

Comments of the PJM Power Providers Group (P3)¹
Submitted to PJM July 26, 2018

The Federal Energy Regulatory Commission’s (“FERC” or “Commission”) June 29, 2018, order² sends a clear message to PJM and its stakeholders that the price suppressive impacts of subsidized resources on the PJM Interconnection, L.L.C.’s (“PJM”) market are real, likely to grow and must be addressed if PJM’s rates are going to be just and reasonable.³ PJM’s existing tariff was unequivocally found to be unjust, unreasonable and unduly discriminatory, because it “..fails to protect the integrity of competition in the wholesale capacity market against unreasonable price distortions and cost shifts caused by out-of-market support to keep existing uneconomic resources in operation, or to support the uneconomic entry of new resources, regardless of the generation type or quantity of the resources supported by such out-of-market support.”⁴

As PJM moves forward, it is imperative that the resulting tariff reforms fix the problem that FERC has identified and not create further problems or further opportunities to continue the “price distortions” that the Commission decries. The Commission has clearly called for tariff rules that end the distortions caused by out-of-market subsidies. PJM must deliver. P3 and its members appreciate PJM’s willingness to seek input in order to assure a PJM response that will fulfill the Commission’s expectations.

The Commission calls for a reformed Minimum Offer Price Rule (“MOPR”) in PJM with “...few or no exceptions.”⁵ P3 continues to support such a MOPR as described in more detail below. The Commission also suggests a “resource-specific FRR Alternative option”⁶ as a means to allow subsidized resources to “... to be removed from the PJM capacity market, along with a commensurate amount of load, for some period of time.”⁷ This second suggestion from the Commission, while certainly well-intentioned, presents numerous implementation challenges that if not addressed will continue or exacerbate the very problem the Commission seeks to remedy.

¹ The comments expressed herein are the comments of P3 as an organization and do not necessarily reflect the views of any individual P3 member with respect to any issue.

² Calpine Corp, et al., 163 FERC ¶ 61,236 (June 29, 2018) (“FERC Order,” or “Order”).

³ *Id.*, at P 149.

⁴ *Id.*, at P 150.

⁵ *Id.*, at P 158.

⁶ *Id.*, at P 157.

⁷ *Id.*, at P 8.

A Clean MOPR in PJM

P3 supports FERC's call for a MOPR with few or no exceptions similar to the "Clean MOPR" proposed by P3. Such a MOPR would address price distortions caused by out-of-market interventions in the market while ensuring that wholesale market rates are just and reasonable. Ultimately, a Clean MOPR would lead to the selection of the least-cost set of capacity resources that satisfy market needs without artificial price suppression.

To establish a Clean MOPR, P3 is prepared to support PJM's proposed definition of a Material Subsidy from ER18-1314 with one modification. In that proceeding, PJM defined a Material Subsidy as:

(1) material payments, concessions, rebates, or subsidies directly or indirectly from any governmental entity connected to the construction, development, operation, or clearing in any RPM Auction, of the Capacity Resource, or (2) other material support or payments obtained in any state-sponsored or state-mandated processes, connected to the construction, development, operation, or clearing in any RPM Auction, of the Capacity Resource. A Material Subsidy shall not include (3) payments (including payments in lieu of taxes), concessions, rebates, subsidies, or incentives designed to incent, or participation in a program, contract or other arrangement that utilizes criteria designed to incent or promote, general industrial development in an area; (4) payments, concessions, rebates, subsidies or incentives designed to incent, or participation in a program, contract or other arrangements from a county or other local governmental authority using eligibility or selection criteria designed to incent, siting facilities in that county or locality rather than another county or locality; or (5) federal government production tax credits, investment tax credits, and similar tax advantages or incentives that are available to generators without regard to the geographic location of the generation.

The one modification to the definition of "Material Subsidy" that P3 suggests is the removal of "federal government production tax credits, investment tax credits, and similar tax advantages or incentives that are available to generators without regard to the geographic location of the generation" from the list of exceptions to the definition of Material Subsidy. As PJM is aware, Congress has decided to phase out the PTC and ITC for solar and wind facilities. By the 2022/23 delivery year, both tax credits will be effectively eliminated and should not be considered for any resources participating in the May 2019 BRA. P3 is not aware of any existing "similar tax advantages" that would qualify under PJM's proposed language. Should Congress pass any new tax credits for other forms of generation, specific legislative direction could be given to the Commission as to whether the tax credits should subject the underlying generation facilities to mitigation. There is no reason to specifically list federal production and investment tax credits in this section and the reference should be removed from the exception list for the definition of a Material Subsidy. By removing this part of PJM's proposed definition, PJM will also be addressing the concern that PJM's proposed definition inappropriately discriminates against state subsidies by excluding federal subsidies.

