**SUPERIOR COURT OF NEW JERSEY**
**APPELLATE DIVISION**
Docket No. A-003939-18

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| In the Matter of the Implementation of L. 2018, C. 16 Regarding the Establishment of a Zero Emission Certificate Program for Eligible Nuclear Plants<br><br>Application for Zero Emission Certificates of Salem 1 Nuclear Power Plant<br><br>Application for Zero Emission Certificates of Salem 2 Nuclear Power Plant<br><br>Application for Zero Emission Certificates of Hope Creek Nuclear Power Plant | ) | APPELLATE DIVISION<br>**Docket No. A-003939-18**<br>Civil Action<br><br>On Appeal from the Order of the New Jersey Board of Public Utilities in:<br><br>Docket Nos. EO18080899, EO18121338, EO18121339 EO18121337 |

# BRIEF OF APPELLANT NEW JERSEY DIVISION OF RATE COUNSEL

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## PRELIMINARY STATEMENT

This appeal challenges the April 18, 2019 decision by the New Jersey Board of Public Utilities to approve a subsidy of approximately $300 million per year to be paid by New Jersey electricity customers to the owners of three nuclear power plants. The subsidy was granted even though these units were deregulated in 1999 and Public Service Electric and Gas Company was already paid $2.94 billion to cover the "stranded costs" that were claimed to have resulted when its generating assets, including its interests in the three plants, were "sold" to an unregulated affiliate. Moreover, the challenged subsidy was granted even though the units have been wildly profitable since 1999 and the plants' new owners were permitted to keep all of those profits.

Most importantly, the subsidy was granted despite the findings of four separate independent entities that these units continue to be profitable today, even if the units are not making the level of profit their owners desire. It is clear the Board believed the owners would follow through with their threat to close the units unless all three plants were awarded subsidies, and it acted out of fear of losing such a significant source of carbon-free generation. As Commissioner Robert Gordon

stated "In my view, the Board is being directed to pay ransom and the hostages are the citizens of New Jersey." (Aa742)

The statute authorizing these subsidies is clear that to be eligible for a subsidy, a nuclear power plant must show that it is projected to not fully cover its costs and risks, and that it will cease operations within three years unless it experiences a material financial change. The statutory criteria were analyzed in depth by BPU Staff, an expert consultant hired by BPU Staff (Levitan and Associates), the New Jersey Division of Rate Counsel's expert consultants, and the Independent Market Monitor for PJM, the regional grid operator that serves New Jersey. All of these experts found that the nuclear units that applied for subsidies were projected to cover their costs fully, leading BPU technical Staff to conclude that the applicants failed to satisfy the financial need criterion in the statute and recommend that the Board reject the subsidies. The analyses performed by Levitan, Rate Counsel, and the PJM Independent Market Monitor all reached the same conclusion.

Despite the unanimous conclusions of the experts who reviewed the applications, the BPU granted the subsidies because they "believed" the units' owners would shut down the units absent such relief. In other words, the decision was not based on the extensive record or the criteria in the statute, but on a high stakes game of "chicken." If a company's threat to deprive

the state of its services is sufficient to justify this subsidy despite the failure to satisfy the statutory threshold, then the ratepayers of this state truly are being held captive. This cannot be the intent of the legislature and the BPU's decision must therefore be viewed as arbitrary and capricious.

Moreover, the Board concluded that it was powerless to reduce the level of the subsidy awarded, thereby abrogating its obligation to ensure that rates charged are "just and reasonable." Rather than analyzing whether its competing statutory mandates could be harmonized, the BPU chose to follow an interpretation of the statute that overrides its long-standing statutory obligation to ensure just and reasonable rates. In fact, a majority of BPU Commissioners opined that the rate set in the statute resulted in rates that were not just and reasonable. The Board's approval of an unjust and unreasonable rate is a further reason why the Board's decision in this case must be overturned.

As stated by Commissioner Chivukula in his dissent, the process applied here sets a "dangerous precedent" that "sidesteps the typical checks and balances established by historical Board regulatory action" to the detriment of the ratepayers of this state. (Aa620) The Board's approval of ZECs in this case was arbitrary and capricious and not supported by the record. It should be overturned.

