be accepted or rejected. ERB technical staff will then either continue the review of the application or present their final determination to the Board. For a Challenge to the financial review, the CEO of the NJEDA will designate a hearing officer who will perform a review of the record. The hearing officer will issue a written report of their findings and be advisory in nature. The NJEDA CEO or equivalent officer may also include a recommendation to the report. The applicant may contact the hearing officer to discuss the report and findings. The NJEDA Board shall consider the hearing offer report, recommendation by the CEO or equivalent officer and comments from the applicant and then issue a final decision on the challenge. Decisions by either Board shall be appealable to the Superior Court, Appellate Division.

### **Budget**

The SRA requires the Board and EDA to jointly develop an annual budget and to determine the use of Program income as part of that budget. Specifically, Board Staff was required to submit the budget for the first year (2014/2015) along with the Program Guide and Product. As ERB staffing and planning were still in progress at the time of the adoption of the Guide and Product, Staff requested, and was granted, an extension of the requirement until the October 22, 2014 Board meeting. The Budget is attached to this Order as Exhibit B. The purpose of the Budget is to provide the Board with the intended costs, but internally and for the overall program for review and approval. A summary of the Budget's contents is as follows:

- The Overall ERB budget for the 2014/2015 year is \$25,229,255
- The internal BPU budget for the 2014/2015 year is \$578,995
- The internal EDA budget for the 2014/2015 year is \$619,048
- Contractor budget for the 2014/2015 year is \$3,703,062<sup>1</sup>
- Ancillary budget for the 2014/2015 year is \$328,153
- CDBG and SBC funding is estimated at \$18,750,00 and \$1,250,000 respectively

This budget was developed based on the current information and anticipated ERB applications expected for the fiscal year.

### **Additional Comments**

Additional comments from the August 27, 2014 stakeholder process were reviewed and responses were drafted. A summary of the comments and responses is attached to the Order as Exhibit C. The comments were from Natural Systems Utilities. They were primarily centered on the use and analysis of private funding and Public Private Partnerships. Additional comments from the organization surrounded the scoring criteria and HUD Low-to-Moderate Income ("LMI")

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<sup>1</sup> This includes accrued costs starting in February 2014.

criteria. ERB Staff is appreciative of the comments and suggestions, many of which were previously addressed during the initial responses posted. After careful consideration, no changes to the Guide or Product resulted.

### **EDA Revisions**

After adoption of the Guide and Product by the NJBPU Board, revisions were made to both documents by ERB Staff in order to provide clarification and additional guidance on the Program. The modified documents are attached to this Order as Exhibit D and the revisions have been highlighted. These versions of the Guide and Product were presented to and approved by the NJEDA board on October 14, 2014. While the revisions are not substantively significant, they warrant review and adoption by the NJBPU. These changes are noted below:

- ERB Staff learned of the existence of the referenced guidance below after the BPU Board meeting. This guidance is part of the body of DEP requirements that projects will need to comply with and so is not a new imposition, but an addition for completeness. The Guide has been changed as noted below on page 10 and duplicated on page 14-15.

“As further explained in the Action Plan, any pertinent infrastructure vulnerabilities should be identified and evaluated in the feasibility and design stage using, among other tools, the National Oceanic and Atmospheric Administration’s (NOAA) Sea Level Rise Tool for Sandy Recovery at <http://www.globalchange.gov/browse/sea-level-rise-tool-sandy-recovery#overlay-context>. Applicants also must consult applicable New Jersey Department of Environmental Protection (DEP) guidance on flood protection located at <http://www.nj.gov/dep/watersupply/pdf/guidance-ifp.pdf>. Another resource that applicants may wish to use is Rutgers University’s coastal flooding and sea level rise interactive mapping tool located at <http://slrviewer.rutgers.edu/>.”

- As a suggestion from EDA's AG, the ERB team discussed clarifying the ineligible costs in section 4.4.2 by setting limits before which the ERB would not reimburse funding for predevelopment costs, independent energy audits (i.e., not the free local government energy audits) and equipment purchases. The following change was made to that section.

#### **“4.4.2 Ineligible Project Costs”**

All costs associated with emergency generators or fossil fuel storage tanks or any components of emergency generators; Systems that require fuel deliveries such as diesel or propane; Used, refurbished, temporary, pilot, or demonstration equipment; Solar PV panels, or balance-of-system equipment related to solar PV panels. (However, upgrades to the inverter and storage-system components are eligible costs); All predevelopment costs prior to April 4, 2014, with the exception of any energy audit costs which are ineligible for reimbursement prior to October 20, 2014. Both these limitations pertain to the WWTP and WTP product; For the WWTP and WTP product, all equipment costs prior to October 20, 2014.

- The following change was made to the Product on page 1 to clarify how the ERB will accept and review applications.

“Applications will be accepted on a rolling basis, and reviewed and brought for Board actions on a first-received, first-ready basis. Once the application

~~becomes available, completed applications will be reviewed as received, and~~  
~~†The application window will remain open until funds are allocated.”~~

### **Stakeholder Process request based on Comments**

ERB Staff conducted a second review of the comments and responses from the August 27, 2014 stakeholder meeting and determined that additional investigation and study was required into the current rules governing emergency generators and the current utility franchises. See the question and response below:

**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.**

*Response: 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.*

This issue is beyond the purview of the ERB program but could impact the use and implementation of equipment installed under the ERB for resiliency. Staff is therefore requesting that the Board allow staff to initiate a stakeholder process to look into this issue and how it would impact the community at large and the goals and objectives of the ERB program. Input from the electric distribution companies, industry experts and regulatory officials will sought and compiled to determine if a conflict exists and potential corrective actions. This process will be completed within a six month period with the results and any recommendations presented to the Board in a written memorandum.

### **Application**

Additionally, staff was directed to develop, in conjunction with the EDA, the application for facilities and entities that wished to apply to the Program and provide public notice when this application is complete. This application is attached as Exhibit E.

Notice will be given to the public once a completed application form is posted.

### **DISCUSSION**

The Board is pleased with the attention Staff gave to creating a Challenge process and Budget for the ERB's implementation that is consistent with SRA. The Board is also pleased that the stakeholders were afforded the opportunity to comment on the Challenge as this helped lead to a fair and balanced second review option for applicants. The Board acknowledges the Application itself and feels that the approach developed is consistent and will foster the goals of the program. The 2014/2015 Budget created by ERB Staff represents the best estimate of

internal and external funding based on current information and interest in the Program and the Board feels confident that this Budget was created in good faith with consideration to all opening aspects of the ERB program.

The Board understands the level of complexity and effort involved in the gathering, compilation and responses to stakeholder comments on the Original Guide and Product. While it is unfortunate that several comments from stakeholder were missed, the Board is confident that ERB Staff took the initiative to review the comments and prepare responses once the issues was realized. The Board therefor accepts these additional responses.

The Board agrees that comment number 116 from the Guide and Product Stakeholder process identifies a unique situation and a potential concern over the emergency generator use and utility franchise rights. The Board agrees with Staff that this issue requires further investigation and approves Staff's request to do so.

Most importantly, the Board understands the need to allow modifications to the Guide and Product as this process moves forward to allow the best possible process for applications into the ERB program. Therefor the Board accepts the changes to the program Guide and Product, as outlined and modified and adopted by the NJEDA Board on October 14, 2014.

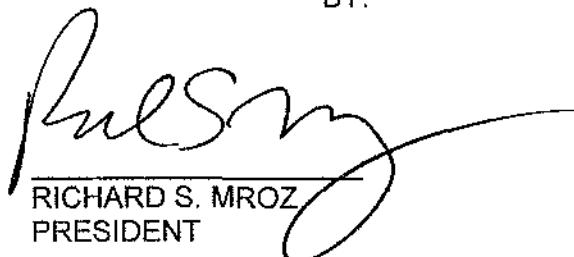
For the following reasons, the Board **HEREBY FINDS** the process utilized in developing the Challenge, Budget and Application related to implementation of the ERB was appropriate in the ERB process creation. Additionally, the Challenge, Budget and Application follow the intention and goals of the Program.

## Conclusion

Based on the above, the Board **HEREBY ADOPTS** both the second review process (Challenge) and the proposed Budget. Furthermore, the Board **ACCEPTS** the application developed for the WWTP sector. The Board also **ADOPTS** the modifications made to the Guide and Product as approved by the NJEDA. The Board **ACCEPTS** the additional comments discovered from the Guide and Product stakeholder process. Additionally, the Board **DIRECTS** ERB Staff to hold a stakeholder process on the issue of emergency generation connection and utility franchise rights to be concluded within six month upon approval of this Order.

DATED: 10/27/14

BOARD OF PUBLIC UTILITIES  
BY:

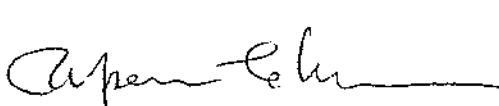


RICHARD S. MROZ  
PRESIDENT

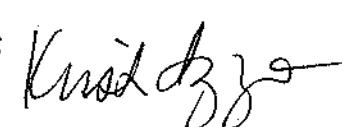
  
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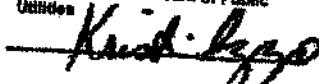
  
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ATTEST:

  
KRISTI IZZO  
SECRETARY

I HEREBY CERTIFY that the within  
document is a true copy of the original  
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Utilities



In the Matter of the New Jersey Energy Resilience Bank – Initial Program Guide and Budget Extension  
Docket Numbers QO14060626

In the Matter of the New Jersey Energy Resilience Bank – Water and Wastewater Treatment Facilities  
Financial Product  
Docket Number QO14091018

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Stakeholder comment is a critical component of developing a reasonable, practical and cost-effective guide for the New Jersey Energy Resilience Bank (ERB). As a result, the New Jersey Board of Public Utilities (BPU) and New Jersey Economic Development Authority (NJEDA) are distributing for review and comment a draft of the proposed Application Challenge Process that is intended to be incorporated into the New Jersey Energy Resilience Bank Grant and Loan Financing Program Guide. Written comments from stakeholders will be evaluated in connection with finalizing the Application Challenge Process as a component of the Program Guide for the purpose of presenting the Application Challenge Process to the Boards of BPU and NJEDA for approval.

### **Energy Resilience Bank Application Challenge Process**

It is the goal of all parties involved in the Energy Resilience Bank to conduct business in a professional manner. In the course of ERB's staff review of an application, ERB staff may reach out to the applicant for clarification or to request additional information. During this review process, ERB staff shall alert the applicant in writing if ERB staff assesses that the application fails to meet the required threshold criteria, as established in the appropriate Financial Guide for the applicant's industry, of the ERB program.

To the extent an applicant and ERB staff agree that there is no need to continue the evaluation of the application, the applicant may notify ERB staff in writing of the applicant's withdrawal of the application. If an applicant withdraws the application, ERB staff will acknowledge the withdrawal and discontinue further review of the application.

To the extent an applicant disagrees with ERB Staff's assessment that the application does not meet the threshold criteria, an applicant may request a formal letter summarizing the ERB staff's reasoning for said assessment within 30 days of the date of the ERB staff's assessment letter. The formal explanatory letter will list the reason(s) for ERB staff's conclusion that the application fails to meet the required threshold criteria. The applicant shall direct the request for a formal explanatory letter to the Deputy Director and the Executive Director of the ERB.

Although the BPU approves the SBC portion of the funding and the EDA approves the CDBG-DR portion of the ERB funding, consistent with their various areas of expertise, ERB financial staff will review and make recommendations about the financial and CDBG-DR aspects of an application and ERB technical staff will review and make recommendations about the technical aspects of an application. Thus, if, upon receipt of a formal explanatory letter, an applicant decides to challenge the financial and/or CDBG-DR findings, it will direct its challenge to the EDA, copying the BPU, and if it decides to challenge the technical findings, it will direct its challenge to the BPU, copying the EDA. Due to the sequential nature of the review process, with the technical review occurring first, it is possible that after the successful resolution of an explanatory

letter based on technical findings, an applicant may go through this process again with respect to financial / CDBG-DR findings. The following is the process that will be followed.

### Challenge to Technical Findings

An applicant may challenge ERB's technical staff's assessment by submitting, in writing to the ERB's Deputy Director and Executive Director no later than 30 calendar days from the date of the ERB's explanatory letter, a response that sets forth how the applicant has met the technical criteria and a request that a hearing officer be appointed to review the application. Such challenges are not contested cases subject to the requirements of Administrative Procedures Act, N.J.S.A. 52:14B-1 et seq., and the Uniform Administrative Procedure Rules, N.J.A.C. 1:1. Challenges that are timely submitted shall be handled by the BPU as follows:

1. The BPU President shall designate an employee of the BPU to serve as a hearing officer for the challenge. The hearing officer shall perform a review of the written record and consult with ERB subject matter experts. The hearing officer may hold a phone consultation with the applicant, and may consider new evidence or information that would demonstrate that the applicant met the requirements for the criterion on which ERB technical staff anticipated recommending that the application be denied.
2. Following the hearing officer's review, the hearing officer shall issue a written report to the ERB technical staff and the applicant containing his or her finding(s) and recommendation(s) on the merits of the challenge.
3. The hearing officer's report shall be advisory in nature and is not binding on ERB technical staff. Within ten days of its receipt of the hearing officer's report, ERB technical staff must notify the applicant in writing of whether ERB technical staff intends to accept, reject, or modify the report. If ERB technical staff anticipates a need for more than ten days to notify the applicant of its intention, ERB technical staff must, within that ten day period, provide the applicant with a reasonable date in writing by which it will provide the applicant with its decision. Such time frame, including the initial ten days, should not exceed thirty days from the ERB technical staff's receipt of the hearing officer's report.
4. Based on ERB technical staff's review of the hearing officer's report, and as appropriate, ERB technical staff shall continue its review of the application or present the application to the Board for final agency action (unless the applicant withdraws its application).
5. ERB technical staff's final recommendation to the Board shall include a copy of the hearing officer's report.

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6. Final decisions rendered by the Board shall be appealable to the Superior Court, Appellate Division, in accordance with the Rules Governing Courts of the State of New Jersey.

### Challenge to Financial Findings

An applicant may challenge the NJEDA's decision by submitting in writing to the NJEDA no later than 30 calendar days from the date of the denial letter, with an explanation as to how the applicant has met the financial and/or CDBG-DR criteria. Such challenges are not contested cases subject to the requirements of Administrative Procedures Act, N.J.S.A. 52:14B-1 et seq., and the Uniform Administrative Procedure Rules, N.J.A.C. 1:1.

Challenges that are timely submitted shall be handled by the NJEDA as follows:

1. The CEO of the NJEDA shall designate an employee of the NJEDA to serve as a hearing officer for the challenge and to make a recommendation on the merits of the challenge to the Board. The hearing officer shall perform a review of the written record, consult with NJEDA subject matter experts, and, if required by the hearing officer, or requested by the applicant, hold a phone consultation with the applicant. The NJEDA may consider new evidence or information that would demonstrate that the applicant met the requirements for the criterion on which they were declined.
2. Following completion of the record review and/or phone consultations, as applicable, the hearing officer shall issue a written report to the NJEDA Board containing his or her finding(s) and recommendation(s) on the merits of the challenge. The hearing officer's report shall be advisory in nature and is not binding on the Board. The CEO, or equivalent officer, of the NJEDA may also include a recommendation to the written report of the hearing officer. The applicant shall receive a copy of the written report of the hearing officer and shall have the opportunity to contact the hearing officer with any comments and exceptions prior to the matter being brought before the Board.
3. The Board shall consider the hearing officer's report, the recommendation of the CEO, or equivalent officer, if any, and any written comments and exceptions timely submitted by the applicant. Based on that review, the Board shall issue a final decision on the challenge. Such decision shall become effective 10 working days after the Governor's receipt of the minutes of the public meeting at which such decision occurs, provided no veto has been issued. The applicant shall have the opportunity to attend the public meeting at which the Board considers its challenge.
4. After consideration by the NJEDA board, if the financing includes SBC funds, the challenge will also be submitted to the BPU board for action.

**ERB Application Challenge Process**  
**OCTOBER 1, 2014**

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**EXHIBIT A**

5. Final decisions rendered by the Board(s) shall be appealable to the Superior Court, Appellate Division, in accordance with the Rules Governing Courts of the State of New Jersey.

## Exhibit B

ERB 2014/2015 Budget										
Area	YTD as of 9/30/14									
	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	TOTALS	
Program Funding - CDBG				\$2,343,750	\$4,687,500	\$4,687,500	\$7,031,250	\$18,750,000	5 projects at avg. \$15M @ 1/4 year	
Program Funding - SBC			\$104,166	\$208,333	\$208,333	\$208,333	\$260,417	\$260,418	\$1,250,000	5 projects @ \$500,000 @ 1/2 year
EDA Internal	\$122,098	\$37,968	\$37,968	\$70,168	\$70,168	\$70,168	\$70,171	\$70,171	\$619,048	
BPU Internal	\$56,599	\$13,500	\$13,500	\$82,566	\$82,566	\$82,566	\$82,566	\$82,566	\$579,995	
Contractor	\$2,016,512	\$198,193	\$216,193	\$231,193	\$211,193	\$206,193	\$211,196	\$206,196	\$3,703,062	
Ancillary Svcs		\$4,812	\$4,812	\$31,212	\$31,212	\$64,024	\$64,024	\$64,027	\$328,150	
Subtotal	\$2,195,209	\$254,473	\$272,473	\$519,305	\$603,472	\$2,975,034	\$5,318,784	\$5,375,877	\$7,714,628	
									\$25,229,255	GRAND TOTAL

**For 2014/2015 Budget Year**

loaded					
<b>EDA</b>	Actual Costs				122,098 Through Sept. 2014
	Exec. Dir.	\$195,000 Full Time	3/4 year		146,250
	Program Man.	\$140,000 Full Time	3/4 year		105,000
	Officer	\$184,800 Part Time	Half Year		92,400
	Admin	\$70,000 Full Time	3/4 Year		52,500
	Officers (4)	\$288,000 Part Time	Half Year		<u>100,800</u> * reflects anticipated actuals and not averages
				Subtotal	<u>619,048</u>
<b>BPU</b>	Actual Costs				56,599 Through Sept. 2014
	Deputy Dir.	\$144,000 Full Time	3/4 Year		108,000
	Sr. Staff (3)	\$117,600 Full Time	1/2 year		176,400
	Staff (6)	\$79332 avg Full Time	1/2 year		<u>237,996</u>
				Subtotal	<u>578,995</u>
<b>Contractors</b>	CEEP				36,000
	Sustainable Jersey				36,000
	Other anticipated				125,000
	Mckinsey (YTD)				2,016,512
	McKinsey				<u>1,489,550</u>
				Subtotal	<u>3,703,062</u>
<b>Ancillary Svcs</b>	Est. Travel	\$3,000 per year per 10 individuals	3/4 year		22,500
	Supplies	\$2,000 per month	3/4 year		16,000
	DEP Reviews	35,000 per project @ 15/yr	1/4 year		131,250
	Outside Legal	\$13,900 / month	1/2 year		83,400
	Gen. Svcs	\$150,000 / year	1/2 year		<u>75,000</u>
				Subtotal	<u>328,150</u>

**ADDITIONAL COMMENTS & RESPONSES**

**EXHIBIT C**

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.

**Natural Systems Utilities**

- 1. Regarding Section 4.3.1 HUD Requirements, please clarify the program description as applicable for Public Private Partnership (PPP), including the definition of Public Facilities within the program to include "assets developed and deployed via a Public-Private-Partnership".**

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.

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.

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.

- 2. Please consider the following: via a PPP the facility is typically publicly owned but the renewable energy facility may have one of several ownership models (public, private lease or other type that transfers ownership) that provide lower risk and costs to the public sector and should be encouraged by the program; projects that are funded under PPPs and for-profits that meet the SRA definition should require a minimum 10% of first loss on capital to be provided by the sponsoring for-profit entity; project development and deployment is more expedient under a PPP arrangement which better serves the funding deadlines.**

Please see response to 1 above.

- 3. Recommend the following clarification under section 4.4.1 Eligible Project Costs regarding fuel produced on-site (biogas): "storage equipment for feedstock and fuel produced on-site (e.g., biogas), with adequate demonstration that storage is sufficient to provide continuous supply of energy throughout a prolonged period".**

While the ERB Staff understand the reasoning for this request, the program is not designed to fund any process that is responsible for biogas production increase or additional storage for waste such as fats, oils, and greases (FOGs). Applicant should investigate all options to satisfy the resiliency criteria; beyond an increase in the Biogas yield.

- 4. Projects that can achieve the required cost benefit ratio greater than 1, as defined by the CEEEP DER model without full HUD funding should be given a higher score than those that require full HUD funding; i.e., don't consider private capital contributed to a project as a cost in the CBA. This will encourage PPPs and private capital.**

Part of the CBA and overall application is to identify all funding received by the applicant project and under the current structure, that funding is included in the analysis and assessment. ERB Staff are engaged in discussion with HUD in an attempt to gain additional project structuring flexibility that would permit the integration of public-private partnerships (PPPs) into ERB projects. If the ERB Staff are successful, the ERB would be able to consider projects using a PPP structure, though at this time it does not appear that additional incentive is needed to encourage these structures. The marketplace appears to provide sufficient encouragement through the federal investment tax credit and accelerated depreciation.

- 5. Regarding the HUD LMI objective, does the entire community need to meet the HUD LMI National objective or only the portion of the population served by the facility?**

See response to Comment #36.

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](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.