PJM will also need to develop a process for determining whether a unit is receiving a material subsidy. Since all new and existing resources would need to be evaluated, PJM should consider an efficient means to receive information from capacity suppliers to ensure that PJM is able to perform its obligations while providing appropriate direction to the supplier. P3 notes that the Competitive Entry Exemption, which is no longer part of the PJM tariff, provided a means by which a capacity supplier could certify to PJM that it is not receiving a subsidy. There also needs to be an efficient process to address disputes between a supplier and PJM in the event there is a disagreement over whether certain capacity is materially subsidized.

Unit-Specific FRR

A unit-specific Fixed Resource Requirement (“FRR”) raises significant price suppression concerns. As detailed in the attached Statement from Dr. Roy Shanker, the removal of a generation facility and the load associated with that facility would likely have the same effect as a subsidized unit bidding in as a price-taker under the existing capacity construct. The end result is the same price suppression that rendered PJM’s existing tariff unjust and unreasonable. P3 has serious concerns about this price suppression and submits that if the price suppression concerns cannot be addressed, PJM should inform FERC that the unit-specific FRR does not represent a just and reasonable means to address the Commission’s concern.

While also raising price suppression concerns, the existing FRR provisions that allow individual load serving entities (“LSEs”) to elect full FRR status, with certain restrictions, provides a state a means to substitute PJM’s market-based procurement for capacity with fully state-sponsored means. P3 would encourage PJM to continue to evaluate the existing structure, instead of a unit-specific approach, as a means to address the Commission’s goals.

Provided that PJM develops an effective means of addressing the price suppression concerns associated with a unit-specific FRR, and can empirically demonstrate that conclusion, P3 offers the following non-exhaustive list of considerations that PJM should contemplate in its response to FERC:

- a. PJM needs an equitable means of assigning the load that is to be removed from the auction.
- b. Reserve margins should be accounted for and load reductions should be able to fluctuate during the FRR period consistent with changes to demand. Load adjustments should be based on the reserve margins procured in specific auctions and not the IRM. Likewise, consistent with existing FRR provisions, FRR obligations need to account for future load increases.
- c. Clarity needs to be provided on who makes the decision to elect unit specific FRR status. (generator? LSE? State?)
- d. PJM should clearly state who is responsible for Capacity Performance penalties for non-performance and PJM must be comfortable that existing tariff provisions provide PJM adequate authority to assess and collect CP penalties. Likewise, FRR units should be ineligible for CP bonus payments.

- e. The FRR election should last for a minimum of 5 years, and perhaps for the life of a subsidized new entrant, consistent with the current FRR construct, so as to avoid disruption to the market. Also, FRR elections must be for a full year and not be “seasonal.”
- f. Forced Outage and UCAP values can change over the life of a unit. PJM would need to account for diminished unit performance over time for any unit specific FRR.
- g. Clear rules need to be provided regarding how a FRR unit can “re-enter” the market including adequate notice to other market participants and appropriate evaluation of the impact of that re-entry on the market.
- h. The tariff should be clear that FRR units receive no PJM capacity market revenues and FRR capacity should have unambiguous capacity performance obligations.
- i. PJM should make it clear that a single unit cannot be partially FRR and partially in the market.
- j. Demand Response and Energy Efficiency Resources are eligible to receive “material subsidies” and PJM needs to develop effective rules for the participation of these resources in a partial FRR construct.

P3, and its members, reserve the right to raise additional issues as further analysis is performed. P3 again thanks PJM for the opportunity to offer thoughts on this very significant order and looks forward to working with other stakeholders to advance FERC’s charge to rid PJM’s markets from the unjust and unreasonable rates created from suppressed capacity prices resulting from out of market subsidies.

STATEMENT OF DR. ROY J. SHANKER
ON BEHALF OF THE PJM POWER PROVIDERS

Introduction

1. My name is Dr. Roy J. Shanker. My address is P.O. Box 1480, Pebble Beach, CA. 93953. I am an independent consultant.

2. I have been asked by the PJM Power Providers Group (“P3”)⁸ to review the Commission’s June 29, 2018 Order in Docket No. EL16-49-000; ER18-1314-000; ER18-1314-001; and EL18-178-000 (consolidated) (“Order” or “June 29 Order”). I was also asked to respond to the PJM Interconnection, L.L.C.’s (“PJM’s”) request for stakeholder comments regarding this Order, which must be submitted by July 27, 2018.