## STATEMENT OF FACTS AND PROCEDURAL HISTORY[1]

### Introduction[2]

In the Board Order that is the subject of this appeal, three nuclear generating units located in Salem County, New Jersey: Salem I, Salem II, and Hope Creek, were selected to be eligible to receive "Zero Emissions Certificates" or "ZECs" under P.L. 2018, c. 16, N.J.S.A. 48:3-87.3 et seq. (the "ZEC Statute") All three of the nuclear generating units selected to

[1] The Procedural History and Facts of this matter are intertwined and therefore are set forth in a combined statement.

[2] The parties and other entities will be referred to in this brief as follows:

"BPU" or the "Board" refers to the New Jersey Board of Public Utilities.

"BPU Staff" or "Staff" refers to the Staff of the Board of Public Utilities.

"Exelon" refers to Exelon Generation Company, LLC.

"Levitan" refers to Levitan and Associates.

"NJDEP" refers to the New Jersey Department of Environmental Protection.

"P3" refers to the PJM Power Producers Group.

"IMM" refers to the Independent Market Monitor for PJM.

"PJM" refers to PJM Interconnection, Inc.

"PSEG" refers to the Public Service Enterprise Group.

"PSEG Power" refers to PSEG Power, LLC.

"PSEG Nuclear" refers to PSEG Nuclear, LLC.

"PSE&G" refers to Public Service Electric and Gas Company.

"Rate Counsel" refers to the New Jersey Division of Rate Counsel

receive ZECs are operated by PSEG Nuclear, a subsidiary of PSEG. (Aa084, Aa100, Aa107)[3] PSEG is a New Jersey corporation reporting over $28 billion in assets as of the end of 2017. (Aa088, Aa091-Aa092) PSEG Nuclear is wholly owned by PSEG Power a Delaware Limited Liability Company that is, in turn, wholly owned by PSEG. (Aa087, Aa088, Aa089) PSEG Nuclear is the sole owner of the Hope Creek unit. (Aa082) Salem I and Salem II are jointly owned by PSEG Nuclear and Exelon. (Aa094, Aa104) PSEG Nuclear has the exclusive authority to make decisions regarding the retirement of all three units. (Aa084, Aa100, Aa107)

Rate Counsel, appellant in this appeal, is the statutory representative of the State's utility ratepayers. N.J.S.A. 52:27EE-48. Rate Counsel was an intervenor as of right in the proceedings below. Id. (Aa019-Aa020, Aa024-Aa025)

As defined by the ZEC Statute, a ZEC is a certificate issued by the Board or its designee that represents the "fuel diversity, air quality, and other environmental attributes" of a megawatt-hour of nuclear power. N.J.S.A. 48:3-87.4. Under the Board Order issued below, each unit will receive one ZEC for each megawatt-hour of electricity that it generates for approximately the next three years and, potentially, for an

[3] References to the non-confidential volumes of Appellant's Appendix will be cited herein as "Aa___." References to the confidential volumes of Appellant's Appendix will be cited as "Aca___."

indefinite number of additional three-year periods thereafter. N.J.S.A. 48:3-87.5(h)(1) & (2). The three units will be paid for the ZECs they receive from the proceeds of a "non-by-passable, irrevocable" surcharge of $0.004 (four-tenths of one cent) on every kilowatt-hour (kWh) of electricity that is distributed to retail customers of New Jersey's electric public utilities. N.J.S.A. 48:3-87.5(j)(1). According to estimates presented at the legislative hearings on the ZEC Statute, the surcharge is expected to result in collections of approximately $300 million annually for the next three years.[4]

**Electric Restructuring and Stranded Costs**

The ZEC Statute, and the proceedings below, arose against the historical backdrop of the restructuring of New Jersey's electric public utilities following passage of the Electric Discount and Energy Competition Act in 1999. N.J.S.A. 48:3-49 et seq. ("EDECA"). Until the enactment of EDECA, the State's electric utilities were vertically integrated entities that owned both the electric power plants and the wires, poles, substations, and related facilities and equipment used to

