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BEFORE THE NEW JERSEY BOARD OF PUBLIC UTILITIES

Investigation of Resource Adequacy Alternatives	)	**Docket No. EO20030203**

Pursuant to the Order issued in this proceeding effective March 27, 2020, and the Request for Written Comments issued in this proceeding on March 27, 2020, Monitoring Analytics, LLC, acting in its capacity as the Independent Market Monitor ("IMM") for PJM Interconnection, L.L.C. ("PJM"), submits this answer to the joint reply comments filed on June 24, 2020, by PSEG and Exelon Generation Company, LLC, jointly ("PSEG and Exelon"); and implicitly to comments filed by others. Because this answer directly addresses new arguments raised in the PSEG and Exelon reply comments, it contributes to a complete record and facilitates the decision making process.

I. ANSWER

A. Introduction

PSEG and Exelon reiterate their opposition to competitive markets, their opposition to the competitive procurement of clean resources, their rejection of market power concerns, their assertion that a carbon price could not work, and their support for an amorphous planning approach with no criteria or rules and that would rely on prudence reviews and a determination of the willingness to pay of New Jersey customers, even

adding a proposal to securitize the Fixed Resource Requirement ("FRR") entity's obligations to ensure that customers and not the utility bear all the risk.[1]

PSEG and Exelon repeat the trope that the PJM Capacity Market is not really a market and assert that the FRR approach is comparable. The capacity market is a market. The discipline of markets means that inefficient and high cost resources do not clear. The FRR construct is at best a weak form of cost of service regulation and centralized Integrated Resource Planning ("IRP"), although the actual details of a New Jersey FRR are unknown because they have not yet been created by New Jersey. There is no such thing as PSEG and Exelon's unbridled free market straw man. Of course there are administrative elements of the PJM capacity markets. But the PJM Capacity Market has, with the exception of the last BRA, resulted in competitive capacity costs for PJM customers, including those in New Jersey. Those competitive market results have cost New Jersey customers much less than if the units had been built under cost of service regulation, even strictly administered cost of service regulation. The PJM Capacity Market has produced competitive results in significant part as a result of clear and generally effective market power mitigation rules. The PJM Capacity Market has created competitive pressures on generators that some would prefer to avoid through the FRR approach. PSEG and Exelon fail to propose any clear rules for evaluating, defining or addressing market power.

PSEG and Exelon make a series of unsupported assertions in defense of their FRR approach, including: that FERC's Minimum Offer Price Rule ("MOPR") order will prevent subsidized renewables and subsidized nuclear plants from clearing in the capacity market; and that the forward looking Energy and Ancillary Services ("E&AS") offset will

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[1] The PSEG and Exelon filing includes a supporting report by the NorthBridge Group. The NorthBridge Group has also previously written a report explaining why carbon pricing is more efficient than the RPS approach preferred under the FRR plan, and a report explaining why competitive markets are more efficient than the regulatory approach favored by FRR proponents. NorthBridge Groups reports are located here: <*http://www.nbgroup.com/publications/*>.

significantly increase MOPR offer floors. PSEG and Exelon fail to provide an estimate of the cost of their proposal. The IMM quantifies the cost of the PSEG and Exelon proposal under a range of pricing assumptions.

B. PSEG and Exelon Critique of the IMM Analysis

PSEG and Exelon critique the IMM analysis of the impacts of a New Jersey FRR and make the unsupported and hyperbolic assertion that continued participation in the PJM Capacity Market would cost New Jersey customers up to $270 million per year by 2025 and up to $400 million per year by 2030.[2] These numbers are explicitly based on the unsupported assumptions that offshore wind, new solar, storage and nuclear do not clear in the capacity market. Most of the asserted cost is associated with nuclear units not clearing in the capacity market. Of these resources, it is only offshore wind that is so uneconomic that it will require subsidies and will not clear in the capacity market. The cost to New Jersey customers of supporting uneconomic offshore wind, based on the PSEG and Exelon report, would be $17 million per year in 2025, as a result of the MOPR rules and therefore as a result of staying in the PJM Capacity Market.[3] The $17 million is the amount that the 1,100 MW of offshore wind would receive in the PJM Capacity Market at the clearing price in the last capacity market auction (2021/2022 BRA) but would not be paid to offshore wind under the MOPR rules.