3. I am an independent consultant. I have worked on electricity issues since approximately 1973 and independently since approximately 1981. I have had consulting engagements related to PJM since approximately 1976. I have been part of the PJM ISO/RTO stakeholder process since approximately 1995. I have participated in just about every aspect of the PJM capacity market developments since the inception of the market. I was involved in the development of the Reliability Pricing Model (“RPM”) through stakeholder processes and Federal Energy Regulatory Commission (“Commission” or “FERC”) dockets and have participated in the Commission settlement proceedings that resulted in the initial version of RPM.

4. I have also submitted comments to the Commission regarding the above dockets and similar proceedings in other markets. Specifically, I have offered testimony on this subject in Docket No. AD17-11-000 (invited speaker) and filed technical conference comments and post-conference comments in Docket No. ER13-535-000; No. ER11-2875-000; No. EL11-20-000; and No. EL15-64-000. I also appeared before the New Jersey General Assembly in 2011, addressing related issues in discussions of Assembly Bill 3442 and Senate Bill 2381, related to the impacts of state-directed and subsidized capacity procurement for new natural gas units. In ISO-NE, I testified in Docket No. ER10-787-000; No. EL10-50-000; and No.

⁸ While I have been retained by P3 to offer this statement, the views expressed herein represent my views alone and not necessarily the views of P3 or any P3 members with respect to any issue.

EL10-57-000 addressing a similar mitigation issue. I participated in multiple stakeholder processes in PJM and NYISO that discussed these issues, including the most recent ones in PJM that evaluated the two alternatives that PJM submitted in the proceedings (Capacity Repricing and Minimum Offer Price Rule (“MOPR”)-Ex), related to this Order. I also recently submitted an affidavit in the related (and still open) Docket No. EL18-169-000.

5. I have, for over a decade, discussed these issues, in one form or another, with most of the relevant PJM staff and management, as well as the Independent Market Monitor (“IMM”). I also participated in similar issues and Commission dockets in ISO-NE and NYISO.

6. I have a bachelor’s degree from Swarthmore College and both a master’s and doctorate degree from Carnegie-Mellon University.

Background

7. The June 29 Order determined that the current PJM tariff procedures for dealing with out-of-market subsidies is unjust and unreasonable.⁹ I agree with the Commission’s conclusion and logic supporting this finding. The Commission also specifically rejected both of PJM’s proposed two alternative “fixes,” the so-called “Capacity Repricing” and the “MOPR-Ex” proposals. Neither alternative was found to result in a just and reasonable means to address the problem of out-of-market payments/subsidies to both new market entrants and existing facilities suppressing wholesale capacity rates rendering them unjust and unreasonable.

⁹ Order at P 156, “For the foregoing reasons, we find, based on this record, that the PJM Tariff allows resources receiving out-of-market support to significantly affect capacity prices in a manner that will cause unjust and unreasonable and unduly discriminatory rates in PJM regardless of the intent motivating the support. We are compelled by the evidence presented by PJM, Calpine, and other parties to these consolidated proceedings to conclude that out-of-market payments by certain PJM states have reached a level sufficient to significantly impact the capacity market clearing prices and the integrity of the resulting price signals on which investors and consumers rely to guide the orderly entry and exit of capacity resources. We cannot rely on such a construct to harness competitive market forces and produce just and reasonable rates. The PJM Tariff, therefore, is unjust and unreasonable.”

Conclusions Related to PJM's Summary and the Order

8. While certainly not exhaustive, I have three principal conclusions. First, any action that PJM takes must satisfy the Commission's basic finding that the status quo is unjust and unreasonable because it allows price suppression from subsidized units. Said another way, any proposal that PJM puts forward must be demonstrated not to cause price suppression and to remedy any existing adverse impacts. Second, consistent with my testimony in the underlying proceeding, I support a "Clean MOPR" that mitigates seller offers to a competitive level for any unit receiving a Material Subsidy (as defined by PJM in Docket No. ER18-1314). Such a MOPR would not include any special exemptions for self-supply resources, state procured resources or public power entities.

