



Rebuttal to EPSA's response to Grid Strategies' MOPR analysis

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Last month, Grid Strategies released [a report](#) concluding that imposing a Minimum Offer Price Rule (MOPR) in the PJM market could impose costs of nearly \$5.7 billion per year on electricity consumers across the Great Lakes and Mid-Atlantic states. Ten U.S. Senators cited that analysis in a letter urging the Federal Energy Regulatory Commission (FERC) not to use a MOPR policy to pre-empt states and private entities that have chosen to purchase clean energy. On September 6, the Electric Power Supply Association (EPSA), a group that is primarily comprised of gas generators who would benefit from a MOPR policy harming consumers by increasing capacity market and electricity prices, sent a letter to those Senators responding to our analysis. Below we respond to each of the arguments made in EPSA's letter:

1. EPSA alleges that the \$5.7 billion figure in our analysis was “cherry-picked,” because it was only one of 14 scenarios studied by the PJM Independent Market Monitor (IMM). It is true that in the [IMM report](#) we cited, the IMM separately modeled 12 other potential capacity market changes that are not the MOPR. In fact, these 12 market changes would have the exact opposite effect of the MOPR, in that they increase supply and therefore decrease prices in the capacity market. Unlike those 12 scenarios, MOPR inherently reduces supply by excluding resources from the capacity market, and the explicit intent of PJM implementing a MOPR is to cause prices to increase. If EPSA is attempting to imply that removing supply through a MOPR could cause capacity market prices to decrease, that is a remarkable claim. To my knowledge, economists have never documented any market in which reducing supply causes prices to decrease and not increase. That would require a downward sloping supply curve, which would undermine the fundamental theory of supply and demand that undergirds all of economics.

2. EPSA also claims that the IMM scenario used as the basis for our analysis did not “[attempt] to distinguish between subsidized and unsubsidized resources.” This is incorrect. The IMM's report explains twice that it was modeling the PJM repricing auction in which “the subsidized resources are removed from the supply while the VRR [demand curve] requirements are left unchanged. This approach resulted in clearing additional high priced offers in order to meet the same demand with reduced MW of supply.” The IMM explicitly accounted for which resources are receiving subsidies and removed them from the auction.

In a separate opinion piece that was posted on Utility Dive today, EPSA argues that some of the resources included in the Grid Strategies analysis would not have cleared the capacity market anyway, and therefore would not be affected by the MOPR making it more difficult for them to clear the market. Specifically, EPSA points out that “the subsidized nuclear plants in Illinois and Ohio, totaling over 4,000 MW, have not cleared certain previous PJM capacity auctions.” This ignores that because those resources are now benefiting from those states' nuclear incentives, they are almost certain to clear the capacity market. However, the MOPR would directly counteract the value of those incentives and return those plants to their previous position of being unable to clear the capacity market, which is the explicit

intent of the MOPR. Thus MOPR would affect them going forward, even if it would not have in the past when they were not receiving state incentives.

3. EPSA also notes that the IMM scenario we cite is different from the MOPR, a fact that was extensively discussed in our original report. Specifically, at pages 9-10, we explained that the policy studied by the IMM was different from the MOPR, but that “The impact on PJM capacity market prices under the MOPR is likely to be comparable to the IMM’s estimate, as both policies have the effect of increasing prices by removing supply from the capacity market.” As the IMM quote above notes, in its scenario, “the subsidized resources are removed from the supply while the VRR [demand curve] requirements are left unchanged.” Our analysis demonstrates that MOPR is likely to remove a comparable amount of capacity supply as the policy analyzed by the IMM. Because the MOPR removes roughly the same amount of capacity from the supply curve, the impact on RTO-wide pricing would be roughly the same.