[4] E.g., Remarks of Stefanie A. Brand, Director, Division of Rate Counsel, Regarding S877 and A2850 (Establishes Nuclear Diversity Certificate Program) Presented at the Joint Meeting of the Senate Budget and Appropriations Committee and the Assembly Telecommunications Committee, p. 2 (Feb. 22, 2018), available at: https://www.state.nj.us/rpa/docs/S877 A2850 testimony 2 22 2018.pdf.

distribute electricity to their customers. See, N.J.S.A. 48:3-50(a). With the enactment of EDECA, the BPU was directed to separate the electric public utilities' generation functions from their transmission and distribution functions. The electric utilities retained their regulated monopoly over electricity transmission and distribution, while most of their generation assets were spun off to unregulated entities, and non-utility electric power suppliers were allowed to compete to provide generation. N.J.S.A. 48:3-52, N.J.S.A. 48:3-53, N.J.S.A. 48:3-59. The goal of EDECA was to place more reliance on the competitive market for generation with a goal of lowering electricity prices for consumers. N.J.S.A. 48:3-50(a).

Pursuant to EDECA, the State's electric utilities divested most of their generation facilities, while continuing to deliver electricity to their customers. Other utilities sold their electric generation facilities to unaffiliated entities following arms-length negotiations. However, PSEG's electric and gas utility subsidiary, PSE&G, transferred its electric generation assets, including its interests in the Salem 1 and 2 and Hope Creek nuclear units, to an affiliate, PSEG Power. In re Public Service Elec. and Gas Company's Rate Unbundling, Stranded Costs and Restructuring Filings, 330 N.J. Super. 65, 112-13 (App. Div. 2000), aff'd 167 N.J. 377, cert. denied 534 U.S. 813 (2001). Because PSE&G's generation plants were not

sold in the open market, the plants' valuation was administratively determined by the Board. In re Public Serv. Elec. & Gas Company's Rate Unbundling, 167 N.J. 377, 390-91, cert. denied 534 U.S. 813 (2001). EDECA also permitted the recovery from ratepayers of stranded costs, i.e., the difference between the book value of the utilities' generation assets for ratemaking purposes and the market value of those assets. N.J.S.A. 48:3-51; N.J.S.A. 48:3-61(a)(1). PSE&G was ultimately permitted by the Board to recover approximately $2.94 billion in stranded costs, most of which was attributable to the company's interests in the Salem 1, Salem 2, and Hope Creek nuclear units. In re Public Service Electric and Gas Company's Rate Unbundling, Stranded Costs and Restructuring Filings, 1999 N.J. PUC Lexis 11 at *24-25, *252 (1999), aff'd 330 N.J. Super. 112 (App. Div. 2000), aff'd 167 N.J. 377, (2001) ("PSE&G Unbundling Order").

The terms and conditions of the divestiture were based on a non-unanimous Stipulation that was approved by the Board, with certain modifications and clarifications, over the objections of Rate Counsel and other parties. PSE&G Unbundling Order, supra, 1999 N.J. PUC Lexis 11 at *220-23. The Board used the non-unanimous Stipulation as a framework for resolution in part because it included benefits for the utility's captive ratepayers including the transfer of "any risks or liabilities associated with the electric generation business" from the

regulated utility to the unregulated affiliate. PSE&G Unbundling Order, supra, 1999 N.J. PUC Lexis 11 at *307-08, par. 27.