- 6. Section 4.3.2, Item 7 should be modified to clarify that a biogas CHP system capacity may provide power beyond the critical loads of the facility to optimize the economic and environmental performance and that any excess power can be sold into the grid?**

The ERB program does not prohibit the selling of power generated from projects funded under the ERB into the grid nor does it prohibit these facilities bidding into or providing ancillary services to the grid. Any project financed under the ERB must have the ability to satisfy critical load during a 7-day utility outage. Additionally, the ERB does not determine how the project operates during normal operation, only that it is cost effective and available during a utility outage.

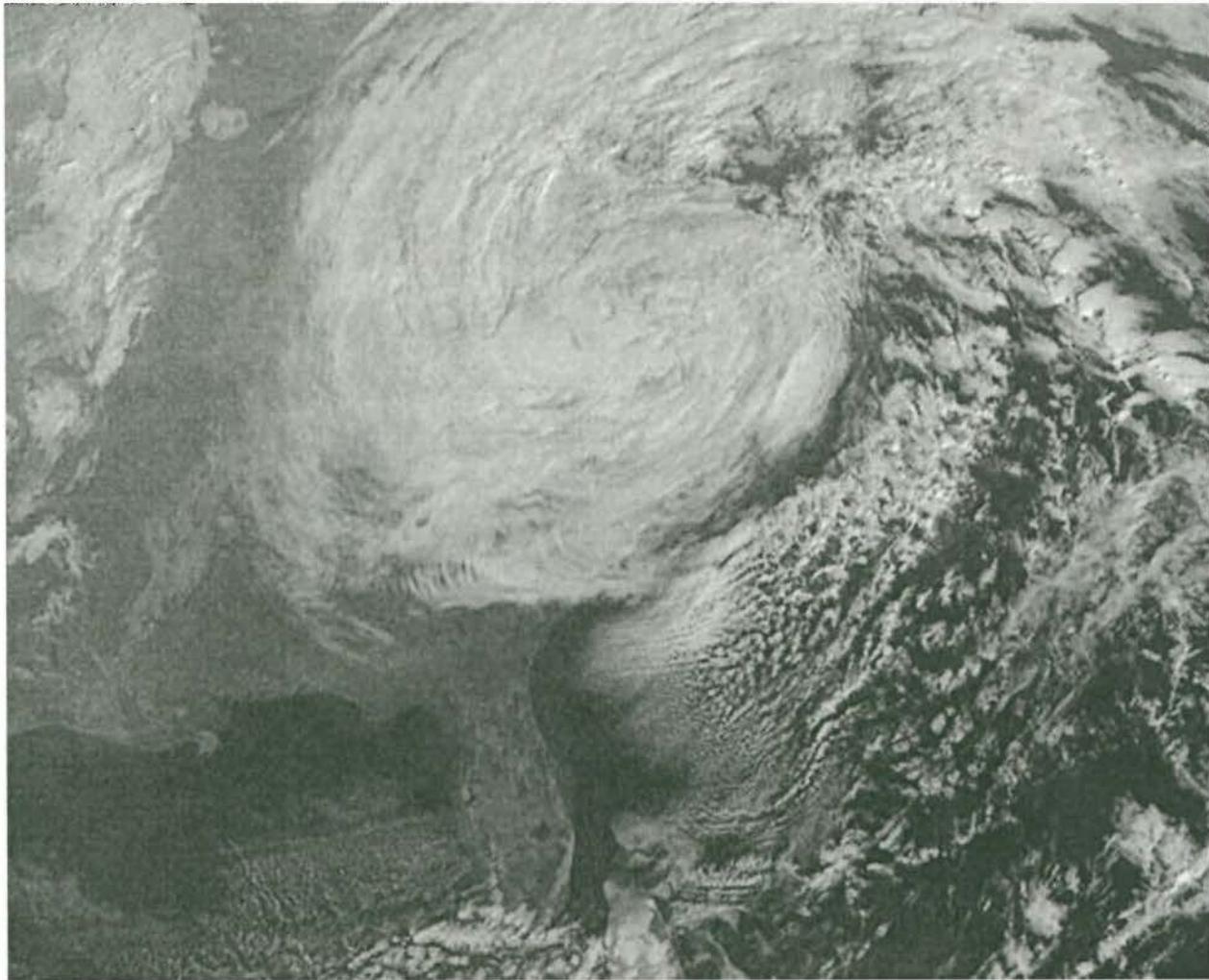
- 7. The program should account for the size of affected communities not only the number of affected communities.**

While the ERB Staff recognize that population served could be used as a factor in determining how to target limited ERB funds to critical facilities, tying funding distributions to population served threatens to carve out from the program critical facilities in need of energy resilience measures simply because they comparatively serve a smaller population. This would put both these facilities and the communities and individuals they serve at risk. Thus, at this time, the ERB will not tie funding determinations to population served.

## **Exhibit D1 - ERB Financing Program Guide**

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### **New Jersey Energy Resilience Bank Grant and Loan Financing Program Guide**



**Date:** October 14, 2014

**Revisions:**

# **Exhibit D1 - ERB Financing Program Guide**

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## **SECTION 1: INTRODUCTION**

As part of New Jersey's ongoing efforts to minimize the potential impacts of future major power outages and increase energy resiliency, the State has established the New Jersey Energy Resilience Bank ("ERB" or the "Bank"), a first-of-its-kind in the nation energy recovery and resilience financing initiative. The Bank is a new, direct and innovative approach to addressing significant energy infrastructure vulnerabilities arising in the aftermath of Superstorm Sandy.

New Jersey took various steps to assess Superstorm Sandy's impact on the State's energy infrastructure in order to develop long-term recovery strategies focused on hardening critical facilities and enhancing energy resilience. As one example, the State partnered with the U.S. Department of Energy (USDOE), the USDOE's National Renewable Energy Laboratory (NREL), and the Federal Emergency Management Agency (FEMA) to study opportunities to expand energy resilience for critical infrastructure and assets. The State also has engaged electric distribution companies regarding their recovery and resiliency plans. Additionally, the State has undertaken a cross-agency initiative to enhance the State's mapping capabilities to more easily identify practical opportunities to incorporate cost-effective resilient energy technologies. New Jersey also partnered with President Obama's Hurricane Sandy Rebuilding Task Force, USDOE, and Sandia National Laboratories to study energy resilience through expanded use of microgrid networks to protect critical facilities in urban centers as well as transportation networks. These and other efforts have directly informed the State's holistic approach to enhancing energy infrastructure resiliency following Superstorm Sandy. The Bank is a central component of that broader effort.

Financing through the Bank will be used to develop or enhance distributed energy resource ("DER") technologies at critical facilities that were directly or indirectly impacted by Superstorm Sandy or other eligible disasters. DER technologies with islanding and blackstart capabilities, described below, proved extremely resilient in the aftermath of Superstorm Sandy, allowing facilities equipped with them to continue to operate despite failures of the larger power grid. By contrast, other facilities not equipped with resilient energy resources could not operate effectively with the larger power grid down for an extended period of time, resulting in various, severe community and environmental impacts. Discharges of untreated wastewater into New Jersey waterways and numerous boil water advisories following Superstorm Sandy are just two examples of these impacts.

While DER technologies are generally more cost effective over time as compared to other resilient power options, the initial costs of installation at critical facilities are considerable. For this reason, many facilities in the past have opted to pursue less expensive diesel-powered generators, despite the fact that DER technologies are less reliant on liquid fuel supply and availability, have longer continuous run times, and have less environmental impacts. The ERB was created to assist eligible facilities with the substantial upfront costs in order to encourage wider adoption of resilient DER technologies. Utilizing \$200 million of second round Community Development Block Grant-Disaster Recovery ("CDBG-DR") funds allocated to New Jersey by the U.S. Department of Housing and Urban Development ("HUD"), ERB funds will allow critical

## **Exhibit D1 - ERB Financing Program Guide**

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facilities to invest in new or retrofitted DER technologies that will allow the facilities to operate when the larger power grid goes down ("islanding") and provide electrical start-up capabilities in the absence of a direct connection to the electric grid ("blackstart").

The Bank will be jointly administered by the New Jersey Board of Public Utilities ("BPU") and the New Jersey Economic Development Authority ("NJEDA"). This arrangement was memorialized in an agreement executed by the Boards of both agencies in July 2014. At the same time, both agencies have been directing resources to effectively develop and administer this initiative.

This Program Guide marks the next step in developing and implementing the ERB. It is intended to:

- Summarize the energy-related vulnerabilities at critical facilities arising after Sandy;
- Provide information about the DER technologies that will be funded through the ERB;
- Set forth eligibility and funding requirements applicable to all ERB financial products across all market sectors, as well as eligible product costs; and
- Describe the ERB project application and funding process.

Additionally, along with this Guide, BPU and NJEDA have provided proposed guidance regarding the first financial product that will be made available through the ERB – up to \$65 million in funding for public, not-for-profit or certain eligible for-profit water and wastewater treatment plant operators. Current federal regulatory requirements restrict the ERB from offering financial products to critical facilities in certain other market sectors, as explained in detail below. BPU and NJEDA plan to develop products specifically for these sectors as regulatory impediments are addressed, and will roll out additional products in future ERB finance rounds.

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### **SECTION 2: ENERGY INFRASTRUCTURE AND NEW JERSEY CRITICAL FACILITIES**

Following Sandy, the State commissioned a study by Rutgers' Center for Energy, Economics and Environmental Policy ("CEEEP") regarding energy vulnerabilities and resiliency needs. Utilizing New Jersey storm electric outage data from the National Oceanic and Atmospheric Administration ("NOAA") in addition to New Jersey electric distribution companies' annual reports, the study found, among other things, that New Jersey experienced 143 events that caused a sustained power outage (i.e., an outage greater than five minutes) between 1985 and 2013. These events include tropical storms, hurricanes, wind and rain storms, ice storms, tornados, and winter storms/nor'easters. More important, of those 143 sustained outages, 27 qualified as "major outages" (i.e., an outage that impacts more than 100,000 electric customers for a period that extends beyond one day). This equates to almost one "major outage" in New Jersey every calendar year.

Superstorm Sandy was unique for New Jersey in terms of the extent of the damage and challenges resulting from power outages at critical facilities caused by the storm, but major outages are not uncommon for New Jersey. **As a result, it is crucial for the State to assist critical facilities with securing resilient energy technologies that will make them – and, by extension, the communities they serve – less vulnerable to future severe weather events and other emergencies.**

#### **2.1 Superstorm Sandy's Impact on New Jersey Critical Facilities**

Superstorm Sandy caused extensive damage to New Jersey's energy infrastructure. As a result, New Jersey's critical infrastructure and assets experienced significant disruption in service that brought everyday operations to a standstill and had significant and, in some cases, life-threatening community impacts.

Ninety-four wastewater treatment plants across all twenty-one counties lost power and were flooded. Failed pumps allowed salt water intrusion into the systems, destroying electrical equipment. It is estimated that between three and five billion gallons of untreated wastewater were discharged into New Jersey waterways. Two hundred and sixty-seven of the 604 water systems across the State were without power, and thirty-seven of those systems issued boil water advisories following the storm. One month after Sandy made landfall, seven drinking water systems were still subject to boil water advisories.

Hospitals, nursing homes, long-term care facilities, domestic violence shelters, foster homes, mental health facilities, and other critical social service providers throughout the State were forced to contemplate evacuation in light of prolonged power outages. Low-lying facilities in flood hazard areas could not operate pumping stations without power, causing direct and

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significant long-term damage to facilities. Police stations, fire stations, 9-1-1 call centers, and other buildings were also severely hindered in their efforts to provide emergency services.

After Sandy, New Jersey took various steps to assess the storm's impact on the State's energy infrastructure in order to develop long-term recovery strategies focused on hardening critical infrastructure and enhancing energy resilience. Some examples of these efforts include:

- Partnering with USDOE, NREL and FEMA to study opportunities to expand energy resilience for the State's critical infrastructure and assets. As a part of this partnership, NREL conducted a comprehensive analysis of energy needs at various critical facilities and identified opportunities for communities to enhance energy resilience by pursuing innovative and cost-effective energy solutions;
- Increasing funding to the New Jersey Clean Energy Program to provide increased rebates for recovery and resilience projects that incorporate clean energy and Energy Star standards and reduce grid demand in Sandy-affected areas;
- Undertaking a cross-agency initiative to enhance the State's mapping capabilities so the State can more easily identify practical opportunities to incorporate cost-effective distributed generation technologies; and
- Partnering with President Obama's Hurricane Sandy Rebuilding Task Force, the USDOE, and Sandia National Laboratories to study energy resilience through expanded use of microgrid networks to protect critical facilities in urban centers and transportation networks.

The State also has been working actively with electric distribution companies ("EDCs") regarding their plans for hardening energy infrastructure. Most New Jersey EDCs are privately owned, and as a result, by federal regulation are not eligible for a variety of federal recovery assistance grants. Per current HUD regulations, a privately owned utility cannot be an ERB applicant.

Superstorm Sandy also demonstrated the value of having more resilient energy technologies at critical facilities. Despite widespread failure of the electric distribution system, there were several entities throughout New Jersey in storm-impacted areas that maintained full power despite prolonged and diffuse failures of the larger electric grid. These "islands of power" had distributed generation units, which allowed the facilities to operate as microgrids while the electric grid was down. For example, Princeton University's combined heat and power (CHP) microgrid operated for a week when the larger grid failed, saving the University millions in avoided losses of irreplaceable research projects. The College of New Jersey's CHP microgrid provided heat, power, hot food and hot showers to 2,000 mutual aid workers from other states that helped to restore power after the storm. Several medical facilities also were able to maintain power through CHP microgrids, becoming larger shelters as well as accepting patients from other facilities. President Obama's Hurricane Sandy Rebuilding Task Force described the Bergen County Utilities Authority in Little Ferry, New Jersey, as a model for the region and nation because it was able to use a "biogas-powered [combined heat and power] system to

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keep its sewage treatment facilities working during and after the storm" in the face of a prolonged power outage.

The resilience of these facilities highlighted opportunities to protect certain critical infrastructure by pursuing commercially available technologies that allow facilities to operate independently from the grid. These technologies bring the added benefit of being more cost-effective, energy efficient and cleaner power options. HUD, USDOE, and the U.S. Environmental Protection Agency all have recognized that DER technologies, in addition to providing resilience, can reduce monthly energy costs, reduce emissions, provide stability in the face of uncertain electrical prices and increase overall efficiency.

For some time, New Jersey has encouraged the use and deployment of DER technologies. For example, the Christie Administration's Energy Master Plan calls for a 17% reduction of the electrical energy usage through energy efficiency measures from 2010 levels by 2021, and the development of 1,500 megawatts of new distributed generation resources where net economic and environmental benefits can be demonstrated. The Energy Master Plan also emphasizes the need to develop new, clean, cost-effective sources of electricity that reduce the State's reliance on older plants that have more emissions and environmental impacts. New Jersey's Clean Energy Program offers several incentive programs to advance DER through the use of CHP, fuel cells, and other renewable technologies.

Nevertheless, the up-front costs of installation have kept some critical facilities from pursuing DER technologies despite the longer-term cost effectiveness and enhanced resiliency generated by such investments. Additionally, Sandy highlighted the fact that a significant number of DER systems that are currently installed and operating in New Jersey did not operate during or after the storm because they lacked "islanding" and "blackstart" capabilities. Even the installation of equipment to provide this additional functionality to existing systems (i.e., retrofitting) is generally quite expensive.

ERB financing incentives will help critical facilities overcome this financial hurdle for installing cleaner, more efficient resilient energy technologies. This will make critical facilities, and the communities they serve, more resilient to future severe weather events and other emergencies.

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### **SECTION 3: DISTRIBUTED ENERGY RESOURCE TECHNOLOGIES**

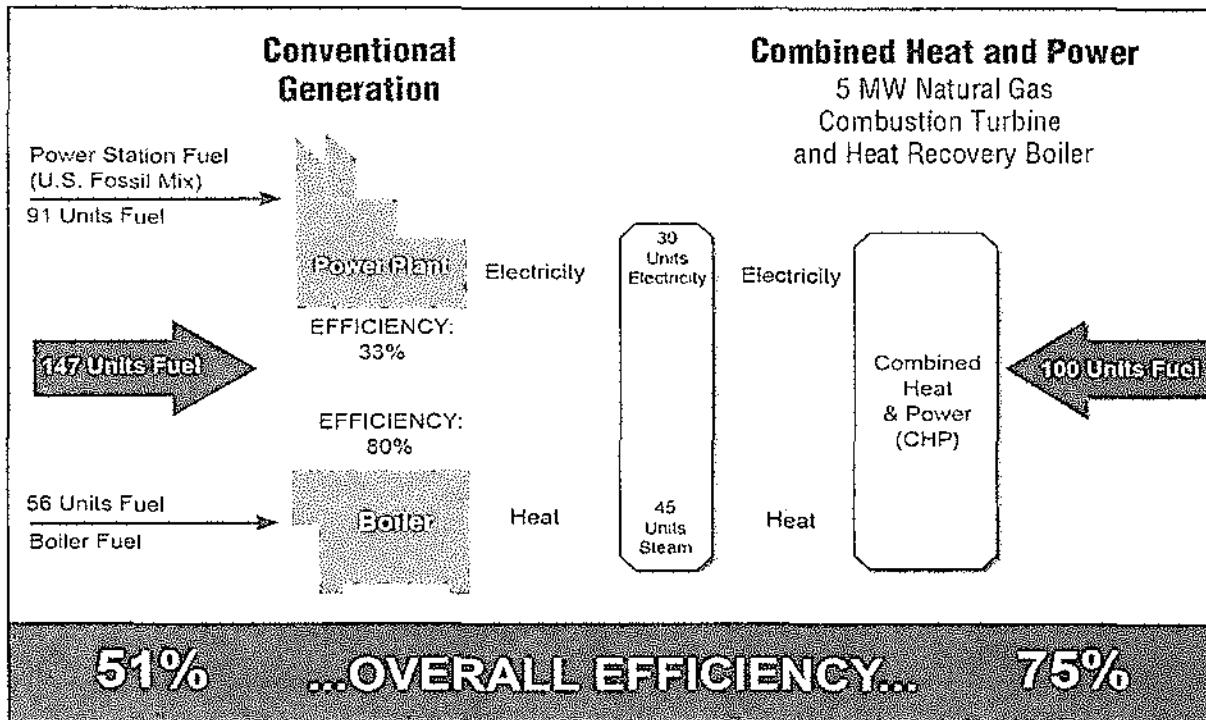
The intent of the ERB is to finance the installation or retrofitting of commercially available and cost effective resilient energy technologies at critical facilities. In this way, the ERB is technology neutral. Presently, the ERB is focusing on existing commercially available and cost effective DER technologies, including combined heat and power, fuel cells, and renewable technologies. However, the ERB can adapt with the emergence of new markets and new technologies that are practical, offer the same or greater resiliency benefits as current DER technologies, and are cost effective.

DER technologies include energy systems, equipment or processes that are small, modular and decentralized, and are either located on-site or very near the location where energy is to be used. A DER system can include, energy efficiency (EE), distributed generation (DG) and technology that allows the facility to voluntarily adjust the amount or timing of its energy consumption ("Demand Response" or "DR"). DER systems can also include engines, turbines, combined heat and power (CHP), fuel cells (FC) and renewables such as solar panels with off-grid inverters and battery storage. DER systems can be designed to function in "island" mode, isolated from the grid during a power outage or other event. During normal, non-island mode, the DER system is operating in synchronization with the grid. A system with islanding capabilities would be defined as a microgrid within the larger electric distribution system if it was capable of starting up without connection to the electric grid. This is typically accomplished through utilizing a small diesel generator or battery system.

DER systems are generally understood to be energy efficient technologies. They generate power at the point of use including both electricity and thermal energy for heating and cooling. Because of this dual operation at the point of use, DER systems are more efficient than the conventional, large, and centralized electric generating facilities. Typically, because the DER generating equipment is more modern than the equipment used in the older centralized power plants, it will also be more efficient. Efficiency also is achieved, in part, by the fact that centralized power plants must transmit power over long distances through transmission and distribution, which results in line losses of the power that those systems generate.

Additionally, DER systems utilize waste heat produced from the electric generation system to heat and cool the facility, including the production of hot water. Compared to larger, centralized power plants – which simply emit this waste heat – the DER system's reuse of this thermal energy adds to the system's overall efficiencies. In other words, facilities receiving their electricity through the transmission and distribution systems associated with centralized power plants must have a separate thermal energy system to provide the same level of heating and cooling provided by DER systems. The efficiencies are reflected in the following graphic, which uses a CHP system as an example:

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In the graphic, the CHP system and the centralized power plant with a separate thermal energy system each produce 75 units of useful energy. However, the centralized power plant and its separate thermal energy system use 147 units of energy (i.e., 91 units for electricity production and 56 units to produce thermal energy heating and cooling), while the CHP system needs only 100 units of energy to produce the same result. Importantly, this efficiency is the same whether or not the CHP system is designed to be a microgrid with islanding capabilities. A CHP unit with islanding capabilities still would be defined as energy efficient equipment.

