



Agenda Date: 6/30/17  
Agenda Item: 9A

**STATE OF NEW JERSEY**  
**Board of Public Utilities**  
44 South Clinton Avenue, 3<sup>rd</sup> Floor, Suite 314  
Post Office Box 350  
Trenton, New Jersey 08625-0350  
[www.nj.gov/bpu/](http://www.nj.gov/bpu/)

MISCELLANEOUS

IN THE MATTER OF THE TOWN CENTER DISTRIBUTED )  
ENERGY RESOURCES MICROGRID INCENTIVE ) ORDER  
PROGRAM AUTHORIZATION OF INCENTIVE FUNDING )  
TO CITY OF ATLANTIC CITY FOR PHASE I FEASIBILITY )  
STUDY ) DOCKET NO. QO17060629

**Party of Record:**

**Donald A. Guardian, Mayor, City of Atlantic City**

**BY THE BOARD:**

The 2015 New Jersey Energy Master Plan Update (EMP Update) established a new overarching goal to "Improve Energy Infrastructure Resiliency & Emergency Preparedness and Response" in response to several extreme weather events that left many people and businesses without power for extended periods of time. These new policy recommendations included the following:

1. Increase the use of microgrid technologies and applications for Distributed Energy Resources ("DER") to improve the grid's resiliency and reliability in the event of a major storm; and
2. The State should continue its work with the USDOE, the utilities, local and state governments and other strategic partners to identify, design and implement Town Center DER ("TC DER") microgrids to power critical facilities and services across the State.

At its November 30, 2016 agenda meeting Docket number QO16100967, the Board authorized the release of staff's Microgrid Report ("Report"). The following recommendations in the Report specifically address the development of a TC DER microgrid feasibility study incentive program and pilot:

1. Develop and implement a TC DER microgrid feasibility study incentive program as part of the current New Jersey Clean Energy Program ("NJCEP") budget. This TC DER microgrid feasibility study incentive program should provide funding for the upfront

feasibility and engineering evaluation project development costs of a Town Center TCDER microgrid at the local level. This incentive should be a phased approach as beginning with an initial feasibility study, followed by detailed engineering designs. Staff should implement a stakeholder process to determine the terms and conditions of the TC DER microgrid feasibility study incentive program. This incentive should be provided through an MOU structure.

2. Initiate a TC DER microgrid pilot within each electric distribution company ("EDC") service territory. This should initially be limited to the municipalities within the 9 Federal Emergency Management Agency ("FEMA") designated counties or municipalities that meet the same criteria identified in the New Jersey Institute of Technology ("NJIT") report. These pilots should include, at a minimum, an initial feasibility study of the TC DER microgrid. This process should assist in the development of a TC DER microgrid tariff.

On August 5, Board staff issued a draft application for public comment regarding this program. On August 23, 2016, a public meeting was held to discuss the draft application and written comments were received and considered in the final application. Board staff's responses to the comments were published as part of the release of application.

At its January 25, 2017 agenda meeting Docket number QO16100967 the Board authorized the release of TC DER microgrid feasibility study application. Incentive funding is capped at \$200,000 per feasibility study. The Board directed staff to release the application and to open a 60-day application submission window. Applications submitted during that period would be reviewed by Staff and selected on a competitive basis. Any application submitted after this time period would be accepted on a first-come-first-served basis subject to available fund. The 60 day period ended on March 27, 2017.

Prior to March 27, 2017, the City of Atlantic City submitted an application to the Board.

City of Atlantic City is a microgrid project with combined heat and power for the mid-town portion of the City including Atlanticare Regional Medical Center, Boardwalk Hall, Ceasars/Bally's Hotels and Casino as the critical facilities. The microgrid assets (electric generation and thermal generation equipment) is planned to be installed at the ACM Energy's (an affiliate company of DCO Energy) Midtown Thermal Control Center (MTCC). Chilled water and steam generated by the MTCC are delivered to customers for cooling, heating, domestic hot water and kitchen use. A combine heat and power ("CHP") was added to the MTCC system consisting of a Solar Taurus 60 fuel combustion gas turbine and a Rentech heat recovery steam generator ("HRSG"). The additional technology employed by the MTCC would include a CHP that was installed in the former Revel Casino, and is now being removed from the facility. This additional generation of 7.5 MW electric and thermal would be connected to the critical facilities to provide additional thermal generation to the microgrid participants and other customers. Revenue would be generated through sale of Locational Marginal Price electricity and demand response. Cost savings would be realized by peak power demand reduction and reduced electric generation. The Atlantic City Electric supervisory control and data acquisition ("SCADA") system would be integrated with the existing control systems at MTCC along with the installation of new EDC compatible control systems. The estimated time to complete the feasibility study is three to four

months. The total project cost estimate has not yet been determined by the applicant at this time.

After review of the application Board Staff recommends that the Board approve the above-referenced application.

The Board **HEREBY ORDERS** the approval of the aforementioned application for the total incentive amount of \$175,000 for City of Atlantic City and **AUTHORIZES** the President of the Board to sign and execute the MOU attached hereto which sets forth the terms and conditions of the commitment of these funds.

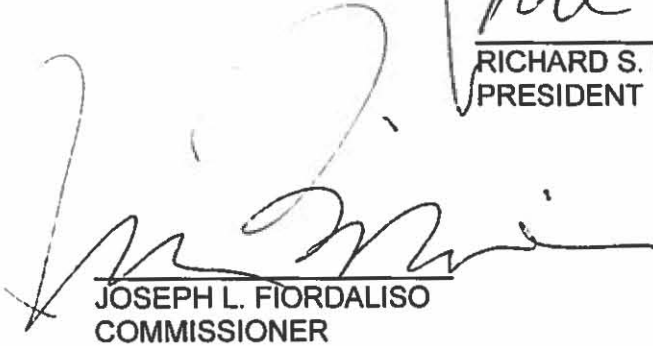
This effective date of this order is July 10, 2017.

DATED: 6/30/17

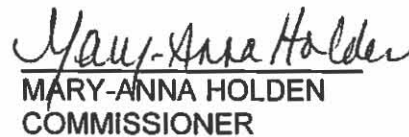
BOARD OF PUBLIC UTILITIES  
BY:



RICHARD S. MROZ  
PRESIDENT



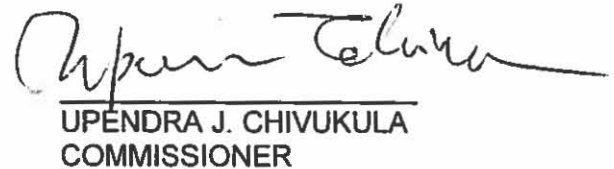
JOSEPH L. FIORDALISO  
COMMISSIONER



MARY-ANNA HOLDEN  
COMMISSIONER



DIANNE SOLOMON  
COMMISSIONER



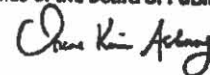
UPENDRA J. CHIVUKULA  
COMMISSIONER

ATTEST:



IRENE KIM ASBURY  
SECRETARY

I HEREBY CERTIFY that the within document is a true copy of the original in the files of the Board of Public Utilities



IN THE MATTER OF THE TOWN CENTER DISTRIBUTED ENERGY RESOURCES  
MICROGRID INCENTIVE PROGRAM AUTHORIZATION OF INCENTIVE FUNDING TO CITY  
OF ATLANTIC CITY FOR PHASE I FEASIBILITY STUDY

SERVICE LIST

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March 24, 2017

President Richard S. Mroz, Esq.  
N.J. Board of Public Utilities  
44 South Clinton Avenue  
Trenton, NJ 08609

*Re: N.J. Board of Public Utilities Town Center Micro Grid System Study Grant Application Submission*

Dear President Mroz:

Atlantic City is pleased to submit in the attachment its application for the "Town Center Distributed Energy Resources Micro Grid Feasibility Study Incentive Program." We believe that we have identified a substantial inner city project that would qualify for this program and would hereby like to formally begin the application process for a \$200,000 grant to cover the anticipated expenses of the feasibility study.

