

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

State Policies and Wholesale Markets
Operated by ISO New England Inc.,
New York Independent System Operator, Inc., and
PJM Interconnection, L.L.C.

Docket No. AD17-11-000

STATEMENT OF JENNIFER CHEN, SUSTAINABLE FERC PROJECT

My name is Jennifer Chen, and I am an attorney with the Sustainable FERC Project, a coalition of public interest environmental organizations housed at the Natural Resources Defense Council. Our coalition is engaged at PJM on issues relevant to this Technical Conference, including the relationships among PJM's capacity construct, public policies, and seasonal capacity resources. We also have been engaged in the accelerated process leading up to PJM's Capacity Performance proposal and the subsequent FERC and appellate court proceedings.

As environmental groups, we support state policies reducing pollution and incenting new technologies. Our main concern here is to ensure that newer resources (which are still scaling up and seeing declines in costs of technology) can continue to participate in the wholesale markets, even if they are favored by state public policies. Our position is that market rule changes that enable fair participation by these resources are much needed. Lastly, we support greater deference to state policies and ensuring that mitigation mechanisms are cabined to addressing market manipulation concerns.

How markets and public policy work together is an important and large topic, but for the purposes of this initial statement, we'd like to highlight several items we think are important but which have not seen much discussion:

- (1) If the problem and its scope are not properly defined, the potential solutions developed from the markets/public policy discussion could result in removing state-preferred resources from the market and further restricting competition in the market to certain baseload resources.
- (2) Subsidies or policies favoring certain resources are pervasive. But there are at least two scope issues that could result in discrimination and adverse policy outcomes:
 - (a) The current focus appears to be on policies for renewable energy that are highly visible and enjoy a great deal of public support, while a wide swath of fossil subsidies, which tend to be embedded in more obscure tax provisions, appropriations, and preferential zoning and setback rules, have been entirely ignored. These fossil subsidies, however, may be at least as significant. The focus on the more visible policies could result in discrimination and undermine the policies the public most strongly supports.

(b) There is a focus on present and potential future state public policies, but this focus disparately targets newer resources and technologies, while ignoring the subsidies incumbent generators have enjoyed for decades.

(3) The capacity market is oversupplied in PJM, and price signals indicate the need to retire excess capacity, not necessarily that there is a revenue insufficiency problem.

Formulating a clear problem definition is important to shaping the result.

We appreciate the Commission’s inquiry of how the competitive wholesale markets can select resources of interest to state policy makers while preserving the benefits of regional markets and economic resource selection. In other fora, the problem posed is one of price suppression from resources with out-of-market subsidies, and the offered solutions are not solicitous of state policy choices because they would likely remove state-preferred resources from the capacity market and unnecessarily restrict competition.¹ From our perspective, incentives for newer technologies and resources are not impermissible interferences with the markets because they address benefits beyond the electric products priced in FERC’s markets. To some extent, these out-of-market mechanisms are symptoms of the “market” failing to procure the kind and quantity of capacity states and customers want and must go around the market to obtain – such as emissions-free, demand-side, or more flexible resources (e.g., energy storage). This is not surprising because the capacity “market” only offers one product and customers are required to procure an administratively set amount of it. That product is an annual-only full-year capacity commitment (now known as “Capacity Performance,” which customers have fought from its development at PJM through its approval at FERC).²

We also question the rationale for attempting to mitigate subsidies in wholesale markets. To the extent states or the federal government provide support to resources, it is not “uneconomic” to acknowledge this support, which affects the costs of supported resources. On the contrary, designing market rules that pretend this support does not exist and prevent supported resources from offering and clearing is more likely to result in customers paying twice for duplicative resources – first for the resources supported by government policies and second for unnecessary resources procured by markets that pretend these subsidies do not exist.

Essentially all resources receive subsidies and limiting the scope of the inquiry can result in discrimination.

The stated goal of PJM’s Capacity Construct/Public Policy task force (Task Force) is to resolve potential conflicts between a well-functioning capacity construct and public policy initiatives

¹ <http://www.pjm.com/~media/committees-groups/stakeholder-meetings/grid-2020-focus-on-public-policy-market-efficiency/meeting-materials/20160816-potential-alt-solution-to-the-min-offer-price-rule-for-existing-resources.ashx>

² <https://www.nrdc.org/experts/jennifer-chen/federal-judges-hear-arguments-against-pjm-market-rules>

impacting PJM's capacity construct (known as RPM).³ For the public policies considered in the Task Force, PJM is limiting the scope to current and future potential state public policies, and produced an initial educational survey of policies that largely pertain to renewable energy.⁴ While PJM staff deserves much praise for being receptive to stakeholder input, this initial scope focuses on renewables policies⁵ as potentially being inconsistent with PJM's identified objectives of RPM.⁶

We are worried about this focus and limit in scope. First, essentially all resources benefit from subsidies and/or favorable policies, but a focus on the more visible renewables incentives is discriminatory.⁷ Like renewables, fossil fuels benefit from state portfolio standards, tax subsidies and other appropriations, and fossil energy get the additional benefit of subsidies associated from taxpayer funded site clean-ups and such costs as road repair from damage incurred in transporting fuel. Certain states also have zoning or setback rules that favor fossils over renewables.⁸ Focusing on the more visible policies that presumably enjoy a high degree of public support and are up for renewal on a regular basis while ignoring the permanent policies hidden in obscure tax provisions or zoning rules could undermine good policies while leaving intact policies that have not been vetted by the public.