9. I would also observe that PJM's summary appears to give the impression that the Commission's Order supports a mitigation exemption for self-supply for public power and vertically integrated utilities. Such a conclusion is incorrect and directly contradicts the Commission's language in Paragraph 167 of the Order. The Commission's Order simply seeks suggestions on potential limited exemptions and did not endorse any specific result, as PJM suggests. Indeed, unless capacity procurement by public power and vertically integrated investor-owned utilities is fully competitive (open to new and existing capacity) and conducted at arm's length, it is undifferentiated from any other subsidized entry and subsidized existing resources that receive guaranteed out-of-market payments.

10. Third, the proposed/suggested use of a unit-specific Fixed Resource Requirement ("FRR") is fatally flawed and should be rejected. While there are a number of actions that could be taken to reduce the adverse impacts of a unit-specific FRR, any reduction in system load by out-of-market subsidized generation inherently suppresses prices and therefore violates the Commission's fundamental finding regarding the unjust and unreasonable nature of any solution that artificially suppresses prices. I will explain this in more detail herein with several examples.

Recommendations

11. With respect to PJM's response to the Commission, I would recommend that PJM pursue the development of a strong "Clean MOPR," and not pursue exemptions that weaken the mitigation to the point of ineffectiveness. Such a structure would resemble the MOPR-Ex alternative that PJM considered just

and reasonable, only without the broad range of specific exemptions that undo the desired mitigation. While I appreciate the Commission's attempt to offer an alternative to States that desire to favor certain resources, a unit-specific FRR inevitably leads to market-distorting price suppression and is riddled with administrative complexities. I do not believe there are any "fixes" that can be made to the unit-specific FRR to make it work in a manner that can address these concerns. Instead, the best, indeed perhaps only, path forward for PJM to instill just and reasonable tariff provisions that address the challenges posed by subsidized resources is to support a "Clean MOPR," while allowing States and load serving entities ("LSEs") to continue to have the option to pursue full FRR status through existing tariff provisions. I would also note that I believe that the existing FRR mechanism in PJM could be improved and I would encourage PJM to invite comment on this topic.

Discussion: Burden of Proof—No Price Suppression

12. The starting point in any proposal that PJM brings forward has to be a design or methodology that resolves the Commission's own determination that the status quo and both of the PJM proposals were unjust and unreasonable based on the existing and continued price suppression due to subsidized participation in the capacity markets. In this context, I believe that any proposal put forward to the Commission has to affirmatively demonstrate that it does not result in price suppression, allow the continuation of existing price suppression, or have "loop-holes" that allow circumvention of the mitigation to prevent price suppression.

13. Such a litmus test is a reasonable one and an empirically feasible task for PJM to undertake as part of any FERC filing. Below I state the reasoning that a unit-specific FRR is fatally flawed in this respect. It is my understanding that the IMM intends to present case studies using previous auction results that will confirm this observation. In turn, if PJM disagrees, or develops alternative methods and approaches that do not have this fatal flaw, I think it is incumbent on PJM to demonstrate such a result to both stakeholders and the Commission.

Discussion: Clean MOPR

14. I refer PJM to the comments and affidavits I filed in Docket No. ER 18-1314 and No. EL18-169. A Clean MOPR mitigating all suppliers with a Material Subsidy is the best solution to mitigate the price

distortion of subsidies. It is simple and all-inclusive. Parties that would otherwise have to claim a competitive exemption are exempt in this process, by definition, as they have no Material Subsidy. The only true exception would be the ability to demonstrate costs lower than a default offer cap, presumably B * Net CONE.

15. However, it is worth noting that PJM has incorrectly suggested that the Commission's comments in the Order "properly recognizes that public power self-supply can properly be excluded (from mitigation)."¹⁰ PJM levers that improper conclusion to suggest that self-supply "for traditionally regulated states and vertically integrated utility resources" should also be excluded from mitigation.¹¹

16. The reality is that the Commission did not offer this type of guidance. The only related comment is in paragraph 167 of the Order where the Commission suggests that exemptions might be applied to a very broad MOPR and asks the question as to whether such types of self-supply exemptions should be considered.¹² The Commission asks for comments to its broad general question, it does not suggest or declare what type of exemptions should be appropriate.

17. My conclusion in regard to a self-supply exemption is very simple: the only instance in which self-supply should not be subject to mitigation is when the supply is obtained via an all source (new and existing), arm's length, competitive solicitation that is evaluated by an impartial third-party using objective criteria. Any other approach, by definition, has a potentially market-distorting out-of-market subsidy impact due to the purchase and cost assurances associated with public power or investor-owned utility ("IOU") ownership and is thus discriminatory. The assurance of recovery (or ability to charge/pass through)

¹⁰ See PJM Member Notification and Memo Regarding Summary of Commission Order on Repricing/MOPR for Out-of-Market Payments, dated July 9, 2018, p. 2.