The assumption that renewables and nuclear will not clear the PJM Capacity Market under the MOPR rules is based on a misunderstanding of the forward markets and a misunderstanding of the IMM's conclusions about the expected results for nuclear plants. The MOPR floor offer for a nuclear plant is the plant's avoidable cost less the forward looking net energy and ancillary services revenues which offset those costs. A forward looking E&AS offset does not mean that the offset will always be lower than an historical

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2 *See* PSEG and Exelon Reply Comments, Docket No. EO20030203 (June 24, 2020).

3 *See id*., Attachment at 4.

offset. The forward curves will reflect the market consensus about expected energy market prices. Forward energy prices, especially near term forward prices, generally respond to current energy market conditions. Given that energy market prices in PJM have been at all time lows in the first half of 2020, it is not surprising that the forward energy prices for the balance of 2020 are also low. The forward prices for 2021 and 2022 are significantly higher.[4] The conclusions that the IMM reached about 2020, cited by PSEG and Exelon, do not apply to 2021 and 2022, as the 2020 State of the Market Report: January through March also makes clear.[5] In markets, prices go up and down and no market participant is insulated from that risk. Further, PSEG and Exelon ignore the fact that PJM's recently approved ORDC will significantly increase energy market prices and that these increases will be reflected in forward prices when traders are confident that the ORDC will be implemented.[6]

PSEG and Exelon, while asserting support for the technologies, assume that renewables and nuclear will be uneconomic and ignore the impact of competitive markets on providing incentives to renewables and nuclear to be competitive. The renewables industry appears to believe that renewables are competitive and that the costs of renewables will continue to fall.[7] Markets provide incentives to reduce costs and improve technology while the FRR approach would simply accept uneconomic offers as unavoidable and provide no incentives to reduce costs. Contrary to assertions by PSEG and Exelon, the unit specific review process under the MOPR rules permits units to demonstrate that their net costs are lower than the PJM default net costs both because their gross costs are lower

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4 *See* 2020 State of the Market Report for PJM: January through March, (May 14, 2020) at 342–343.

5 *Id*.

6 *PJM Interconnection, L.L.C. v. PJM Interconnection, L.L.C.*, 171 FERC ¶ 61,153 (2020).

7 Monitoring Analytics, LLC, Potential Impacts of the MOPR Order, (March 20, 2020) <*http://www.monitoringanalytics.com/reports/Reports/2020/IMM_Potential_Impacts_of_the_MOPR_Order_20200320.pdf*> .

than the PJM defaults and because their net revenues are higher than the PJM default revenues. The IMM will review all requests for unit specific cost reviews.

C. FRR Costs under PSEG and Exelon Approach

PSEG and Exelon critique the IMM for doing a sensitivity analysis of an FRR price equal to the existing offer cap in the capacity market ($217.38 per MW-day for JCPL) because, in their view, it overstates the cost of the FRR option. Yet PSEG and Exelon propose to pay preferred resources prices well in excess of those offer caps. The effective capacity price for offshore wind is about $3,100 per MW-day, based on the contractual all in price of $105 per MWh.[8] Under the contract, offshore wind requires a subsidy of about $2,900 per MW-day.[9] The effective capacity price for ZECs is $413.83 per MW-day. If the ZECs prices are incorporated in the FRR, the nuclear subsidy, added to the capacity market clearing price, is $248.10 per MW-day.