Second, subsidies have been around for a long time, and fossil subsidies have been in place for much longer than renewables incentives. For example, the natural gas industry has been receiving tax breaks since 1913,⁹ and the coal industry since 1932.¹⁰ Only now beginning to focus on current and potential future public policies (which tend to favor newer, pollution-free resources) as impermissible market interference in PJM ignores the economic benefits and

³ <http://www.pjm.com/~media/committees-groups/task-forces/ccppstf/postings/ccppstf-issue-charge.ashx>

⁴ <http://www.pjm.com/~media/committees-groups/task-forces/ccppstf/20170327/20170327-item-05-state-policy-education.ashx>

⁵ See also <http://www.pjm.com/~media/committees-groups/stakeholder-meetings/grid-2020-focus-on-public-policy-market-efficiency/meeting-materials/20160816-grid-2020-public-policy-master.ashx>, <http://www.pjm.com/~media/committees-groups/stakeholder-meetings/grid-2020-focus-on-public-policy-market-efficiency/meeting-materials/20160816-capacity-markets-and-efficient-renewable-procurement-in-carbon-constrained-world.ashx>.

⁶ <http://www.pjm.com/~media/committees-groups/task-forces/ccppstf/20170306/20170306-item-07-objectives-of-rpm.ashx>

⁷ See e.g., the stakeholder education in PJM's Task Force, albeit not exhaustive, focuses on the most visible renewable public policies. <http://www.pjm.com/~media/committees-groups/task-forces/ccppstf/20170327/20170327-item-05-state-policy-education.ashx>.

⁸ Examples of State Public Policies Benefitting Non-Renewable Resources, <http://www.pjm.com/~media/committees-groups/task-forces/ccppstf/20170421/20170421-item-04-kwa2-subsidy.ashx>

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<http://blogs.edf.org/energyexchange/2017/04/10/moresubsidiesthanyouthinkinfluencethecostofelectricity/>

¹⁰ <http://www.gpo.gov/fdsys/pkg/CPRT-113SPRT91950/pdf/CPRT-113SPRT91950.pdf>

impacts the century-old subsidies have on fossils, enabling them to scale up and build out infrastructure. In addition, focusing on state and not federal subsidies appears to be unjustified. For example, fossil energy has received 65% of federal support to date while wind energy has received only 3%.¹¹ These arbitrary constraints on scope likely discriminate against renewables and other newer technologies.

Capacity oversupply is likely the biggest factor driving down prices, which are signaling the market to retire excess capacity – this should not be confused for revenue insufficiency.

A separate “problem” that appears to be lumped into the markets and public policy discussion is “revenue insufficiency” for baseload generation.¹² We’re now seeing falling demand, record-low natural gas prices,¹³ capacity oversupply, and lower prices per megawatt than otherwise expected. PJM cleared a record-high reserve margin of 22.4% in its latest 3-year forward auction (BRA). Including uncleared capacity increases the margin to over 35%. (Compare this to PJM’s required margin of 16.5%.)¹⁴ Importantly, the BRA report noted that unlike previous BRAs there were no new environmental regulations associated with the delivery year for which it was procuring. Instead, more new supply, much of it natural gas, offered in and cleared in 2016, lowering prices.

There are many factors impacting market prices aside from the state policies at issue. The largest factor driving down prices in the 2016 BRA was lower generator bids. The second largest factor depressing prices was the federal bonus depreciation extension in 2015, which in part, spurred new gas builds and resulted in lower clearing prices. Around 5.5 GWs of new gas found it economic to enter the market despite a record-high capacity oversupply and prices much lower than Net CONE.¹⁵ Analysis shows that the result of the incentive was a \$33/MW-day decrease in

¹¹ <http://www.aweablog.org/14419-2/>

¹² <http://www.pjm.com/~media/committees-groups/task-forces/ccppstf/20170306/20170306-item-07-objectives-of-rpm.ashx>; <http://www.pjm.com/~media/committees-groups/stakeholder-meetings/grid-2020-focus-on-public-policy-market-efficiency/meeting-materials/20160816-potential-alt-solution-to-the-min-offer-price-rule-for-existing-resources.ashx>

¹³ Note that the impact of low natural gas prices on baseload generation is dozens of times larger than the impact of wind energy. The wind production tax credit is almost never incorporated into the electricity market prices received by other power plants because wind almost never sets the market price. Fossil fuel power plants almost always set the market clearing price, so low natural gas prices and subsidies for fossil fuels have a much larger impact on baseload generators. <http://www.aweablog.org/low-natural-gas-prices-not-wind-energy-primarily-responsible-coals-troubles/>; <http://www.aweablog.org/fact-check-wind-power-and-nuclear-can-successfully-coexist/>.