¹¹ *Id.*

¹² Order at P 167: "167. As discussed above, the proposed replacement rate would expand the MOPR to new and existing resources receiving out-of-market support with few to no exemptions. We request comment on the types of MOPR exemptions that should be included. For example, should an exemption be included for self-supplied resources used to meet loads of public power entities? Alternatively, should those resources have the option to use the resource-specific FRR Alternative? What, if any, exceptions should be added to the MOPR for existing resources in the capacity auction?"

prudent costs constitutes a Material Subsidy which leads to price suppression. The market seller is assured of full prudent cost recovery regardless of the market-clearing price. In turn, the self-supply seller is allowed to lean on the rest of the market when convenient in order to reduce the costs of carrying surplus capacity at the expense of other load, while at the same time suppressing pricing to competitive suppliers.

18. PJM should also be wary of justifications for such exemptions based on arguments related to “historic business models.” Such models were indeed followed in the past, but they were done so for a different regulatory, business and operational model. The “historic business model” did not supply the operating security and efficiency of over 150,000 MWs under central dispatch. It did not provide the planning reserves and diversity associated with almost 170,000 MWs of Capacity Resources. It was not designed to be compatible with and facilitate retail access. Parties entering into a more efficient market like the current RTO structure did so voluntarily. While they may wish to obtain discriminatory and favorable rules, appealing to historic practices and ignoring the reality and benefits of the RTO structure is not a legitimate justification. A new paradigm was put in place with attendant obligations. The reality of fully participating in an unbiased design which may not accommodate all of a load serving entity’s preferences leads to two options: withdrawing, or accepting the full consequences, both positive and negative (from their own perspective), of a level non-discriminatory market platform.

19. Similarly, I believe a discussion by Robert Stoddard sponsored by NRG, in Docket No. ER18-1314, also offers an excellent articulation of the market impact of the current self-supply exemption. I would urge PJM to consider those comments in making its own proposal. Specifically, Mr. Stoddard observes, “In the face of massive surpluses, averaging over 7,300 MW in the past five BRAs, self-supply entities should be deferring new builds and buying any capacity shortfall at the low market prices, rather than exacerbating the surplus and lowering prices even more. The net-short and net-long bands are providing a false sense of security, as evidenced by the fact that at least two “self-supply” providers have cleared 4,152 MWs in the five BRAs in which the exemption and bands were in effect, even though capacity prices were low and no new supply was needed.”¹³

Discussion: Flaws with Unit-Specific FRR

¹³ Stoddard Affidavit attached to NRG Protest, ER 18-1314, at page 20.

20. The Commission’s suggested alternative of a unit-specific FRR is inherently price suppressive. It actually appears worse than the status quo by allowing unfettered subsidization of existing and new units, corresponding reductions in load, and the displacement of competitive units. All of this combines to suppress prices artificially due to the subsidies compounding the very problem that the Commission seeks to address.

21. The mechanics of removing both generation and an appropriate level of load from the auction process as suggested by the Commission are slightly different for new entrants and existing units that failed to previously clear the auction without a subsidy, versus application to existing units that have cleared and received a subsidy. However, the negative impacts to the market are similar.

22. Consider an actual example in which an existing unit failed to clear an auction, but then received a subsidy. Exelon owns approximately 1,350 MWs of the Quad Cities nuclear station (“Quad Cities”). Quad Cities failed to clear in the 2016 and 2017 RPM auctions.¹⁴ Failure to clear two consecutive auctions is an indication that a unit is likely no longer economic and should consider retiring. Indeed, in the past, Exelon announced its intention to shut down Quad Cities on June 1, 2018.¹⁵ However, in the case of Quad Cities, Illinois provided an out-of-market subsidy in the form of a Zero Emissions Credit (“ZEC”) in 2017 and thus, the plant was able to clear the auction in May of 2018. As Exelon made clear in a press release, “Quad Cities cleared the capacity auction as a result of Illinois legislation....”¹⁶