While PSEG and Exelon assert that nuclear and renewables should be paid premium prices that are guaranteed under five year contracts, PSEG and Exelon never state what the appropriate price would be for nuclear or renewables under their FRR proposal.[10] Despite the assertion that the IMM's scenario analysis including an FRR price based on the market seller offer cap overstated the cost of the FRR, the capacity price that PSEG and Exelon propose to pay for nuclear, based on the ZECs price, substantially exceeds the market seller offer cap. The ZECs price is a low estimate of the potential subsidies to nuclear plants under the PSEG and Exelon FRR proposal. As part of the FRR proposal, PSEG and Exelon are actually proposing an FRR replacement for the ZECs approach that would increase the subsidies for the New Jersey nuclear plants and would include an all in price that would be

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8 *See* PSEG and Exelon Reply Comments, Docket No. EO20030203 (June 24, 2020) at 16.

9 On a UCAP basis, adjusted for the expected capacity factor of offshore wind resources.

10 *See* PSEG and Exelon Reply Comments, Docket No. EO20030203 (June 24, 2020) at 20.

guaranteed for five years rather than the defined $10/MWh adder for the three year term of ZECs. PSEG and Exelon failed to specify the target all in price.

PSEG and Exelon support an FRR for New Jersey, but prefer to advocate an FRR limited to the JCPL Zone for now because the JCPL FRR can be made to appear more economic. PSEG and Exelon critique the IMM analysis of the JCPL FRR for assuming that New Jersey would prefer to use New Jersey resources prior to importing capacity from outside New Jersey. But the PSEG and Exelon FRR proposal would require JCPL to procure most capacity within New Jersey. PSEG and Exelon critique the IMM analysis for assuming that imported capacity would be paid a single FRR price. Under the proposed JCPL FRR, the FRR could be required to purchase desired external resources at above market prices. For example, the FRR could be required to purchase nuclear plant capacity from Pennsylvania, owned by PSEG and Exelon, at ZEC prices.[11]

Even with an FRR temporarily limited to JCPL, PSEG and Exelon fail to provide any detailed information about the costs to customers of their proposed FRR design. That cost will be high and well in excess of the 2021/2022 BRA capacity market prices. While explicitly advocating an FRR plan for all of New Jersey, PSEG and Exelon support a short run FRR plan for JCPL only, recognizing the difficulties of the full New Jersey FRR plan and recognizing that the full New Jersey FRR plan has even higher costs for customers.

D. Analysis of PSEG and Exelon Approach

In addition to the six scenarios analyzed in the IMM report filed on May 13, 2020, in this matter, the IMM analyzed five scenarios. The first two scenarios track the last two scenarios in the IMM report (Scenario 5 and Scenario 6) as a benchmark for the new scenarios and scenarios three, four and five are new scenarios based on the details of the PSEG and Exelon filing that clarify the potential costs of the PSEG and Exelon FRR proposal.

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11 PSEG and Exelon Comments, Docket No. EO20030203 (May 20, 2020) at 9.

In Scenario 1A, the IMM assumes that an FRR is established for the JCPL LDA (JCPL FRR) and that the JCPL FRR procures all the nuclear and renewable capacity resources in New Jersey at a rate equal to the 2021/2022 net CONE times B offer cap for JCPL ($217.38 per MW-day). In this scenario, the JCPL LDA would have 1,730.9 MW UCAP or 26.3 percent fewer MW than needed to meet its FRR UCAP Obligation. The IMM assumes that the JCPL FRR would contract with nuclear resources located in EMAAC to cover the shortfall and these imports would also be paid 2021/2022 net CONE times B offer cap for JCPL ($217.38 per MW-day). Scenario 1A is comparable to Scenario 5 in the IMM report filed in this matter. It is included as a benchmark for comparing the results of this analysis to the results in that report.

Table 1 shows the gross and net load charges for the JCPL LDA for the 2021/2022 BRA and Scenario 1A. Under Scenario 1A, the net load charges for the JCPL LDA would increase by $133.2 million or 34.2 percent compared to the results of the 2021/2022 RPM BRA.

Table 2 shows the gross and net load charges for New Jersey for the 2021/2022 BRA and Scenario 1A. Under Scenario 1A, the net load charges for New Jersey would increase by $76.9 million or 5.9 percent compared to the results of the 2021/2022 RPM BRA.