As you know, our community was severely challenged by Superstorm Sandy and our ability to continue to provide critical healthcare services, public shelter, police and fire services was tested to the limit. We have continued to review City assets, in the context of creating an energy resilient infrastructure that could stand alone in the face of extended utility grid outages to continue to provide vital services during weather emergencies.

Currently, the Mid-Town Control Center (MTCC) facility (recently acquired by ACM Energy Partners, a DCO Energy company) has the capability of incorporating the electric generation and heat recovery assets that are now being removed from the Revel CHP facility. These assets taken together would form the basis of a combined heat and power facility of over 7.4 megawatts that could power the AtlantiCare Regional Medical Center on a property contiguous to the MTCC facility, the Boardwalk Convention Center as an emergency public shelter, other local City emergency assets and power the nearby Caesar's/Bally properties with electric and chilled water and thermal energy under a long-term contract to generate additional revenues to keep the micro-grid economically viable over the long term.

While there are a significant public policy issues need to be resolved, the circumstances and the available assets clearly warrant our great interest in moving quickly to apply for the feasibility



study grant.

We have met with DCO Energy and they have also had a number of preliminary conversations with Atlantic City Electric, South Jersey Gas, AtlantiCare, CRDA, and Caesar's/Bally, all of whom are interested in moving to the next step of the process. As you know, DCO Energy has a wealth of experience in developing economic and reliable energy projects not only in Atlantic City but throughout New Jersey.

We are very pleased that the Board has advanced the feasibility study grant program and think that these kinds of efforts can begin to reshape energy public policies that not only will create new energy efficiency opportunities, environmental and economic savings, but also, perhaps more importantly, create an energy resilient infrastructure that will support vital life-saving services and shelter during weather and other emergencies for Atlantic City.

We look forward to working with you and your staff going forward in this process. Please don't hesitate to reach out to my office if you have any questions or would like to meet on-site to review the project with our partners at DCO.

Very truly yours,

A handwritten signature in black ink that reads "Donald A. Guardian".

Donald A. Guardian

Mayor



## TC DER Microgrid Application

1. **Project Name:** Atlantic City Midtown Microgrid

2. **Submitted by:** City of Atlantic City, NJ

The City of Atlantic City submits this Town Center Distributed Energy Resource Microgrid Application. If we are successful in obtaining feasibility study incentive funds to conduct the feasibility study, we would enter a Memorandum of Understanding with DCO Energy, LLC, who would be the lead firm in the Feasibility Study. DCO in turn would work with the local utilities and potential project participants during this time.

### 3. **Background Information**

Atlantic City was severely challenged by Superstorm Sandy and its ability to continue to provide critical healthcare services, public shelter, police and fire services was tested to the limit. Since that time, the City has continued to review “in City” energy assets, in the context of creating an energy resilient infrastructure that could stand alone in the face of extended utility grid outages to continue to provide vital services during weather emergencies.

Currently, the Mid-Town Control Center (MTCC) facility (recently acquired by ACM Energy Partners, a DCO Energy company) appears to have the capability of incorporating the electric generation and heat recovery assets that are now being removed from the Revel CHP facility. These assets taken together could then form the basis of a combined heat and power facility of over 7.4 megawatts that could power the AtlantiCare Regional Medical Center on a property contiguous to the MTCC facility, the Boardwalk Hall as an emergency public shelter, other local City emergency assets and perhaps also power the nearby Caesar’s/Bally properties with electric (they currently purchase chilled water and thermal energy from the MTCC) under a long-term contract to generate additional revenues to keep the micro-grid economically viable over the long term.

Clearly, there are a significant number of technical, economic, and public policy issues that need to be thought through to bring a project such as this to fruition. However, the feasibility study incentive program coupled with these available assets that could quickly be brought into play warrant our moving quickly to the feasibility study application process.

DCO Energy has had several preliminary conversations with Atlantic City Electric and South Jersey Gas from the Utility side, and AtlantiCare, CRDA, and Caesar’s/Bally from the potential participant side, all of whom are interested in engaging and moving to the next step of the process. The entities have provided Letters of Support with this application.

Currently, the participants of the microgrid are collecting load and other relevant data to assist in the application process. DCO Energy has a wealth of experience in developing economic and reliable energy projects not only in Atlantic City but throughout New Jersey and is uniquely positioned with assets in hand to assist Atlantic City in achieving its goals of improving its energy infrastructure,

resiliency, and emergency preparedness and response through the development of a microgrid. Clearly, these kinds of efforts can begin to reshape energy public policies that not only will create new energy efficiency opportunities, environmental and economic savings, but also, perhaps more importantly, create an energy resilient infrastructure that will support vital life-saving services and shelter during weather and other emergencies for Atlantic City.

#### **4. Project Description**

The City of Atlantic City has discussed a microgrid project for the mid-town portion of the City with several critical facilities. The potential critical facilities, with a description of each, size, energy loads, etc. are provided below.

**Caesars Atlantic City Hotel and Casino.** Caesars is a hotel/casino located on Pacific Avenue. The facility has a peak electric load of approximately 5 MW, and peak thermal loads of 6,600 tons and 82.3 MMBTU steam. The facility currently purchases chilled water and steam from the Midtown Thermal Control Center (MTCC) district energy system that serves the midtown portion of the city. The facility is fed electric from Atlantic City Electric.

The exact square footage of the entire resort has not been provided, but the gaming portion of the facility is approximately 115,000 square feet. In addition, the resort has 1,141 guest rooms and suites, gourmet and casual restaurants, retail, Spa, and a state-of-the-art fitness center. Connected to Caesars via walk-way is The Playground, Atlantic City's upscale shopping mall with stores such as Tiffany & Co., Burberry, Gucci and Louis Vuitton to name a few.

The proposed project as anticipated now is approximately .4 miles from the Midtown Control Center and the Caesars facility.

We were not able to identify the FEMA Category Classification.

We are not aware of any previous energy efficiency or ESCO work being performed in the facility.

**Bally's Hotel and Casino.** Bally's is a hotel/casino located on Pacific Avenue and includes the Wild West Casino Hotel. The facilities have a peak electric load of approximately 7.6 MW, and peak thermal loads of 7,700 tons and 44 MMBTU steam. The facility currently purchases chilled water and steam from the Midtown Thermal Control Center (MTCC) district energy system that serves the midtown portion of the city. The facility is fed electric from Atlantic City Electric.

The exact square footage of the entire resort has not been provided, but the gaming portion of the facility is approximately 121,000 square feet. In addition, the resort has 1,251 guest rooms and suites, Bally's Atlantic City also features a theater, an in-season beach bar, and a 40,000-square foot spa with 10 treatment rooms, a state-of-the-art fitness center, sport courts and an indoor swimming pool.

The proposed project as anticipated now is approximately .2 miles from the Midtown Control Center and the Bally's facility.

We were not able to identify the FEMA Category Classification.

We are not aware of any previous energy efficiency or ESCO work being performed in the facility.



**Atlanticare (Atlantic City Regional Medical Center).**

AtlantiCare Regional Medical Center's Atlantic City campus was Atlantic City's first hospital, founded in 1898. For more than a century, ARMC City has remained a regional leader in acute care services.

