



New Jersey's Clean Energy Program™

Efficiency Opportunities for Commercial,
Industrial, & Institutional Buildings



September 17, 2019

New Jersey's Town Center DER Microgrid Program

National Association of State Energy Officials
2019 Annual Meeting

September 17, 2019



Agenda

- Introduction to New Jersey's Clean Energy Program
- NJBPU's TCDER Microgrid Program

NJCEP Background

ADMINISTERED BY:

NJBPU's Office of Clean Energy

FUNDED BY:

Societal Benefits Charge (SBC) on utility bill

PROGRAM GOALS:

- Education
- Change behavior
- Provide opportunity for ALL NJ residents to reduce energy and lower operating cost
- Protect the environment and lower emissions
- Meet Governor's goal of 100% clean energy by 2050



Town Center Distributed Energy Resources (TCDER) Microgrid Program

TCDER MICROGRID

TCDER Microgrid is a cluster of critical facilities within a municipal boundary that may also operate as shelter for the public during and after an emergency event or provide services that are essential to function during and after an emergency situation.

These critical facilities are connected to a single or series of DER technologies that can operate while isolated and islanded from the main grid due to a power outage



Town Center Distributed Energy Resources (TCDER) Microgrid Program

TIMELINE

- October 29, 2012 - Superstorm Sandy



- Superstorm Sandy told us that “business-as-usual” – with respect to the overall electric distribution system and backup generators at critical facilities – was inadequate for resiliency

Town Center Distributed Energy Resources (TCDER) Microgrid Program

TIMELINE (CONTINUED)

- 2014 - NJBPU funded New Jersey Institute of Technology to conduct a TCDER Potential Study
 - An analysis of potential locations for distributed energy resources in the Sandy-affected region of New Jersey
- 2015 - Energy Master Plan Update: Increase the use of microgrid technologies
- November 2016 - NJBPU Microgrid Report issued
 - Provided information for the Board's consideration for establishing New Jersey's initial microgrid policies
 - Stakeholder input received
 - Report is available on NJBPU website <https://nj.gov/bpu/>



Town Center Distributed Energy Resources (TCDER) Microgrid Program

TIMELINE (CONTINUED)

- 2017 - NJBPU awards grants for TCDER Feasibility Studies (Phase I)
 - Approximately \$2 million in grants awarded to 13 public entities (municipalities, counties, authorities)
- 2018 – NJBPU receives Feasibility Studies
 - Upon review, 12 studies were found to be eligible for next round of funding (1 participant withdrew from further consideration)
 - Feasibility studies also available on NJBPU website <https://nj.gov/bpu/>
- 2019-2020 – Next round of funding anticipated (Phase II)



Town Center Distributed Energy Resources (TCDER) Microgrid Program

PHASE II PROGRAM

- \$4 million available for detailed TCDER Design
- Program design is in development
 - All 12 feasibility study participants will be eligible
- Parallel Track - Identify and address potential barriers
 - Regulatory and Statutory Barriers
 - Tariffs
 - Development and Construction Financing
 - DOE Grant



Town Center Distributed Energy Resources (TCDER) Microgrid Program

US DOE GRANT - FINANCING ADVANCED MICROGRIDS IN NEW JERSEY

- Overview
 - DOE Funding: \$299,840
 - Cost Match: 29%
 - Partners: New Jersey Institute of Technology, Rutgers University
- Project Goals
 - Utilize “real-world” data from the 13 TCDER microgrid feasibility studies as they enter the procurement and financing process
 - Develop a local government procurement guide to financing advanced community microgrids
 - Guide stakeholders through the process to maximize the economic and resiliency benefits of the microgrid
- Impact
 - Jurisdictions across the U.S. will have access to a guide grounded in legal, economic, and regulatory realities that improves understanding of the process for procuring and financing advanced community microgrids
 - Advancement of shovel-ready projects that need financial options for construction and economic optimization.



More Information

JIM FERRIS

Bureau Chief of New Technology
Clean Energy Division
Jim.Ferris@bpu.nj.gov
(609) 292-1664

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