Table 1 Net load charges for JCPL LDA (Scenario 1A) [12]

JCPL FRR	BRA	Scenario 1A	Change	Percent
Zonal UCAP Obligation	6,538.6	6,583.7	45.1	0.7%
Zonal Capacity Price ($/MW-day)	$166.31	$217.38	$51.07	30.7%
Gross Load Charges	$396,922,134	$522,375,118	$125,452,984	31.6%
Value of CTRs	$7,710,573	$0	($7,710,573)	(100.0%)
Net Load Charges	$389,211,561	$522,375,118	$133,163,557	34.2%

[12] In scenarios presented in the IMM report: Potential Impacts of the Creation of New Jersey FRRs (May 13, 2020), JCPL LDA would be required to procure 6,295.9 MW, the FRR obligation plus the EE add back for the JCPL LDA. In the Scenario 1A, JCPL LDA would be required to procure 6,583.7 MW. The difference is due to the EE add back. In the scenarios presented in the report, only EE capacity resources in the JCPL LDA were included in the JCPL FRR. In the Scenario 1A, all EE capacity resources in New Jersey were included in the JCPL FRR.

Table 2 Net load charges for New Jersey (Scenario 1A)

New Jersey	BRA	Scenario 1A	Change	Percent
Zonal UCAP Obligation	20,568.1	20,623.4	55.3	0.3%
Gross Load Charges	$1,402,173,465	$1,520,257,284	$118,083,819	8.4%
Value of CTRs	$94,492,963	$135,670,704	$41,177,741	43.6%
Net Load Charges	$1,307,680,502	$1,384,586,580	$76,906,078	5.9%

In Scenario 2A, the IMM assumes that an FRR is established for the JCPL LDA (JCPL FRR) and that the JCPL FRR procures all the nuclear and renewable capacity resources in New Jersey at a rate equal to clearing price in the 2021/2022 RPM BRA ($165.73 per MW-day). In this scenario, the JCPL LDA would have 1,730.9 MW UCAP or 26.3 percent fewer MW than needed to meet its FRR UCAP Obligation. The IMM assumes that the JCPL FRR would contract with nuclear resources located in EMAAC to cover the shortfall and these imports would also be paid the clearing price in the 2021/2022 RPM BRA ($165.73 per MW-day). Scenario 2A is comparable to Scenario 6 in the IMM report filed in this matter. It is included as a benchmark for comparing the results of this analysis to the results in that report. Scenario 2A is not consistent with the PSEG and Exelon proposal.

Table 3 shows the gross and net load charges for the JCPL LDA for the 2021/2022 BRA and Scenario 2A. Under Scenario 2A, the net load charges for the JCPL LDA would increase by $9.0 million or 2.3 percent compared to the results of the 2021/2022 RPM BRA.

Table 4 shows the gross and net load charges for New Jersey for the 2021/2022 BRA and Scenario 2A. Under Scenario 2A, the net load charges for New Jersey would decrease by $47.2 million or 3.6 percent compared to the results of the 2021/2022 RPM BRA.

Table 3 Net load charges for JCPL LDA (Scenario 2A) [13]

JCPL FRR	BRA	Scenario 2A	Change	Percent
Zonal UCAP Obligation	6,538.6	6,583.7	45.1	0.7%
Zonal Capacity Price ($/MW-day)	$166.31	$165.73	-$0.58	(0.4%)
Gross Load Charges	$396,922,134	$398,257,559	$1,335,426	0.3%
Value of CTRs	$7,710,573	$0	($7,710,573)	(100.0%)
Net Load Charges	$389,211,561	$398,257,559	$9,045,999	2.3%

Table 4 Net load charges for New Jersey (Scenario 2A)

New Jersey	BRA	Scenario 2A	Change	Percent
Zonal UCAP Obligation	20,568.1	20,623.4	55.3	0.3%
Gross Load Charges	$1,402,173,465	$1,396,139,726	($6,033,739)	(0.4%)
Value of CTRs	$94,492,963	$135,670,704	$41,177,741	43.6%
Net Load Charges	$1,307,680,502	$1,260,469,022	($47,211,480)	(3.6%)