Atlanticare, located on Pacific Avenue, is a 276-bed teaching hospital, as well as the region's only Level II Trauma Center. The facility has a central boiler and chiller plant to provide its heating and cooling needs, and purchases its electric from Atlantic City Electric. The hospital has a peak electric load of approximately 3 MW, and peak thermal loads of 1,700 tons and 25,000 lbs./hour of steam.

The total square footage of the medical center campus in Atlantic City has not been determined, however, in 2007, AtlantiCare Regional Medical Center completed construction on the George F. Lynn Harmony Pavilion, a \$98 million, 198,000 square foot addition to the Atlantic City campus.

The proposed project as anticipated now is approximately .2 miles from the Midtown Control Center and the Atlanticare facility.

We were not able to identify the FEMA Category Classification, but based upon Principal Building Activity as an inpatient health facility, it could be a Category 4.

We are not aware of any previous energy efficiency or ESCO work being performed in the facility.

**Boardwalk Hall.** This facility, formally known as the Historic Atlantic City Convention Hall, is located off Pacific Avenue. Boardwalk Hall is a multi-purpose facility located on the iconic Atlantic City Boardwalk and includes the 141,000-square-foot main arena with a capacity of 14,770 seats, as well as the 23,100-square-foot Adrian Phillips Ballroom with a capacity of 3,200. The facility purchases its electric from Atlantic City Electric and purchases chilled water and steam from the Midtown Thermal Control Center (MTCC) district energy system that serves the midtown portion of the city. Peak electric load for Boardwalk Hall is 1,690 kW and thermal peaks are estimated to be 3,000 tons of chilled water and 36 MMBTU of steam.

The estimated square footage of the facility is estimated at 750,000 sf, including the West Hall.

The proposed project as anticipated now is approximately .6 miles from the Midtown Control Center and the Boardwalk Hall facility.

The FEMA Category Classification is a Classed Special District Government. Based upon the Principal Building Activity as a public assembly facility, it could be a Category 3.

There has been no previous energy efficiency or ESCO work done to date in the facility.

If applicant is not a Town Center as identified in the NJIT report, documentation indicating that it satisfies the screening criteria set forth in the NJIT report is required as follows:

The applicant for this TC DER Microgrid Application would be the City of Atlantic City. While Atlantic City was named as a potential DER Microgrid, it was not for this project.

### **Description of Technology**

The Microgrid assets (electric generation and thermal generation equipment) is planned to be installed at ACM Energy's Midtown Control Center (as noted above, ACM Energy is an affiliate company of DCO Energy). The Midtown Control Center was developed under the banner of Atlantic Thermal Systems (ATS). DCO Energy, LLC personnel, then employees of ATS, originated the concept and fully developed and operated the System until the end of 2000. In 2016, ACM Energy Partners, LLC, acquired the plant from PEPCO. This energy project emphasized the developer's long-term vision of a city-wide district steam and chilled water system, built in multiple phases. The system also utilizes production capabilities in two of the customer's locations perfecting the integration of distributed equipment into the system.

The Midtown Thermal Control Center is in the midtown section of Atlantic City, New Jersey. Chilled water and steam generated by the plant are delivered to customers primarily for cooling, heating and domestic hot water and kitchen use. The facility has:

- (3) three 70,000 pound per hour steam boilers (210,000 pound per hour total capacity). One pound of steam is equal to approximately 1,000 BTUs.
- (14) fourteen centrifugal chillers (16,200 tons total capacity). Each ton of cooling has 12,000 BTUs.

A Combined Heat and Power (CHP) plant was added to the system consisting of a Solar Taurus 60 fuel combustion gas turbine and a Rentech HRSG.

- 5.5 MW gas turbine with Heat Recovery Steam Generator (72,000 pounds per hour total steam capacity). One megawatt of power is equal to 3,412,141 BTU/hour, and a pound of steam is equal to 1,000 BTUs.
- 1 MW Emergency Generator

The additional technology employed in the Midtown Control Center would include a Combined Heat and Power plant that was installed in the former Revel Casino, and is now in the process of being removed from the facility. The plant includes the following equipment:

- 7.5 MW Electricity (Solar Turbine Taurus 70 Turbine-Generator)
- 1,820 Tons of Chilled Water (2- Thermax Absorption Chillers)
- 38.3 MMBTU/hour Heat Recovery (Rentech Waste Recovery Unit)

The concept is that the additional generation of electric and thermal would be connected to the participating facilities to provide additional thermal generation to the participants in the microgrid and other customers. Revenue would be generated through sale of Locational Marginal Price electricity and demand response. Cost savings are realized by peak power demand reduction and reduced electric generation.

## Scope of Feasibility Study

### Technical Assessment:

Naturally, the first area of study would be devoted to a full technical assessment of the existing assets at the Midtown Control Center utilized in conjunction with the relocated power and thermal assets from the Revel combined heat and power facility. This assessment would focus upon the technical potential to connect area electric and thermal loads that would then continuously serve AtlantiCare, CRDA, potentially Caesar's/Bally's, the Boardwalk Convention Center and other potential essential and emergency services under "black sky" conditions and "blue sky" conditions. This phase of the assessment would also provide basic data regarding the thermal efficiencies achievable under various interconnection scenarios and provide the technical data required for the economic evaluation.

### Interconnection Assessment:

The interconnection strategy for each critical facility needs to be evaluated in terms of geographic distance, contiguous property requirements set by existing statute, a potential "pilot program" interconnection agreement with Atlantic City Electric applicable singularly to this project, and potential statutory alteration of public policy on a more global basis. Each of these scenarios needs to be evaluated in the context of capital and operating cost, physical site constraints and other factors.

### Economic Evaluation:

The final and "third leg" of the analysis would then subsequently focus upon the prospective revenues associated with long term "blue sky" power purchase contracts that would then largely drive the economics of the microgrid, the cost and "standby" revenues associated with "black sky" conditions and the evaluation of standby and other EDC costs that may be required.

This analysis would identify cost "gaps" and areas of public policy that may need to be revisited to create the incentives and cost realignment necessary to make this technology feasible.

### Other Criteria:

Other criteria of critical facilities that were stated in the TC DER Microgrid Feasibility Study Application, and how this project would meet or exceed those, are included below.

- **A Town Center should have at least 2 Category III or IV facilities within 0.5 miles and a facility with an energy usage of approximately 90 M BTUs per square feet.**
  - We have identified two facilities, AtlantiCare Regional Medical Center and Boardwalk Hall, which we believe meet the criteria based upon Category rankings. In addition, the Midtown Control Center, where the assets would likely be located has a very high energy usage per square foot, as provided above.
- **General Description of the overall cost and potential financing that may be available.**
  - Due to the uncertainty of the cost with respect to the electric distribution work, which may include new lines, automatic transfer switches, etc., it is difficult to determine at this point. Atlantic City Electric is willing to support the project and work collaboratively but that work has not begun yet.