Fuel cells are a second DER technology that will be eligible for ERB funding. Most fuel cells that generate electricity without utilizing the produced thermal energy are more efficient sources of power than other traditional generation systems. This efficiency increases when line losses from the centralized power plant are taken into account. Moreover, fuel cells are one of the “cleanest” DER systems that use a fossil fuel; it has essentially zero nitrogen oxide (NO<sub>x</sub>), Sulfur Dioxide (SO<sub>2</sub>) and Mercury (Hg) emissions and generates no waste or wastewater. While there is a certain level of carbon dioxide (CO<sub>2</sub>) emission associated with fuel cells, which varies depending on the fuel source used, CO<sub>2</sub> emissions are low due to the efficiency of the system (i.e., they are approximately equal to CO<sub>2</sub> emissions associated with combustion of methane or natural gas). Moreover, fuel cells present the added benefit of capacity (i.e., the measure of the run-time electric generating equipment). Because fuel cells generate electricity by moving gases through a membrane, the systems essentially contain no moving parts, resulting in a capacity factor of 98% or higher. Finally, fuel cells are an extremely quiet DER system, so they can be placed in locations where other conventional electric generators like turbines or engines would violate noise ordinances.

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Solar photovoltaic (PV) systems equipped with off grid inverters and battery storage represent a third key eligible DER system. Solar PV systems convert sunlight to direct current (DC) electricity, which then must be converted to alternating current (AC) electricity to service a critical facility's equipment. An inverter transforms DC power into AC power and connects the solar PV system to the local distribution grid. Additionally, when equipped with an off grid inverter, the solar PV system can operate when the grid is down by generating power solely for the facility. Coupled with backup battery storage – which permits the facility to store excess power – such a solar PV system constitutes an ERB-eligible DER system.

Due to these higher efficiencies across the different DER technologies, on-site DER systems are defined as energy efficient equipment. The overall on-site DER systems save energy usage to the facility and save on the facility's overall energy costs. In addition, their emissions levels are lower, they generate less waste and wastewater, and they use less water in comparison to traditional centralized power plants. These efficiencies and savings are the same regardless of whether the system is designed to be a microgrid with islanding capabilities or not. Finally, designing an on-site DER does not change its overall efficiencies or definition as energy efficiency equipment.

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### SECTION 4: ERB PROGRAM & ELIGIBILITY REQUIREMENTS

#### 4.1 New Jersey's Energy Resilience Bank Overview

The ERB will finance the design, acquisition, construction, and installation of distributed energy resources that will improve and increase the energy resiliency at certain New Jersey critical facilities. ERB financing will include both grant funding and longer term, low-interest loans with a portion of principal forgiven over time based on satisfying annual operational performance requirements. The grants will be provided for certain project costs incurred early in the development process. The ERB grant funding also may include reimbursement of the cost for feasibility studies related to a project, but only if the applicant proceeds with the DER project and it is funded by the ERB.

The DER technologies to be financed under the ERB include, but are not limited to:

- CHP systems using various sized gas turbines, reciprocating internal combustion (IC) engines, or microturbines and may include thermal storage;
- Fuel cells with and without heat recovery; and
- Upgrades to solar panel systems with off-grid inverters and storage systems. (The ERB will not finance the cost for installation of solar PV panels or for any balance-of-system equipment related to solar PV panels.)

CHP or fuel cells can be fueled with fossil fuel natural gas or renewable fuels such as biogas methane from landfills or digesters or hydrogen generated from a renewable source.

The energy resiliency of the critical facility must include, at a minimum, the ability of the DER technology to operate isolated from the electric utility grid as a microgrid in times when the larger electric grid is down due to extreme weather events, reliability events, security events or other grid failures. The DER technology financed through the ERB also must be capable of starting up without connection to the electric grid.

In addition to energy resiliency, the DER technologies to be financed by the ERB must include designs for flood hardening the facility in which the DER technology will be constructed and installed, as set forth in the State's Comprehensive Risk Analysis, detailed in Substantial Amendment No. 7 to New Jersey's CDBG-DR Action Plan ("Action Plan"). At a minimum, all resilient generation or storage equipment of the project within the facility will be required to be constructed 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.

As further explained in the Action Plan, any pertinent infrastructure vulnerabilities should be identified and evaluated in the feasibility and design stage using, among other tools, the National Oceanic and Atmospheric Administration's (NOAA) Sea Level Rise Tool for Sandy Recovery at <http://www.globalchange.gov/browse/sea-level-rise-tool-sandy-recovery#overlay>.

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context. Applicants also must consult applicable New Jersey Department of Environmental Protection (DEP) guidance on flood protection located at <http://www.nj.gov/dep/watersupply/pdf/guidance-ifp.pdf>. Another resource that applicants may wish to use is Rutgers University's coastal flooding and sea level rise interactive mapping tool located at <http://slrviewer.rutgers.edu/>. Additionally, to the maximum extent practicable and reasonable, all project designs – including both new constructions, as well as retrofits to existing facilities – should be cost effective and energy efficient. The ERB will require a detailed ASHRAE Level II energy audit be performed for each project prior to an application to the ERB, as described in more detail below. At a minimum, it is anticipated that the goals and requirements of the NJCEP Pay for Performance or Societal Benefits Charge (SBC) Credit program will be applied to each project to be financed by the ERB. Additional financing for the installation of all practicable and reasonable energy efficiency can be developed through the BPU's Energy Saving Improvement Program (ESIP). Details on ESIP are available at <http://www.njcleanenergy.com/commercial-industrial/programs/energy-savings-improvement-program>.

Federal regulations governing CDBG-DR funds, and the application of the regulations to the ERB, restrict or limit the opening of ERB financing to certain types of critical facilities at this time. The State is working with HUD to address these regulatory issues. As a result, ERB funding will be distributed in discrete funding rounds. The first funding round will be open exclusively to water and wastewater treatment plant operators that are public facilities, not-for-profit (NFP) entities, or for-profit (FP) businesses that meet the U.S. Small Business Administration (SBA) definition of "small business" (and, per HUD regulations, are not privately owned utilities). Federal regulations permitting, additional ERB funding rounds may be announced and made available for other critical facilities.

### **4.2 ERB Target Market and Financing Product Development**

The ERB will focus on providing capital to those facilities that offer the greatest resilience benefits for the State. While the ERB has not set a schedule for the development and roll out of each market sector financing product, preliminarily (and subject to timely receipt of any required federal regulatory waivers or clarifications), the ERB expects to develop initial financing product for the water treatment plant and wastewater treatment plant market sector, followed by developing a financing product for the hospitals and long-term care facilities market sector. The ERB also projects to develop funding products for the following market sectors, though not necessarily in the following sequence:

- Colleges and Universities, and State and County Correctional Institutions
  - Multifamily Housing Units, Primary and Secondary Schools that act as Community Shelters during disasters, Other Facilities operating as Community Shelters during disasters, Certain Municipal Buildings, and Town Centers
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## **Exhibit D1 - ERB Financing Program Guide**

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- Transportation and Transit Infrastructure
- Other Tier 1 and Tier 2 Critical Facilities as defined by New Jersey's Office of Homeland Security and Preparedness

Additionally, based on marketplace analytics the ERB may develop individual financial products that benefit multiple market sectors.

ERB financing will not be made available to a specific market sector until the ERB program has developed a grant or loan product for that particular sector. BPU and NJEDA will solicit input from each sector as part of the grant/loan product development process.

Where feasible, the ERB will encourage market sectors to leverage additional federal, state, private and other funding sources to realize critical energy resiliency initiatives. As one example, the ERB will closely coordinate with the New Jersey Environmental Infrastructure Trust (EIT) in instances where the ERB may be used to purchase new or retrofit DER technologies, whereas EIT funding may be used to harden the critical facility in order to better protect the DER technologies obtained through the ERB.

However, it should be noted that, in any instances where ERB and EIT funding may be used for the same energy investment (i.e., funding for DER technologies), projects which have already been approved for funding through the EIT are expected to proceed using EIT funding. Going forward, where new or retrofitted DER technologies can be wholly funded through the ERB, applicants must first seek funding through the ERB. Where the project scope goes beyond ERB eligible project costs, the project may choose whether to pursue EIT-only funding or a combination of EIT and ERB funding.

### **4.3 ERB General Program Requirements**

The following subsections set out ERB eligibility requirements and guidelines that will apply to all financial products offered by the ERB, regardless of market sector. Among other things, this section is responsive to certain applicable HUD regulations implicated by the distribution of CDBG-DR funds through the ERB and describes eligible DER systems and project costs. Importantly, additional requirements may be incorporated, as necessary, into sector-specific funding rounds through the ERB.

#### **4.3.1 HUD Requirements**

The ERB will comply with all applicable federal laws and regulations, including those promulgated by HUD pertaining to the use of CDBG-DR funds. This includes the following:

1. HUD requires that no more than 20% of the overall CDBG-DR funding may be allocated outside the nine most impacted counties as determined by HUD (that is, Atlantic, Bergen, Cape May, Essex, Hudson, Middlesex, Monmouth, Ocean, and Union). In the administration of this program, BPU and NJEDA must remain cognizant of that requirement. Specifically for the ERB, the State has projected that no more than 50% of

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funding may be used outside the nine most impacted counties, though that projection is subject to change. If and when 50% (or the amended percentage, if changed) is reached in CDBG-DR funding commitments, the ERB will not fund additional projects outside the nine most-impacted counties using CDBG-DR funding. This condition does not limit the use of State SBC funds.

2. Applicants must show that the critical facility was either directly or indirectly impacted by Superstorm Sandy or another qualifying disaster listed in Appendix A. Direct impact means physical damage to the facility caused by the eligible disaster in the amount of \$5,000 or more. At this time, to qualify for indirect impact applicants must demonstrate one of the following two circumstances: 1) where area flooding and/or loss of power from a qualifying disaster prevented the facility from being able to treat waste water 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 the facility from operating and being able to treat drinking water. Applicants using indirect impact also must demonstrate that the project is supporting revitalization of the community in which it is located. Applicants claiming other indirect impact may qualify, though determination will be made on a case-by-case basis, and will likely involve consultation with HUD. These projects are encouraged to apply even though there is no guarantee that they will be eligible.
3. Applicant facilities must be eligible CDBG-DR recipients pursuant to applicable HUD regulations. At this time, ERB applicant facilities are limited to public facilities, not-for-profit entities, and for-profit entities that meet the SBA definition of a "small business." Per current HUD regulations, a privately owned utility cannot be an ERB applicant. As HUD may provide waivers and/or regulatory clarifications, additional applicant facilities may become eligible for ERB financing. The following link from the SBA website provides information on the small business definition, <http://www.sba.gov/content/small-business-size-standards>. The definition is determined by North American Industrial Classification System (NAICS) code of the applicant facility, their average 3-year annual receipts and/or number of employees. Within the link above is a listing by NAICS codes of the annual receipts and employment maximums, and further small business information.
4. With limited exceptions, per federal regulation, CDBG-DR funding may not be used within the Coastal Barrier Resource Area (CRBA). HUD regulations may potentially bear on the provision of funding to facilities located within the CBRA. Currently, nevertheless, facilities located within the CRBA are encouraged to apply to the ERB, and the ERB will address these regulatory issues with HUD as they arise. (This condition does not limit the use of State SBC funds.) Such a facility's DER microgrid may require appropriately tailored designs to address the impacts of the CBRA. (An illustration of New Jersey's Coastal Barrier Resource System can be found at <http://www.fema.gov/national-flood-database>.)

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insurance-program/coastal-barrier-resource-system-new-jersey, but this map is not dispositive of whether a facility would be considered within a CBRA.)

5. Priority, as established through the scoring system discussed in this document and the funding round guide(s), is placed on projects which serve low and moderate income communities or which create low or moderate income (LMI) employment, either part of which is referred to as the LMI National Objective. Employment creation is measured by full-time equivalent (FTE) permanent job creation, 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](http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/library/stateguide).
6. Project equipment must be installed at a facility and be operational within two years of the closing of the ERB grant and loan. Extension of this construction/operation timeframe may be granted for up to two six-month terms if the project documents significant progress has been made to date. The extension of the construction/operation timeframe 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.
  - All CDBG-DR funds in an approved project must be requested and disbursed by September 30, 2019. Any CDBG-DR funds not disbursed after September 30, 2019 will be rescinded. (This excludes Program Income deployed after this date and does not limit use of SBC funds.)
7. All resilient generation or storage equipment within the project facility will be required to be constructed above FEMA's best available data for base flood elevations, plus any additional requirements that may be imposed by federal, state or local statutes or regulations.
8. Any entity that applied for and received flood-event-related assistance for damage to the property for which ERB financing is sought from any federal source for any previous Presidential declared disaster (occurring after September 14, 1984) that required the mandatory purchase and maintenance of flood insurance pursuant to National Flood Insurance Program (NFIP) regulations, must have obtained and maintained flood insurance (unless the federally required period for maintaining flood insurance has lapsed). As a condition of receiving ERB financing, applicant will be required to purchase and maintain flood insurance to the extent required by any applicable federal regulations.
9. Consistent with the State's CDBG-DR Action Plan, any proposed project design must ensure that energy technology will be appropriately resilient to potential future flooding and storm surge. Tools that can help assess these risks include the NOAA Sea Level Rise Tool for Sandy Recovery at <http://www.globalchange.gov/browse/sea-level-rise->

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tool-sandy-recovery#overlay-context= and Coastal Vulnerability Index and Mapping Protocol at <http://www.state.nj.us/dep/cmp/docs/ccvamp-final.pdf>. Applicants also must consult applicable DEP guidance on flood protection located at <http://www.nj.gov/dep/watersupply/pdf/guidance-ifp.pdf>. Another resource that applicants may wish to use is Rutgers University's coastal flooding and sea level rise interactive mapping tool located at <http://slrviewer.rutgers.edu/>.

10. All ERB projects must comply with all applicable federal and state requirements relating to CDBG-DR funds, which may include but not be limited to: Davis Bacon and/or Prevailing Wage requirements as set forth at N.J.S.A. 48:2-29.47 and N.J.S.A. 34:1B-5.1 et seq., Affirmative Action, subcontracting to small and minority-owned enterprises, National Environmental Policy Act (NEPA) environmental review, and National Historic Preservation Act (NHPA) historical review, among others. **No physical construction activity may occur on site until the completion of required federal environmental reviews.** Other work that does not involve on-site physical construction activities (e.g., architectural designs) may proceed prior to completion of federally required environmental reviews.

### 4.3.2 DER System and Equipment Eligibility

Eligible DER systems may include new resilient DER systems, retrofits to existing DER systems and microgrids as follows:

New Resilient DER Systems: The ERB will finance new resilient DER systems that incorporate any, or all, of:

- DER equipment, such as fuel cells without heat recovery, off grid inverters and battery storage associated with solar photovoltaic (PV) panels, and combined heat and power (CHP) systems including fuel cells, turbines or engines;
- DER equipment that is able to disconnect and operate independently of the electricity grid in the event of a blackout to provide continuous electricity supply to a facility (islanding); and
- DER equipment that is capable of starting up without connection to a functioning grid (blackstart).

**Note:** The ERB will not finance the cost or installation of solar photovoltaic (PV) panels, or any balance-of-system equipment related to solar PV panels. However, off grid or dynamic inverters and battery storage related to solar PV panels will be financed. Any solar electricity storage must be paired with other DER technology to meet the resiliency criteria set forth below.

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Retrofits to Existing DER Systems: The ERB will finance retrofits to existing DER systems that incorporate any, or all, of:

- Incremental distributed generation equipment, such as fuel cells without heat recovery, off grid inverters and battery storage associated with solar PV panels, and CHP systems including fuel cells, turbines or engines to meet the critical load requirement. Only the incremental expansion of DER equipment to generate electricity or useful thermal energy is eligible; and
- The addition of islanding and blackstart equipment to meet the minimum resilient and critical load requirement.

For existing DER solar PV panels, this includes upgrades to an off-grid or dynamic inverter and battery storage.

**Note:** The ERB will not finance the cost or installation of solar photovoltaic (PV) panels, or any balance-of-system equipment related to solar PV panels. However, off-grid or dynamic inverters and battery storage related to solar PV panels will be financed. Any solar electricity storage must be paired with other distributed generation technology to meet the resiliency criteria set forth below.

Microgrids: The ERB will finance equipment necessary to connect a collection of load centers together to a distributed generation source. This may include demand management and other control technologies to match the electrical supply and demand.

For new DER technologies, retrofits, and microgrids, all electric storage projects must be capable of meeting the below resiliency criteria to operate during a continuous seven-day electric grid outage. For solar storage, this system can be paired with an on-site emergency or back-up generator with fuel storage. The ERB will not finance the cost of emergency back-up generators.

**Note:** Nothing contained in this Program Guide is intended to promote project configurations that are, or may be, inconsistent with existing statutes or regulations. Applicants should consult with appropriate energy and legal advisors and with their local electric distribution company regarding the operational and legal feasibility of proposed project configurations.

### General Requirements:

To qualify for financing to install new resilient DER systems, retrofits to existing DER systems, or microgrids through the ERB, the following general eligibility requirements must be met for all market sectors:

1. DER equipment must be new, commercially available and stationary or permanently installed on the customer side of the meter.

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2. For projects incorporating renewable energy technology, in order to verify the renewable energy certificates (REC) for the DER systems (CHP or fuels cells fueled with biogas or renewable hydrogen), or solar REC (SREC) for storage added to existing photovoltaic system, a separate performance meter must be installed that is capable of recording all renewable energy generation.
3. CHP systems must achieve an annual system efficiency of at least 65% based on the lower heating value (LHV), and electric only generation fuel cells must achieve at least a 50% electrical efficiency. System efficiency is defined as the total useful electrical, thermal and/or mechanical power produced by the system at normal operating rates and expected to be consumed in its normal application divided by the lower heating value of the fuel sources for the system.
4. CHP or Fuel Cell system warranty, service contract, or equivalent must be all inclusive for at least ten years. The warranty must cover all components that are financed under the ERB. The warranty must cover the full cost of repair or replacement of defective components including all labor costs.
5. The DER system must be able to disconnect and operate independently of the electric grid in the event of an emergency that results in a grid outage. In order to prevent back feeding to the distribution system, all DER systems must be able to automatically disconnect from the utility in the event of a substantial congestion, grid interruption or grid power failure.
6. The DER system must be able to start up without connection to the electric grid.
7. The DER system must be designed to provide energy to all designated critical loads during a seven-day grid outage without a delivery of fuel to emergency generators. Over the course of such an outage, facilities could plan on using emergency generators and fuel storage in conjunction with the resilient DER system. The costs associated with emergency generators or fossil fuel storage tanks are not eligible for ERB funding.
8. The DER systems must be sized to supply the facility's critical loads. The critical loads are the sum of the electrical load of the facility equipment required to perform the facility's critical functions. This may result in excess useful thermal energy, which would need to be addressed in the feasibility study, energy audit and final design.
9. The critical function should include any anticipated shelter function to provide a safe and secure facility for displaced employees, customers or residents in the event of a disaster or other emergency. This may include microgrid capabilities to connect additional buildings or facilities.

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10. The DER system must operate a minimum number of hours to have a CEEEP DER cost-benefit ratio greater than 1.0 at all times under full load. The facility must document the ability to operate at that capacity during the full year. The CEEP DER Cost Benefit Model is available at <http://ceep.rutgers.edu/combined-heat-and-power-cost-benefit-analysis-materials/>.
11. DER systems, except for solar off-grid inverter and storage systems as noted below, can be sized larger than the facility's electric and thermal loads provided they have customers for the additional electricity and useful thermal energy that meet the on-site definitions at N.J.S.A. 48:3-51 and 48:3-77.1. However, redundancy measures may not be funded by ERB.
12. Applicants are encouraged, to the extent possible, to make use of technology manufactured in and project construction to be completed by New Jersey-based businesses.

### **4.3.3 Applicant and Finance-Related Requirements**

1. Applicants are responsible for obtaining all appropriate interconnection approval which may include a level III interconnection review by the appropriate electric distribution company (EDC) for the DER and storage equipment and tariff approval, if required, from their local natural gas and electric utilities.
2. Applicants are responsible for obtaining and maintaining all construction and environmental permits from the appropriate agencies.
3. Applicants must have no outstanding violations with the New Jersey Department of Environmental Protection.
4. For-profit and non-profit applicants must be registered to do business in New Jersey with Dun and Bradstreet, and have a DUNS number. Governmental entities and instrumentalities of governmental entities such as authorities do not need to comply with the business registration requirement. However, all applicants must have a DUNS number.
5. For-profit and non-profit applicants, and any third-party contractors, must be in good standing with the State of New Jersey, and must not be debarred by the federal government or the State. Governmental entities and instrumentalities of governmental entities such as authorities do not need to comply with this requirement.
6. For-profit and non-profit applicants must receive tax clearance from the New Jersey Division of Taxation as evidenced by a tax clearance certificate. Governmental entities

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and instrumentalities of governmental entities such as authorities do not need to comply with this requirement.

7. In no case should the sum total of any and all grants, incentives, rebates, tax credits or other tax incentives or other financing exceed 100% of the overall system costs.
8. If any SBC funds are used to finance a project, the ERB applicant must be a customer of an electric distribution utility or a gas distribution utility that pays a SBC surcharge for natural gas or electric usage.
9. Where feasible, applicants are encouraged to leverage federal, state, private and other funding sources with ERB funding to realize critical energy resilience projects.