By 2005, it became clear that the transferred nuclear units had been grossly undervalued. As shown in a slide presentation submitted in support of the applications filed with the Board below, PSEG Power's nuclear production costs were well below daily energy prices from at least 2005 to 2013. (Aa370-Aa372, Aa425) Despite these profits, as of 2013, 6.6 percent of residential ratepayers' electricity bills consisted of "securitization" charges intended to compensate PSE&G for "stranded" costs. (Aa371-Aa372, Aa442). The "securitization" charges continued to be collected until 2015. (Aa372, Aa442)

**The ZEC Statute**

On December 4, 2017 the Senate Energy and Environment Committee and the Assembly Telecommunications Committee held a joint session to discuss "Strategies to Prevent the Premature Retirement of Nuclear Power Plants." On December 14, 2017, S3560/A5330 was introduced to establish a "Nuclear Diversity Certificate Program."[5] In the hearings held on this bill, the primary supporter of the legislation and the first witness other

[5] S3560 (Dec. 14, 2017)is available at: https://www.njleg.state.nj.us/2016/Bills/S4000/3560_I1.PDF. A5330 (Dec. 14, 2017) is available at: https://www.njleg.state.nj.us/2016/Bills/A9999/5330_I1.PDF.

than the sponsors, was PSEG's President Ralph Izzo.[6] The bill did not pass during the 2016-2017 legislative session, but a virtually identical new bill, S877/A2850, was introduced in January 2018.[7]

Hearings on the bill and various amendments, were held in the Senate Environment and Energy Committee, Assembly Telecommunications and Utilities Committee and the Senate Budget and Appropriations Committee in January and February, 2018. Throughout this process, the sponsors of the bill described it as one that would enable a proceeding in which the Board would make an independent determination of the need for subsidies based on financial records to be submitted by the applicants. For example, at the hearing before the Senate Energy and Environment Committee on January 25, 2018, Primary Sponsor and Senate President Stephen Sweeney stated: "This creates one thing--a process of review where PSEG will show their books to

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[6] Transcript of December 4, 2017 Joint Committee Meeting, p. 8-13, available at https://www.njleg.state.nj.us/legislativepub/pubhear/senatu12042017.pdf; and Transcript of December 20, 2017 Joint Committee Meeting, p. 5-10, available at https://www.njleg.state.nj.us/legislativepub/pubhear/senatu12202017.pdf.

[7] S877 (Prefiled for Introduction in the 2018 Session) (available at: https://www.njleg.state.nj.us/2018/Bills/S1000/877_I1.PDF). A2850 (Feb. 1, 2018), which included a number of changes and added several clean energy provisions that were later removed to a separate bill, is available at: https://www.njleg.state.nj.us/2018/Bills/A3000/2850_I1.PDF.

the BPU and BPU has the authority and ability to make a determination at that point. There is no guarantee here."[8] A bill substantially identical to the one considered in the January and February 2018 legislative hearings, with the clean energy provisions omitted (S2313/A3724), was ultimately passed in April, 2018 and was signed into law by the Governor on May 23, 2018. P.L. 2018, c. 16.

The ZEC Statute provides for the award of ZECs to a limited number of nuclear units, with annual production totaling no more than 40 percent of total electricity distributed by New Jersey's electric distribution utilities in Energy Year 2018 (June 1, 2017 through May 31, 2018). N.J.S.A. 48:3-87.5(g)(1).[9] Owners of nuclear power plants were required to apply to the Board no later than December 19, 2018 to be selected to receive ZECs. N.J.S.A. 48:3-87.5(c). In order to qualify, a plant was required to meet five separate requirements:

1. The plant must be licensed to operate by the United States Nuclear Regulatory Commission through at least 2030;

2. The applicant must demonstrate that the plant "makes a significant and material contribution to the air

[8] The audio of the hearing is available at: https://www.njleg.state.nj.us/media/mp.asp?M=A/2018/SEN/0125-1000AM-M0-1.M4A&S=2018. The referenced statement is located at 16:46.

[9] An "energy year" is defined in EDECA as "the 12-month period from June 1st through May 31st, numbered according to the calendar year in which it ends." N.J.S.A. 48:3-51.

quality in the State by minimizing emissions that result from electricity consumed in New Jersey" and that retirement of the plant would "significantly and negatively affect New Jersey's ability to comply with State air emission reduction requirements;"

3. The applicant must demonstrate that the plant's "fuel diversity, air quality and other environmental attributes" are at risk of loss because, based on projected financial results, the plant "will cease operations within three years unless the nuclear plant experiences a material financial change;"

4. The applicant must certify that the plant does not receive other direct or indirect payments that eliminate the need for a subsidy; and

5. The applicant must pay an application fee set by the Board but not to exceed $250,000.

N.J.S.A. 48:3-87.5(e).