- **Benefits of the proposed Town Center DER Microgrid as well as the need for the proposed project.**
  - Atlantic City was severely challenged by Superstorm Sandy and its ability to continue to provide critical healthcare services, public shelter, police and fire services was tested to the limit. Since that time, the City has continued to review “in City” energy assets in the context of creating an energy resilient infrastructure that could stand alone in the face of extended utility grid outages to continue to provide vital services during weather emergencies. The potential participants of the microgrid project are not only the recognizable names of Atlantic City, but can assist in any emergencies (Atlanticare-patient care on emergency or other basis; Boardwalk Hall-place of public gathering; Caesars/Bally’s-place of public gathering, food, water, shelter).
- **Timeframe for the completion of the feasibility study.**
  - Our Feasibility Study would entail conceptual engineering and cost estimates for the initial technology, as well as potential options and alternates for the microgrid. The estimated time to complete the feasibility study would be approximately 3-4 months.
- **The specific modelling to be used in the overall feasibility study.**
  - A conceptual engineering design will be prepared along with cost estimates. A project proforma will be used to identify costs, expenses (operations and maintenance, gas, electric, etc.) as well as revenue for the system to determine if the project can support the estimated cost. Obviously certain assumptions will need to be made relative to the revenue from PJM programs, because they change regularly.
- **The requested funding amount.**
  - We request the full amount that would be granted for any project deemed to meet the criteria established, \$200,000.
- **Any cost share by the Lead Local Agency or any of the stakeholder partners.**
  - At this point of the feasibility study we have not discussed cost sharing as we intend to ensure that the microgrid concept is viable. It is certainly possible that participants in the microgrid may elect to be equity participants in the project.
- **Letters of Support.**
  - Letters of support are attached to this application from utilities and potential participants in the microgrid.



Vincent Maione  
President  
Atlantic City Electric Region

5100 Harding Highway  
Mays Landing, NJ 08330

609.625.5864 - Telephone  
609.625.5274 - Facsimile

vincent.maione@atlanticcityelectric.com

March 22, 2017

The Honorable Donald A. Guardian  
Mayor, City of Atlantic City  
1301 Bacharach Boulevard  
Atlantic City, New Jersey 08401

**Re:** Atlantic City Electric Company  
Letter of Support for Town Center Distributed Energy Resource Microgrid Feasibility Study  
Incentive Program

Dear Mayor Guardian:

On January 25, 2017 the New Jersey Board of Public Utilities ("BPU" or the "Board") approved the Town Center Distributed Energy Resource ("TC DER") Microgrid Feasibility Study Incentive Program (the "Program"). The BPU has recognized that significant information and data to evaluate and optimize the feasibility of a microgrid is needed from the utilities and, as part of the application process<sup>1</sup> for the Program, has required that Program applicants obtain a Letter of Support for the feasibility study from the electric and gas distribution companies that operate in the service territory where the proposed microgrid project will be located.

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<sup>1</sup> There is a two-phase application process for the Program. The first phase is the feasibility study. The second phase is detailed engineering of the proposed microgrid project. The Board must approve an applicant's feasibility study in order for the applicant to move on to the second phase of the application process.

Representatives from Atlantic City Electric Company (“ACE” or the “Company”) have met with the City of Atlantic City regarding a proposed TC DER microgrid project. ACE is pleased to offer this Letter of Support in connection with the City’s proposed TC DER Microgrid Feasibility Study Application (the “Application”). ACE agrees to provide to the City of Atlantic City with reasonable and relevant information regarding the Company’s distribution and transmission infrastructure which exists, is available, and is not subject to an enhanced level of system/operational security (referred to in this letter as the “Information”), that is necessary for the City of Atlantic City to complete a microgrid feasibility study. The City of Atlantic City acknowledges and agrees that any Information provided by the Company shall be returned at any point in the process that the Application is withdrawn, rejected by the BPU or delayed for a period of six months or more. ACE will provide the Information with the understanding that the City of Atlantic City will execute all Company required forms and agreements, including, but not limited to, confidentiality and/or non-disclosure agreements.<sup>2</sup>

Although ACE agrees to provide the Information to the City of Atlantic City, to the extent that special studies are required, the Company reserves the right to bill the City of Atlantic City for these special studies, according to ACE’s tariff and/or customary practice. In addition, to the extent that interconnection applications are required for the distribution utility, PJM Interconnection, LLC or both, the City of Atlantic City acknowledges and agrees that it will be responsible for all applications and associated fees. Nothing in this Letter of Support shall be interpreted as circumventing or accelerating well-established practices for processing interconnection applications.

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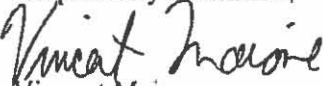
<sup>2</sup> In accordance with N.J.A.C. 14:4-7.8, the Company will also require signed consent forms before personally identifiable customer information will be released to any Program applicant.



The Honorable Donald A. Guardian  
March 22, 2017  
Page 3

ACE further reserves the right to review, comment, and take positions on the City of Atlantic City's feasibility study throughout the BPU's review process, including, but not limited to, any final report that may be issued by the Board as well as the remaining phases of the Program.

The Company is pleased to provide this Letter of Support and looks forward to working with the City of Atlantic City throughout this application process.

Respectfully submitted,  
  
Vincent Maione  
Regional President  
Atlantic City Electric Company

cc: Irene Kim Asbury, Esquire, Secretary, BPU (First Class Mail and Electronic Mail)  
Michael Winka, BPU (First Class Mail and Electronic Mail)  
Frank E. DiCola, PE, DCO Energy (First Class Mail and Electronic Mail)



*South Jersey Gas*

**David Robbins Jr.**

*President*

March 20, 2017

Mayor Donald A. Guardian  
City of Atlantic City  
City Hall  
301 Bacharach Boulevard  
Suite 706  
Atlantic City, NJ 08401

Re: Letter of Support

Dear Mayor Guardian:

South Jersey Gas(SJG) is pleased to provide this letter of support for the Town Center Distributed Energy Resource Microgrid Application (TCDER) project.

We have been closely following the work of The Board of Public Utilities (BPU) with the development of the TCDER Microgrid Feasibility Study Incentive Program. Our distribution system in Atlantic City was impacted during Superstorm Sandy, and participation in this Microgrid project can be beneficial for not only SJG to assist in adding electric grid reliability and resiliency, but also our customer's that are participating in the project as well.

We have met with DCO Energy, LLC with respect to this project, and are ready to work with and support them in their efforts regarding this Microgrid project.

We are pleased to be part of this project and evaluation of it.

Sincerely,

David Robbins, Jr.

# AtlantiCare

REGIONAL MEDICAL CENTER

A MEMBER OF GEISINGER HEALTH SYSTEM

March 20, 2017

Mayor Donald A. Guardian  
City of Atlantic City  
City Hall  
301 Bacharach Boulevard  
Suite 706  
Atlantic City, NJ 08401

Re: Letter of Support

Dear Mayor Guardian:

AtlantiCare Regional Medical Center is pleased to provide this letter of support for the feasibility study for the Town Center Distributed Energy Resource Microgrid Application (TCDER) project.

We have been closely following the work of the Board of Public Utilities (BPU) with the development of the TCDER Microgrid Feasibility Study Incentive Program. As the region's only Level II Trauma Center it is imperative for us to continue to have interest in creating an energy resilient infrastructure to serve this area of Atlantic City that could stand alone during an extended utility grid outage.

We have met with DCO Energy, LLC with respect to the feasibility study for this project, and are interested in being one of the participants in the feasibility study. We are ready to work with and support the feasibility study regarding this Microgrid project.

Sincerely,



Margaret Belfield  
Executive Vice President & Chief Operating Officer



Atlantic City Campus  
1925 Pacific Avenue, Atlantic City, NJ 08401  
609-345-4000 • [www.atlanticare.org](http://www.atlanticare.org)



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March 23, 2017

Mayor Donald A. Guardian  
City of Atlantic City  
City Hall  
301 Bacharach Boulevard, Suite 706  
Atlantic City, NJ 08401

**Re: Microgrid Feasibility Letter of Support**

Dear Mayor Guardian:

Bally's Atlantic City and Caesars Atlantic City are pleased to provide this letter of support for the Town Center Distributed Energy Resource (TCDER) Microgrid Feasibility Study Incentive Program application being submitted by the City of Atlantic City (City).