23. Had a “Clean MOPR” been applied to the materially subsidized Quad Cities unit, the Material Subsidy would have been recognized and mitigated. However, had the unit-specific FRR been available (assuming Illinois found a means to provide full compensation for Exelon’s capacity), the unit and the load associated with it would have been removed from PJM’s capacity auction. So, for the unit-specific FRR, if applied in the case of the 2018 BRA to Quad Cities, approximately 1,350 MWs that would have not cleared the auction would now be considered an FRR resource and the appropriate, corresponding load

¹⁴ [Exelon Announces Outcome of 2020/2021 PJM Capacity Auction \(“Exelon 2020/2021 Announcement”\)](#), and [Exelon Announces Outcome of 2019/2020 PJM Capacity Auction](#)

¹⁵ [Exelon Begins Steps To Shut Down Nuclear Plant in Cordova](#)

¹⁶ Exelon 2020/2021 Announcement, at p. 1.

would have been reduced to account for the unit FRR choice (i.e. load declines and cleared auction supply stays the same).

24. For the market as a whole in the 2017 BRA, 165,109.2 MWs cleared, resulting in a 23.3% reserve margin (excluding FRR).¹⁷ If we consider the actual 2017 BRA as our base case “without” the FRR unit exemption, we can then quickly see the impact of allowing 1,350 MWs of uncleared capacity to “qualify” under a unit-specific exemption. The “with,” or unit specific FRR case for the market, would have the exact same supply curve up to the 165,109.2 MWs, but now load would be reduced by the amount of load deemed to be associated with the 1,350 MWs of unit-specific FRR capacity. Assuming a 25% reserve margin for the FRR capacity and 0% EFORd (for simplicity), load would be reduced by 1,080 MWs (80% of 1350 resulting in the 25% reserve e.g. $1350/1080=1.25$). Inherently this means that the price must decline as the supply curve has remained the same (remember the previously uncleared unit priced above the clearing quantity has left the market while the cleared units still remain), but in the “with” case the overall demand is reduced by approximately 1% (the 1,080 MWs). This is a generic result. Any existing unit that failed to clear and then is subsidized and removed via the unit-specific FRR must suppress price as cleared supply remains the same but load decreases. The same is true for any new entry claiming the exemption.

25. To put this in context, PJM’s IMM, Dr. Joseph Bowring, conducted an analysis of the capacity auction impacts of adding 1,000 MWs of subsidized power in 2011 (in the context of the debate over Maryland and New Jersey discriminatory procurement initiatives). His findings were that such subsidized entry would depress overall market prices by \$1 billion dollars a year.¹⁸ In my very realistic example, the impact of reducing load by 1,080 MWs would be expected to be larger (e.g. it should roughly equate to the addition of the 1,350 MWs of generation). Moreover, this price suppression would have spill-over impacts to other states that have chosen not to provide out-of-market support for certain resources. As a result, the competitive price for capacity that those states rely upon to meet reliability targets will be severely eroded.

¹⁷ [PJM RPM Auction Results 2020/2021](#)

¹⁸ *Impact on New Jersey Assembly Bill 3442 on PJM Capacity Market*, The Independent Market Monitor for PJM, dated January 6, 2011, p. 3. [The IMM’s numbers assumes the subsidized resources bid in at zero.] Monitoring Analytics Reports 2011 [Monitoring Analytics Reports 2011 Impact of NJ Assembly 3442 on PJM Capacity Market](#)

In this regard, the unit-specific FRR comes up short again and allows one state to inappropriately interfere with the markets relied upon by other states.

26. The same type of impact would be associated with FRR unit exemptions for new generation. The prior (without the new generation) supply curve for the system remains the same, and net load served by the remaining generation decreases along with prices. While “counting” rules related to the amount of load removed under the type of proposal suggested by the Commission can mitigate the magnitude of the suppression, *it can't be eliminated if any load is removed.*¹⁹

27. The inevitable, and perhaps at some level regrettable, conclusion that I reach is that a unit-specific FRR just doesn't work. From the view of other market participants, load will be decreasing for the same level of supply whenever the exempted unit is either a new entrant or an uncleared existing supplier. This makes the price suppression worse, not better.²⁰

28. This concludes my comments.

¹⁹ It is my understanding that the IMM will be preparing a range of specific examples based on auction sensitivities. I believe that these will all demonstrate the specific level of price suppression with variations in rules and quantities for the unit specific FRR.

²⁰ For infra-marginal existing cleared units with a subsidy that are subsequently mitigated by the unit-specific FRR, the result would be the already suppressed price would remain at the existing level. The mitigation via Unit-Specific FRR of a marginal existing unit would be expected to exacerbate price suppression.