¹⁴ <http://www.pjm.com/~media/markets-ops/rpm/rpm-auction-info/2019-2020-base-residual-auction-report.ashx>

¹⁵ <http://www.pjm.com/~media/markets-ops/rpm/rpm-auction-info/2019-2020-base-residual-auction-report.ashx>

the bids of new generators and that the downward impact of new gas was \$12/MW-day to \$25/MW-day for PJM.¹⁶

There appears to be no indication of revenue insufficiency – a low price in an oversupplied market is a signal to retire excess capacity,¹⁷ and new natural gas entry and low natural gas prices, not renewables, are driving market prices down. Once sufficient resources retire and the market is no longer oversupplied, market prices should rise.

Elements of potentially harmful solutions to state policies.

While the Task Force has not yet begun its solution development phase, PJM's proposed solutions so far are a two-tier market and MOPR expansion.¹⁸ In their current forms, neither proposal appears particularly respectful of state actions because resources states support including within their mix likely would be removed from the capacity market. The two-tier market would do so explicitly, and the MOPR expansion could have that effect if the adjusted price does not allow the resources earning revenues from state policies to clear the capacity market. Resources earning state revenues would no longer be able to receive capacity market revenues and compete with and displace other capacity resources that are no longer necessary. This is particularly worrisome for policies incenting greater renewable uptake, which have been highlighted as public policy interventions, while the numerous subsidies to fossil fuels have not been mentioned at all.

Not only would these solutions undermine state public policies, they would be burdensome to administer in a consistent and nondiscriminatory manner because subsidies are so pervasive. A principled approach to the MOPR or two-tier market could apply to all resources. But it's eminently impracticable to untangle all of their market impacts and adjust market rules for the full range of state and federal subsidies, all with different terms and forms.

Elements of potentially beneficial solutions.

If the market wants to remain relevant while protecting reliability, it must adapt to customer needs. Given the diverse customer and state interests in PJM, its rules should flexibly accommodate these interests. FERC and PJM should continue to cooperate with the states, and enable them to shape how to satisfy their resource adequacy needs. States should be able to continue to internalize environmental externalities (which could be done approximately through procurement targets or by more explicitly pricing in environmental externalities).

¹⁶ <https://www.icf.com/-/media/files/icf/white-papers/2016/energy-2019-2020-capacity-auction-analysis.pdf>

¹⁷ <https://www.raponline.org/wp-content/uploads/2016/09/rap-hogan-hitting-mark-on-missing-money-2016-september.pdf>

¹⁸ <http://www.pjm.com/~media/committees-groups/stakeholder-meetings/grid-2020-focus-on-public-policy-market-efficiency/meeting-materials/20160816-potential-alt-solution-to-the-min-offer-price-rule-for-existing-resources.ashx>

Customers should easily be able to procure policy-preferred resources within or outside of the market as desired. Either way, PJM should have a mechanism that ensures that capacity is not over-procured. If states opt to procure preferred resources competitively within the market, PJM could enable customers to select resource attributes that they want the market to clear for them. For example, a state may require through legislation that its LSEs must procure at least 5% wind, 5% solar, and 5% storage. PJM should be able to clear at least that much of each in those LSEs' zones, and if these resources are competitive, they would clear at levels higher than 5% each.

By keeping these favored resources in the same capacity supply stack as other resources (unlike the two-tier market), these resources would be able to compete with and displace unneeded generation, enabling the market to signal less favored resources to retire and help avoid over-procurement of capacity.

Current capacity market rules that severely limit renewable and demand-side resource participation would also have to be redesigned to enable these resources to participate. Markets could also be structured to procure capacity better aligned with seasonal¹⁹ and daily peaks as well as needs for more flexible resources.

What should FERC do?

As mandated by statute, FERC must continue to ensure just and reasonable rates and the avoidance of unduly discriminatory or preferential. Based on the prevalence for subsidies for essentially every resource, past and present, federal and state, it's difficult to see how PJM could expand the MOPR or implement a two-tier system without discriminating against some resources, preferencing others, and unnecessarily inflating consumer costs. FERC should provide broad latitude for states to pursue their own policies and regions to pursue their own solutions, and critically examine proposed RTO/ISO solutions to ensure they are consistent with the elements of some of the solutions discussed above.

¹⁹ <http://www.pjm.com/~media/committees-groups/task-forces/scrstf/20160801/20160801-item-03a-seasonal-rpm-construct.ashx>;
<https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=14419999>.