

PHIL MURPHY GOVERNOR

SHEILA OLIVER LT. GOVERNOR State of New Jersey BOARD OF PUBLIC UTILITIES 44 South Clinton Avenue, 3rd Floor, Suite 314 Post Office Box 350 Trenton, New Jersey 08625-0350 <u>www.nj.gov/bpu/</u> (609)777-3300 Joseph L. Fiordaliso President

Mary-Anna Holden Commissioner

Dianne Solomon Commissioner

Upendra Chivukula Commissioner

> Bob Gordon Commissioner

NOTICE¹ New Jersey 2019 Energy Master Plan (EMP)

Building A Modern Grid Stakeholder Meeting Discussion Points September 24, 2018, 10 a.m. – Mercer Community College, Conference Center

2019 Energy Master Plan

Clean energy is vital for our future from both an economic development and environmental sustainability policy perspective. With this in mind, Governor Murphy, through Executive Order 28, has set an ambitious goal of establishing a state-wide, 100 percent clean energy conversion by 2050 and we are moving full speed ahead.

The EMP is a document that outlines the strategic vision for the state's role in the development, use, distribution, and management of energy. The EMP is developed with the collaboration and input of a coalition of state experts working as the EMP Committee, and chaired by a senior staff member of the NJBPU, and is informed by feedback from a wide variety of stakeholders from across the state.

Building A Modern Grid

Building a modern grid to meet New Jersey's new energy needs and goals will require addressing and overcoming current barriers to new and enhanced infrastructure. The EMP will explore the utilization of new and developing technologies to allow the affordable distribution of energy to all customer classes, as well as developing new plans and policies for grid modernization and maintenance as the state transitions to 100 percent clean energy by 2050. The work group will also examine new cyber security policies, procedures, strategies, and enhancements to maintain security and reliability, particularly in the face of new and impending climate and environmental challenges.

¹ This is not a paid legal advertisement

Information for stakeholders:

- Please provide responses to the discussion points listed below. Consistent with the EO, for each question, please include a time horizon (2030 and/or 2050) in your response.
- You may also submit comments/proposals not specifically requested here.
- Email box for submittals: emp.comments@bpu.nj.gov
- Comment period ends: October 12, 2018 at 5pm
- Public Stakeholder Meeting: Monday, September 24th, Mercer County Community College, Conference Center
- Energy Master Plan Website: <u>https://nj.gov/emp/</u>

General

- 1. What does a modern grid look like in 2030 and 2050? What are the timeframes and pathways to achieve that?
- 2. What is the most critical step to modernize the grid? What barriers exist to prevent state implementation of a modern grid?
- 3. How does a modern grid address, adapt, or respond to climate change and its impacts on New Jersey?
- 4. How does the state plan for fuel diversity and renewable energy within a modern grid?
- 5. What integrated distribution planning is needed in a modern grid?
- 6. In what ways can a modern grid meet the Global Warming Response Act 2050 greenhouse gas emissions reduction requirements and the Governor's goal of achieving 100% clean energy by 2050?

State Policy

- 7. How can state policies support a modern grid to increase resiliency and reliability and fight climate change?
- 8. What regulations need to be updated with a modern grid? Should there be performance metrics tied to grid performance?
- 9. Could regulated rate design and tariff structures be developed to implement the development of a modern grid? What are examples of these?

- 10. What actions could the State take to manage energy costs while upgrading the grid? Within the regional transmission system, how does modernizing the grid have the potential to save ratepayers money?
- 11. How should the costs be allocated for grid upgrades and operation?
- 12. In a modernized grid, how should the interface between the energy distribution systems and the energy transmission systems work?
- 13. Should residential, commercial, or industrial customers of the energy distribution systems receive a benefit, incentive, or subsidy to fund upgrades to the grid? What types and level of incentive should this include or not? Should this include rate and tariff designs/structures? Should these incentives be limited to low and moderate-income households?
- 14. How do we address interdependencies between the energy distribution systems and other critically important environmental infrastructure such as water supply, wastewater treatment and waste management systems?

Technology

- 15. In what ways can a modern grid utilize new and developing technologies? How can this allow the affordable distribution of energy to all customer classes?
- 16. What technologies and measures can be adopted to make the energy distribution systems more efficient and reduce losses? How do these technologies assist in managing annual and peak load?
- 17. What is the role of advanced meter infrastructure, IoT, and data analytics in the modern grid? How can technology assist in two-way communication, trouble shooting and overall grid management? What changes in operating protocols and grid designs will be needed to handle the two-way flow of power?
- 18. Who should manage and oversee access to advance meter infrastructure data? Who should own the data?
- 19. What advanced distribution monitoring or distribution monitoring systems should be in place to manage and control the energy distribution systems?
- 20. What are the current technological advancements for natural gas leak detection and how often should the natural gas distribution system be reviewed for leaks? Should specific methods leak detection and mitigation measures be mandated?

Security

- 21. What cyber security policies, strategies, and procedures should be incorporated into plans to build out a modern grid?
- 22. What are the security risks of expanding distributed energy resources, variable energy resources, smart grid and advanced meters? How can they be mitigated?
- 23. What role can the State play in providing physical and cyber security for the modern grid?

Economic Growth and Workforce Development

- 24. What workforce training and jobs will be needed to support the development of the modern grid?
- 25. What new or existing industries in the grid modernization field could be developed or brought to the State?

Environmental Justice

- 26. How could modernizing the grid address the needs of disparately impacted communities and low and moderate income (LMI) families/communities?
- 27. What changes to retail rate structures and regulatory pathways are necessary to help activate and engage energy efficiency (EE) distributed energy resources and variable renewable energy resources to lower electricity costs?
- 28. What are the current barriers to the distribution of affordable renewable energy to all customer classes?
- 29. In building a modern grid, what are policies that could limit barriers to participation by disparately impacted communities?
- 30. How can the State play a role in ensuring that disproportionately impacted communities receive opportunities and benefits connected to modernizing the grid?