If anything, the MOPR is likely to cause larger capacity market price increases than the policy modeled in the IMM’s analysis, making \$5.7 billion per year a conservative estimate of the MOPR cost. The IMM’s analysis was focused on removing resources at risk of retirement from the capacity market supply. We do not have access to the IMM’s list of which PJM resources are at risk of retirement, but it likely includes a number of coal plants in PJM zones with lower demand, few import constraints, and lower capacity market prices. In contrast, the MOPR policy would remove capacity supply from non-emitting generators in states like Illinois, New Jersey, and Maryland, all higher-priced capacity zones with binding import constraints. As a result, the zonal and total price increase is likely to be higher than the IMM’s estimate. Moreover, because we do not have access to the IMM’s assumptions about the location of resources at risk of retirement, our analysis did not even include the higher zonal price increases that were found in the IMM’s analysis. To be conservative, we assumed capacity market prices increased uniformly across the RTO at the IMM’s lower estimate for the RTO-wide level of price increase. Had we included those larger zonal price increases, our cost estimate would have been \$6.9 billion per year instead of \$5.7 billion. In the likely case that MOPR has a larger impact on zonal prices than the scenario studied by the IMM, the total cost of MOPR would be even higher than \$6.9 billion per year.

4. EPSA notes that the cost of state policies is not accounted for in our analysis, which is true. Because these state policies are separate from the MOPR and will continue to exist with or without the MOPR, it did not make sense to include them in an analysis of the cost of FERC imposing a MOPR. Regardless, the fact that we did not include these costs only makes our estimate more conservative. Even if one believes that these state policies are costly, as EPSA alleges, then using a costly MOPR policy to counteract them only increases total costs for consumers. Two wrongs do not make a right. That said, and contrary to the claim in EPSA’s letter, state renewable portfolio standards have played a key role in [cost-effectively reducing carbon emissions](#), and [will continue](#) to do so. The renewable deployment incentivized by state policies has played a key role in the large cost reductions for wind and solar energy over the last decade by achieving economies of scale and driving technology development. Moreover, due to the economic inefficiency caused by a failure to price the externality cost of carbon dioxide emissions and other pollutants, state clean energy policies result in a more efficient market outcome. If one believes state policies should be subject to the MOPR, a more compelling argument is that states that do not adequately account for those externalities are making a policy decision to unfairly subsidize polluting resources and should be subject to the MOPR.

5. Our estimate may be conservative in other ways as well. We assumed that the MOPR would not apply to existing renewable resources, as PJM has proposed. If FERC decided to apply the MOPR to existing renewable resources, the cost to consumers would likely be higher than our estimate. This is particularly true because biomass and other resources with relatively high capacity values make up a large share of the existing renewable resources that are meeting state RPS policies. Similarly, if incremental RPS energy requirements are met going forward with resources like biomass that have higher capacity value than wind and solar, the amount of accredited capacity subject to the MOPR, and therefore the cost of the MOPR, would likely be higher than our estimate. Our analysis conservatively assumed that resources with relatively low capacity values, like wind and solar resources, meet 100% of the incremental state RPS demand going forward.

On the other hand, our analysis does note that if PJM and FERC implement MOPR in a way that provides exemptions and other mechanisms for clean energy resources to clear the market, as we hope they would if they make the unfortunate decision to implement a MOPR, then the impact on prices could be lower than our estimate. However, even in this more optimistic case, MOPR would still cost consumers billions of dollars per year. The IMM report we cited also included a separate scenario in which nearly half as much capacity supply was removed from the market, which predictably caused capacity prices and therefore consumer costs to increase by nearly half as much as in the \$5.7 billion case. As we extensively caveated in our report, we cannot predict exactly how MOPR may be implemented or when and where renewable resources will be built in the future, and we do not have access to the detailed but confidential market information that the IMM used for its analysis. Regardless and most importantly, the conclusion of all available analysis is that MOPR will cost PJM consumers billions of dollars per year. Whether the actual cost will be \$3 billion, \$6 billion, or \$9 billion does not change the fact that using a MOPR to pre-empt state policy and even private transactions will impose large and unnecessary costs on all PJM consumers, even those who are not buying clean energy.