The statute provided a 120-day period, ending on April 18, 2019, to review the applications and prepare a rank-ordered list of qualified units, based on "how well" they satisfied the statutory criteria and "other relevant factors." N.J.S.A. 48:3-87.5(d), N.J.S.A. 48:3-87.5(f). The Board was directed to select units in rank order, until the point at which the addition of the next-ranked unit would cause the total electric production of the selected units to exceed 40 percent of the electricity distributed in New Jersey in Energy Year 2018. N.J.S.A. 48:3-87.5(g)(1).

If selected, units became eligible to receive ZECs for an initial eligibility period that runs through the end of the energy year when the unit is selected, and the next three energy

years. N.J.S.A. 48:3-87.5(h)(1). Thereafter, the selected units may apply to receive ZECs for additional 3-year eligibility periods. N.J.S.A. 48:3-87.5(h)(2).

The ZEC Statute sets the rate surcharge collected from all electric public utility customers to fund the ZEC program at $0.004 per kWh for the duration of the initial three-year eligibility period. N.J.S.A. 48:3-87.5(j)(1). During subsequent eligibility periods, the statute provides that the Board may lower the rate if it finds that a lower charge will be sufficient to prevent the retirement of the selected nuclear units. N.J.S.A. 48:3-87.5(j)(3)(a). Such determinations must be made by the Board not later than 13 months prior to the commencement of the applicable eligibility period. N.J.S.A. 48:3-87.5(j)(3)(b).N.J.S.A. 48:3-87.5(k)(1).

The value of the ZECs for each energy year is determined by the amount held in the accounts established to receive the proceeds of the surcharge as of the end of that energy year. The value of a ZEC for each energy year is determined by dividing the amount in the account by the greater of: (1) 40 percent of the total number of megawatt-hours distributed by New Jersey's electric public utilities during that energy year, or (2) the actual number of megawatt-hours generated during the energy year by the selected nuclear units. N.J.S.A. 48:3-87.5(i)(1). If a selected unit receives revenues as a result of

federal or state action for its "fuel diversity, resilience, air quality or other environmental attributes," that amount is deducted from the amount that would otherwise be paid to the unit. N.J.S.A. 48:3-87.5(i)(3).

Selected units are required to certify as part of the application process, and annually thereafter, that they will operate at full capacity except for maintenance and re-fueling during the current eligibility period. N.J.S.A. 48:3-87.5(h)(3). However, the legislation excuses a unit from this obligation for reasons including "significant" new taxes or assessments, other state or federal laws that materially reduce the value of ZECs, the Board's exercise of its discretion to reduce the ZEC surcharge, or required capital expenditures exceeding $40 million. N.J.S.A. 48:3-87.5(k)(1).

**Proceedings Before the BPU**

On December 19, 2018, applications to receive ZECs were filed on behalf of the Salem I, Salem II, and Hope Creek nuclear generating units. (Aa601). Although the ZEC Statute did not limit eligibility to nuclear units located within New Jersey, the Board did not receive applications from out-of-state units.

Petitions to intervene or participate were filed by the following entities:

1. Rate Counsel, Appellant in this appeal, the statutory representative of New Jersey's public utility ratepayers was an intervenor as of right. N.J.S.A. 52: 27EE-48 (Aa018-Aa019)

2. The IMM, which monitors the competitiveness of the wholesale electric markets operated by PJM, a regional transmission organization that coordinates the movement of electricity in thirteen states including New Jersey, moved to intervene. (Aa019-Aa020)

3. The New Jersey Large Energy Users Coalition, an association whose members include large volume electric customers served by New Jersey's electric distribution utilities, moved to intervene (Aa049)