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## **4.4 Project Costs**

### **4.4.1 Eligible Project Costs**

Financing is available for total eligible project costs, less any applicable equity contribution, and less other sources of funding (and subject to all applicable CDBG-DR regulations, including those governing duplication of benefits). Eligible project costs include:

1. Reimbursement for feasibility studies. Initial costs for feasibility studies are borne by the applicant. These costs may be eligible for reimbursement if the project is selected for ERB funding and the first disbursement milestone is met.
2. DER system equipment that meets the criteria in 4.3.2 above and all equipment necessary to convert fuel into electricity or electricity and useful thermal energy. This includes all gas cleanup systems.
3. All secondary components located between the existing infrastructures for fuel delivery and the existing infrastructure for power distribution, including equipment and controls for meeting relevant power standards, such as voltage, frequency and power factors.
4. All secondary components connecting thermal energy output to the facility's existing thermal systems.
5. Storage equipment for electricity (e.g., batteries to store on-site renewable electricity production).
6. Storage equipment for fuel produced on-site (e.g., biogas), if it can be demonstrated that more on-site fuel will be produced than can be consumed by the resilient distributed generation system.
7. Incremental additional costs required to make distributed generation equipment islandable, including blackstart equipment and grid isolation equipment.
8. Acquisition of property on which the equipment is being installed and necessary for installation of the equipment, excluding property acquisition associated with solar installation. The applicant will be required to document that there is no reasonable on-site alternative to the acquisition of additional property.
9. Fuel pre-treatment cost such as biogas treatment and compressors for boosting inlet pressure.
10. Installation and construction costs for the above equipment.

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11. Site preparation and other civil work necessary to build a project, including cost to flood harden the facility.
12. Project engineering, project management, and other soft costs.
13. Contingency up to a maximum of 10% of total eligible project costs. Contingency is not included in the basis for grant calculations.

### **4.4.2 Ineligible Project Costs**

1. All costs associated with emergency generators or fossil fuel storage tanks or any components of emergency generators.
2. Systems that require fuel deliveries such as diesel or propane.
3. Used, refurbished, temporary, pilot, or demonstration equipment.
4. Solar PV panels, or balance-of-system equipment related to solar PV panels. (However, upgrades to the inverter and storage-system components are eligible costs.)
5. For other ineligible costs, please see the ERB Funding Round document for each applicable sector.

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### **SECTION 5: APPLICATION, REVIEW AND APPROVAL PROCESS**

The following section describes the two-step application and review process.

#### **5.1 ERB Initial Intake Application and Review**

Prior to applying to the ERB for project financing, each project must have a detailed energy audit performed, which includes the DER system. This may include a previously conducted audit or an updated audit which includes the DER system and must be either a Local Government Energy Audit conducted by the New Jersey Clean Energy Program or an ASHRAE Level II audit conducted by a DPMC classified energy audit professional. Information on energy audits provided free of charge through the New Jersey Clean Energy Program can be obtained at <http://www.njcleanenergy.com/commercial-industrial/programs/local-government-energy-audit/local-government-energy-audit>.

Additionally, prior to applying to the ERB for project funding, each project applicant is strongly encouraged to meet with staff of the Office of Permit Coordination and Environmental Review (DEP's ONE STOP permit coordination) to identify needed permitting for the proposed project. Follow this link <http://www.nj.gov/dep/pcer/> for further information about ONE STOP. Moreover, applicants already aware of projects that may be eligible for funding through the ERB are encouraged to engage DEP to begin the permitting process even before an application for ERB funding is submitted. DEP has taken steps to address increases in permit requests arising in connection with Sandy recovery.

Also, prior to applying or during the design phase, the project applicant is strongly encouraged to meet with its EDC to confirm that the proposed system will be compatible with the EDC's infrastructure, and discuss interconnectivity and other issues that may arise in connection with the project.

An ERB In-Take Application will be made accessible through the BPU and NJEDA websites ([www.bpu.state.nj.us](http://www.bpu.state.nj.us) and [www.njeda.com](http://www.njeda.com)), which will gather general information about the applicant and project. Once completed and submitted, BPU and NJEDA will review the project to determine if it falls within the ERB program general technical and financial requirements, as well as within any other requirements that may be specific to a particular ERB funding round.

If the project is determined to meet all basic requirements of the program, the project applicant will be asked to provide additional information and submit further details regarding the project for review and funding consideration on a detailed Full Application, discussed below.

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### **5.2 ERB Full Application and Review**

A completed Full Application will be reviewed to determine eligibility. If the completed application meets all necessary requirements, it will be scored using the Scoring Criteria applicable to the ERB funding round.

Projects will undergo a technical review that may include, but may not be limited to, equipment selection, equipment layout, site design, operating profile, existing fuel delivery infrastructure and grid interconnection plans. Projects also will undergo an underwriting analysis which may include, but may not be limited to, an assessment of the applicant's ability to repay the loan portion of the funding, a credible funding source(s) to fund any remaining gap between sources and uses and cost overruns, experience and capacity of the applicant to complete the project, creditworthiness of the applicant, and whether the applicant and project meet all federal CDBG-DR funding requirements.

Additional information regarding the Full Application process, including proofs of cost reasonableness, capacity to timely utilize CDBG-DR funding, satisfaction of specific CDBG-DR regulatory requirements including ensuring no duplication of benefits, among other things, will be provided upon development and release of the Full Application. The Full Application may vary slightly across funding rounds to account for certain differences that may arise between projects focused on different types of critical facilities.

In evaluating project applications, the ERB will consider whether the project meets the 15% energy savings goals of the NJCEP Pay for Performance or SBC Credit program. Further details of these program goals can be found at <http://www.njcleanenergy.com/commercial-industrial/programs/pay-performance> and <http://www.njcleanenergy.com/commercial-industrial/programs/societal-benefits-charge-credit-program>.

### **5.3 Project Funding**

Following completion of the Full Application and the scoring of applications according to the scoring criteria applicable to the funding round, projects that meet the minimum scoring requirements will be brought for consideration to the Boards of both BPU and NJEDA (or considered by delegation to staff, if applicable). Scoring criteria may vary slightly by funding round, but generally, projects will be evaluated based on a comprehensive risk analysis framework that incorporates the following principles:

1. Criticality
2. Resilience
3. Technical Feasibility
4. Cost Effectiveness
5. Impacted Communities Served

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6. Readiness to Proceed
7. Meeting HUD Low- to Moderate-Income National Objective

A comprehensive underwriting process also will be incorporated into funding decisions for project applications submitted to the ERB.

Approved projects will be deemed preliminarily eligible for funding, subject to successful completion of a NEPA environmental review, as necessary, and any additional on-site reviews that may be federally required as a precondition of receiving CDBG-DR funding.

Any project qualifying as a "Major Infrastructure Project" pursuant to the HUD Federal Register Notices of November 18, 2013 and March 27, 2014 also will be required to be reviewed by HUD before funding is approved. This review includes publishing a Substantial Amendment to the New Jersey Department of Community Affairs CDBG-DR Action Plan, followed by a public comment period, and then submission of the proposed amendment to HUD for consideration which can take up to 60 days. "Major Infrastructure Projects" are projects that:

- Are physically located in multiple counties (i.e., physical construction activities for the same project will occur in multiple counties);
- Have a total project cost of \$50 million or more, with at least \$10 million of CDBG-DR funding; or
- Involve two or more related projects that combine to have a total project cost of \$50 million or more, with at least \$10 million of CDBG-DR funding.

### **5.4 Appeals**

An applicant will be able to formally appeal final eligibility decisions for ERB funding. Further information on the appeal process will be forthcoming.

### **5.5 Reporting Requirements**

Approved projects will be subject to all applicable federal and state regulatory reporting requirements, which may include, but not be limited to: energy and facility performance, HUD National Objectives, labor requirements, procurement requirements, environmental requirements and employment. To the extent that other reporting requirements may apply, applicants will be made aware of these requirements and will have to provide information sufficient to satisfy the requirements.

Energy and performance reporting may be an online remote reporting system that tracks daily performance.

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### **5.6 Quality Control Provisions**

Prior to closing, the ERB may employ an outside entity or another state agency to review the application file to determine that the closing is appropriate and meets ERB requirements. Additionally, any contract relating to ERB-funded projects where deployment of oversight monitors is mandated, pursuant to N.J.S.A. 52D-15.1 to 15.2, will be required to undergo monitoring in accordance with those requirements.

All grants provided under this program will be subject to the Single Audit Act and the provisions of the Single Audit Policy set forth OMB Circular 04-04-OMB.

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## APPENDIX A ELIGIBLE DISASTERS

To be eligible for funding under the Energy Resilience Bank, according to the Robert T. Stafford Disaster Relief and Emergency Assistance Act (P.L. 93-288), as amended by the Disaster Relief Act of 1974 (P.L. 93-288), projects must demonstrate a tie to one of the listed weather events below or have incurred physical damage from one of the listed storms.

- **Declaration No. 1954** – Severe Winter Storm and Snowstorm (Incident Period: December 26, 2010 to December 27, 2010). Impacted counties: Passaic, Bergen, Morris, Essex, Hudson, Union, Somerset, Middlesex, Mercer, Monmouth, Ocean, Burlington, Atlantic, Cumberland, Cape May.
- **Declaration No. 4021** – Hurricane Irene (Incident Period: August 27, 2011 to September 5, 2011). Impacted counties: all twenty one counties.
- **Declaration No. 4033** – Severe Storms and Flooding (Incident Period: August 13, 2011 to August 15, 2011). Impacted counties: Gloucester, Salem, Cumberland.
- **Declaration No. 4039** – Remnants of Tropical Storm Lee (Incident Period: September 28, 2011 to October 6, 2011). Impacted counties: Passaic, Sussex, Warren, Hunterdon, Mercer.
- **Declaration No. 4048** – Severe Storm (Incident Period: October 29, 2011). Impacted counties: Middlesex, Somerset, Hunterdon, Union, Morris, Warren, Essex, Bergen, Passaic, Sussex, Cape May.
- **Declaration No. 4070** – Severe Storms and Straight-Line Winds (Incident Period: June 30, 2012). Impacted counties: Salem, Cumberland, Atlantic.
- **Declaration No. 4086** – Hurricane Sandy (Incident Period: October 26, 2012 to November 8, 2012). Impacted counties: all 21 counties.

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Date: October 14, 2014

## ERB FUNDING ROUND 1: WATER AND WASTEWATER TREATMENT FACILITIES

A maximum of **\$65 million** may be committed to projects in this first ERB funding round, which will be open to wastewater treatment plant (WWTP) and water treatment plant (WTP) applicants that satisfy the threshold eligibility criteria in Section 4 as well as all requirements for funding set forth below. Capping this funding round at \$65 million is intended to ensure that sufficient funding is available for future funding rounds that may benefit other critical market sectors. Importantly, capping this initial funding round should not be taken to mean that additional ERB funds cannot be made available for WWTP and WTP applicants.

**Applications will be accepted on a rolling basis, and reviewed and brought for Board actions on a first-received, first-ready basis. The application window will remain open until funds are allocated.** Applications will not be accepted once the budget cap is reached, based on submittal of a complete application. However, as mentioned above, the ERB may modify this initial budget cap based on availability of funding, prioritization of other sectors, CDBG-DR funding limitations, or other factors.

### 1.1 Maximum Award

There is no maximum project award for this funding round except for a per project cap on electricity storage equipment; however, cost effectiveness, including the amount of CDBG-DR funds sought in relation to the benefit realized from the project, is a critical factor in scoring qualifying projects.

The total available budget in this Funding Round 1 for **electricity storage equipment** such as batteries to store onsite renewable electricity production is **\$5 million**, and each project will be limited to a cap of **\$500,000** for electricity storage equipment.

### 1.2 WWTP / WTP Ineligible Costs

The following costs are ineligible for the WWTP and WTP sector. See the ERB Program Guide for ineligible costs for all sectors.

1. All predevelopment costs prior to April 7, 2014, with the exception of any energy audit costs which are ineligible for reimbursement prior to October 20, 2014.
2. All equipment costs prior to October 20, 2014.

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## 1.3 Scoring Criteria for Funding Round 1

**Scoring Criteria** – Projects will be scored on a point system between 0 and 100 based on the following:

1. Technology Efficiency/Economic Cost Effectiveness (Up to 30 points) – Using the Rutgers Center for Energy, Economics and Environmental Policy Distributed Energy Resource Cost Benefit model:
  - a. A project will receive 30 points for a cost-benefit ratio greater than 3.0.
  - b. A project will receive 25 points for a cost-benefit ratio between 2.5 and 3.0 (including 3.0).
  - c. A project will receive 20 points for a cost-benefit ratio between 2.0 and 2.5 (including 2.5).
  - d. A project will receive 15 points for a cost-benefit ratio between 1.5 and 2.0 (including 2.0).
  - e. A project will receive 10 points for a cost-benefit ratio between 1.0 and 1.5 (including 1.5).

***Projects with a Cost-Benefit Ratio less than 1.0 are not eligible for funding.***

2. LMI National Objective (20 points) – A project that meets HUD's Low Moderate Income (LMI) National Objective will receive 20 points. A project that does not meet this National Objective will receive 0 points.
3. Most Impacted Communities (Up to 15 points) – Projects at critical facilities that were directly or indirectly impacted by Superstorm Sandy or other qualifying disaster, as listed in Appendix A:
  - a. Will receive 15 points if the critical facility serves three or more of the municipalities listed in Appendix B.
  - b. Will receive 10 points if the critical facility serves one or two of the municipalities listed in Appendix B.
  - c. Will receive 0 points if the critical facility serves none of the municipalities listed in Appendix B.

The list of communities in Appendix B is based on FEMA data showing municipalities with the largest combined number of primary homes and rental units that sustained at least \$8,000 of physical damage (i.e., "major" damage) as a result of Superstorm Sandy. 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 regulations governing the use of CDBG-DR monies that fund the ERB,

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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.

4. Readiness To Proceed (Up to 10 points)

- a. A project will receive 10 points if project completion is reasonably expected within one year from the estimated closing date.
- b. A project will receive 5 points if project completion is reasonably expected more than one year, but less than two years, from estimated closing date.
- c. A project will receive 0 points if project completion is reasonably expected to be more than two years from the estimated closing date.

For purposes of this criterion, project completion will be measured by such factors as scope of the project; status of permitting; if applicable, availability of other funding to complete the project; and reasonableness of proposed project timeline. Importantly, this factor is not measured from the date of application submission, but rather from the date of closing.

5. Criticality (10 points) – A facility that is identified as a state level asset in the Office of Homeland Security and Preparedness State Asset database will be awarded 10 points.
6. Microgrid (10 points) – A project that includes more than one free-standing facility interconnection will be awarded 10 points.
7. Facility Energy Efficiency (5 points) – A project that meets or exceeds the performance requirements of Pay for Performance of the Societal Benefits Charge (SBC) Credit program, or project is participating in the Energy Savings Improvement Program (ESIP), will receive 5 points.

In addition to the above scoring criteria, funding determinations also will be based, in part, on the results of a comprehensive credit underwriting analysis.

Finally, all DER system designs, as outlined in Section 4.3.2.7 of the ERB's Program Guide, should be consistent, to the extent possible, with the guidance set forth in NJDEP Auxiliary Power Guidance and Best Practices for Wastewater and Drinking Water Systems (see <http://www.nj.gov/dep/watersupply/pdf/guidance-ap.pdf>).

**Scoring Results** – Projects must score a minimum of 55 points or more to be considered eligible for project financing. Projects that do not score at least 55 points pursuant to these criteria will be deemed ineligible for funding (and may not be resubmitted in the case of future funding rounds open to WWTP and WTP facilities, unless either the circumstances of the project or the parameters of the program change).

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### 1.4 Financial Product Terms for ERB Funding Round 1

The financial product terms for this ERB Funding Round 1 are as follows:

1. Funding – ERB will provide 100% of unmet funding needs for an eligible project, after equity contribution applicable to for-profit owned projects, (i.e., the ERB may finance the entire funding gap, after applicable equity contribution is satisfied.) The amount of unmet need will be established through the federally required duplication of benefits/unmet need analysis. In funding up to the entire unmet need of an eligible project, 40% of the funding gap (remaining after equity is applied, if applicable) will be provided in the form of an incentive and 60% through an amortizing loan. The terms of the incentive and loan financing are described below.
  - a. Incentive
    1. Grant – 20% of unmet funding need, after any applicable equity contribution, will be provided as a grant
    2. Loan – 20% of unmet funding need, after any applicable equity contribution, will be provided as a loan with principal forgiveness based on performance standards as follows. Principal forgiveness will be provided in equal percentages over five years (4% each year) based on proof of successful operation of equipment and evidence of minimum required performance.
      - a. Performance will be measured through a method of measurement and verification (M&V) to support the claim of achieving minimum run hours and production capacity. M&V requirements may be documented through a real-time remote performance reporting system.
      - b. If a project does not meet the required performance level at the end of any year, the forgivable portion of that year's loan principal will not be forgiven. In the following year, if the performance level is returned to the required level, then the forgivable portion of the current and previous year's principal will be forgiven. However, if the performance level is not attained for two consecutive years or more, and the applicant subsequently meets a required performance level in a year within the five-year principal forgiveness period, only the previous and the current year's forgivable portion of principal will be forgiven. Circumstances of force majeure that cause a project to fail to meet required performance will not affect that year's principal forgiveness.

## Exhibit D2 - ERB Financing Program Guide

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- b. Amortizing and Forgivable Loan Terms. Any balance on the loan, including the portions to be forgiven until forgiven, will be governed by the following terms:
    - 1. 2%, fixed interest rate for applicants with bond rating of BBB- or higher at the time of approval; 3% fixed interest rate for applicants with bond rating lower than BBB- or which are not rated at the time of approval.
    - 2. Collateral – None required.
    - 3. Up to 20-year term, based on useful life of majority of assets.
    - 4. Up to 2 years' principal moratorium starting from closing, according to the following:
      - a. Moratorium duration will be the length of the construction period, but will not exceed 2 years, but can be extended as set forth in c. below.
      - b. Moratorium is included in loan term, not in addition.
      - c. Up to two, six-month extensions of the moratorium may be provided based on evidence of significant progress toward project completion, and where delay was unavoidable or unforeseeable. In no event will the moratorium, as extended, exceed three years.
    - 5. Interest charged during the construction period will be based on disbursements of loan capital and will not accrue on undisbursed funds.
    - 6. Debt Service Coverage (DSC) Ratio: The DSC ratio requirement is as follows:
      - a. No DSC ratio requirement for entities with bond ratings of BBB- or better; or
      - b. DSC ratio requirement of 1:1.0 (including loan principal anticipated to be forgiven) for entities with lower rating or that are unrated.
  - 7. Equity Requirements
    - a. No equity contribution for publicly-owned, publicly-controlled or non-profit facilities.
    - b. Equity contribution of at least 10% of total project costs for for-profit facilities.
-

## **Exhibit D2 - ERB Financing Program Guide**

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2. **Disbursement** – Grant funding for projects will be disbursed before loan capital. Disbursement will be based on the following milestones, with presentation of evidence of cost incurred and site visit to verify:
  - a. Purchase and delivery of equipment in amount of cost of equipment, delivery and feasibility study, if applicable,
  - b. Up to 3 construction milestones based on development schedule specific to each project construction schedule, and
  - c. Completion of equipment commissioning/testing with passing results.
  - d. All disbursements to CDBG-DR-funded projects will be subject to meeting all applicable HUD requirements.

# Exhibit D2 - ERB Financing Program Guide

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## APPENDIX A

### ELIGIBLE DISASTERS

To be eligible for funding under the Energy Resilience Bank, according to the Robert T. Stafford Disaster Relief and Emergency Assistance Act (P.L. 93-288), as amended by the Disaster Relief Act of 1974 (P.L. 93-288), projects must demonstrate a tie to one of the listed weather events below or have incurred physical damage from one of the listed storms.

- **Declaration No. 1954** – Severe Winter Storm and Snowstorm (Incident Period: December 26, 2010 to December 27, 2010). Impacted counties: Passaic, Bergen, Morris, Essex, Hudson, Union, Somerset, Middlesex, Mercer, Monmouth, Ocean, Burlington, Atlantic, Cumberland, Cape May.
- **Declaration No. 4021** – Hurricane Irene (Incident Period: August 27, 2011 to September 5, 2011). Impacted counties: all twenty one counties.
- **Declaration No. 4033** – Severe Storms and Flooding (Incident Period: August 13, 2011 to August 15, 2011). Impacted counties: Gloucester, Salem, Cumberland.
- **Declaration No. 4039** – Remnants of Tropical Storm Lee (Incident Period: September 28, 2011 to October 6, 2011). Impacted counties: Passaic, Sussex, Warren, Hunterdon, Mercer.
- **Declaration No. 4048** – Severe Storm (Incident Period: October 29, 2011). Impacted counties: Middlesex, Somerset, Hunterdon, Union, Morris, Warren, Essex, Bergen, Passaic, Sussex, Cape May.
- **Declaration No. 4070** – Severe Storms and Straight-Line Winds (Incident Period: June 30, 2012). Impacted counties: Salem, Cumberland, Atlantic.
- **Declaration No. 4086** – Hurricane Sandy (Incident Period: October 26, 2012 to November 8, 2012). Impacted counties: all 21 counties.