We have been following the work of the Board of Public Utilities and the development of the TCDER Microgrid Feasibility Study Incentive Program. While we obtain our thermal energy (steam and chilled water) from ACM Energy Partners, LLC (an affiliate company of DCO Energy, LLC) Midtown Thermal Control Center, we continue to have interest in the creation of energy resilient infrastructure to serve areas of the City that could stand alone during an extended utility grid outage.

We have met with DCO Energy, LLC with respect to this project and believe our geographic location, the existence of critical electrical and generating infrastructure, and interest by several neighboring properties creates a unique opportunity that would benefit the development of a local microgrid. Such a microgrid would allow for the operation of critical facilities and shelters during a catastrophic event that impacts the electric grid for an extended period.

We are interested working with the City and DCO Energy, LLC to support your efforts related to the TCDER Microgrid Feasibility Study Incentive Program and believe that further investigating the feasibility of a local microgrid is a logical next step. Should you have any questions, please don't hesitate to contact me at 702-880-6876.

Sincerely,

Eric Dominguez  
Vice President  
Facilities, Engineering & Sustainability

Cc: Kevin Ortizman, Caesars Entertainment  
David Satz, Caesars Entertainment  
Amie Sabo, Caesars Entertainment  
Lynne Hughes, Caesars Entertainment  
Jonathan Wohl, DCO Energy, LLC



Chris Christie  
Governor

March 16, 2017

Robert L. Mulcahy, III  
Chair

**BY FIRST CLASS MAIL AND EMAIL: [dguardian@cityofatlanticcity.org](mailto:dguardian@cityofatlanticcity.org)**

Ford M. Scudder  
State Treasurer

The Honorable Donald A. Guardian  
City of Atlantic City  
301 Bacharach Boulevard, Suite 706  
Atlantic City, NJ 08401

Christopher S. Porrino  
Attorney General

Re: Town Center Distributed Energy Resource Microgrid  
Application (TCDER) project

Charles A. Richman  
DCJ Commissioner

Dear Mayor Guardian:

Matthew B. Levinson  
Casino Control Commission

The Casino Reinvestment Development Authority, as owner/operator of Boardwalk Hall, is pleased to provide this letter in support of the Town Center Distributed Energy Resource Microgrid Application (TCDER) project.

Mayor Don Guardian  
City of Atlantic City

CRDA currently obtains its thermal energy (steam and chilled water) from the Midtown Thermal Control Center, which is owned and operated by ACM Energy Partners, LLC [an affiliate of DCO Energy, LLC (DCO)]. The Authority is closely monitoring the work of the Board of Public Utilities (BPU) in connection with the development of the TCDER Microgrid Feasibility Study Incentive Program, and supports the creation of resilient infrastructure capable of providing energy to the downtown area of Atlantic City during an extended utility grid outage.

Debra P. DiLorenzo

CRDA has met with DCO and BPU representatives with respect to a Microgrid program for Atlantic City, and supports DCO's efforts regarding the TCDER project.

Edward H. Gam

Mark Giannantonio

Michael L. Hanley

Gary L. Hill

Howard J. Kyle

William L. Mullen


Kevin C. Oltzman

Frank G. Spencer

Richard L. Tolson

Sincerely,

Christopher Howard  
Executive Director

  
Christopher M. Howard



**State of New Jersey**  
**BOARD OF PUBLIC UTILITIES**  
44 SO. CLINTON AVENUE  
THIRD FLOOR, SUITE 314 - P.O. BOX 350  
TRENTON, NEW JERSEY 08625-0350

**CHRIS CHRISTIE**  
GOVERNOR

**KIM GUADAGNO**  
LT. GOVERNOR

**RICHARD S. MROZ**  
PRESIDENT  
TEL: (609) 777-3310  
FAX: (609) 292-2264

April 17, 2017

Mayor Donald A. Guardian  
City of Atlantic City  
1301 Bacharach Blvd.  
Atlantic City, NJ 08401

Dear Mayor Guardian:

The NJBPU Town Center DER Microgrid Evaluation Team (Evaluation Team) has received your application for a TC DER microgrid feasibility study incentive. While this application was accepted for evaluation, there are a number of items that are required to be submitted in order to complete that evaluation. These items are listed below:

1. FEMA classification of each building as part of the TC DER microgrid
2. Identification of at least two category III or IV facilities within 0.5 miles
3. A general description of the overall cost
4. A general description of the communication system between the TC DER microgrid and the EDC system
5. The specific modeling to be used in the overall feasibility study

BPU has received 13 proposals for feasibility study incentives. The Board's approved DER microgrid line item budget is \$1 million. The 13 proposals significantly exceed that budget. The TC DER evaluation team is requiring that you submit a best and final offer (BAFO) for your proposal. This BAFO should include your estimated breakdown of the budget for the prime investigator and all subcontracts including any estimated fees to be paid to the EDC/GDC. The above noted items, the BAFO and the budget breakdown of the prime investigator and subcontractors should be submitted to [TCDERmicrogrid@bpu.nj.gov](mailto:TCDERmicrogrid@bpu.nj.gov) by close of business (COB) 5:00 p.m. on May 1, 2017. Non-submittal of the additional items, the BAFO and budget breakdown will result in a non-completeness determination of the proposal.

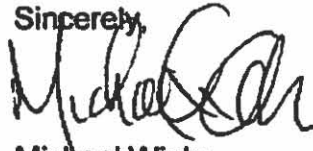


April 17, 2017

Page 2

As noted in the TC DER microgrid feasibility study application, the Board has the sole discretion over the approval of projects and awards of incentives, and may change criteria or available funding at any point during the duration of the program.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Winka". The signature is fluid and cursive, with the first name "Michael" written in a larger, more prominent script than the last name "Winka".

Michael Winka  
Senior Policy Advisor



April 27, 2017

[TCDERmicrogrid@bpu.nj.gov](mailto:TCDERmicrogrid@bpu.nj.gov)

Michael Winka, Senior Policy Advisor

NJ Board of Public Utilities

44 S. Clinton Avenue

Third Floor, Suite 312; PO Box 350

Trenton, NJ 08625-0350

Dear Mr. Winka:

Pursuant to your recent letter of request for additional information and a "best and final offer" in the above referenced regard, please find below our response.

**1) FEMA Classifications:**

- a) Atlantic City Regional Medical Center – FEMA Category 4
  - i) Category designation based upon hospital potential to include occupants who may not be sufficiently mobile to avoid loss of life or injury during flood or storm events.
- b) Boardwalk Hall – FEMA Category 3
  - i) Category Designation based upon the use of the facility to house City residents in large numbers for shelter and the continuing provision of other emergency services during times of flood or storm events.
- c) Bally's Hotel and Casino – FEMA Category 3 (potential use)
  - i) Category Designation based upon the potential use of the facility to house City residents in large numbers for emergency shelter.
- d) Caesar's Atlantic City Hotel and Casino – FEMA Category 3 (potential use)
  - i) Category Designation based upon the use of the facility to house City residents in large numbers for shelter and the continuing provision of other emergency services during times of flood or storm events.

**2) Category III and IV Facilities located within 0.5 miles**

- a) All sites listed in (1) are within 0.5 miles of the Midtown Thermal Facility.
- b) The farthest being Boardwalk Hall at 0.4 miles as shown in attachment 1.

