



Environmental Justice Task Force

Comments on Discussion Points on Sustainable and Resilient Infrastructure

Not all questions were answered; the answers that are present are in bold to make them easy to find.

General

1. What infrastructure is necessary to meet the EMP's goals of, among other things, affordable, resilient, clean energy? Do these inter-related EMP goals require the construction of new infrastructure or the upgrade of existing infrastructure in the state, or both?

In addition to the obvious — solar farms, wind farms, storage, etc, — New Jersey should be looking at municipality-based microgrids (the BPU is considering 13 town-center microgrids), community solar (the BPU has just published draft rules for a pilot project), and promote small scale renewable projects in order to provide jobs in the communities where the systems are built.

2. What are pathways forward to ensure New Jersey has secure, modern, and resilient infrastructure by 2030? By 2050?

3. What is the role of restructuring and competitive markets on infrastructure and energy needs?

4. How does New Jersey's location between two grids, PJM and NYISO, impact our future goals and reliability?

5. How does New Jersey's membership in PJM affect its ability to meet the 2030 and 2050 goals?

6. What steps are needed for to preserve the integrity of our energy systems in the face of future acts of nature (storms, hurricanes, wind, etc.)?

Push forward on the 13 proposed town center microgrids.

State Policy

7. What technological changes need to be adopted to ensure continued sustainable and resilient infrastructure? How should the cost of this technological infrastructure be allocated?

8. What is the role of the following in achieving 2030/2050 goals: decoupling; advanced metering infrastructure (AMI); distributed energy resources (DER); and micro grids? If previously answered in another stakeholder group, please cite which one.
9. Are the regulatory constructs currently in place to assure reliability, security, and resiliency of infrastructure adequate to meet the EMP's goals? If not, what steps can the state take to address the inadequacies?
10. What potential stranded assets could be created with increased energy efficiency, distributed energy resources, and the move to 100% clean energy?
11. What changes are needed to assure reliability, security, and resiliency of infrastructure? How is that balanced with affordability for ratepayers?
12. What level of coordination is required between state and national standards (i.e. RGGI, California Car, etc.) to meet the EMP's goal? What steps could be taken to coordinate standards?
13. What else is needed for cybersecurity related to infrastructure? If additional resources are needed, describe software, hardware and human resource needs. Who should pay for it?

Workforce Development

14. To maintain a reliable infrastructure, what are the workforce needs of today and tomorrow?
15. How will the workforce change as we move towards 2030? 2050? How does technology impact these changes?
16. What training and workforce development are needed to insure future workforce and energy infrastructure needs are met?
17. Is New Jersey at a competitive advantage or disadvantage to recruit these workers?
18. What jobs and industry may be lost and how do we mitigate these losses?
19. What other industries and jobs may be associated with infrastructure changes necessary to achieve the EMP's goal?

New Jersey should pursue research in energy storage technologies and processing of waste in order to take advantage of our excellent engineering schools and the opportunities in these fields of establishing industries here in New Jersey.

Environmental Justice

General comments on some potential issues:

How can we reduce energy burdens on low-income customers? The percentage of income that low-income customers spend on energy is more than other customers, in some cases over 14%. A consequence is that in order to pay energy bills, they go without food and medical care and skip rent or mortgage payments.

In the long run, using renewable energy will lower energy costs, but for now, the required up-front investment may instead increase them, making the energy burden of low income customers even worse. Approaches to this include discounts for low income customers and differential rates.

How can we avoid shifting the cost of transitioning to affordable, resilient, clean energy to lower income customers? For example, solar customers use less energy from the grid and receive payments from net metering when they put energy into the grid. As a consequence, they shift the payment of lost utility revenues to customers who do not have solar. This impact will become even more pronounced with decoupling. Furthermore, since wealthy customers are more likely to have solar panels than lower-income customers, this shifts the costs onto those least able to pay. One solution to this source of inequity is Community Solar, for which the BPU has recently released proposed rules for a pilot project. Community Solar would permit renters, homeowners whose roofs don't receive enough sunlight, and households that can't afford the investment to participate in the benefits of solar.

However, for each kind of change to the grid, we need to consider carefully how it will impact low-income customers.

How can we provide benefits equitably to all customers? As noted in another response, the Societal Benefits Charge supports energy efficiency improvements and conversions to clean energy with rebates. However, these rebates are in fact rarely available to low-income customers because they can't afford the kinds of improvements that qualify for the rebates.

Another example would involves the use of "Advanced Metering Infrastructure." If households are required to buy smart meters, the benefits will go primarily to wealthier households.

A related issue is that it is not easy to evaluate the benefits of shifting to a new energy generator or of investing in solar panels or a Community Solar facility. The BPU has provided excellent programs advertising the benefits of their energy efficiency programs. We need to ensure that these programs are available in low-income communities. We also need to ensure that it is easy for consumers to evaluate offers, sign up, and understand their bills.

Along with this point is that overburdened communities should be given the opportunity to participate in the decision-making. This would require meetings in more locations, sometimes far from Trenton, and a more extensive publicity effort.

September 28,2018

20. How can infrastructure be responsibly and effectively sited while taking into consideration environmental justice concerns?

21. How should costs for reliability and security be allocated?