# Exhibit D2 - ERB Financing Program Guide

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## APPENDIX B

### LIST OF IMPACTED MUNICIPALITIES\*

Asbury Park	Atlantic City	Atlantic Highlands	Avalon	Avon-by-the-Sea
Barnegat	Bass River	Bay Head	Bayonne	Beach Haven
Belleville	Belmar	Berkeley	Bradley Beach	Brick
Brielle	Brigantine	Camden	Carteret	Downe Township
Eagleswood	East Brunswick	Egg Harbor	Elizabeth	Hackensack
Harrison	Harvey Cedars	Highlands	Hoboken	Jersey City
Keansburg	Kearny	Keyport	Lacey	Lake Como
Lavallette	Linden	Little Egg Harbor	Little Ferry	Little Silver
Long Beach	Long Branch	Longport	Lyndhurst	Manasquan
Mantoloking	Margate	Middle Township	Middletown	Monmouth Beach
Moonachie	Mullica Township	Neptune	Newark	North Bergen
North Wildwood	Ocean City	Ocean Gate	Oceanport	Old Bridge
Penns Grove	Perth Amboy	Pleasantville	Point Pleasant Beach	Point Pleasant Borough
Rahway	Ridgefield Park	Rumson	Sayreville	Sea Bright
Sea Isle City	Seaside Heights	Seaside Park	Secaucus	Ship Bottom
Somers Point	South Amboy	South River	South Toms River	Spring Lake
Stafford	Surf City	Toms River	Tuckerton	Union Beach
Ventnor	Wallington	Weehawken	West Wildwood	Wildwood
Woodbridge				

\* This list of communities is based on FEMA data showing municipalities with the largest combined number of primary homes and rental units that sustained at least \$8,000 of physical damage (i.e., "major" damage) as a result of Superstorm Sandy.

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## ENERGY RESILIENCE BANK FULL APPLICATION

### A. PROJECT NAME AND CONTACT INFORMATION

#### PROJECT NAME

Project Name \_\_\_\_\_  
(Assigned by the Applicant to be used for reference purposes.)

#### APPLICANT INFORMATION

Applicant Organization Name \_\_\_\_\_  
(Official, legal name without abbreviations.)

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Federal Tax I.D. Number \_\_\_\_\_

New Jersey Tax Identification Number \_\_\_\_\_

DUNS Number \_\_\_\_\_

All applicants, including governmental entities, must have a DUNS number to be eligible for federal assistance. Please call Dunn and Bradstreet at 1-866-705-5711, or visit <http://www.dnb.com/get-a-duns-number.html> to see if you already have a DUNS number, or learn how to obtain one.

Organization Type - check the Organization Type below which best describes the Applicant.

- Municipality
- County
- Municipal Authority
- County Authority
- Non-profit
- For-Profit
- Other (please describe):

North American Industrial Classification System (NAICS) Code \_\_\_\_\_

To find this number, look to the federal determination provided when the Applicant was formed, or visit the following link to determine based upon current business functions, <http://www.census.gov/eos/www/naics/>.

**APPLICATION CONTACT**

Primary Contact for Application

Name \_\_\_\_\_

Title \_\_\_\_\_

Company Name \_\_\_\_\_

Daytime Phone Number \_\_\_\_\_ Email \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Do you, the Authorized Representative, or any staff working on this application or project require translation of documents or other communication in another language?

 Yes     No**AUTHORIZED REPRESENTATIVE FOR APPLICANT**

(Person authorized to enter into agreements on behalf of the Applicant. This person must be the Applicant signatory of certifications for this application.)

Name \_\_\_\_\_

Title \_\_\_\_\_

Phone \_\_\_\_\_

Email \_\_\_\_\_

**INSTALLATION INFORMATION**

Installation Address

Address \_\_\_\_\_

City \_\_\_\_\_ County \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Mailing Address (if different from installation address)

Address \_\_\_\_\_

City \_\_\_\_\_ County \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Provide Block and Lot Number of facility where the system will be constructed.

Block \_\_\_\_\_  
Lot Number \_\_\_\_\_

## PROFESSIONALS

Have you spoken to or met with a member of the business development staff of the ERB?

Yes     No

**The applicant is strongly encouraged to meet with a member of the business development staff of the ERB prior to submitting an Intake Form. Please call the Customer Care Line at 866-534-7789.**

Do you have a Design Professional under contract?  Yes     No

Name \_\_\_\_\_

Title \_\_\_\_\_

Company Name \_\_\_\_\_

Daytime Phone Number \_\_\_\_\_ Email \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

## ACCOUNTANT CONTACT

Name \_\_\_\_\_

Title \_\_\_\_\_

Company Name \_\_\_\_\_

Daytime Phone Number \_\_\_\_\_ Email \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

## LEGAL COUNSEL CONTACT

Name \_\_\_\_\_

Title \_\_\_\_\_

Company Name \_\_\_\_\_

Daytime Phone Number \_\_\_\_\_ Email \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

**B. PRE-APPLICATION ACTIVITY**

Has a Local Government Energy Audit (LGEA) or American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Level II audit been conducted by a DPMC classified energy audit professional which includes the DER system?  Yes  No

**The applicant is prohibited from applying to ERB before a LGEA is conducted by BPU's Clean Energy Program or a Level II ASHRAE Audit is performed by a DPMC classified energy audit professional. Information on energy audits provided free of charge through the New Jersey Clean Energy Program can be obtained at <http://www.njcleanenergy.com/commercial-industrial/programs/local-government-energy-audit/local-government-energy-audit>.**

Has the Applicant met with staff of the Office of Permit Coordination and Environmental Review (DEP's ONE STOP permit coordination)?  Yes  No

**Yes: Provide date of meeting, list of needed permits, and any outstanding issues.**

**No: The applicant is strongly encouraged to meet with DEP's ONE STOP staff to identify needed permitting for the proposed project. Follow this link <http://www.nj.gov/dep/pcer/> for further information about ONE STOP. Describe the work conducted to date to investigate needed permitting.**

Has the Applicant met with their Electric Distribution Company (EDC) to confirm that the proposed system will be compatible with the EDC's infrastructure and to otherwise coordinate with the EDC on their interconnection?  Yes  No

**Yes: Provide date of meeting, summary of results, and any outstanding issues (include date and summary of results and outstanding issues)**

**No: The applicant is strongly encouraged to meet with their EDC to confirm that the proposed system will be compatible with the EDC's infrastructure and to otherwise coordinate on interconnection.**

**C. PROJECT DESCRIPTION**

Project Type (technology or technologies):

Project Capacity/Total Project Size (kW or MW):

Annual Generation:

Project Operating Fuel:

Total Financing Requested:

Total Financing as a Share of Total Project Cost (%):

Total Project Cost (\$):

Estimated Rate of Return, IRR (%):

Cost/Benefits Analysis of similar project models:

Provide a brief description in the form of a short paragraph of the project to be undertaken. The description should include the general services provided by the applicant, existing DER equipment currently in place, current aggregate megawatt capacity and proposed changes and additions with reference to megawatt capacity changes. The brief description (approximately 500 words or less) also should include a general site description.

Describe the status of the development process including predevelopment permitting and environmental review, estimated start and completion of construction and target in-service date.

#### **D. STORM-RELATED INFORMATION**

Describe how the facility was impacted by Superstorm Sandy or another qualifying disaster listed in Appendix A of the ERB Financing Program Guide. Direct impacts include physical damage to the facility caused by the eligible disaster. Describe other impacts of the Superstorm or other qualifying disaster on the Applicant facility(s) and its ability to function during and following the weather event. Include the duration of each impact and identify which weather event it pertains to.

Briefly describe any damage or detrimental impacts to the area surrounding the facility where the DER system will be constructed or expanded. Describe how the facility contributes to the local economy through its provision of services and any economic impacts that resulted from the facility's direct or indirect impact from Superstorm Sandy or other qualifying disaster. Please quantify to the extent possible.

Is the facility located inside the Coastal Barrier Resource Area (CBRA)?

- Yes  
 No

Describe how the facility generation or storage equipment within the project facility will be constructed above FEMA ABFE, plus any additional requirements imposed by federal or state regulations.

Was the Applicant Organization required to obtain and maintain flood insurance pursuant to National Flood Insurance Program (NFIP) regulations due to the fact that it applied for and received flood-event-related assistance from any federal source for damage to the property for which ERB financing is sought for any previous Presidential-declared disaster (occurring after September 14, 1984) that required the mandatory purchase and maintenance of flood insurance pursuant to NFIP regulations.

- Yes  
 No

For which Presidential-declared disaster(s) did the Applicant Organization receive funding?

Outline the requirements for obtaining and maintaining NFIP associated with each disaster listed.

Did the Applicant Organization obtain and maintain flood insurance for the federally required period associated with the federal funding it received?

- Yes  
 No

**Note:** As a condition of receiving ERB financing, the Applicant Organization will be required to purchase and maintain flood insurance to the extent required by any applicable federal regulations.

Using the listed tools, provide an assessment of the Facility's risk of being affected by sea level rise over the useful life of their DER system. Describe how the risks of sea level rise on the system will be mitigated. Sea level rise tools: 1) NOAA Sea Level Rise Tool for Sandy Recovery at <http://www.globalchange.gov/browse/sea-level-rise-tool-sandy-recovery#overlay-context>; 2) New Jersey Department of Environmental Protection (DEP) guidance on flood protection located at <http://www.nj.gov/dep/watersupply/pdf/guidance-ifp.pdf>; and 3) Coastal Vulnerability Index and Mapping Protocol at <http://www.state.nj.us/dep/cmp/docs/ccvamp-final.pdf>.

## E. GENERAL APPLICANT INFORMATION

Provide a description of operations, services provided and customer base.

Describe the ownership and/or statutory authority of the Applicant.

Year Applicant was established:

Describe the service area of the Facility including street boundaries if less than whole municipal and/or county areas.

Does the Facility where construction will occur have any tenants?

- Yes     No

How many new positions will the Facility create as a result of construction or expansion of the DER system? (This estimate relates to permanent Full-Time Equivalent (FTE) positions to be maintained after construction completion, and should not include construction jobs.)

Fill out chart for each new position the Facility will create as a result of construction or expansion of the DER system?

Employee Title	Annual Salary	Hours Employee Will Work Per Week	Full- or Part-Time Employee

Is the Applicant any of the following types of entities or located in the following area? Check all that apply.

- Yes  No Minority-Owned Business
- Yes  No Veteran-Owned Business
- Yes  No Affirmative Action/Disadvantaged Small Business
- Yes  No Located in a Historically Underutilized Business (HUB) Zone

Provide a description of any liens, judgments, pending lawsuits or other legal claims, tax claims or other outstanding financial claims against the Applicant, its parent or any of its related entities.

## F. EQUIPMENT

Check type of system:

- Facility is a New Resilient DER System

- Fuel cells (Complete forms 1, 2, 3 &3a)

- Without heat recovery
  - With heat recovery

- Combined Heat and Power (CHP) Systems (Complete forms 1, 2, 3 &3a)

- Reciprocating Engine
    - Gas Turbine
    - Microturbine

- Solar PV Off-Grid Inverter and/or Batteries (See Notes) (Complete form 1)

- The new DER equipment is able to disconnect and operate independently of the electricity grid in the event of a blackout to provide continuous electricity supply to the facility (islanding) to meet the minimum resilient and critical load requirement (See Notes)

- The new DER equipment is capable of starting up without connection to a functioning grid (blackstart) to meet the minimum resilient and critical load requirement (See Notes)

- The Facility is a Retrofit to an Existing DER System (See Notes)

- Fuel cells
    - Without heat recovery
    - With heat recovery

- Combined Heat and Power (CHP) Systems
  - Reciprocating Engine
  - Gas Turbine
  - Microturbine
- Solar PV Off-Grid Inverter and/or Batteries (See Notes)
- The addition of islanding equipment to meet the minimum resilient and critical load requirement (See Notes)
- The addition of blackstart equipment to meet the minimum resilient and critical load requirement (See Notes) state type of equipment
- The facility is a Microgrid - connection of a collection of load centers with different meters together to a distributed generation source
- Combination of Systems (e.g., Fuel Cell and CHP)

Equipment Type (select all that apply):

- Boiler w/Steam Turbines
- Gas Engines
- Gas Turbines
- Heat Recovery Equipment
- Battery
- Inverter
- Fuel Cells

Manufacturer \_\_\_\_\_

Model \_\_\_\_\_

Installed Capacity (in kW, as calculated in the Technical Worksheets):\_\_\_\_\_

- DER equipment is new, commercially available and will be stationary or permanently installed on the customer side of the meter.
- The DER system is designed to provide energy to all designated critical loads during a seven-day grid outage without a delivery of fuel to emergency generators. Over the course of such an outage, facilities could plan on using emergency generators and fuel storage in conjunction with the resilient DER system.
- A separate performance meter is or will be installed that is capable of recording all renewable energy generation to verify the renewable energy certificates (REC) for renewable DER systems (CHP or fuels cells fueled with biogas or renewable hydrogen) or solar REC (SREC) for storage added to existing photovoltaic system.
- The CHP system achieves an annual efficiency of at least 65% based on the lower heating value (LHV)

- The electric only generation fuel cells achieve annual system efficiency of at least 50% electrical efficiency defined as the total useful electrical, thermal and/or mechanical power produced by the system at normal operating rates and expected to be consumed in its normal application divided by the lower heating value (LHV) of the fuel sources for the system.
- CHP or Fuel Cell system warranty, service contract, or equivalent is all inclusive for at least ten years. The warranty covers all components that are financed under the ERB. The warranty covers the full cost of repair or replacement of defective components including all labor costs.
- The DER system under minimum operating hours has a cost-benefit ratio greater than 1.0 at all times under full load.
- The application provides full documentation of the ability to operate at that capacity during the full year.
- The design of the facility counts for all excess useful thermal energy identified in the feasibility study, energy audit and final design.

**Note:** Critical loads are the sum of the electrical load of the facility equipment required to perform the facility's critical functions. The critical function should include any anticipated shelter function to provide a safe and secure facility for displaced employees, customers or residents in the event of a disaster or other emergency. This may include microgrid capabilities to connect additional buildings or facilities.

**Note:** For Retrofits, only the incremental expansion of DER equipment to generate electricity or useful thermal energy is eligible

**Note:** The ERB will not finance the cost or installation of solar photovoltaic panels or any of the balance of system costs except for off-grid or dynamic inverters and battery storage. Any solar electricity storage must be paired with other distributed generation technology to meet the resiliency criteria.

**Note:** All electric storage projects must be capable of meeting the resiliency criteria to operate during a continuous seven-day electric grid outage.

**Note:** For solar storage, this system can be paired with an on-site emergency or back-up generator with fuel storage. The ERB will not finance any of the components of the on-site emergency or back-up generators.

## G. PROJECT INFORMATION

### COST SUMMARY

Total Project Cost \$ \_\_\_\_\_

Total Financing Requested \$ \_\_\_\_\_

Fill out the Summary Sources and Uses of Funds Chart that includes at least the items below, as applicable. Total Project Costs for each column should be equal.

**Summary Sources and Uses of Funds Chart**

<b>SOURCES</b> (Include funding in hand, committed and expected)		<b>USES</b>
Bank Financing	\$0.00	Generation System Component Cost \$0.00
Equity	\$0.00	Design \$0.00
Other Sources	\$0.00	Construction \$0.00
Other Sources	\$0.00	Labor and Materials Site Improvements (such as utilities installation) \$0.00
Other Sources	\$0.00	Contingency \$0.00
ERB Financing	\$0.00	Acquisition \$0.00
		Other Eligible Costs \$0.00
		Other Eligible Costs \$0.00
		Other Costs not Eligible for ERB Financing \$0.00
<b>TOTAL PROJECT COST</b>	<b>\$0.00</b>	<b>TOTAL PROJECT COST</b> \$0.00

For each identified source of funding in the Sources and Uses Chart above, other than the ERB Financing, describe status of application, commitment or approval.

If FEMA is a funding source, provide Control Number.

If SBA is a funding source, provide Application Number.

Have other sources of funding been applied for and denied? If yes, provide list of entities applied to and brief description of reason(s) for denial for each.

Describe how any remaining gap between sources will be funded if the full amount of the request could not be funded or if the project experiences unexpected cost overruns.

Provide a listing of all grants, incentives, rebates, tax credits or other tax incentives including Modified Accelerated Cost Recovery (MACRS).

Grant/Incentive/Tax Credit/Financing	Agency	Amount	Date

### PROJECT

**Project's Goals and Objectives** – Describe the overall goals and objectives to be achieved by successful completion of this project. Include project's success metrics and how defined. Also describe how this project will commence work quickly and complete the project within a two-year time period, or earlier; the project's ability to be resilient and operate when the grid is down; to create jobs; the project's ability to reduce greenhouse gas emissions, criteria pollutant emissions and other environmental discharges; and the project's ability to create or save energy.

**Site Location and Description** – Indicate the site for project development and the basis for site selection including the location of substations and transmission lines and all points of interconnection to the distribution system serving New Jersey. Also indicate the location and connection point to any regulated natural gas utility or interstate pipeline. Describe the current uses, conflicts, or characteristics of the site location under consideration. Define the attributes which make the site attractive and list any potential problems, constraints or limitations with siting an energy facility at that location, including but not limited to environmental, economic, or energy production characteristics.

**Site Ownership or Control** – Identify the nature of land ownership or lease arrangements for all aspects of the Project including all required interconnection areas. Describe progress in securing leases, easements and land required for the Project and propose a plan for accomplishing remaining steps toward acquiring leases or land ownership. Indicate whether Applicant has site control, or demonstrate the ability to have site control within 90 days after the funding approval date.

**Environmental, Energy and Economic Impacts and Benefits** – Discuss the of potential impacts of the Project including, but not limited to, air emissions, waste water discharges, noise, aesthetics, during construction and post-constructional operations. Address all anticipated or likely environmental, energy or economic issues, (e.g., if on a US or NJ Registered Historic Site, applicant must certify NJDEP determination that project complies with all applicable requirements of N.J.A.C. 7:4-2. Also Applicant must certify that all applicable requirements of the NJDEP's Solid Waste rules at N.J.A.C. 7:26 will be met).

**Electric Interconnection** – Describe the tasks required and discuss issues associated with electrical interconnection, including reverse power protection and, if utilized, export power requirements. This section should include a description of each proposed point of interconnection.

**Equipment** – To the fullest extent possible, indicate the major types of equipment that will be installed. If not yet selected, indicate the candidate equipment suppliers and the characteristics specified. Indicate whether the project team plans to own or lease equipment. Describe the equipment, the specifications, warranties, how long it has been commercially available, approximately how many are currently in service, and where they are installed. Discuss how the electric generation equipment will have a minimum useful service life of twenty (20) years subject to necessary major maintenance including engine or fuel cell core change out and rebuild. Also discuss to the extent possible which of the technology and project proposed will be manufactured or supported in the State and constructed by New Jersey-based businesses. (For actual construction of the Project if approved for financing, equipment which is identified in the Application may be replaced or updated with more technologically advanced equipment that is equal to or better than the equipment identified in the Application.)

**Project Capacity and Energy Production** – Indicate the proposed nameplate capacity for the entire Project and the anticipated number of individual generating, heat recovery units and storage. The total nameplate capacity that is being proposed for the site must be included. Based on each DER technology proposed, there must also be an estimate of the net yearly energy output or energy storage for the Project, accounting for parasitic losses, and any assumptions that are the basis for the estimate. To the fullest extent possible, discuss the coincidence between time of generation/storage for the Project and peak electricity demand. An estimate of the amount of energy being generated and stored over the life of the Project must be included.

Estimate, to the best of the Applicant's ability, the level of generation/storage that the Project will be able to provide over the life of the equipment, assuming the Project runs for the equipment's full life.

**Project Emissions** – Discuss of the proposed treatment of all "secondary environmental attributes" associated with the onsite generation, such as SO<sub>2</sub>, NO<sub>x</sub>, CO<sub>2</sub> emission credit allowances and renewable energy certificates. Refer to information provided in Project Air Emissions Data Form.

### FACILITY

Utilities Serving the Facility:

Electric Utility:

- Atlantic City Electric
- Jersey Central Power & Light
- PSE&G
- Rockland Electric Company

Electric Utility Account Number: \_\_\_\_\_

Gas Utility:

- Elizabethtown Gas
- New Jersey Natural Gas
- PSE&G
- South Jersey Gas

Gas Utility Account Number: \_\_\_\_\_

Will the Project be used as an Emergency Management Facility?

Yes  No

If yes, please provide verification from the county office of Emergency Management.

### **STATEMENT OF WORK**

Specifically delineate each step or procedure required to accomplish the objectives of the Project who will perform it, how it will be performed and its intended result. Be clear and specific; concentrate on "how" and not "why." Clearly identify what has been done and present the results to date, and what still needs to be done and how it will be done. The Statement of Work must be structured as an ordered set of tasks. Fill in each section below.

**Introduction** – Briefly and clearly state the overall technical goals of the Project.

#### **Task 1: Project Management**

Subcontractor Coordination – State how activities will be coordinated between the Applicant and any partners, any subcontractors, and related entities. A discussion of subcontracting arrangements should also be included.

Project Management Meetings – Plan a kickoff meeting, an acceptance meeting, and a wrap-up meeting. Identify parties to participate at each meeting. Identify parties responsible for scheduling the meeting, providing the agenda (in advance), and issuing minutes.

#### **Task 2: Reporting**

If approved for financing, the Applicant shall submit at a minimum, quarterly reports by the 15th of the month following the reporting period. Semi annual reports shall summarize progress, difficulties, and planned solutions associated with developing and installing the Project. The PJM Generator Attribute Tracking System (PJM GATS) will be utilized to report the electrical production of the units and onsite metering will be utilized for the purpose of reporting thermal energy production. The ERB may develop a real time reporting system for all energy inputs and outputs of the Project. At that time the Project will be required to report through that remote reporting system. All reports which are utilized for the purpose of submitting invoices for payment related to equipment delivery and setup under the financing will be auditable. Any operational problems and actions taken to fix any problems which might affect the term of the financing should be

addressed. Discuss who of the project team and how reporting requirements will be satisfied.