In Scenario 3A, the IMM assumes that an FRR is established for the JCPL LDA (JCPL FRR) and that the JCPL FRR procures all the nuclear and renewable capacity resources in New Jersey at a rate equal to the capacity market price equivalent to the ZEC subsidy ($413.83 per MW-day).[14] In this scenario, the JCPL LDA would have 1,730.9 MW UCAP or 26.3 percent fewer MW than needed to meet its FRR UCAP Obligation. The IMM assumes that, per the defined objectives in the PSEG and Exelon FRR proposal, the JCPL FRR would contract with nuclear resources located in EMAAC to cover the shortfall and these imports would also be paid the capacity market price equivalent to the ZEC subsidy ($413.83 per MW-day).

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[13] In scenarios presented in the IMM's report: Potential Impacts of the Creation of New Jersey FRRs (May 13, 2020), the JCPL LDA would be required to procure 6,295.9 MW, the FRR obligation plus the EE add back for the JCPL LDA. In the Scenario 2A, JCPL LDA would be required to procure 6,583.7 MW. The difference is due to the EE add back. In the scenarios presented in the IMM's report, only EE capacity resources in the JCPL LDA were included in the JCPL FRR. In the Scenario 2A, all EE capacity resources in New Jersey were included in the JCPL FRR.

[14] The capacity market price equivalent to ZEC subsidy is derived from the $300 million per year or $248.10 per MW-day approved by the State of New Jersey for the three nuclear plants in New Jersey plus the capacity market clearing price in the 2021/2022 RPM BRA ($165.73 per MW-day). The ZEC subsidy assumed the nuclear plants would continue to receive energy and capacity market revenues from the PJM energy and capacity markets.

Table 5 shows the gross and net load charges for the JCPL LDA for the 2021/2022 BRA and Scenario 3A. Under Scenario 3A, the net load charges for the JCPL LDA would increase by $605.2 million or 155.5 percent compared to the results of the 2021/2022 RPM BRA.

Table 6 shows the gross and net load charges for New Jersey for the 2021/2022 BRA and Scenario 3A. Under Scenario 3A, the net load charges for New Jersey would increase by $549.0 million or 42.0 percent compared to the results of the 2021/2022 RPM BRA.

Table 5 Net load charges for JCPL LDA (Scenario 3A)

JCPL FRR	BRA	Scenario 3A	Change	Percent
Zonal UCAP Obligation	6,538.6	6,583.7	45.1	0.7%
Zonal Capacity Price ($/MW-day)	$166.31	$413.83	$247.52	148.8%
Gross Load Charges	$396,922,134	$994,454,388	$597,532,255	150.5%
Value of CTRs	$7,710,573	$0	($7,710,573)	(100.0%)
Net Load Charges	$389,211,561	$994,454,388	$605,242,828	155.5%

Table 6 Net load charges for New Jersey (Scenario 3A)

New Jersey	BRA	Scenario 3A	Change	Percent
Zonal UCAP Obligation	20,568.1	20,623.4	55.3	0.3%
Gross Load Charges	$1,402,173,465	$1,992,336,555	$590,163,090	42.1%
Value of CTRs	$94,492,963	$135,670,704	$41,177,741	43.6%
Net Load Charges	$1,307,680,502	$1,856,665,851	$548,985,349	42.0%

In Scenario 4A, the IMM assumes an FRR is established for the JCPL LDA (JCPL FRR) and that the JCPL FRR procures all the nuclear and renewable capacity resources in New Jersey and that the nuclear resources are paid the capacity market price equivalent to the ZEC subsidy ($413.83 per MW-day) and the renewable resources are paid the 2021/2022 net CONE times B offer cap for JCPL ($217.38 per MW-day). In this scenario, the JCPL LDA would have 1,730.9 MW UCAP or 26.3 percent fewer MW than needed to meet its FRR UCAP Obligation. The IMM assumes that the JCPL FRR would contract with nuclear resources located in EMAAC to cover the shortfall and these imports would also be paid the capacity market price equivalent to the ZEC subsidy ($413.83 per MW-day).