**3) General Description of the scope of the feasibility study and research activities anticipated:**

- a) Create detailed cost estimates to provide new high voltage service lines to each of the prospective loads.
- b) Create detailed cost estimates and specifications for all the switch gear required to provide these services to all potential microgrid customers.
- c) Estimate the cost of moving the existing Solar turbine from local storage to the Midtown Thermal facility.
- d) Estimate the cost to remove existing boiler facilities to accommodate the new turbine location at Midtown Thermal.
- e) Estimate the cost to install the new turbine at Midtown Thermal.
- f) Estimate the cost of and engineering for all associated control, relay and operational integration into the existing system at Midtown Thermal.
- g) Estimate the value of PJM revenues available from current programs.
- h) Provide Cost and time estimates for new Title V air permit, required air modeling, and other required permits both from the state of New Jersey and Atlantic City as may be applicable.
- i) Estimate the costs associated with infrastructure required for "black start" capabilities.
- j) Estimate and preliminarily negotiate power purchase contracts to obtain indicative pricing (potential revenue) from each of the four potential microgrid customers.
- k) Estimate all operating expenses that will be incurred in providing services for each potential service option.
  - i) Service by private wire network.
  - ii) Service by Atlantic City Electric Infrastructure.
  - iii) Hybrid options involving dual owned and operated infrastructure.
- l) Estimate Atlantic City Electric's billable incurred cost to assist in providing EDC associated infrastructure cost estimating, interconnection planning and associated system control functions.
- m) Work with Atlantic City Electric to incorporate their interconnection requirements for each of the service scenario options studied.
- n) Estimate the cost for engineering and installation of thermal (heat and cooling) connection to Atlanticare facility located 0.2 miles away.
- o) Each of these estimates must be completed for individual option evaluations that would include the potential for significant changes to current public policy.
  - i) Research public policy implications for private wire network to be installed in public rights of way.
  - ii) Research public policy implications for TC DER use of existing and new Atlantic City Electric utility infrastructure to support the TC DER proposal.
  - iii) Evaluate and quantify public benefits achievable for each option.
  - iv) Evaluate hybrid options that may include combining private and EDC infrastructure investments where feasible.
- p) Estimate cost savings associated with thermal efficiency gains, power demand reduction and reduced system requirements for electric generation.

- q) Compile all collected data and estimates and produce financial pro forma for each option studied along with recommendations for incentives that may be required and public policy changes necessary to implement each studied option.
- r) Generate and publish a final report to cover all technical, administrative, financial cost, legal, and public policy options including recommended legislative changes that may be required.

**4) *General description of the communication system between the TC DER microgrid and the Atlantic City Electric system.***

- a) The Atlantic City Electric SCADA system will be integrated with the existing control systems at Midtown thermal along with the installation of new EDC compatible control systems yet to be determined. It is envisioned that this new system will incorporate state of the art "fiber" based systems that will provide Atlantic City Electric "transfer trip" and other communications and control functions as appropriate.

**5) *The specific modeling that will be used in the overall feasibility study.***

- a) Cost estimates will be modeled using existing proprietary cost and engineering estimating programs currently employed by DCO Energy for similar evaluations used nationally. Conceptual engineering designs for each option will be created along with "line drawings" for the electrical infrastructure required using CAD modeling systems currently employed by DCO. Environmental modeling for Title V and other permits as required will be conducted with DCO "in house" environmental and engineering resources.

**Best and Final Offer: \$181,500.**

Due to the significant complexity and scope of the proposed project including the required dimension of running different options to achieve the desired outcome, a modified request for \$181,500 in grant monies to cover the expenses of the feasibility study represents our best and final offer to undertake this work. Naturally, imbedded in the cost matrix below are the time that will be required to work with the staffs of all four potential microgrid customers in developing workable plans specific to each site as delineated below along with obtaining broad agreement on the potential financial models with each customer.

While the base estimate of cost for the DCO portion of the work associated with the creation of the feasibility study is \$126,500 we have no firm estimate of the cost of Atlantic City Electric's required input into the work product. For the purposes of this estimate, however, we have estimated the EDC cost at \$55,000.

| <u>Work Category</u>               | <u>Anticipated Study Cost</u> |
|------------------------------------|-------------------------------|
| <i>Mechanical</i>                  | \$23,500                      |
| <i>Electrical</i>                  | \$74,000                      |
| <i>Structural/Civil</i>            | \$6,500                       |
| <i>Instrumentation and Control</i> | \$12,500                      |
| <i>EDC Utility Allocation</i>      | \$55,000                      |
| <i>Final Report Preparation</i>    | \$10,000                      |
| <i>Total</i>                       | \$181,500                     |

We appreciate the opportunity to provide this additional requested data and look forward to working with the Board in the coming weeks and months to begin the process of evaluating the potential for the creation of an energy resilient infrastructure that will support vital life savings services and shelter during weather and other emergencies for our City.

Please do not hesitate to contact my office if you have any questions or require clarification.

Sincerely,

  
 Donald A. Guardian  
 Mayor

Attachment #1:





## **Town Center Distributed Energy Resources Microgrid Feasibility Study Report Requirements**

As set forth in the MOU the Town Center (TC) Distributed Energy Resource (DER) Microgrid Feasibility Study Report should be of sufficient detail to demonstrate how the TC DER Microgrid's functional and technical requirements will be executed, the proposed approach to solve technical problems, and how project goals will be accomplished.

The TC DER Microgrid Feasibility Study Report should include an Executive Summary including all project definitions and special terms used in the Report.

The full report must include, but is not necessarily limited to, the following

1. Table of Contents
2. Project Name
3. Project Applicant – This should be the local government or state agency that is the MOU signatory.
4. Project Partners – This should include any agreements entered into by the partners.
5. Project location – This should include a detailed mapping of the boundaries on the TC DER microgrid within the municipality.
6. Project Description including a detailed description of all included critical facilities with a description of why they are critical facilities within the proposed TC DER Microgrid. The Project Description should include the following:<sup>1</sup>
  - i. The electrical and thermal loads for each critical facility over the month and year. This should include a description and illustration of any variability in loads including daily, weekend or seasonal loads that impact on the peak, minimum and average loads.
  - ii. The electric and thermal load of the total microgrid project over the month and year. This should include a description and illustration of any variability in loads including daily, weekend and seasonal loads that impact on the peak, minimum and average loads as well as the coincident loads of the overall system.

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<sup>1</sup> The energy data in this section and the full report should be provided through metered data were available but may also be provided through simulated data from models such as EnergyPlus. If the data is simulated the specific software and model should be identified and available.

- iii. The monthly and annual energy costs for each critical facility and the overall project including both energy and demand costs. This should include the monthly cost and any variations over the year that could impact demand costs.
- iv. The square footage of each building and the total project.
- v. The overall boundaries of the proposed project and distance between critical facilities should be provided. A map should be provided showing the locations of any Right of Way (ROW) crossings.
- vi. The size of the available emergency shelter facilities and for what periods they can serve during and after an emergency.
- vii. The specific FEMA Category Classification of each building and whether they are a state or federal designated critical or emergency facility.
- viii. A listing of all potential permits, permit issuing agency, and general timeframe for issuance.
- ix. Any previously installed EE or energy conservation measure (ECM) or currently implemented demand response (DR) measure.

6. A detailed description of the ownership/business model for the overall project including all procurement issues between the various local government and state government partners. This should include a detailed description of the statutory and regulatory provisions of proposed ownership models, EDC/GDC utility roles, as well as any billing systems for electricity and thermal energy.

7. A detailed description of the technology, business and operational protocol to be developed and/or utilized and the location within the TC DER Microgrid. This should include the following:

- i. A detailed description of the proposed connections (electric, gas and/or thermal) of the critical facilities and the DER technologies.
- ii. A one line diagram of the microgrid and location of the electrical connections to the EDC's facilities/equipment.
- iii. A detailed description of the type of distribution system the TC DER would be interconnecting into (radial or network) and the interconnection procedures and requirements.
- iv. A detailed description of how the TC DER will black start and operate and over what time period in island mode and in sync with the distribution system.

v. A detailed description of the NJBPU and EDC tariff requirements/issues including any smart grid or distribution automation upgrades proposed or under development by the EDC.

vi. A detailed description of the FERC and PJM tariff requirements/issues.

