

**STATE OF NEW JERSEY  
BOARD OF PUBLIC UTILITIES**

**Comments of the PJM Power Providers Group  
to the Notice of Request for Comments**

**In The Matter Regarding The Implementation of L. 2018 c. 16  
Regarding The Establishment of a Zero Emission Certificate  
Program For Eligible Nuclear Plants in Docket No. EO18080899**

**AND**

**Application For Zero Emission Certificates of Hope Creek Nuclear Power Plan  
Docket No. EO18121337**

**Application For Zero Emission Certificates of Salem I Nuclear Power Plan  
Docket No. EO18121338**

**Application For Zero Emission Certificates of Salem II Nuclear Power Plan  
Docket No. EO18121339**

The PJM Power Providers (“P3”)<sup>1</sup> appreciates the opportunity to again comment in this docket regarding the implementation and establishment of Zero Emission Certificates (“ZECs”). With the issuance of the Board of Public Utilities (“BPU” or the “Board”) June 22, 2023 Notice (“Notice”)<sup>2</sup> and preliminary findings of no evidence of duplicative funds received by the unit owners for generation in the prior energy year and the recommendation of no reduction to the payment obligation to the nuclear unit owners, the Board has the opportunity to take a fresh look

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<sup>1</sup> P3 is a non-profit organization dedicated to advancing federal, state and regional policies that promote properly designed and well-functioning electricity markets in the PJM Interconnection, L.L.C. (“PJM”) region. Combined, P3 members own over 83,000 MWs of generation assets and produce enough power to supply over 63 million homes in the PJM region covering 13 states and the District of Columbia. For more information on P3, visit [www.p3powergroup.com](http://www.p3powergroup.com). The comments contained herein represent the position of P3 as an organization, but not necessarily the views of any particular member with respect to any issue.

<sup>2</sup> NJ Board of Public Utilities Request for Comments, In the Matter Regarding The Implementation of L. 2018 c. 16 Regarding The Establishment of a Zero Emission Certificate Program For Eligible Nuclear Plants in Docket No. EO18080899 AND Application For Zero Emission Certificates of Hope Creek Nuclear Power Plan Docket No. EO18121337, Application For Zero Emission Certificates of Salem I Nuclear Power Plan Docket No. EO18121338, Application For Zero Emission Certificates of Salem II Nuclear Power Plan Docket No. EO18121339, June 22, 2023, (“June 22, 2023 NJ BPU Request for Comments”).

and inventory of the earnings of the nuclear plants without subsidies as well as the upcoming federal tax credits on the horizon for nuclear power plants based on recently enacted federal legislation.

P3 remains opposed to any subsidies that interfere with the competitive, regional, federally regulated wholesale markets. By providing out of market support for selected resources, ZECs not only undermine the competitive market in New Jersey and the entire PJM region, they represent an ill-conceived giveaway that unnecessarily harms consumers. . . . If they remain in place, double payments to the ZEC recipients could occur.

To be clear, as stated previously, P3 supports nuclear power provided it is competing with other forms of generation on a level playing field. Nuclear power has been a stable source of power in PJM for decades. P3's concern is focused on the market-distorting effects that the ZECs have on the interstate market that has benefited New Jersey enormously for decades. Subsidies distort markets and ultimately lead to the devolution of markets as competing suppliers seek subsidies to support their facilities rather than pursuing innovation and efficiency that drive down costs. As P3 pointed out previously and commented many times, ZECs were questionable when initially introduced. As Commissioner Gordon stated at the April 18, 2019 Board hearing, the ZEC legislation was enacted "not because the three plants are losing money, but because they are not profitable enough."<sup>3</sup> Even then PSEG CEO, Ralph Izzo, conceded in 2018 in an editorial board meeting that an annual \$300 million ZEC would provide an 18% return on investment.<sup>4</sup> Now is the time to take a hard look at the ZECs based on current data from the PJM Independent Market Monitor ("PJM IMM") and federal support on its way for nuclear power plants.

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<sup>3</sup> Transcript, In The Matter of BPU Agenda Item 9A, April 18, at p. 27.

<sup>4</sup> See, <https://www.northjersey.com/story/news/watchdog/2018/02/21/nuclear-plants-profitable-should-nj-electric-consumers-asked-pay-more/336011002/>

Specifically, despite the challenging economic circumstance for all power generators in PJM, the PJM IMM has reported significant forward unit surplus earnings of the Hope Creek, Salem I and Salem II power plants and these earnings indicate that these plants are producing tremendous revenues that are more than sufficient to justify their continued operations without any further ZEC subsidies. As the below charts show, in 2019 and 2020, the PJM IMM reported for Hope Creek forward unit surplus earnings of \$14.4 million and \$30.6, respectively. Salem I and Salem II forward unit surplus earnings for 2019 and 2020 were \$23.2 million and \$54.9 million, respectively. In 2021 and 2022, forward unit surplus earnings increased tremendously with the PJM IMM reporting that Hope Creek had forward unit surplus of \$169.3 million, and \$346.9 million, respectively, and the IMM also showed the forward unit surplus of revenues including subsidies of \$263.5 million in 2021 and \$440 million in 2022. Similarly, Salem I and Salem II had surplus forward unit earnings in 2021 of \$329.5 million and \$674 million in 2022, and \$516.7 million with the subsidies included in 2021, and in 2022 \$863.4 million with the subsidies included.