4. NRG Energy, Inc., an electric generation provider that participates in the PJM wholesale market, moved to participate. (Aa051)

5. P3, a nonprofit organization made up of power providers that participate in the PJM markets, moved to intervene. (Aa052)

6. PSE&G, PSEG Nuclear, and PSEG Power filed a joint motion to intervene. (Aa049, Aa053)

The Board granted intervenor status to only two of the movants: Rate Counsel and the IMM. (Aa024, Aa026) The remaining movants were granted participant status, with the right to file briefs, including comments on the applications. (Aa055-Aa058)

Under the ZEC Statute, access to information deemed confidential by the applicants is limited to entities that are jointly determined by the Board and the New Jersey Attorney General to be "essential" to aid the Board in making the statutorily required determinations. N.J.S.A. 48:3-87.5(a). Only Staff, Rate Counsel and the IMM were granted access to confidential information. (Aa010-Aa011, Aa024-Aa25, Aa026))

During December 2018 and January 2019 Rate Counsel propounded discovery and the applicants provided responses. (Aa605). On January 31, 2019, the deadline established by the Board for comments on the applications, Rate Counsel filed comments and supporting Certifications in opposition to the issuance of ZECs. (Aa360-Aa529, Aa602). Rate Counsel's comments also argued that the ZEC Statute should be interpreted as allowing the Board to reduce the ZEC surcharge during the initial eligibility period if it finds that $0.004 per kWh is unjust and unreasonable. (Aa413-Aa416, Aa603) Comments opposing

the issuance of ZECs were also filed by intervenor the IMM and by participants NJLEUC and P3. (-Aa148, Aa149-Aa180, Aa181-Aa359) Responsive comments were filed by PSEG Nuclear on February 14, 2019. (Aa530-Aa573) Subsequently, additional comments were submitted by several parties. (Aa574-Aa592, Aa523-Aa598; see Aa605)

On December 18, 2018 the Board approved the selection of an expert consultant, Levitan & Associates ("Levitan") to assist the Board's Staff in its review of the applications. (Aa601) The BPU's Staff subsequently propounded information requests, and received responses from the applicants.(Aa622, Aa639, Aa655) On April 8, 2019, Levitan issued a confidential report containing the results of its evaluation of the eligibility of the applicant plants to receive ZECs. (Aa672) Based on its independent analysis of the expected costs and revenues for each of the three units, Levitan concluded that all were profitable without subsidies. (Aa674-Aa676)

No evidentiary hearings were held in this matter. Instead, the information contained in the applications and the various other submissions to the Board were reviewed by an "Eligibility Team" that included representatives of Staff, the New Jersey Department of Environmental Protection ("NJDEP"), and Levitan. (Aa601, Aa622, Aa639, Aa655) The results of this review were presented to the Board in three confidential memoranda from

Staff dated April 17, 2019—one for each of the three nuclear units seeking to receive ZECs. (Aa621, Aa638, Aa654) These memoranda, along with Levitan's report and a memorandum containing NJDEP's comments on the ZEC applications (Aa714), were appended to and made part of the Order below. (Aa606) The Board Order was issued in both a Confidential form, containing complete confidential versions of the attached memoranda and report, and a Public form, containing redacted version of the attachments. (Aa599-Aa715, Aca294-Aca406)

The conclusions of the three Staff memoranda with regard to the need for subsidies were substantially identical: none of the units satisfied the financial criteria in the ZEC Statute. (Aa633, Aa651, Aa668) In all three memoranda, Staff found that the applicants inflated the projected costs of continuing to operate the units by (1) including operational and market risks as "costs," with no evidence that these are true costs that are reflected in the applicants' regularly filed financial statements and no evidence to show what portion, if any, of such "costs" would be avoided by ceasing operation; (2) including labor and non-labor costs that would not be avoided by ceasing operation; and (3) including a federal spent fuel fee that was discontinued in 2014. (Aa627-Aa633, Aa644-Aa651, Aa661-Aa668) With adjustments to correct for these flaws, Staff concluded that the projected revenues from each of the three units was

more than sufficient to cover the units' avoidable costs from June 2019 through May 2022. (Aa632-Aa633, Aa650-Aa651, Aa666-Aa667, Aca328, Aca344, Aca359-Aca360)