Table 7 shows the gross and net load charges for the JCPL LDA for the 2021/2022 BRA and Scenario 4A. Under Scenario 4A, the net load charges for the JCPL LDA would

increase by $488.4 million or 125.5 percent compared to the results of the 2021/2022 RPM BRA.

Table 8 shows the gross and net load charges for New Jersey for the 2021/2022 BRA and Scenario 4A. Under Scenario 4A, the net load charges for New Jersey would increase by $432.1 million or 33.0 percent compared to the results of the 2021/2022 RPM BRA.

Table 7 Net load charges for JCPL LDA (Scenario 4A)

JCPL FRR	BRA	Scenario 4A	Change	Percent
Zonal UCAP Obligation	6,538.6	6,583.7	45.1	0.7%
Zonal Capacity Price ($/MW-day)	$166.31	$365.19	$198.88	119.6%
Gross Load Charges	$396,922,134	$877,569,290	$480,647,157	121.1%
Value of CTRs	$7,710,573	$0	($7,710,573)	(100.0%)
Net Load Charges	$389,211,561	$877,569,290	$488,357,730	125.5%

Table 8 Net load charges for New Jersey (Scenario 4A)

New Jersey	BRA	Scenario 4A	Change	Percent
Zonal UCAP Obligation	20,568.1	20,623.4	55.3	0.3%
Gross Load Charges	$1,402,173,465	$1,875,451,457	$473,277,992	33.8%
Value of CTRs	$94,492,963	$135,670,704	$41,177,741	43.6%
Net Load Charges	$1,307,680,502	$1,739,780,753	$432,100,251	33.0%

In Scenario 5A, the IMM assumes an FRR is established for the JCPL LDA (JCPL FRR) and that the JCPL FRR procures all the nuclear and renewable capacity resources in New Jersey and that the nuclear resources are paid the capacity market price equivalent to the ZEC subsidy ($413.83 per MW-day) and the renewable resources are paid the 2021/2022 net CONE times B offer cap for JCPL ($217.38 per MW-day). In this scenario, the JCPL LDA would have 1,730.9 MW UCAP or 26.3 percent fewer MW than needed to meet its FRR UCAP Obligation. The IMM assumes that the JCPL FRR would contract with nuclear resources located in EMAAC to cover the shortfall and these imports would be paid the 2021/2022 net CONE times B offer cap for JCPL ($217.38 per MW-day).

Table 9 shows the gross and net load charges for the JCPL LDA for the 2021/2022 BRA and Scenario 5A. Under Scenario 5A, the net load charges for the JCPL LDA would increase by $370.7 million or 95.3 percent compared to the results of the 2021/2022 RPM BRA.

Table 10 shows the gross and net load charges for New Jersey for the 2021/2022 BRA and Scenario 5. Under Scenario 5, the net load charges for New Jersey would increase by $314.5 million or 24.0 percent compared to the results of the 2021/2022 RPM BRA.

Table 9 Net load charges for JCPL LDA (Scenario 5A)

JCPL FRR	BRA	Scenario 5A	Change	Percent
Zonal UCAP Obligation	6,538.6	6,583.7	45.1	0.7%
Zonal Capacity Price ($/MW-day)	$166.31	$316.24	$149.93	90.1%
Gross Load Charges	$396,922,134	$759,945,639	$363,023,505	91.5%
Value of CTRs	$7,710,573	$0	($7,710,573)	(100.0%)
Net Load Charges	$389,211,561	$759,945,639	$370,734,078	95.3%

Table 10 Net load charges for New Jersey (Scenario 5A)

New Jersey	BRA	Scenario 5A	Change	Percent
Zonal UCAP Obligation	20,568.1	20,623.4	55.3	0.3%
Gross Load Charges	$1,402,173,465	$1,757,827,806	$355,654,341	25.4%
Value of CTRs	$94,492,963	$135,670,704	$41,177,741	43.6%
Net Load Charges	$1,307,680,502	$1,622,157,101	$314,476,599	24.0%

E. Summary of Additional Scenarios

The IMM analyzed five additional scenarios designed to show the impacts of the PSEG and Exelon approach to FRR design. Table 11 presents a summary of the additional scenario results for all five scenarios including the impact on net load charges for the JCPL FRR and for New Jersey.

