N.J. Board of Public Utilities Highlights Proposed Cape May County Microgrid

-Project will explore energy, economic, and environmental benefits of deploying microgrid along coast-

Cape May Court House, N.J. – Today, New Jersey Board of Public Utilities (Board) President Richard S. Mroz, Cape May County Freeholder Director Gerald M. Thornton, and Joseph V. Rizzuto, Cape May County Municipal Utilities Authority (CMCMUA) Executive Director, highlighted the Board’s approval of Cape May County’s application for a microgrid feasibility study. Cape May County’s proposed microgrid would connect 17 critical facilities allowing them to improve storm resiliency by remaining operational during major power outages. Cape May County’s proposed microgrid is one of 13 proposed town center microgrids that the Board approved for funding of feasibility studies.

The proposed microgrid would utilize a new Combined Heat and Power (CHP) system fueled by syngas/biogas produced at the CMCMUA Seven Mile Beach/Middle Wastewater Treatment Facility to generate electrical and thermal energy for numerous critical public facilities in the Crest Haven Complex.

“Among the 13 microgrid projects that the board is funding, the Cape May County project is unique in that it would use the biogas produced by the CMCMUA as a resilient on-site energy source. The power generated can be used in both non-emergency and emergency conditions,” said President Mroz. “I’m excited to get the feasibility study started for this town center microgrid as the final report will provide great detail on options concerning designs, connections, financing, and the types of buildings to be included in a town center microgrid.”

In the aftermath of Superstorm Sandy, the Christie Administration made it a priority to improve energy resiliency and the emergency preparedness and response of the utility companies. The 2015 Energy Master Plan Update (EMP) contained a new section on hardening and improving utility infrastructure resiliency which supports the establishment of Distributed Energy Resources (DER) such as microgrids to improve the grid’s resiliency and reliability in the event of a major emergency. The EMP Update also directed the Board to continue its work with the utility companies, local, state and
federal governments, and other strategic partners to identify, design and implement Town Center DER microgrids to power critical facilities and services across the state.

Cape May County’s proposed microgrid would connect critical facilities including:

- CMCMUA Seven Mile Beach/Middle Wastewater Treatment Facility
- CMCMUA Crest Haven Wastewater Pump Station
- CMCMUA/County Reclaimed Water for Beneficial Reuse Supply System
- Cape May County Prosecutor’s Office/Crime Lab
- Cape May County Sheriff’s K9 Unit
- Cape May County Correctional Center
- Cape May County Police and Fire Academies
- Cape May County Administration Building
- Cape May County Health Department
- Cape May County Road and Bridge Department (Middle Section)
- Cape May County Fueling Station
- Cape May County Crest Haven Nursing and Rehabilitation Center
- Cape May County Special Services School
- Cape May County Technical High School
- New Jersey Army National Guard Armory
- Federal Aviation Administration Navigational Beacon
- Various wireless communication carriers and emergency communication
"Utilizing biogas, a beneficial fuel from the anaerobic digestion of biosolids, to produce a resilient onsite power supply is consistent with the Authority's vision to pursue and implement innovative, reliable and environmentally sustainable systems," said Rizzuto.

Based on the list of partners and proposed critical facilities there are seven FEMA category IV designated facilities (category IV is the most critical facility category according to FEMA) and six FEMA category III facilities that can provide shelter in an emergency.

The estimated timeframe to complete the feasibility study is 12 months. The Board is funding the total feasibility cost of $175,000.

“We are so excited to be part of this innovative project. We sincerely thank President Mroz and the Board for providing us seed money necessary for the feasibility study and visiting us here in Cape May County to see our facility first hand,” Gerald M. Thornton, Cape May County Freeholder Director.

The Board established a Town Center Distributed Energy Resource Microgrid Feasibility Study program to fund all 13 applications at a total cost of $2,052,480. The program was developed to provide incentives for local and state government agencies to study the feasibility of Town Center DER microgrids. The Board approved funding for applications submitted by: Atlantic City, Camden County, Cape May County MUA, Galloway Township, Highland Park, Hoboken, Hudson County, Middletown Township, Montclair Township, Neptune Township, Paterson, Woodbridge Township, and the State of New Jersey Department of Treasury with the partners Mercer County, Mercer County Improvement Authority and Trenton.

Information regarding the board’s approval of the 13 applications for feasibility studies is below: www.state.nj.us/bpu/newsroom/announcements/pdf/20170630_MicrogridFeasibilityStudies.pdf

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