### **PROJECT ECONOMICS AND OPERATING COSTS**

Discuss and justify requested funding (capital) needs referencing budget, energy sales or use plan, cash flow analysis and other attachments and factors as needed. Include discussion of plans for utilizing or marketing energy from the Project and the status of negotiations with potential purchasers or users of the energy.

If applicable, discuss how Applicant's production of renewable electricity generation will fulfill BPU's Renewable Portfolio Standards (RPS) requirements including Class II, Class I and Solar renewable energy certificates (REC) or other green power pricing options. For information on New Jersey's Independent System Operator, visit the PJM website at [www.pjm.com](http://www.pjm.com).

### **PROJECT EXPERIENCE**

Describe the experience of the Applicant in operating a DER system(s) of the same or similar size and type as that proposed. Also include the Applicant's individual and combined expertise that will enable successful completion of the Project. If a new system, describe plan to ensure safe and efficient operation of the new system through procurement of contractors and subcontractors, additional staff to be hired, and other measures.

Describe the proposing team's experience in developing and operating conventional or renewable energy plants, battery storage, microgrids, marketing power, and other relevant areas. Include work done to date by the project team members in developing projects of similar scope. If the work described was not performed by the entire team, delineate the experience or work performed by team members. List related projects that have been undertaken and successfully completed by the Applicant and/or subcontractors. For each project, provide a brief project summary and the name and phone number of a client contact. The ERB reserves the right to contact any reference listed.

### **PERMITS**

Identify all local, State and/or federal permits and/or approvals required for building and operating the Project and the expected time to obtain such permits and/or approvals. Information on all NJDEP permits is available from the Office of Permit Coordination and Environmental Review through the One Stop program which can be accessed from the NJDEP website at <http://www.nj.gov/dep/oppcc/permitcoor.htm>

Permit	Agency	Date Issued

## PROJECT TIMELINE AND MILESTONES

Provide a detailed chronological schedule for undertaking the Project, including projected dates for commencement of the Project and completion, as well as all major project milestones for anticipated events and deliverables from the date of submission of the Application through commissioning and operation of the Project and the disbursement period of the grant/loan. The timeline must indicate steps in weeks or months and can take the form of a Gantt chart or similar chart type. The project-related milestones will include, but not be limited to, all the necessary State and municipal code requirements. Minimum milestones shall include:

- Local planning board or zoning board of adjustment approval
- All NJDEP Permit Application and specifically all Air Permits
- Project Financing
- Non-Refundable Deposit on Equipment
- Equipment Procurement
- Construction Permits
- Equipment Delivered to site
- System Installation Complete
- Installed System Shakedown Complete
- Full Scale System Verification (commercial operation) minimum 48 continuous hours
- Project Complete

## PROJECT TECHNICAL WORKSHEETS

The following includes the Technical Requirements, Instructions, and Terms and Conditions for projects eligible under the ERB Program. Before completing the forms and the related technical worksheets, please carefully read: A) ERB Program Guide, B) ERB Funding Round 1, C) Instructions for Completing the Incentive Forms, and D) Important Terms and Conditions.

### INSTRUCTIONS FOR COMPLETING THE INCENTIVE FORMS:

1. Complete all sections of the Technical worksheets (Forms 1, 2, 3, and 3a), and a detailed feasibility analysis. **All information is necessary for processing applications and incentives.** Illegible or incomplete Application Forms and/or Technical Worksheets will not be considered.
2. Any changes between the initially proposed system and the installed system must be fully documented and are subject to EDA and BPU approval.
3. After the approved system is installed, the Applicant (or Installation Contractor) must submit the following to the EDA: a completed Notification of Commercial Operations – full scale system verification; proof of purchase; proof of warranty; completed W9 Taxpayer ID and certification form; a copy of the Electrical Code Inspection Certificate; and a completed Interconnection Application.

### IMPORTANT TERMS AND CONDITIONS:

1. To receive financing, Applicant must agree to an inspection by the BPU, a BPU/EDA representative, or a BPU/EDA-designated contractor. The applicant must also agree to allow the BPU to monitor the facility's energy production to verify meeting efficiency requirements and energy production for loan forgiveness performance payments.
2. The ERB reserves the right to modify or withdraw this program. Program procedures and incentive levels are subject to change or cancellation without notice. Approved projects will be honored under the terms stated in the commitment letter.
3. Installation must comply with the host utility's Interconnection Requirements, which are available from the respective electric utility. These include Operation/Disconnection Procedures, Liability/Indemnity and Insurance Requirements according to the size of the project.
4. All required permits must be properly obtained and posted.
5. Equipment must be new, commercially available and permanently installed. The following are **not eligible** for financing: portable and emergency backup power systems; used, refurbished, temporary, pilot or demonstration equipment; systems that use diesel fuel, other types of oil or coal for continuous operation.
6. Construction projects will be subject to prevailing wage requirements pursuant to P.L. 2009, c. 203, which amends P.L. 2009, c. 89, as well as the prevailing wage regulations promulgated by the New Jersey Department of Labor and Workforce Development pursuant to P.L. 1963 c. 150 as amended, and N.J.A.C. 17:27-1.1 et seq. and Affirmative Action rules.
7. All projects must be in compliance with all applicable laws. Applicants may not have any unresolved environmental violations, past due unresolved Federal financial obligations, past due unresolved financial obligations to the State of New Jersey, and must be current in all payment of all state and local taxes at time of application submittal and through the entire duration of project funding received by Applicant.

## **ERB Program**

### **Technical Worksheets for DER Equipment**

*Before completing the attached Technical Worksheets for the ERB Program, please carefully read all of the information in Sections A, B and C below.*

#### **A. INSTALLATION REQUIREMENTS:**

1. CHP systems with waste heat utilization must achieve annual system efficiency of at least 65% (LHV) and fuel cells without heat recovery must achieve annual system efficiency of at least 50% (LHV).
2. An expected completion date. The Applicant should submit documentation from manufacturers and contractors which state the expected equipment delivery and installation dates.
3. Equipment must be commercially available and permanently installed. The following are **not eligible** for incentives: portable and emergency backup power systems, temporary, pilot, or demonstration equipment; systems that use petroleum diesel fuel, other types of petroleum oil or coal for continuous operation.
4. The installation must comply with manufacturer's instructions.
5. The installation must comply with the interconnection and protection requirements of the local electric distribution company.
6. The installation must comply with provisions of these standards, as appropriate: NFPA 853 – Stationary Fuel Cell, and all codes governing the installation of Combined Heat and Power equipment; Power Plants; IEEE 519 – Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems; ANSI Z21.83-1998 Fuel Cell Power Plants, and input and output protection functions should be in compliance with ANSI C37.2 Device Function Number specifications.
7. The system should be equipped with the following capabilities, indicators and/or controls:
  - On/off control on site
  - Operating mode setting indication - parallel vs. stand-alone
  - AC & DC overcurrent protection or equivalent
  - Operating status indication
  - Remote control and data acquisition capable
  - Electric load-following capable
8. Warning labels must be posted on the control panels and junction boxes indicating that the circuits are energized by an alternate power source independent of utility-provided power.
9. All interconnecting wires must be copper. (Some provisions may be made for aluminum wiring; approval must be received from utility engineering departments prior to acceptance.)
10. All wiring splices must be contained in UL-approved workboxes.
11. Operating instructions must be posted on or near the system, or on file with facilities operation and maintenance documents. *Proposed changes to the requirements will be considered, but they must be documented by the Applicant or Installation Contractor and approved by EDA. These requirements are not all-encompassing and are intended only to address certain minimum safety and efficiency standards.*

#### **B. CODE REQUIREMENTS:**

1. The installation must comply with the provisions of the National Electrical Code and all other applicable local, state, and federal codes or practices.
2. All required permits must be properly obtained and posted. (e.g., Title V)
3. All required inspections must be performed (i.e., Electrical/NEC, Local Building Codes Enforcement Office, etc.).

*In order to ensure compliance with provisions of the NEC, an inspection by a state-licensed electrical inspector is mandatory.*

#### **C. INSTRUCTIONS:**

*The information below must be supplied in the detailed feasibility analysis. Provide a brief narrative describing the facility and the project including but not limited to the following.*

##### System Type and Mode of Operation:

Grid-connected Operating mode (parallel/capable of synchronizing with the electric grid; capable of automatically reducing load to prevent backfeeding the meter)

1. Grid-connected/grid-independent operating mode (parallel/capable of synchronizing with the electric grid and capable of switching automatically to independent, load-following operation when the grid is unavailable; automatic operation and synchronization of multiple power plants connected in parallel)
2. Stand-alone load-following operation (system confined to an independent circuit, no utility backup)
3. Battery interactive capabilities, if applicable

## ERB Program

### Technical Worksheets for CHP Equipment

#### C. INSTRUCTIONS (continued from previous page)

##### System Information:

1. Complete Form #1 in its entirety.
2. The type and rating of the prime mover and an energy balance around the prime mover. The energy balance must be applied to a schematic of the system showing all major components, including the uses for the recovered heat. Annual totals for each energy input/output must be shown along with maximum, minimum, and average instantaneous values. Temperatures for each waste heat transfer fluid and sink must also be indicated.
3. Fuel conversion efficiency (FCE) for the prime movers must be provided. FCE is defined as the ratio expressed as a percentage of the total usable energy produced by a technology to the sum of all fuel or other energy inputs to the technology measured at each fuel's lower heating value.
4. The description of the proposed system must include a floor plan indicating equipment location and tie-in to existing building systems. Any structural modifications must be included in the capital cost of the system. This document must indicate the location of the Combined Heat and Power system, batteries (if any), lockable disconnect switch (unless otherwise approved by the electric utility, the disconnect switch shall be installed at the electric utility meter location), and point of connection with the utility system. The installation address, current account number at that address (gas and electric), and the installer's name and telephone number must also be included on the site map.
5. The pressure and availability of gas must be described in the study.
6. An operational sequence must be included that specifies the control system to be used along with a discussion of its integration with other on-site controls systems and who will have the responsibility for system operation.
7. A construction schedule that includes engineering, permitting, construction, start-up and commissioning must be provided.

##### Economic Evaluation: Complete Form 3 and Form 3a in their entirety

##### CHP System Economic Evaluation Requirements:

Simple payback, 10 year cash flow analyses, and IRR analysis are required for purposes of this Application Attachment. Although the format of these analyses is at the discretion of the applicant, the following inputs must be considered and shown within these analyses:

1. Total CHP system capital cost (from Form3)
2. CHP system operating hours, load factor, and availability factor
3. Total service and maintenance costs (from Form3a)
4. CHP system heat rate/ fuel consumption
5. Efficiency of current boiler plant, chiller plant, etc. for which recovered waste heat will supplement.
6. Clearly state energy savings or increased use of energy; and the demand savings. The savings, or the increase, should be stated in terms of KW, kWh and in MMBtu.
7. Fuel cost – commodity and delivery
8. Offset electricity quantity and value – customer charge, demand charge, commodity charge, TOU where applicable, any unavoidable charges
9. Offset thermal energy quantity and value – commodity and delivery
10. Changes to tariffs due to CHP, including supplemental electricity tariffs, standby rates
11. Fuel and electricity escalation rates for cash flow analysis
12. Financing options and assumptions, such as the discount rate and interest rate for cash flow analysis
13. Any additional costs or credits, including incentives; the value of reliability, emission credits, HVAC equipment offsets

##### Tariff Impacts and Interconnections:

1. In addition to inclusion in the economic analysis described above, a detailed description of the relationship between the proposed CHP facility and the customer's existing energy tariffs must be included. Contract dates and dates of potential tariff rule changes must be included. In the case where such future changes would significantly impact the economics of the project, sensitivity analysis must be presented assuming the potential tariff or contract changes occurred.
2. Site-specific grid interconnection issues and costs must be discussed. A brief, clear plan for if and how the system will be properly interconnected to the grid and/or natural gas pipelines must be presented.

##### Permitting:

1. A brief description of the necessary environmental and building permits or certificates that the customer needs to obtain must be provided. The permit determination should be based on a detailed emissions inventory developed from the hourly spreadsheet based model. A schedule of realistic permit receipt dates must be included in the schedule described above.

##### System Reliability and Availability:

1. The reliability and availability of the CHP system must be quantified, (e.g. number of hours the system would be available at less than full capacity).

##### Supporting Documentation Should Include the Following:

1. Self-generation and waste heat recovery equipment specifications.
2. New and existing facility equipment (both thermal and electric) annual operating schedules.
3. At least two years of the most recent electric bill(s) for the facility served by the CHP system.
4. At least two years of the most recent bills for natural gas, fuel oil and/or other fuels used in the facility served by the CHP system.

*If you plan to use an absorption chiller to offset cooling load, provide cooling load calculations.*

# FORM 1A: PROPOSED ERB CHP SYSTEM PERFORMANCE

*With the help of your installation contractor, fully complete the technical worksheets for equipment.*

## **Proposed System overview (Annual)**

Prime Mover Type		
Energy Input	(MMBtu)	
Electric Output	(kWh)	
	(MMBtu)	
Recoverable Thermal Output	(MMBtu)	
Utilized Thermal Output <sup>1</sup>	(MMBtu)	
Annual System Efficiency <sup>2</sup>	(%)	

1 kWh =  
0.003412  
MMBtu

## **Rated System Information**

Prime Mover Model Info	
Energy Input	(MMBtu)
Rated Electric Output	(kW)
	(MMBtu/h)
Total Thermal Output	(MMBtu/h)
Recoverable Thermal Output	(MMBtu/h)
Fuel Conversion Efficiency <sup>3</sup>	(%)

1 – Heat used from the CHP systems for the purpose of heating and cooling  
Thermal Output)/Energy Input

3 – Fuel Conversion Efficiency = (Rated Electric output + Recoverable

2 – Annual System efficiency = (Electric output + Utilized Thermal Output)/Energy Input

## **Proposed System Overview**

Month	Anticipated operating hours	Input Fuel (MMBtu)	Output Electricity (MMBtu)	Recoverable Thermal output (MMBtu)	Utilized Thermal output	Electric Efficiency (%)	Thermal Efficiency (%)	Annual Efficiency (%)
Jan								
Feb								
Mar								
Apr								
May								
Jun								
Jul								
Aug								
Sep								
Oct								
Nov								
Dec								
Total								

**Breakdown of Recovered Thermal Output (Indicate in the detailed feasibility analysis the fuels that are being displaced and the respective equipment efficiency)**

Month	Process Heating (MMBtu)	Process Cooling (MMBtu)	Space Heating (MMBtu)	Space Cooling (MMBtu)	Domestic Hot Water (MMBtu)	Other (MMBtu)	Total (MMBtu)
Jan							
Feb							
Mar							
Apr							
May							
Jun							
Jul							
Aug							
Sep							
Oct							
Nov							
Dec							
Total							

Unit Cost of Gas	
Unit Cost of Electricity	
Rate Schedule	Electricity
	Gas

## **FORM 1B: PROJECT AIR EMISSIONS DATA**

*With the help of your Installation Contractor, fully complete the Technical Worksheets for ERB Project Equipment.*

This form reports anticipated annual emissions of the six (6) pollutants due to the CHP System. The first table should include vendor supplied data on the emissions from the prime mover to be installed. The second two sections will show what fraction of those new emissions is displacing current system emissions.

Yearly Grid Supplied Electricity (Pre-Installation) (MWh/year)	
Yearly CHP System Supplied Electricity (MWh/year)	
Yearly Grid Supplied Electricity (Post-Installation) (MWh/year)	

### **Vendor Supplied CHP System Emissions**

NOx		lbs/MWh
SOx		lbs/MWh
PM-10		lbs/MWh
CO2		lbs/MWh
CO		lbs/MWh
VOC		lbs/MWh

### **Estimates of "Displaced" Emissions**

The following two tables should be completed if data or information exists. By reporting on the emissions of the facility both before and after installation of the CHP system, the net impact of the new system can be estimated. If insufficient data exists, leave the tables blank. For systems greater than 2 MW, both tables must be completed prior to the release of the committed incentive.

### **Calculated Annual Boiler/Furnace Emissions (lbs)**

	Pre-CHP Installation	Post Installation D	Difference
NOx			
SOx			
PM-10			
CO2			
CO			
VOC			

### **Annual Site Emissions (lbs)**

	Pre-CHP Installation	Post Installation D	Difference
NOx			
SOx			
PM-10			
CO2			
CO			
VOC			

## **FORM 1C: ERB CHP PROJECT SYSTEMS COST TABLE**

*With the help of your Installation Contractor, fully complete the Technical Worksheets for CHP Equipment.*

**Directions:** Please enter all CHP system capital costs in the table below. Break out costs should add up to total CHP system turnkey cost. Turnkey line item costs should include any administrative and markup costs. Where a component or construction cost is not included in CHP project design enter "N/A." Where a component or construction cost is provided within another line item, please enter "included."

<b>Generation System Component Cost</b>	<b>(\\$)</b>
Prime Mover	
Fuel Compressor	
Black Start Capability	
Generator	
Heat Recovery	
Cooling Tower or other Heat Dump	
Absorption Chiller	
Desiccant	
Controls	
Sound Attenuation	
Inlet Air Handling	
Vibration Isolation	
Emission Controls	

<b>Design/Construction/Labor and Materials Cost</b>	<b>(\\$)</b>
Engineering	
Site Preparation	
Buildings	
Construction Labor	
Materials	
Exhaust Stack	
Electrical Tie-in	
Mechanical Tie-in	
Grid Interconnection Devices	
Permitting Fees	
Contingency	

<b>Total System Turnkey Cost</b>	

## **FORM 1D: ERB CHP PROJECT SYSTEM SERVICE AND MAINTENANCE COSTS**

*With the help of your Installation Contractor, fully complete the Technical Worksheets for CHP Equipment.*

**Directions:** Please enter annual costs for system service and maintenance, including parts, labor and all major equipment overhauls. Include fixed costs for extended service warranty where applicable. If multiple rows are included in a fixed maintenance cost, please enter "included" or N/A in that row as applicable.

	YR 1	YR 2	YR 3	YR 4	YR 5	YR 6	YR 7	YR 8	YR 9	YR 10
Prime Mover/Heat Recovery										
Thermal Equipment										
Emissions Control										
Remote Monitoring/Control										
Warranty/Service Contracts										
Total Service/Maintenance Costs										

## **FUEL CELL PROJECT TECHNICAL WORKSHEETS**

### **INCENTIVE QUALIFICATION REQUIREMENTS:**

*The ERB has the right to change/modify or discontinue the program without notice. The program will cease when commitments exhaust allocated funding.*

1. The system must be installed in New Jersey. The applicant must serve a governmental, commercial, institutional, or industrial electricity customer in this State. Only stationary Fuel Cell (FC) equipment installed on the customer side of the meter is eligible. This is inclusive of prepackaged generating systems.
2. The proposed system must be capable of meeting all requirements of the NJDEP for the proposed equipment and be in the process of obtaining an air permit. All accessory and exhaust after treatment equipment and associated capital and operating costs required to meet emissions limits must be included in the proposal.
3. The project shall establish by contract or other arrangement that the electric output generated at a FC facility shall, to the maximum extent feasible, be consumed at the project site by a facility located at the site and that any surplus power produced that is not needed by that facility may be sold into the interstate PJM grid.
4. Equipment must be new, commercially available and permanently installed. Equipment must be sized to serve all or a portion of the electrical load at the customer site. The proposed generating system is sized to meet the customer's electrical loads for demand-metered customers – no more than 100% of historical annual consumption or peak demand. Historical annual consumption is for the most recent twelve (12) month period. New additions or expansions to existing facilities will be considered, detailed information of load assumptions must be submitted with the application.
5. Fuel cells without heat recovery must achieve annual system efficiency of at least 50% (LHV). The annual system efficiency shall be based on higher heating value and calculated from the total prime mover output in Btu plus the total heat recovered for useful purposes in Btu divided by the higher heating value of the fuel input in Btu. Mechanically-developed energy may be included in the efficiency evaluation.
6. The system must achieve annual system efficiency of at least 50% (LHV), based on total energy input and total utilized energy output. Mechanical energy may be included in the efficiency evaluation.
7. The system must have a warranty to be all-inclusive for at least 10 years. The cost of ten year warranty may not be considered as part of the cost of the project..
8. Incentives will not be processed without a Federal Tax Identification number, Proof of Purchase (receipt), and authorized signatures from the Applicant and Installer.

### **INSTRUCTIONS FOR COMPLETING THE INCENTIVE FORMS:**

1. Complete all of Sections A through E of Form 1, all sections of the Technical worksheets (Forms 2, 3, and 3a), and a detailed feasibility analysis. **All information is necessary for processing applications and incentives.** Illegible or incomplete Application Forms and/or Technical Worksheets will not be considered.
2. Any changes between the initially proposed system and the installed system must be fully documented and are subject to EDA and BPU approval.
3. After the approved system is installed, the Applicant (or Installation Contractor) must submit the following to the EDA: a completed Notification of Commercial Operations – full scale system verification; proof of purchase; proof of warranty; completed W9 Taxpayer ID and certification form; a copy of the Electrical Code Inspection Certificate; and a completed Interconnection Application.

## **IMPORTANT TERMS AND CONDITIONS:**

To receive an incentive, Applicant must agree to an inspection by the BPU, a BPU/EDA representative, or a BPU/EDA-designated contractor. The applicant must also agree to allow the BPU to monitor the facility's energy production to verify meeting efficiency requirements and energy production for grant performance payments.