8. A detailed description of the overall cost including site prep, equipment and equipment installation, construction, operations and maintenance including a detailed construction schedule. This should include a detailed description of the overall energy costs for each critical facility and the overall project as well as any proposed ECM or DR measure to be constructed or operated within each critical facility and the overall project and its impact of the overall operation costs.

(Both 7 and 8 should be detailed through an available microgrid modeling efforts. Applicants must also demonstrate that their proposed project is consistent with the use of the Societal Benefit Charge as set forth in N.J.S.A. 48:3-60(a)(3)).

9. A detailed cash flow evaluation. This should also include a description of the potential revenue markets for any ancillary services, demand response including EE, capacity or energy markets and any available emission or energy certificate trading markets.

10. A detailed description of the potential financing of each location/critical facility and/or the overall project.

11. A detailed description of the benefits of the proposed Town Center DER Microgrid as well as the need for the proposed project. This should include an estimate of the value for reliability, resiliency, flexibility, sustainability including avoided environmental impacts such as air emissions, water usage, wastewater discharges, land use and waste generation, affordability and security.<sup>2</sup>

12. A general description of the communication system between the TC DER microgrid and the EDC's system. This should include a detailed description of distribution management systems and controls and all building controls.

13. The estimated timeframe for the completion of the construction and commencement of operations of the individual critical facilities and the overall project.

14. A description of the on-going work with the EDC and GDC.

The overall quality of the TC DER microgrid feasibility study report and the data provided will be one factor used by the Board to determine which projects proceed to a Phase 2 – Detailed Engineering Design and TC DER microgrid pilot.

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<sup>2</sup> This valuation should follow the Grid Services and Technologies Valuation Framework developed by the USDOE in their Grid Modernization Initiative.

1 **MEMORANDUM OF UNDERSTANDING**  
2 BETWEEN AND AMONG  
3 THE NEW JERSEY BOARD OF PUBLIC UTILITIES,  
4 AND  
5 CITY OF ATLANTIC CITY  
6  
7

8 **THIS MEMORANDUM OF UNDERSTANDING (“MOU”)**, is made this \_\_\_\_ day of  
9 \_\_\_\_\_, 2017, by and between **The CITY OF ATLANTIC CITY (“Recipient”)** and **The**  
10 **NEW JERSEY BOARD OF PUBLIC UTILITIES (“BPU”** in general or “Board” when  
11 referring to Board of Commissioners) (collectively the “Parties”) setting forth the roles and  
12 responsibilities of the Parties in connection with the Town Center Distributed Energy Resource  
13 (TCDER) Microgrid Feasibility Study Incentive Program (“Program”).<sup>1</sup>  
14

15 **WHEREAS**, the BPU is charged with the authority to ensure that safe, adequate,  
16 and proper utility services are provided at reasonable, non-discriminatory rates to all members of  
17 the public who desire such services and to develop and regulate a competitive, economically cost  
18 effective energy policy that promotes responsible growth and clean renewable energy sources  
19 while maintaining a high quality of life in New Jersey; and

20 **WHEREAS**, as set forth in N.J.S.A. 48:2-13, BPU is responsible for regulatory  
21 oversight of all necessary services for transmission and distribution of electricity and natural gas  
22 including but not limited to safety, reliability, metering, meter reading and billing; and

23 **WHEREAS**, the BPU is chair of the Energy Master Plan Committee and is  
24 responsible for the preparation, adoption and revisions of the Energy Master Plan (EMP)  
25 regarding the production, distribution, and conservation of energy in this State; and

26 **WHEREAS**, the BPU 2015 Energy Master Plan Update (EMP Update)  
27 established a new overarching goal to “Improve Energy Infrastructure Resiliency & Emergency  
28 Preparedness and Response” in response to several extreme weather events that left many people  
29 and businesses without power for extended periods of time. One “Plan for Action” policy

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<sup>1</sup> Acronyms related to this program are referred to herein are as follows: Town Center (TC); Disributed Energy Resource (DER);

30 recommendation included in the EMP Update is to “Increase the use of microgrid technologies  
31 and applications for Distributed Energy Resources (DER) to improve the grid’s resiliency and  
32 reliability in the event of a major storm.”; and

33           **WHEREAS**, specifically, this new policy recommends that:  
34  
35 “The State [of New Jersey] should continue its work with the [United States Department of  
36 Energy], the utilities, local and state governments and other strategic partners to identify, design  
37 and implement Town Center DER microgrids to power critical facilities and services across the  
38 State.”; and

39           **WHEREAS**, The Board approved the FY17 Clean Energy Program Budget  
40 which established as part of the Office of Clean Energy Distributed Resources Program, the  
41 Town Center DER Microgrid Program and budget.; and

42           **WHEREAS**, The BPU staff has, under the direction and approval of the Board,  
43 issued a full report and recommendations regarding the utilization of TCDER Microgrids and  
44 subsequently issued an application for this Program; and

45           **WHEREAS**, the Recipients who are Parties to this MOU freely and voluntarily,  
46 in full consideration of the costs and benefits incident hereto, submitted an application to  
47 participate in the Program; and

48           **WHEREAS**, BPU Staff issued a draft application for public comment regarding  
49 this Program on August 5, 2016, a public meeting to discuss the draft application on August 23,  
50 2016, and written comments were received and considered and staff responses were published;  
51 and

52           **WHEREAS**, the Board, by virtue of proper procedure, and execution of this  
53 MOU, has determined that the Recipient’s application is approved and incentive funds will be  
54 awarded to the Recipient, pursuant to the terms included herein;

55

56           **NOW THEREFORE**, in consideration of the promises and mutual  
57 representations, warranties, and covenants herein contained, the receipt and sufficiency of which  
58 are hereby acknowledged, the Parties hereby agree as follows:

59           **I. INCORPORATION**

60           All of the above recitals, the entirety of the TCDER Micrigrd Feasibility Study Incentive  
61 Program Application (attached hereto as Appendix A), the entirety of the Recipient's submitted  
62 application (Sumbittal letter which references recipient's application is attached hereto as  
63 Appendix B), The Best and Final Offer request letter and recipient's response thereto (attached  
64 hereto as Appendix C), and final Feasability Study Report Requirements (attache hereto as  
65 Appendic D) are hereby incorporated by reference into this MOU as if set forth at length herein.

66           **II. SCOPE OF THE AGREEMENT**

67           This MOU applies only to the Feasibility Study phase of the Program which encompasses  
68 the incentive award funding for the satisfactory completion and submission of the Recipient's  
69 TCDER Microgrid Feasibility Study only. Conformance to the terms of this MOU and timely  
70 completion of the Feasibility Study does not guarantee Recipient's future participation in this  
71 Program or any other related programs. Furthermore, the terms and conditions included herein  
72 represent the entire scope of this agreement and supersede all former representations whether  
73 written or verbally communicated.

74           **III. DUTIES OF THE PARTIES**

75           **A.**     The Recipient will submit a complete and final TCDER Microgrid Feasibility  
76 Study (The Study) in accordance with the terms and conditions of this MOU and incorporated  
77 documents.  
78



79           B.     The Recipient shall have one (1) year from the date that this MOU is executed to  
80 complete The Study, unless a timely request for extension is submitted by the recipient for good  
81 cause and is granted by Board Staff.