In addition, Staff noted that even these adjusted "costs" reflected some "inconsistencies or questionable approaches" such as (1) assuming that the costs of all capital projects including multi-year projects would be fully charged or accrued and fully recovered in the year the project was initiated; and (2) including projected costs for "Support Service and Fully Allocated Overhead" that were not consistent with historical costs. Such "unusual treatments of cost" led Staff to conclude that "as a general matter, the costs provided by [the applicants] appear to be inflated to maximize higher projected costs that are contrary to their own historical representations." (Aa633, Aa650-51, Aa667, Aca328-Aca329, Aca344-Aca345, Aca360) Finally, Staff noted that its analysis of the units' profitability did not consider the potential additional revenues that would result from market changes under consideration by PJM or revenues that could result if PSEG Nuclear continues its past practice of selling capacity from the Hope Creek unit into the New York capacity market. (Aa632-Aa633, Aa650, Aa666-Aa667)

With regard to the environmental impact if the plants were to close, Staff addressed both the short-term impact during the

initial ZEC eligibility period and longer-term impacts. For the short term, Staff concluded that the replacement generation for the nuclear plant would come mostly from fossil-fuel units and that accordingly there would be an increase in greenhouse gas and other emissions. (Aa624-Aa625, Aa642, Aa658-Aa659) Staff did not make a determination whether the air quality impacts would be "material." (Aa635, Aa652, Aa668) Staff found further that the closure of the plants would not significantly affect the State's ability to comply with greenhouse gas reduction requirements in 2020, but would make attainment of ozone reduction requirements more challenging. (Aa626, Aa642, Aa660) Over the longer term, Staff concluded that the impact of closure was less certain. Specifically, Staff found that closure would not likely affect the achievement of the State's energy goals for 2050, as the plants will likely close before 2050 in any event, and the "environmental landscape is expected to change significantly" over the longer term. (Aa626, Aa643-Aa644, Aa660)

Based on the findings summarized above, Staff concluded that the applicants had not shown a need for financial assistance to continue operating, and, accordingly, none of the units had demonstrated eligibility for ZECs. Staff therefore recommended denial of ZECs to all three units. (Aa636, Aa653, Aa669-Aa670)

The applications were considered by the Board at its April 18, 2019 open public meeting. Following Staff's presentation of the recommendations contained in its April 17, 2019 memoranda, the Commissioners proceeded to a discussion of the three applications. (Aa729) While none of the five Commissioners appeared to question the factual accuracy of Staff's findings, four of them voted to award ZECs. (Aa758, Aa760) Three Commissioners stated that they were voting to award ZECs because they believed PSEG's threats to retire the units in the absence of a subsidy. President Fiordaliso stated that "PSEG has made it quite clear that they will not continue to operate the nuclear facilities absent the subsidies." (Aa724) Commissioner Gordon agreed with Staff's conclusion that "it is economically rational to keep those plants in operation" but believed that PSEG and Exelon would nevertheless shut them down "because they are not profitable enough." (Aa742-Aa743) Commissioner Holden was unwilling to "play the equivalent of a generation chicken game with our nuclear power plants." (Aa753) President Fiordaliso and Commissoners Solomon and Holden stated their belief that the ZEC Statute required consideration of operational and market risks notwithstanding Staff's findings and recommendations. (Aa732-Aa733, Aa752-Aa753) Commissioners Solomon and Gordon stated that a ZEC surcharge of four-tenths of one cent per kWh

appeared excessive, but that the ZEC Statute did not allow the Board to set a lower rate. (Aa739-Aa740, Aa742-Aa743)

Commissioner Chivukula voted against awarding the ZECs. He cited the submissions of Rate Counsel, the IMM and P3 concluding that the applicants did not qualify for ZECs, and letters from AARP and others that quantified the impact of the subsidies on commercial and residential customers. (Aa745-Aa746) He called the ZECs "highway robbery" perpetrated by "one of the most powerful companies in New Jersey" that imposed an "undue burden on the ratepayers of the State." (Aa748, Aa749-Aa750)