**Table 7-46 Nuclear unit forward annual surplus (shortfall)**

	ICAP (MW)	Surplus (Shortfall) (\$/MWh)		Surplus (Shortfall) (\$ in millions)	
		2020	2021	2020	2021
Beaver Valley	1,808	\$0.92	\$3.41	\$13.6	\$50.3
Braidwood	2,337	\$3.02	\$4.09	\$57.8	\$78.1
Byron	2,300	\$2.00	\$3.05	\$37.7	\$57.2
Calvert Cliffs	1,708	\$2.29	\$4.76	\$32.0	\$66.4
Davis Besse	894	(\$12.10)	(\$8.79)	(\$88.7)	(\$64.2)
Dresden	1,797	\$3.57	\$4.67	\$52.5	\$68.7
Hope Creek	1,172	\$1.50	\$3.52	\$14.4	\$33.7
LaSalle	2,271	\$2.82	\$3.89	\$52.5	\$72.2
Limerick	2,242	\$1.28	\$3.30	\$23.5	\$60.4
North Anna	1,892	\$1.61	\$4.13	\$24.9	\$63.9
Peach Bottom	2,347	\$0.66	\$2.63	\$12.7	\$50.4
Perry	1,240	(\$11.50)	(\$8.14)	(\$116.9)	(\$82.5)
Quad Cities	1,819	\$0.77	\$1.82	\$11.5	\$27.0
Salem	2,328	\$1.22	\$3.24	\$23.2	\$61.6
Surry	1,676	\$0.81	\$3.32	\$11.1	\$45.5
Susquehanna	2,520	(\$3.24)	(\$1.07)	(\$67.0)	(\$21.9)

Source: PJM IMM State of Market Report 2019<sup>5</sup>

<sup>5</sup> See, PJM Independent Market Monitor, Monitoring Analytics 2019 State of Market Report at [https://www.monitoringanalytics.com/reports/PJM\\_State\\_of\\_the\\_Market/2019/2019-som-pjm-sec7.pdf](https://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2019/2019-som-pjm-sec7.pdf) at p. 27 of Section 7 and p. 353 of full report.

**Table 7-46 Nuclear unit forward annual surplus (shortfall)**

	ICAP (MW)	Surplus (Shortfall)	
		(\$/MWh)	(\$ in millions)
		2021	2021
Beaver Valley	1,808	\$3.13	\$47.4
Braidwood	2,337	\$4.05	\$79.0
Byron	2,300	\$3.23	\$62.4
Calvert Cliffs	1,708	\$4.54	\$64.5
Davis Besse	894	(\$5.83)	(\$41.7)
Dresden	1,797	\$4.81	\$71.8
Hope Creek	1,172	\$3.11	\$30.6
LaSalle	2,271	\$3.91	\$74.1
Limerick	2,242	\$2.76	\$52.1
North Anna	1,892	\$3.61	\$57.0
Peach Bottom	2,347	\$2.64	\$52.3
Perry	1,240	(\$5.90)	(\$58.6)
Quad Cities	1,819	\$1.33	\$21.1
Salem	2,328	\$2.80	\$54.9
Surry	1,676	\$2.69	\$38.0
Susquehanna	2,520	(\$1.33)	(\$25.6)

Source: PJM IMM State of the Market Report 2020<sup>6</sup>

**Table 7-46 Nuclear unit forward annual surplus (shortfall)**

ICAP (MW)	Surplus (Shortfall)		Surplus (Shortfall)		
	Subsidy	Excluding Subsidy	Including Subsidy	Including Subsidy	
	(\$/MWh)	(\$/MWh)	(\$ in millions)	(\$ in millions)	
	2022	2022	2022	2022	
Beaver Valley	1,808	\$19.94		\$291.6	\$291.6
Braidwood	2,337	\$20.90	\$0.00	\$394.8	\$394.8
Byron	2,300	\$19.24	\$0.00	\$357.8	\$357.8
Calvert Cliffs	1,708	\$24.36		\$336.3	\$336.3
Davis Besse	894	\$7.95		\$58.0	\$58.0
Dresden	1,797	\$21.63	\$0.00	\$314.2	\$314.2
Hope Creek	1,172	\$17.86	\$10.00	\$169.3	\$263.5
LaSalle	2,271	\$20.63	\$0.00	\$378.6	\$378.6
Limerick	2,242	\$17.91		\$324.7	\$324.7
North Anna	1,892	\$23.30		\$356.4	\$356.4
Peach Bottom	2,347	\$17.87		\$339.1	\$339.1
Perry	1,240	\$8.90		\$89.9	\$89.9
Quad Cities	1,819	\$17.70	\$16.50	\$260.3	\$501.7
Salem	2,328	\$17.50	\$10.00	\$329.5	\$516.7
Surry	1,676	\$22.83		\$309.3	\$309.3
Susquehanna	2,520	\$14.10		\$287.8	\$287.8