Table 11 Scenario summary

	JCPL FRR		New Jersey	
Scenario	Chage	Percent	Change	Percent
1A	$133,163,557	34.2%	$76,906,078	5.9%
2A	($47,211,480)	(3.6%)	($47,211,480)	(3.6%)
3A	$605,242,828	155.5%	$548,985,349	42.0%
4A	$488,357,730	125.5%	$432,100,251	33.0%
5A	$370,734,078	95.3%	$314,476,599	24.0%

The purpose of the multiple scenarios is to reflect the range of likely impacts on New Jersey customers of the PSEG and Exelon FRR proposal. Scenarios 1A and 2A are presented in order to benchmark the prior analysis for comparison to the PSEG and Exelon proposal.

Scenarios 1A and 2A correspond to Scenarios 5 and 6 in the IMM's May 13, 2020, report, Potential Impacts of the Creation of New Jersey FRRs.[15] The results differ slightly as a result of the treatment of energy efficiency (EE) resources. Scenario 2A is the low cost option from the IMM report. It is not consistent with the PSEG and Exelon FRR proposal.

The PSEG and Exelon FRR approach would first purchase capacity for the JCPL FRR from New Jersey nuclear units and then from New Jersey renewables. The JCPL FRR can meet all but 1,730.9 MW of its capacity requirements from New Jersey nuclear and renewable resources. The PSEG and Exelon approach would reasonably be expected to result in the purchase 1,730.9 MW of imports from EMAAC nuclear plants owned by PSEG and Exelon under the defined Tier 2. The 3,117.3 MW UCAP of gas generation (with a minor exception) in the JCPL FRR would be exported to the PJM Capacity Market.

Scenarios 3A through 5A include pricing options for these purchase strategies. The scenarios include options to implement PSEG and Exelon's stated intent of paying nuclear and renewable resources higher prices. The scenarios include pricing at the ZEC equivalent for internal and external nuclear plants and pricing renewables at the BRA clearing price, the offer cap or the ZEC equivalent price. The ZEC equivalent price is the ZEC subsidy translated into a capacity market price in units of $/MW-day. The ZEC subsidy of $10 per MWh is equivalent to paying an additional $248.10 per MW-day for the nuclear capacity in New Jersey. The total ZEC capacity market price is $413.83 per MW-day, equal to the ZEC subsidy of $248.10 per MW-day plus the capacity market clearing price in the 2021/2022 RPM BRA of $165.73 per MW-day.

In Scenario 3A, the JCPL FRR pays the capacity market price equivalent of the ZEC subsidy for New Jersey nuclear and New Jersey renewables and for nuclear imports from EMAAC. In Scenario 4A, the JCPL FRR pays the ZEC price for New Jersey nuclear, the offer

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[15] Monitoring Analytics, LLC, Potential Impacts of the Creation of New Jersey FRRs (May 13, 2020) <*http://www.monitoringanalytics.com/reports/Reports/2020/IMM_Potential_Impacts_of_the_Creation_of_New_Jersey_FRRS_20200513.pdf*>.

cap for New Jersey renewables, and the ZEC price for nuclear imports from EMAAC. In Scenario 5A, the JCPL FRR pays the ZEC price for New Jersey nuclear, the offer cap for New Jersey renewables, and the offer cap for nuclear imports from EMAAC.

The conclusion is that, using any plausible interpretation of the PSEG and Exelon FRR proposal, costs to New Jersey customers will increase significantly compared to continued participation in the PJM Capacity Market.

II. CONCLUSION

The IMM respectfully requests that the New Jersey Board of Public Utilities accept into the record and afford due consideration to this answer as it determines how to best ensure resource adequacy in New Jersey.

Respectfully submitted,

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