82           C.     Recipient shall include in the Feasibility Study a Conceptual Design that should  
83 be of sufficient detail to demonstrate how the TCDER Microgid functional and technical  
84 requirements will be executed, the proposed approach to solve technical problems, and how  
85 project goals will be accomplished. The Recipient's Conceptual Design shall include at a  
86 minimum: (1) Design Analysis including design narrative and design calculations for all  
87 disciplines, an intended specifications list, environmental permitting memorandum that identifies  
88 any and all required permits and the detailed outline of process required to obtain the identified  
89 permits; (2) Schematic or one-line concept drawings; (3) Conceptual cost estimate; (4)  
90 Preliminary construction schedule in bar chart format; and, (5) Project definitions and special  
91 conditions.

92           D.     Recipient shall report to Board Staff regarding the status and progress of The  
93 Study upon request.

94           E.     The Recipient is solely responsible for fully complying with the terms and  
95 conditions of this MOU, the above-referenced incorporated documents, and any and all duly  
96 executed subsequent agreements between the Parties.

97           F.     Effective upon execution of this MOU, BPU agrees to firmly commit the sum of  
98 \$175,000, to cover costs to be incurred by the Recipient to administer, complete, and deliver the  
99 Feasibility Study.

100           G. All requisitions, pay applications, and invoices submitted for costs or expenses  
101 associated with the Feasibility Study shall be subject to review and approval by Recipient  
102 according to its standard procedures. Upon approval, Recipient shall promptly submit to BPU for

103 payment all such requisitions, pay applications and invoices. In reviewing, approving, submitting  
104 and paying such requisitions, pay applications, Recipient and BPU shall be cognizant of and  
105 shall comply with the requirements of the New Jersey Prompt Payment Act, N.J.S.A. 2A:30A-1  
106 et seq.

107 H. Recipient shall submit all final invoices of expenditures and a final draft of the  
108 Study within one year of the execution of this MOU or at the end of an approved extension  
109 pursuant to Section III B of this MOU.

110 I. Upon receipt of the Study and final invoices of expenditures, BPU Staff shall  
111 determine if the Study meets the requirements of the program and the MOU at Section III C. If  
112 BPU Staff determines that the Study does not meet any requirement(s), BPU Staff shall provide  
113 to Recipient a list of requested revisions which recipient shall forward to the consultant that  
114 completed the Study. The consultant shall then be afforded a reasonable period of time to make  
115 the requested revisions and will then resubmit the Study. Final payment shall be made upon  
116 BPU Staff approval of the Study.

117 J. Incentive funds for this program may not be diverted to pay for any work  
118 conducted prior to the date of execution of this MOU. Furthermore, Incentive funds must only  
119 be used in furtherance of the completion of the Feasibility Study specifically.

120 K. Recipient shall procure the services necessary to complete the Feasibility Study in  
121 compliance with N.J.S.A. 52:32-2, N.J.S.A. 52:34-9.1, et seq., and N.J.S.A. 52:35-1, et seq.,  
122 and any and all applicable State and local procurement laws, rules, and procedures.

123 L. The BPU reserves the right to withhold or deny incentive funding for any invoice  
124 items submitted by Recipient that BPU determines to be unlawful or otherwise inappropriate for  
125 this Program.

126

127 **IV. DESIGNATED REPRESENTATIVES**

128 Written communication between the Parties for the purpose of this MOU as defined  
129 above shall be delivered to the following representatives.

130 New Jersey Board of Public Utilities  
131 Attn: Michael Winka Sr Policy Advisor  
132 44 S. Clinton Ave, Trenton, NJ 08625  
133 Michael.Winka @bpu.nj.gov

134  
135 Local Gov  
136 Attn:  
137 Addresss  
138 XXXX.YYY@abc.gov  
139

140 **V. MISCELLANEOUS**

141 A. No Personal Liability. No official or employee of BPU shall be charged  
142 personally by Recipient, its employees, agents, contractors, or subcontractors with any liability  
143 or held liable to Recipient, its employees, agents, contractors, or subcontractors under any term  
144 or provision of this MOU or because of its execution or attempted execution or because of any  
145 breach or attempted or alleged breach of this MOU.

146 No official or employee of Recipient shall be charged personally by BPU, its employees,  
147 agents, contractors, or subcontractors with any liability or held liable to BPU, its employees,  
148 agents, contractors, or subcontractors under any term or provision of this MOU or because of its  
149 execution or attempted execution or because of any breach or attempted or alleged breach of this  
150 MOU.

151 C. Captions. The captions appearing in this MOU are inserted and included solely  
152 for convenience and shall not be considered or given effect in construing this MOU, or its  
153 provisions, in connection with the duties, obligations, or liabilities of the Parties or in  
154 ascertaining intent, if a question of intent arises. The preambles are incorporated into this  
155 paragraph as though set forth in verbatim.

156 D. Entirety of Agreement. This MOU and its attachments represent the entire and  
157 integrated agreement between the Parties and supersedes any and all prior agreements or  
158 understandings (whether or not in writing). No modification or termination hereof shall be  
159 effective, unless in writing and approved as required by law.

160 E. Amendments. This MOU may be amended by the written request of any Party  
161 and with the consent of the other Party. Any proposed amendment of this MOU shall be  
162 submitted by one Party to the other Party at least five (5) business days prior to formal discussion  
163 or negotiation of the issue. Any agreed amendment of this MOU shall be set forth in writing and  
164 signed by an authorized representative of each Party in order to become effective.

165 F. No Third-Party Beneficiaries. This MOU does not create in any individual or  
166 entity the status of third-party beneficiary, and this MOU shall not be construed to create such  
167 status. The rights, duties, and obligations contained in this MOU shall operate only between the  
168 Parties and shall inure solely to the benefit of the Parties. The provisions of this MOU are  
169 intended only to assist the Parties in determining and performing their obligations under this  
170 MOU. The Parties intend and expressly agree that only the Parties shall have any legal or  
171 equitable right to enforce this MOU, to seek any remedy arising out of a Party's performance or  
172 failure to perform any term or condition of this MOU, or to bring any action for breach of this  
173 MOU.

174 G. No Assignment. This MOU shall not be assignable, but shall bind and inure to  
175 the benefit of the Parties hereto and their respective successors.

176 H. Governing Law. This MOU and the rights and obligations of the Parties shall be  
177 interpreted, construed, and enforced in accordance with the laws of the State of New Jersey.

178 I. Authority. By execution of this MOU, the Parties represent that they are duly  
179 authorized and empowered to enter into this MOU and to perform all duties and responsibilities  
180 established in this MOU.

181 J. Term. This MOU shall be effective as of the date hereinabove written and, unless  
182 terminated sooner as set forth below, shall remain in effect until the completion of the Feasibility  
183 Study and payment of funds as set forth in Section III.

184 K. Termination. Board Staff and the Recipient may terminate this contract in whole,  
185 or in part, when both parties agree that the continuation of the project would not produce  
186 beneficial results commensurate with the expenditure of funds. The two parties shall agree upon  
187 the termination conditions including the date on which the termination shall take effect, and, in  
188 case of partial terminations, the portion to be terminated.

189 K. Counterparts. This MOU may be executed in duplicate parts, each of which shall  
190 be an original, but all of which shall together constitute one (1) and the same instrument.

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[SIGNATURE PAGE FOLLOWS]

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IN WITNESS WHEREOF, the parties have signed this Memorandum of Understanding the date first written above.

Witness:

City of Atlantic City

\_\_\_\_\_

By: \_\_\_\_\_

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Dated: \_\_\_\_\_

Witness:

New Jersey Board of Public Utilities

\_\_\_\_\_

By: \_\_\_\_\_

Richard S. Mroz, President

Dated: \_\_\_\_\_

APPROVED AS TO FORM:  
Andrew Kuntz  
Attorney General, State of New Jersey

By: \_\_\_\_\_