Source: PJM IMM State of Market Report 2021<sup>7</sup>

<sup>6</sup> See, PJM Independent Market Monitor, Monitoring Analytics 2020 State of Market Report at [https://www.monitoringanalytics.com/reports/PJM\\_State\\_of\\_the\\_Market/2020/2020-som-pjm-sec7.pdf](https://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2020/2020-som-pjm-sec7.pdf) at p. 29 of Section 7 and p. 361 of full report

<sup>7</sup> See, PJM Independent Market Monitor, Monitoring Analytics 2021 State of Market Report at [https://www.monitoringanalytics.com/reports/PJM\\_State\\_of\\_the\\_Market/2021/2021-som-pjm-sec7.pdf](https://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2021/2021-som-pjm-sec7.pdf) at p. 28 of Section 7 and p.390 of full report.

**Table 7-51 Nuclear unit forward annual surplus (shortfall)**

	ICA	Surplus (Shortfall) (\$/MWh)	Subsidy (\$/MWh)	Surplus (Shortfall) Excluding Subsidy (\$ in millions)	Surplus (Shortfall) Including Subsidy (\$ in millions)
	(MW)	2023	2023	2023	2023
Beaver Valley	1,808	\$52.90		\$775.5	\$775.5
Braidwood	2,337	\$44.44	\$0.00	\$801.3	\$801.3
Byron	2,300	\$39.48	\$0.00	\$694.0	\$694.0
Calvert Cliffs	1,726	\$62.47		\$891.5	\$891.5
Davis Besse	894	\$41.88		\$300.1	\$300.1
Dresden	1,797	\$45.79	\$0.00	\$636.3	\$636.3
Hope Creek	1,172	\$37.82	\$10.00	\$346.9	\$444.0
LaSalle	2,265	\$43.98	\$0.00	\$767.8	\$767.8
Limerick	2,242	\$42.46		\$749.8	\$749.8
North Anna	1,892	\$60.02		NA	NA
Peach Bottom	2,550	\$42.41		\$851.8	\$851.8
Perry	1,240	\$44.60		\$444.2	\$444.2
Quad Cities	1,819	\$36.92	\$16.50	\$510.3	\$759.0
Salem	2,285	\$37.70	\$10.00	\$674.0	\$863.4
Surry	1,676	\$58.74		NA	NA
Susquehanna	2,494	\$40.49		\$833.9	\$833.9

Source: PJM IMM State of the Market Report 2022 <sup>8</sup>

This information reported by the PJM IMM tells a clear story and the numbers make it obvious that New Jersey ratepayers do not need to be subsidizing nuclear plants. The PJM IMM shows that that the plants receiving ZECs in New Jersey are producing revenues that are more than sufficient to justify their continued operations without ZECs and the ZEC payments are simply padding the bottom line of these otherwise profitable units.

Furthermore, the Board should also be mindful that nuclear plants are expected to receive federal tax credits as a result of the passage in the Fall of 2022 of the Inflation Reduction Act (“IRA”). This act provides a tax credit up to \$15 per megawatt-hour for the electricity produced by the plants assuming that labor and wage requirements are met. The production tax credit is available for facilities in service in 2024 and would last through 2032.<sup>9</sup>

<sup>8</sup> See, PJM Independent Market Monitor, Monitoring Analytics 2022 State of Market Report at [https://www.monitoringanalytics.com/reports/PJM\\_State\\_of\\_the\\_Market/2022/2022-som-pjm-sec7.pdf](https://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2022/2022-som-pjm-sec7.pdf) at p. 29 of Section 7 and p. 425 of full report.

<sup>9</sup> See, <https://www.energy.gov/ne/articles/inflation-reduction-act-keeps-momentum-building-nuclear-power>

Clearly it is time for the New Jersey ZECs to end based on the ability of nuclear power plants to operate with high earnings without the subsidies as the past several years have shown, as well as based on the federal tax credits that will soon be available to nuclear power plants. Although Board Staff has found that currently duplicative funds may not have been received, in the near future they certainly will be if ZEC payments are not ended. The Board owes it to the ratepayers of New Jersey to stop any further ZECs from being paid and avoid any double counting and unnecessary costs to be borne by New Jersey consumers. To continue ZEC payments will be an unnecessary wealth transfer from homes and businesses of New Jersey to the two owners of New Jersey's nuclear facilities.

P3 urges the Board to review, reassess and reevaluate the revenues the plants have without the ZECs and the additional federal revenues on their way. The time is now to end the NJ ZEC payments and avoid windfalls and double payments at the expense of New Jersey ratepayers.

P3 respectfully requests that the Board and Board Staff consider its comments herein.

Respectfully submitted,

On behalf of the PJM Power Providers Group

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