1. The BPU reserves the right to modify or withdraw this program. Program procedures and incentive levels are subject to change or cancellation without notice. Approved projects will be honored under the terms stated in the commitment letter.
2. Installation must comply with the host utility's Interconnection Requirements, which are available from the respective electric utility. These include Operation/Disconnection Procedures, Liability/Indemnity and Insurance Requirements according to the size of the project.
3. All required permits must be properly obtained and posted.
4. Equipment must be new, commercially available and permanently installed. The following are not eligible for incentives: renewable source-fueled systems (Renewable fueled projects must be submitted to the Renewable Energy market Manager through the REIP program under the NJCEP); portable and emergency backup power systems; used, refurbished, temporary, pilot or demonstration equipment; systems that use diesel fuel, other types of oil or coal for continuous operation.
5. Construction projects will be subject to prevailing wage requirements pursuant to P.L. 2009, c. 203, which amends P.L. 2009, c. 89, as well as the prevailing wage regulations promulgated by the New Jersey Department of Labor and Workforce Development pursuant to P.L. 1963 c. 150 as amended, and N.J.A.C. 17:27-1.1 et seq. and Affirmative Action rules.
6. All projects must be in compliance with all applicable laws. Applicants may not have any unresolved environmental violations, past due unresolved Federal financial obligations, past due unresolved financial obligations to the State of New Jersey, and must be current in all payment of all state and local taxes at time of application submittal and through the entire duration of project funding received by Applicant.

# Technical Worksheets for Fuel Cells Equipment

*Before completing the attached Technical Worksheets for the ERB Program, please carefully read all of the information in Sections A, B and C below.*

## A. INSTALLATION REQUIREMENTS:

*Equipment installation must meet the following requirements in order to qualify for the ERB program:*

1. Fuel cells without heat recovery must achieve annual system efficiency of at least 50% (LHV).
2. An expected completion date. The Applicant should submit documentation from manufacturers and contractors which state the expected equipment delivery and installation dates.
3. Equipment must be commercially available and permanently installed. The following are *not eligible* for incentives: portable and emergency backup power systems, temporary, pilot, or demonstration equipment; systems that use petroleum diesel fuel, other types of petroleum oil or coal for continuous operation.
4. The installation must comply with manufacturer's instructions.
5. The installation must comply with the interconnection and protection requirements of the local electric distribution company.
6. The installation must comply with provisions of these standards, as appropriate: NFPA 853 – Stationary Fuel Cell, and all codes governing the installation of Combined Heat and Power equipment; Power Plants, IEEE 519 – Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems; ANSI Z21.83-1998 Fuel Cell Power Plants, and input and output protection functions should be in compliance with ANSI C37.2 Device Function Number specifications.
7. The system should be equipped with the following capabilities, indicators and/or controls:
  - On/off control on site
  - Operating mode setting indication - parallel vs. stand-alone
  - AC & DC overcurrent protection or equivalent
  - Operating status indication
  - Remote control and data acquisition capable
  - Electric load-following capable
8. Warning labels must be posted on the control panels and junction boxes indicating that the circuits are energized by an alternate power source independent of utility-provided power.
9. All interconnecting wires must be copper. (Some provisions may be made for aluminum wiring; approval must be received from utility engineering departments prior to acceptance.)
10. All wiring splices must be contained in UL-approved workboxes.
11. Operating instructions must be posted on or near the system, or on file with facilities operation and maintenance documents.

*Proposed changes to the requirements will be considered, but they must be documented by the Applicant or Installation Contractor and approved by EDA. These requirements are not all-encompassing and are intended only to address certain minimum safety and efficiency standards.*

## B. CODE REQUIREMENTS:

The installation must comply with the provisions of the National Electrical Code and all other applicable local, state, and federal codes or practices.

1. All required permits must be properly obtained and posted. (e.g., Title V)
2. All required inspections must be performed (i.e., Electrical/NEC, Local Building Codes Enforcement Office, etc.).

*In order to ensure compliance with provisions of the NEC, an inspection by a state-licensed electrical inspector is mandatory.*

## C. INSTRUCTIONS:

*The information below must be supplied in the detailed feasibility analysis. Provide a brief narrative describing the facility and the project including (but not limited to) the following.*

### System Type and Mode of Operation:

Grid-connected Operating mode (parallel/capable of synchronizing with the electric grid; capable of automatically reducing load to prevent backfeeding the meter)

1. Grid-connected/grid-independent operating mode (parallel/capable of synchronizing with the electric grid and capable of switching automatically to independent, load-following operation when the grid is unavailable; automatic operation and synchronization of multiple power plants connected in parallel)
2. Stand-alone load-following operation (system confined to an independent circuit, no utility backup)
3. Battery interactive capabilities, if applicable

# Technical Worksheets for Fuel Cells Equipment

## C. INSTRUCTIONS (continued from previous page)

### System Information:

1. Complete Form #2 in its entirety.
2. The type and rating of the prime mover and an energy balance around the prime mover. The energy balance must be applied to a schematic of the system showing all major components, including the uses for the recovered heat. Annual totals for each energy input/output must be shown along with maximum, minimum, and average instantaneous values. Temperatures for each waste heat transfer fluid and sink must also be indicated.
3. Fuel conversion efficiency (FCE) for the prime movers must be provided. FCE is defined as the ratio expressed as a percentage of the total usable energy produced by a technology to the sum of all fuel or other energy inputs to the technology measured at each fuel's higher heating value.
4. The description of the proposed system must include a floor plan indicating equipment location and tie-in to existing building systems. Any structural modifications must be included in the capital cost of the system. This document must indicate the location of the Fuel Cell system, batteries (if any), lockable disconnect switch (unless otherwise approved by the electric utility, the disconnect switch shall be installed at the electric utility meter location), and point of connection with the utility system. The installation address, current account number at that address (gas and electric), and the installer's name and telephone number must also be included on the site map.
5. An operational sequence must be included that specifies the control system to be used along with a discussion of its integration with other on-site controls systems and who will have the responsibility for system operation.
6. A construction schedule that includes engineering, permitting, construction, start-up and commissioning must be provided.

### Economic Evaluation: Complete Form3 and Form3a in their entirety

#### Fuel Cell System Economic Evaluation Requirements:

Simple payback, 10 year cash flow analyses, and IRR analysis are required for purposes of this Application Attachment. Although the format of these analyses is at the discretion of the applicant, the following inputs must be considered and shown within these analyses:

1. Total Fuel Cell system capital cost (from Form3)
2. Fuel Cell system operating hours, load factor, and availability factor
3. Total service and maintenance costs (from Form3a)
4. Fuel Cell system heat rate/ fuel consumption
5. Efficiency of current boiler plant, chiller plant, etc. for which recovered waste heat will supplement.
6. Clearly state energy savings or increased use of energy; and the demand savings. The savings, or the increase, should be stated in terms of KW, kWh and in MMBtu.
7. Fuel cost – commodity and delivery
8. Offset electricity quantity and value – customer charge, demand charge, commodity charge, TOU where applicable, any unavoidable charges
9. Offset thermal energy quantity and value – commodity and delivery
10. Changes to tariffs due to Fuel Cell, including supplemental electricity tariffs, standby rates
11. Fuel and electricity escalation rates for cash flow analysis
12. Financing options and assumptions, such as the discount rate and interest rate for cash flow analysis
13. Any additional costs or credits, including incentives, the value of reliability, emission credits, HVAC equipment offsets

### Tariff Impacts and Interconnections:

1. In addition to inclusion in the economic analysis described above, a detailed description of the relationship between the proposed Fuel Cell facility and the customer's existing energy tariffs must be included. Contract dates and dates of potential tariff rule changes must be included. In the case where such future changes would significantly impact the economics of the project, sensitivity analysis must be presented assuming the potential tariff or contract changes occurred.
2. Site-specific grid interconnection issues and costs must be discussed. A brief, clear plan for if and how the system will be properly interconnected to the grid and/or natural gas pipelines must be presented.

### Permitting:

1. A brief description of the necessary environmental and building permits or certificates that the customer needs to obtain must be provided. The permit determination should be based on a detailed emissions inventory developed from the hourly spreadsheet based model. A schedule of realistic permit receipt dates must be included in the schedule described above.

### System Reliability and Availability:

1. The reliability and availability of the Fuel Cell system must be quantified (e.g. number of hours the system would be available at less than full capacity).

### Supporting Documentation Should Include the Following:

1. Self-generation and waste heat recovery equipment specifications
2. New and existing facility equipment (both thermal and electric) annual operating schedules
3. At least two years of the most recent electric bill(s) for the facility served by the Fuel Cell system
4. At least two years of the most recent bills for natural gas, fuel oil and/or other fuels used in the facility served by the Fuel Cell system.

*If you plan to use an absorption chiller to offset cooling load, provide cooling load calculations.*

## **FORM 2A: PROPOSED FUEL CELL SYSTEM PERFORMANCE**

*With the help of your installation contractor, fully complete the technical worksheets for Fuel Cell equipment.*

### **Proposed System overview (Annual)**

Prime Mover Type		
Energy Input	(MMBtu)	
Electric Output	(kWh)	
	(MMBtu)	
Recoverable Thermal Output	(MMBtu)	
Utilized Thermal Output <sup>1</sup>	(MMBtu)	
Annual System Efficiency <sup>2</sup>	(%)	

1 kWh =  
0.003412  
MMBtu

### **Rated System Information**

Prime Mover Model Info		
Energy Input	(MMBtu)	
Rated Electric Output	(kW)	
	(MMBtu/h)	
Total Thermal Output	(MMBtu/h)	
Recoverable Thermal Output	(MMBtu/h)	
Fuel Conversion Efficiency <sup>3</sup>	(%)	

1 - Heat used from the Fuel Cell system for the purpose of heating and cooling

3 Fuel Conversion Efficiency = (Rated Electric output + Recoverable Thermal Output)/Energy Input

2 - Annual System efficiency = (Electric output + Utilized Thermal Output)/Energy Input.

### **Proposed System Overview**

Month	Anticipated operating hours	Input Fuel (MMBtu)	Output Electricity (MMBtu)	Recoverable Thermal output (MMBtu)	Utilized Thermal output	Electric Efficiency (%)	Thermal Efficiency (%)	Annual Efficiency (%)
Jan								
Feb								
Mar								
Apr								
May								
Jun								
Jul								
Aug								
Sep								
Oct								
Nov								
Dec								
Total								

**Breakdown of Recovered Thermal Output** (Indicate in the detailed feasibility analysis the fuels that are being displaced and the respective equipment efficiency)

Month	Process Heating (MMBtu)	Process Cooling (MMBtu)	Space Heating (MMBtu)	Space Cooling (MMBtu)	Domestic Hot Water (MMBtu)	Other (MMBtu)	Total (MMBtu)
Jan							
Feb							
Mar							
Apr							
May							
Jun							
Jul							
Aug							
Sep							
Oct							
Nov							
Dec							
Total							

Unit Cost of Gas	
Unit Cost of Electricity	
Rate Schedule	Electricity
	Gas

## **FORM 2B: FUEL CELLS AIR EMISSIONS DATA**

*With the help of your Installation Contractor, fully complete the Technical Worksheets for Fuel Cell Equipment.*

This form reports anticipated annual emissions of the six (6) pollutants due to the Fuel Cell System. The first table should include vendor supplied data on the emissions from the prime mover to be installed. The second two sections will show what fraction of those new emissions is displacing current system emissions.

Yearly Grid Supplied Electricity (Pre-Installation) (MWh/year)	
Yearly Fuel Cell System Supplied Electricity (MWh/year)	
Yearly Grid Supplied Electricity (Post-Installation) (MWh/year)	

### **Vendor Supplied Fuel Cell System Emissions**

NOx		lbs/M Wh
SOx		lbs/M Wh
PM-10		lbs/M Wh
CO2		lbs/M Wh
CO		lbs/M Wh
VOC		lbs/M Wh

### **Estimates of "Displaced" Emissions**

The following two tables should be completed if data or information exists. By reporting on the emissions of the facility both before and after installation of the Fuel Cell system, the net impact of the new system can be estimated. If insufficient data exists, leave the tables blank. For systems greater than 2 MW, both tables must be completed prior to the release of the committed incentive.

### **Calculated Annual Boiler/Furnace Emissions (lbs)**

	Pre-Fuel Cell Installation	Post Installation	Difference
NOx			
SOx			
PM-10			
CO2			
CO			
VOC			

### **Annual Site Emissions (lbs)**

	Pre-Fuel Cell Installation	Post Installation	Difference
NOx			
SOx			
PM-10			
CO2			
CO			
VOC			

## **FORM 2C: FUEL CELL SYSTEMS COST TABLE**

*With the help of your Installation Contractor, fully complete the Technical Worksheets for Fuel Cell Equipment.*

**Directions:** Please enter all Fuel Cell system capital costs in the table below. Break out costs should add up to total system turnkey cost. Turnkey line item costs should include any administrative and markup costs. Where a component or construction cost is not included in Fuel Cell project design enter "N/A." Where a component or construction cost is provided within another line item, please enter "included."

Fuel Cell System Component Cost	(\$)
Prime Mover	
Fuel Compressor	
Fuel Reformer	
Black Start Capability	
Generator	
Heat Recovery	
Cooling Tower or other Heat Dump	
Absorption Chiller	
Desiccant	
Controls	
Sound Attenuation	
Inlet Air Handling	
Vibration Isolation	
Emission Controls	
Other:	

Design/Construction/Labor and Materials Cost	(\$)
Engineering	
Site Preparation	
Buildings	
Construction Labor	
Materials	
Exhaust Stack	
Electrical Tie-in	
Mechanical Tie-in	
Grid Interconnection Devices	
Permitting Fees	
Contingency	
Other:	

Total System Turnkey Cost	
---------------------------	--

## **FORM 2D: Fuel Cell SYSTEM SERVICE AND MAINTENANCE COSTS**

*With the help of your Installation Contractor, fully complete the Technical Worksheets for Fuel Cell Equipment.*

**Directions:** Please enter annual costs for system service and maintenance, including parts, labor and all major equipment overhauls. Include fixed costs for extended service warranty where applicable. If multiple rows are included in a fixed maintenance cost, please enter "included" or N/A in that row as applicable.

	YR 1	YR 2	YR 3	YR 4	YR 5	YR 6	YR 7	YR 8	YR 9	YR 10
Prime Mover										
Fuel Reformer										
Stack Replacement										
Generator										
Heat Recovery/Thermal Equipment										
Emissions Control										
Remote Monitoring/Control										
Warranty/Service Contracts										
Black Start Capability										
Other:										
Total Service/Maintenance Costs										

## **FORM 3: PROPOSED ERB BATTERY/SOLAR SYSTEM PERFORMANCE**

*With the help of your installation contractor, fully complete the technical worksheets for equipment.*

Description of system operating under normal operation:

Description of system operating under island mode, including any planned emergency generator or back-up generator use to satisfy the resiliency criterion:

**Proposed System Overview Operating in Island Mode under Fuel Limiting Scenario<sup>1</sup>**

Electric Output - PV	(kWh)	
Electric Output - Other <sup>2</sup>	(kWh)	
Proposed dispatch strategy <sup>3</sup>	(load following/cycle charging)	
Liquid fuel storage tank capacity	(gal)	
Battery Bank Autonomy <sup>4</sup>	(hours)	
Critical Load	(kWh)	

**Rated System Information- Battery Bank**

Manufacturer/Model number	
Battery type	
Nominal voltage (per battery)	(Volts )
Nominal capacity (per battery)	(Amp-hr)
	(kWh)
Number of batteries	(#)
Round Trip Efficiency <sup>5</sup>	(%)
Minimum state of charge	(%)
Float life <sup>6</sup>	(years)
Maximum charge rate	(Amp/Amp-hr)
Maximum charge current	(Amp)

**Rated System Information- Battery Bank Capacity Curve<sup>7</sup>**

Current (Amp)	Current (Amp-hr)

<sup>1</sup> Please note Fuel Limiting Scenario is defined as the consecutive 7 day period in December where the ratio of the electric output of PV (kWh) to the critical load is the lowest. For PV systems that are currently installed, historical performance shall be used. For PV systems that are not currently installed, the theoretical performance shall be used.

<sup>2</sup> This would include all electric generation besides solar PV, e.g. emergency generator output, during the Fuel Limiting Scenario

<sup>3</sup> For the purposes defined here, dispatch strategy is a set of rules used to control the operation of the generator(s) and the battery bank whenever there is insufficient renewable energy to supply the load. Under a load following strategy, the generator(s) would only operate to produce enough power to meet critical load. Under a cycle charging strategy, the generator(s) would operate at full output power with excess power charging the battery bank.

<sup>4</sup> Battery Bank Autonomy is the ratio of the battery bank size to the electric load and will be calculated as follows:

$$A = [N \cdot V \cdot Q \cdot (1 - q_{\min}/100) \cdot (24h/d)] / [L \cdot (1000Wh/kWh)]$$

where N is the number of batteries in the battery bank, V is the nominal voltage of a single battery (V), Q is the nominal capacity of a single battery (Amp-hr), q<sub>min</sub> is the minimum state of charge of the battery bank (%), and L is the average December critical load (kWh/d)

<sup>5</sup> Roundtrip efficiency is defined as the roundtrip efficiency of the battery bank, or the fraction of energy put into the battery that can be retrieved.

<sup>6</sup> Float life is the maximum length of time the battery will last before it needs to be replaced, regardless of use.

<sup>7</sup> Please identify several data points on the battery's capacity curve relating discharge current to capacity.

### Rated System Information- Battery Bank Lifetime curve\*

#### Rated System Information- Emergency /Back-Up Generator

Manufacturer				
Estimated Age	(years)			
Lifetime	(years)			
Fuel Type				
Energy Input	(MMBtu)			
Rated Electric Output	(kW)			
	(MMBTU/hr)			
<b>Fuel Consumption Data</b>				
Output power	25%	50%	75%	Full
Gallon per hour				

### Rated System Information- Converter

Manufacturer/Model number	
Inverter rated capacity	(kW)
Inverter efficiency	(%)
Lifetime	(years)
Inverter can operate simultaneously with AC generator	(Y/N)
Converter serves as rectifier	(Y/N)
Rectifier rated capacity	(kW)
Rectifier efficiency	(%)

#### **Rated System Information- PV System**

Estimated Age	(years)
Lifetime	(years)
Rated Electric Output	(kW)
Array Type	(fixed, 1-axis, 2-axis)
Array Tilt	(degrees)
Array Azimuth	(degrees)

<sup>8</sup> Please identify several data points on the battery's lifetime curve relating cycles the battery can withstand before failure at different depth of discharge percentages.

## **VIOLATIONS**

List of any outstanding violations with the New Jersey Department of Environmental Protection

Violation	Date issued	Resolved

## **DEBARMENT**

Applicants are required to answer the following background questions of certain actions that can lead to debarment or disqualification from eligibility under State or Federal law.

At any time during the past ten years has the Applicant (including its major stockholders, officers, partners, directors and employees):

1. Been convicted and/or found guilty and/or pled guilty and/or found liable and/or paid a fine or otherwise paid to settle any allegations made by the government in any court to any violation of law, other than minor traffic offenses?

Yes  No

If yes, provide complete details, including when, where, and why.

2. Been denied a license or permit required to engage in its business or profession or has any such license or permit or been suspended or revoked by any government?

Yes  No

If yes, provide complete details, including when, where, and why.

3. Been suspended, debarred, disqualified, denied a classification rating or prequalification or otherwise been declared not responsible to bid or submit a form of prequalification on or to perform work on any public contractor subcontract?

Yes  No

If yes, provide complete details, including when, where, and why.

4. Violated the terms of a public agreement or transaction so seriously as to affect the integrity of an agency program?

Yes  No

If yes, provide complete details, including when, where, and why.

5. Had an injunction, order or lien entered against it in favor of any governmental agency including but not limited to judgments or liens based on taxes assessed or fines and penalties imposed by any government agency?

Yes  No

If yes, provide complete details, including when, where, and why.

6. Is the Applicant presently indicted for or otherwise criminally or civilly charged by a government business with the commission of a violation of law?

Yes  No

If yes, provide complete details, including when, where, and why.

## **ACKNOWLEDGEMENTS**

Check each box below indicating that you have read, understand and will comply with the following.

### **NOTICE REGARDING AFFIRMATIVE ACTION**

1. An Affirmative Action Program of Equal Opportunity, in support of P.L. 1975, C 127, the New Jersey "Law Against Discrimination" as supplemented and amended, as well as in accordance with Executive Order No. 11246 promulgated by the President of the United States, September 24, 1965 and Executive Order No. 11625, promulgated by the President of the United States, October 13, 1971, has been or will be adopted by this organization to ensure that applicants are employed, and employees are treated without regard to their race, creed, color, national origin, nationality, gender, affectional or sexual orientation age, ancestry, marital status, handicap or disability and that the selection and utilization of contractors, subcontractors, consultants, material suppliers and equipment lessors shall be done without regard to their race, creed, color, national origin, nationality, gender affectional or sexual orientation, age, ancestry, marital status, handicap or disability. Said Affirmative Action Program addresses both the internal recruitment, employment and utilization of minorities and the external recruitment policy regarding minority contractors, subcontractors, consultants, material suppliers and equipment lessors.

2. All documentation required by the Affirmative Action Program of Equal Opportunity, as evidence of compliance, may be inspected at the office of the individual, partnership or corporation submitting this application.

I have read, understand and will comply with the Notice above.

