RECURVE

Comments on
Draft New Jersey Energy Master Plan
September 16, 2019

Dear New Jersey Board of Public Utilities,

Recurve respectfully submits comments on the Draft New Jersey Energy Master Plan in support of market-based solutions to deliver distributed energy resources, particularly energy efficiency. New Jersey will need to make significant investments in energy efficiency and building retrofits to meet the legislative goals. Recurve supports continued progress in three key areas that were outlined in our original comments and which were partially reflected in the June 2019 draft plan.

First, meter-based quantification helps ensure that emissions goals are met with a common understanding of value. *Goal 2.1.6 Develop a mechanism to compensate DER for its full value-stack at the regional and federal level* is essential to drive investments through market structures. We applaud NJBPU staff in taking on the necessary analysis to support a thoughtful common valuation structure to unlock the benefits of DER deployment, including energy efficiency, and we look forward to contributing to the development process. We note that investments in advanced metering infrastructure will also be essential to capture the time value of the flexible demand and send the right price signals to reduce consumption when and where it delivers the most value for emissions reduction. In essence, we need to measure carbon like our planet depends on it, and hourly consumption data is key to enabling these analyses to optimize emission reduction investments. Meter-based pay for performance models can also simplify the execution of common valuation structures and serve as a common function across DERs (because it is technology agnostic); so investments and outcomes can be synchronized around the value they are delivering not a prescribed technology-specific average estimate.

Second, mechanisms for **performance accountability** will support the achievement of the ambitious goals envisioned in the Energy Master Plan. For energy efficiency, New Jersey can prioritize meter based pay-for-performance program models over the traditional rebate incentive program models. Meter-based pay-for-performance models being used in California, New York and Oregon pay aggregators (implementers) on the aggregate savings achieved through the program and as calculated using open source standardized methods like CalTRACK and the OpenEEmeter. This model holds aggregators accountable for delivering savings and/or emissions reductions at the meter at the price negotiated, while also giving them the flexibility to meet customers with products and services they want and need. Program administrators have the flexibility to provide a wider set of services to the citizens of New Jersey, quickly adapt to changing market needs, and target efforts where they are needed most. There are many pathways to meter-based pay for performance across the country, and they all lead to improved accountability for the investments.

Third, the ambitious activities envisioned in the energy master plan cannot be achieved through public investments alone. **Competitive procurement** and valuation approaches

must be designed to reward and encourage the infusion of external investment into the New Jersey economy. As noted under Goal 2.3.4. "*Current state practice is often to encourage DER investments with incentives through the Clean Energy Program. NJBPU and NJEDA should determine if continued reliance on rebates is the most optimal way of encouraging clean energy investments once additional financing mechanisms are developed to leverage public funding." p 50.* Fixed rebates are not the optimal way of encouraging clean energy investments in this changing market.

Decarbonization of electricity requires market-based demand flexibility. More flexible market mechanisms leveraging meter-based quantification and performance accountability, offer a more efficient means of capturing and incenting behind the meter activities and they open alternative pathways for financing these efforts. Unlike traditional efficiency programs that have a single implementer and business model (likely promoting single measures), in pay-for-performance, a utility or other administrator will solicit bids and sign contracts with multiple vendors who compete for customers and to deliver savings or emissions reductions. Winning aggregators enter into a Power Flex Agreement (PFA) and get paid for performance based on the portfolio-level resource curve over a set period of time. Cash flows created by these contracts can be brought forward using project finance, meaning aggregators and their customers do not need to carry the cash flow. This type of financing is known as project or infrastructure finance and is a much lower cost source of capital than consumer credit. Rather than financing the cost of this grid infrastructure using the consumer credit and asset value of only the participants, project finance underwrites the likelihood of savings being realized. This approach can be seen as analogous to the type of financing used by independent power producers, in which investors are paid back through the revenue stream generated by the IPP, only in this case the revenue stream comes not from sales but avoided costs (savings).

Non-wires alternatives (state-funded or otherwise) also benefit from this flexible market structure for financing distributed energy resource investments. As has been illustrated in other research, clean energy portfolios offer another way to optimize the investments in combined strategies for reducing emissions.

We welcome the opportunity to discuss these ideas and resources in more detail.

Respectfully,

Carmen Best
Director of Policy & Emerging Markets
RECURVE

Resources:

OpenEE Comments on New Jersey Energy Master Plan, October 12, 2018
https://nj.gov/emp/pdf/general/comment2/Carmen%20Best%20-%20OpenEE%20Comments%20-%20EMP%202019.pdf

Measure Carbon Like Our Planet Depends On It, Recurve, June 10, 2019
https://www.recurve.com/blog/measuring-carbon-like-our-planet-depends-on-it

Policy Pathways to Meter-Based Pay for Performance, C. Best, M. Fisher, M. Wyman August 2019
https://www.iepec.org/2019_proceedings/#/paper/event-data/044-pdf

Decarbonization of electricity requires market-based demand flexibility, Electricity Journal M. Golden, A. Scheer, C. Best; August 2019 [In press version attached in pdf]
https://doi.org/10.1016/j.tej.2019.106621

The Economics of Clean Energy Portfolios, Rocky Mountain Institute, M. Dyson, A. Engle, J. Farbes, 2018.
https://rmi.org/insight/the-economics-of-clean-energy-portfolios/