### **NOTICE REGARDING PREVAILING WAGE**

For any construction work undertaken in connection with Energy Resilience Bank funding, the Applicant funding recipient will be required to comply with, and require all contractors and subcontractors used by it in relation to the Project to comply with, all Federal, State and municipal laws, rules and regulations applicable to all activities performed by, or on behalf of, Applicant funding recipient in pursuit of and in relation to the Project. These laws and regulations include, but are not limited to: N.J.S.A. 34:1B-5.1 (Prevailing Wage) and prevailing

wage requirements as set forth under Davis Bacon, 40 U.S.C. sec. 3141 et seq., and related acts, where applicable; and implementing regulations and guidelines.

I have read, understand and will comply with the Notice above.

## **DISCLAIMER**

Under the provisions of the Federal Privacy Act, set forth in 5 U.S.C. 552a, you are not legally required to provide your Social Security number to the Authority in order to apply for financial assistance under this disaster recovery program. The failure to provide your Social Security number to the Authority may not affect any right, benefit or privilege to which you are entitled by law. However, EDA uses Social Security numbers to distinguish between people with a similar or the same name. Voluntarily providing this number makes it easier for EDA to more accurately identify to whom adverse credit information applies and to keep accurate financing documentation.

## **ATTACHMENTS**

**The BPU and the EDA reserve the right to request any additional information deemed necessary to complete the review process.**

### **1. Organizational and Applicant Financial**

Articles of incorporation or certificate of formation and amendments

Listing and detail of all corporate entities and subsidiaries and ownership

Organizational Chart of Applicant including senior management

Complete bios of management team and board members, including any voting rights and current contact information (if not included in business plan)

Applicant Financial Statements (income statement, balance sheet, cash flow) - historical year end for two years, (if available), preferably certified public accountant prepared, in accordance with GAAP and to include detailed footnotes, and YTD interim management prepared financials less than 90 days old (income statement, balance sheet, cash flow)

Detailed description of all debts and liabilities presently owed by the Applicant (debt amount, how secured, terms of repayments, lender contact information)

Financing agreements including, but not limited to, grant agreements for sources of project funding

Cash reserve policy

Current Employment List

## **2. Storm Damage**

If the project was damaged by the storm, attach documentation of damage, such as, but not limited to, cost estimates for repair, invoices for recovery work performed, photos, news articles, and other such evidence.

Declaration pages for all insurance policies on the project, all claims made related to the Superstorm, and evidence of payouts, as applicable.

Duplication of Benefits Affidavit

## **3. Project**

Feasibility Study and any related attachments and analyses – see Technical Worksheets for details on required information that must be contained in the feasibility analysis.

Local Government Energy Audit or ASHRAE Level II audit (newly completed or previously prepared) which includes the DER system.

A map with the location of the site(s) clearly marked with the location of the Project.

Letter from utility stating that the proposed point(s) of interconnection is able to be interconnected.

A complete operation and maintenance plan for the term of the ERB funding, including any estimated increases resulting from additional fuel costs.

Documentation from manufacturers and contractors which state the expected equipment delivery and installation dates.

Proposed system floor plan indicating equipment location and tie-in to existing building systems. Any structural modifications must be included in the capital cost of the system. This document must indicate the location of the Combined Heat and Power system, batteries (if any), lockable disconnect switch (unless otherwise approved by the electric utility, the disconnect switch shall be installed at the electric utility meter location), and point of connection with the utility system. The installation address, current account number at that address (gas and electric), and the installer's name and telephone number must also be included on the site map.

Self-generation and waste heat recovery equipment specifications.

New and existing facility equipment (both thermal and electric) annual operating schedules.

Last most recent two years' electric bill(s) for the facility served by the CHP system.

Last most recent two years' bills for natural gas, fuel oil and/or other fuels used in the facility served by the CHP system.

If an absorption chiller to offset cooling load is part of the proposed Project, provide cooling load calculations.

If procuring equipment or services to complete the Project, provide all associated Requests for Proposals (RFPs) and summary of decision showing the selected respondent and the qualified

respondents not selected. If procurement has not yet occurred for some or all project components, describe process to be used.

Provide documentation of staff's or other independent source's estimate of anticipated cost of equipment or service for each procurement undertaken to date for the Project.

Plans and Schematic Drawing(s) of the project.

When available, but before BPU/EDA Board action on the Project, copy of resolution granting Preliminary Site Plan Approval and/or Zoning Board Approval from the municipality in which the project is located, as applicable to the project and municipal requirements.

Evidence of Site Control such as a fee simple title, fully-executed long-term lease agreement, or other similar documentation.

If Project will be used as an Emergency Management Facility, provide verification from the county office of Emergency Management.

#### **4. Project Financial**

An estimate of all costs and revenues including plans for selling or using energy from the Project and the production incentive in \$/kWh and \$/mmbtu being requested.

Detailed budget that clearly describes the sources and schedule of all project financing and how the funds from the ERB financing will be used. Indicate any private, venture, or existing project financing and the total amount of bond financing required for the project and any other incentives, subsidies or other funding associated with the project and projected internal rate of return or other industry-relevant measure of return. Include all assumptions associated with data provided. The project budget estimated by the Applicant is expected to include expenses to be incurred during the course of the project, including direct labor, overhead, materials, subcontractors, consultants, travel, and selling, general, and administrative expenses related to the project. The funding agreements will be structured to take into account capital limitations. The detailed budget should be consistent with the Summary Sources and Uses of Funds Chart and total figures should be equal.

A cash flow analysis over the lifetime of the Project. Included should be any private, venture or existing project financing, the total amount of tax-exempt bond financing or taxable bond financing required for the Project and any other incentives, subsidies or other funding associated with the Project and projected internal rate of return or other measure of return compared to industry averages. Also see Technical Worksheets for further detail on required information.

Desired drawdown schedule for the funding indicating as a percentage (%) of funding desired to be disbursed at various time points or milestones.

CEEEP Cost Benefit model results

Copies of all Funding Commitments – funding commitments include commitment letter(s), subscription agreement(s), award letters, etc. showing dollar amount of committed funding, terms and conditions.

For denied funding, attach each denial letter.

## **5. Project Team**

Organizational Chart listing all team members, including the project manager and any subcontractors and other sponsors involved in Project, showing their roles and responsibilities.

Resumes of all key project team members, including those of proposed subcontractors. Include education and experience that are relevant to the proposed work.

## **6. Environmental Forms**

NJDEP Environmental and Historic Review Application for EDA and DCA/NEP Programs

NJDEP Environmental and Historic Preservation Application #9) Detailed Project Description - Required Information

RIGHT-OF-ENTRY PERMIT and RELEASE OF INFORMATION

## **7. Other State Forms**

Certification of good standing with the State of New Jersey. (Governmental entities and instrumentalities of governmental entities such as authorities do not need to comply with this requirement.)

Tax clearance application or certificate from the New Jersey Division of Taxation. (Governmental entities and instrumentalities of governmental entities such as authorities do not need to comply with this requirement.) No fee is required for Tax Clearance utilizing CDBG-DR funding.

## **8. Certifications**

CEO Certification

Clean Air and Water Certification

Independent Engineer Certification

Historic Sites and Waste Management Certification

## APPENDIX A

### ELIGIBLE DISASTERS

To be eligible for funding under the Energy Resilience Bank, according to the Robert T. Stafford Disaster Relief and Emergency Assistance Act (P.L. 93-288), as amended by the Disaster Relief Act of 1974 (P.L. 93-288), projects must demonstrate a tie to one of the listed weather events below or have incurred physical damage from one of the listed storms.

- **Declaration No. 1954** – Severe Winter Storm and Snowstorm (Incident Period: December 26, 2010 to December 27, 2010). Impacted counties: Passaic, Bergen, Morris, Essex, Hudson, Union, Somerset, Middlesex, Mercer, Monmouth, Ocean, Burlington, Atlantic, Cumberland, Cape May.
- **Declaration No. 4021** – Hurricane Irene (Incident Period: August 27, 2011 to September 5, 2011). Impacted counties: all twenty one counties.
- **Declaration No. 4033** – Severe Storms and Flooding (Incident Period: August 13, 2011 to August 15, 2011). Impacted counties: Gloucester, Salem, Cumberland.
- **Declaration No. 4039** – Remnants of Tropical Storm Lee (Incident Period: September 28, 2011 to October 6, 2011). Impacted counties: Passaic, Sussex, Warren, Hunterdon, Mercer.
- **Declaration No. 4048** – Severe Storm (Incident Period: October 29, 2011). Impacted counties: Middlesex, Somerset, Hunterdon, Union, Morris, Warren, Essex, Bergen, Passaic, Sussex, Cape May.
- **Declaration No. 4070** – Severe Storms and Straight-Line Winds (Incident Period: June 30, 2012). Impacted counties: Salem, Cumberland, Atlantic.
- **Declaration No. 4086** – Hurricane Sandy (Incident Period: October 26, 2012 to November 8, 2012). Impacted counties: all 21 counties.

**NJDEP Environmental and Historic Review**  
**Application for EDA and DCA/NEP Programs**

- 1. Agency Name:** \_\_\_\_\_
- 2. Date of Application Submittal to DEP:** \_\_\_\_\_
- 3. CDBG-DR Program:** \_\_\_\_\_
- 4. Application ID Number:** \_\_\_\_\_
- 5. National Objective Description/Number:** \_\_\_\_\_
- 6. Grant Number:** B-13-DS-34-0001
- 7. Applicant Name:** \_\_\_\_\_
- 8. Project Location:** \_\_\_\_\_ (Street Address) \_\_\_\_\_ (Zip)  
\_\_\_\_\_ (Municipality) \_\_\_\_\_ (County)  
\_\_\_\_\_ (Block) \_\_\_\_\_ (Lot)

*(A separate form with a unique Application ID number is required for each geographic location.)*

**9. Detailed Project Description.**

Provide a thorough description of the existing conditions at the site, work that will occur at the site, and the final project outcome. See Attachment A for directions.

**10. Change in Use.**

Will the project result in a change in use for the land or structure? If YES, please describe and document.

Examples:

- a. Residential use → Non-residential (commercial, industrial, or mixed use).
- b. Non-residential (commercial, industrial, or mixed use) → Residential

**11. Change in Size or Capacity.**

Will the project result in a change in size or capacity of any kind? If YES, describe the percentage increase in size, footprint, number or capacity. Include any increase to main building(s), ancillary structure(s), parking areas, landscaping, paving, etc.

Examples:

- a. Increase in retail space, restaurant or theater seating capacity with 30% larger footprint and additional parking spaces.
- b. Increase in production capacity of manufacturing facility by 15%
- c. Change in landscaping resulting in 25% more impervious surface/paving.
- d. Increase in discharges such as sewage [from bathrooms], solid waste (trash), or process discharges?

**12. Market Value (for multi-family rehabilitation projects only).**

Will the proposed project for which funding is requested result in an increase in the market value of the property, facility, or installation? If YES, what is the percentage increase?

Examples:

- a. Funding will be used to construct an addition to a retail space of 6000 square feet. The enlarged space will increase the market value of the property by 20%, from \$300,000 to \$360,000.

Attach **Right of Entry Form** signed by property owner.

## **NJDEP Environmental and Historic Preservation Application**

### **#9) Detailed Project Description - Required Information**

#### **1. Contact Information**

- a. Property owner name, phone number, email
- b. Project representative name, phone number, email

#### **2. Project Description**

Describe the existing conditions, work that will occur at the site, and final project outcome. Project description must include the following:

- a. The number of units (if applicable),
- b. Ancillary services for the project during the work and after completion, such as solid waste, sewage, water, heating (including location of any tanks).
- c. Change in footprint of the building(s)
- d. Elevation height of the final project's first finished floor, if in the special flood hazard area
- e. Project Alternatives: Were any other alternatives considered? Why were those alternatives eliminated?
- f. Describe all phases of development, even if the application is only for a single phase. If future plans for the site are unknown, please state that.
- g. Keywords - all of the following that apply to the project should be included in the project description:
  - i. reconstruction
  - ii. rehabilitation
  - iii. new construction
  - iv. replacement
  - v. repair
  - vi. demolition
  - vii. acquisition or purchase
  - viii. disposition or sale
  - ix. excavation
  - x. expansion

#### **2. Project Budget**

- a. Include all activities and purchases to be funded by this loan or grant
- b. Identify all funding sources

#### **3. Site Plan** (not required if the project is rehabilitation.) Site plan must show:

- a. Site location (can use side streets, cross roads, lot/block lines, etc.)
- b. Scale
- c. Orientation (compass direction)
- d. Land use
- e. In the case of new construction, reconstruction and expansion projects, the site plan(s) should show existing conditions and final build out.

#### **4. Previous Environmental Studies**

- a. E.g., lead survey, asbestos survey, radon, Phase I, Preliminary Assessments, Site Investigations, and Environmental Assessments.
- b. If Areas of (environmental) Concern (AOC) have been identified, an AOC map is required.  
(A definition of AOC can be found at N.J.A.C. 7:26E-1.8.)  
Note: This will probably be contained in the environmental report.

#### **5. Miscellaneous**

- a. Any other **existing** site information such as photographs, site maps, state, federal and/or local permits or applications, surveys, engineering drawings, other documentation that explains or shows the work that has been or will be undertaken at the site.

## **EXAMPLE**

### **Ministry of Caring Project**

**Application for Environmental Review portion of Stronger NJ Loan Program  
October 11, 2013**

#### **1. Contact information**

- a. Property owner  
Joe Smith, xxx-xxx-xxxx, [j.smith@xmail.com](mailto:j.smith@xmail.com)
- b. Project representative  
Jane Doe, JW Consulting Services, yyy-yyyy-yyyy, [J.Doe@ymail.com](mailto:J.Doe@ymail.com)

#### **2. Project Description**

**Summary:** The purpose of this project is to renovate 401 Washington Street to provide accommodations for up to seven volunteers and 3 staff persons serving the poor and homeless through the Ministry of Caring. The total project cost is estimated at \$1.5 million with EDA loan funding \$194,800.

The existing building is a 3 story brick structure of 600,000 ft<sup>2</sup> built in 1955. It measures 24' by 55' and has a concrete lined basement. There are currently 4 parking spaces in the front of the building. The renovation project's primary goal is to create an updated facility to house up to 7 volunteers and 3 staff. The project entails an environmental assessment of the property, acquisition of the property, architectural and engineering studies and design for the housing, rehabilitation of the structure.

Rehabilitation will include removing and replacing the roof, repointing brickwork, replacing windows with energy efficient model, purchase of furnishings, textiles, kitchen and bathroom fixtures and cabinetry. Renovation of the property exterior to the building will involve some clearing and grubbing, re-grading, landscaping, paving for parking and access roads and runoff control. Demolition of the existing structure and construction of a new building was considered but determined to cost more than rehabilitation. Rehabilitation of the existing building will not change the building footprint or elevation.

The site is served by public drinking water supply and public sewer. Trash pick-up is through a private contractor. The building will be heated by an oil burning furnace. The oil tank is located in the basement.

The environmental study is complete and the property is under contract. The engineering and design work for the interior of the structure is complete. But no work on the building has been initiated.

**3. Project Budget**

Acquisition	\$135,000
Architectural and Engineering	59,000
Survey	1,400
Environmental	6,500

**Exterior**

Carpentry, milling and renovation	147,000
Roof replacement	72,000
Brick repointing	53,000
Window replacement	24,000

Miscellaneous costs (electric, waste management,  
equipment rental)

20,000

Landscaping (tree removal, sidewalk,  
parking lot, drainage)

12,800

**Interior**

Construction/rehabilitation	643,000
Contingency	64,300
Furniture/furnishings/ fixtures	262,000
<b>Total Project Budget:</b>	<b>\$1,500,000</b>

**Funding Sources:**

Private capital	305,200
Mortgage, ABC Bank	1,000,000
EDA Loan	194,800
<b>Total Funding</b>	<b>\$1,500,000</b>

4. Site plan enclosed.

5. No previous environmental studies have been conducted.

**6. Miscellaneous**

- a. Environmental Assessment dated February 10, 2013,
- b. dated photos,
- c. Engineer's drawings prepared by XYZ Engineers dated June 2013.

**RIGHT-OF-ENTRY PERMIT and RELEASE OF INFORMATION**  
**NJEDA Small Business Grant or Loan and Neighborhood and Community**  
**Revitalization Programs**

<b>Applicant Name:</b>	
<b>Address:</b>	
<b>City:</b>	<b>County:</b>
<b>Phone:</b>	
<b>Email:</b>	

**RIGHT OF ENTRY (“ROE”):** The undersigned Applicant hereby unconditionally authorizes New Jersey Economic Development Authority (“NJEDA”), the New Jersey Department of Environmental Protection (“NJDEP”), and their respective assigns, employees, agents, contractors, program managers, inspectors and subcontractors (collectively, the “Permitted Parties”) to have the right of access and to enter in and onto the property described above (the “Property”) for the purpose of performing any of the following activities in connection with determining eligibility for and/or receiving assistance under the Stronger NJ Business Grant and/or Loan Program, the Neighborhood and Community Revitalization Program or the Energy Resilience Bank (the “Program”): environmental review and inspections, historic preservation review and inspections, the taking of samples for specialized testing, on-site inspections and regulation compliance inspections.

**Applicant understands and agrees:**

1. This Right of Entry does not create any obligation on the part of the Permitted Parties to perform any of the foregoing activities on the Property.
2. Environmental inspections and historic preservation reviews are a requirement of CDBG-DR funding. Compliance with that funding requirement requires that the Permitted Parties be granted full access for the purpose of environmental and historic preservation inspection activities. Inspection activities will primarily consist of external inspections of the property.
3. No inspections will be performed until this ROE is completed in full.
4. Applicant authorizes the Permitted Parties to collect samples of materials, including but not limited to, drywall compound, floor tile, piping insulation, paint, ceiling tile, soil, potable water and groundwater for purposes of testing for potentially hazardous materials (including lead paint, asbestos, mold, etc) in accordance with the requirements of local, State, and federal authorities. Applicant understands that this sampling may result in minor damages to the Property, which damages may be repaired if the Applicant receives assistance from the Program, but will not be repaired if the Applicant does not receive assistance from the Program.
5. Applicant shall indemnify and hold harmless the NJEDA, NJDEP, and the other Permitted Parties for any and all liability, loss, damage, or destruction of any type whatsoever to the Property and to personal property and fixtures situated thereon, and for bodily injury or death to persons on the Property, and hereby releases, discharges and waives any and all liability, claims, demands, damages, injuries, losses, penalties, fines, costs, causes of action, judgments, expenses, as well as any and all actions, either legal or equitable, which the undersigned has, or that might arise, of any nature whatsoever and by whomever made, or may have, by reason of or incident to any action of aforesaid NJEDA, NJDEP or the other Permitted Parties taken to accomplish the purpose of this Right of Entry.

6. Applicant represents and warrants that Applicant has full power and authority to execute and fully perform Applicant's obligations under this ROE. If Applicant is an entity, Applicant also represents and warrants that Applicant has such power and authority pursuant to its governing instruments, without the need for any further action, and that the person(s) executing this ROE on behalf of Applicant are the duly designated agents of Applicant and are authorized to do so. Applicant expressly represents and warrants that fee title to the Premises is vested solely in Applicant.
7. This Right of Entry shall expire twelve (12) months after this Application is duly signed and submitted to the NJEDA, unless otherwise extended in writing by Applicant.

Applicant Name \_\_\_\_\_ Date \_\_\_\_\_

Authorized Signatory \_\_\_\_\_ Date \_\_\_\_\_

Witness Signature \_\_\_\_\_ Date \_\_\_\_\_

## CEO CERTIFICATION

I, THE UNDERSIGNED, BEING DULY SWORN UPON MY OATH SAY:

1. I have received a copy of the "Notice Regarding Payment of Prevailing Wages" and the "Notice Regarding Affirmative Action" and am prepared to comply with the requirements contained therein.
2. I affirm, represent, and warrant that the applicant has no outstanding obligations to any bank, loan company, corporation, or individual not mentioned in the application and attachments; that the information contained in the application and in all attachments submitted herewith is to the best of my knowledge true and complete and that the funding applied for herein is not for personal, family, or household purposes.
3. I understand that if such information is willfully false, I am subject to criminal prosecution under law, including N.J.S.A. 2C:28-2 and civil action by the EDA which may at its option terminate its financial assistance.
4. By executing this Application, Applicant(s) acknowledge and understand that Title 18 United States Code Section 1001: (1) makes it a violation of federal law for a person to knowingly and willfully (a) falsify, conceal or cover up a material fact; (b) make any materially false, fictitious, or fraudulent statement or representation; OR (c) make or use any false writing or document knowing it contains a materially false, fictitious, or fraudulent statement or representation, to any branch of the United States Government; and (2) requires a fine, imprisonment for not more than five (5) years, or both, which may be ruled a felon, for any violation of such Section.
5. I authorize the New Jersey Department of Law and Public Safety to verify any answer(s) contained herein through a search of its records, or records to which it has access, and to release the results of said research to the EDA.
6. I authorize the EDA to obtain such information including, but not limited to, a credit bureau check as it may require, covering the applicant and/or its principals, stockholders and/or investors.
7. I authorize the EDA to provide information submitted to it by or on behalf of the applicant to BPU, any bank or State or federal agency which might participate in the requested financing with the EDA or undertake an audit.
8. I authorize the EDA to request of any company with which I hold insurance policies, or FEMA or the SBA or any other business from which I have applied for or am receiving proceeds, including but not limited to banks and other financial institutions, any non-public or confidential information determined to be reasonably necessary by the EDA to evaluate and process my application, and I give my consent to such company to release said information to the EDA.

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(Signature)

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(Title)

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(Name, please print)

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(Date)