Following the April 18, 2019 meeting, the Board issued an Order awarding ZECs to the Salem I, Salem II, and Hope Creek nuclear units. With regard to the financial showing required by the ZEC Statute, the Board stated that it "appreciate[d]" its Staff's analysis (Aa612), but determined that it was required by the ZEC Act to consider operational and market risks "along with other outside factors, including fuel diversity, resiliency, and the impact of nuclear power plant retirement on RGGI, New Jersey's economy, carbon, and the Global Warming Response Act." (Aa613) The Board found that, "[h]ad the Eligibility team and [Levitan] considered the two risk factors as well as the other externalities, and had they reviewed the financial filings as submitted by the applicants, the plants would have been deemed eligible to receive subsidies, as a matter of fact." (Aa613)

The Board Order did not address whether the Board had authority to set the ZEC surcharge at a rate below $0.004 per kWh.

With regard to the environmental impact if the plants were to close, the Board found that there are not sufficient renewable energy resources to replace the loss of nuclear power and, therefore, "if all three units were to retire, the replacement power would increase carbon" in contravention of the State's goal to reduce carbon and other pollutants. (Aa613) The Board concluded that this would "make it more difficult for New Jersey to meet its obligations under the GWRA [Global Warming Response Act] and NAAQS [National Ambient Air Quality Standards] and to reach the State's goal of 100% clean energy by 2050." (Aa613)

The Order states that the Board also considered "the economic impacts to the region and to the state." (Aa613) Specifically, the Order discussed potential job losses in Salem County, and concluded that "[i]t could be argued that Salem County cannot afford this type of economic loss and that there are not enough employers in the county to support the layoffs from the closing units." (Aa613)

Commissioner Chivukula issued a dissent, finding there was "no need to disregard Board Staff's analysis that these plants should not receive ZEC incentives." (Aa620)

## ARGUMENT

### Standard of Review

While the Board's decisions are entitled to a measure of deference, they are not immune from judicial review. In re Petition of New Jersey American Water Company, 169 N.J. 181, 188 (2001). The courts are authorized to "review any order of the board and to set aside such order in whole or in part when it clearly appears that there was no evidence before the board to support the same reasonably or that the same was without jurisdiction of the board." Id. (quoting N.J.S.A. 48:2-46). Like all administrative decisions, BPU Orders must be based on credible evidence in the record, may not be arbitrary and capricious, and must be in accordance with applicable law. In re Musick, 143 N.J. 206, 216 (1996). There must be "substantial evidence in the record to support the findings upon which the agency based its application of legislative policies." Public Service Electric and Gas Company v. New Jersey Dept. of Envtl. Protection, 101 N.J. 95, 103 (1985) (citations omitted). Further, the record evidence in support of an agency's finding must be explained in the agency's decision.

> Application of this standard requires far more than a perfunctory review; it calls for careful and principled consideration of the agency record and findings. The administrative agency must set forth basic findings of fact supported by the evidence and supporting the ultimate conclusions and final determination so that the parties and any reviewing

> tribunal will know the basis on which the final decision was reached.
>
> Riverside Gen. Hosp. v. New Jersey Hosp. Rate Setting Comm'n, 98 N.J. 458, 468 (1985)(citations omitted).

Judicial deference to administrative agencies stems from the agency's technical expertise. See, In re Adoption of Amendments to Northeast, Upper Raritan, Sussex County, 435 N.J. Super 571, 583(App. Div.), certif. denied 219 N.J. 627 (2014)("[w]here an agency's expertise is a factor, a court defers to that expertise"). However, our Supreme Court has stressed that "judicial allegiance to the actions of administrative agencies is neither unlimited nor blind," and that "it is only 'in situations where agency expertise is essential towards understanding the proper context of a dispute [that] a deferential standard of review is appropriate.'" In re Alleged Improper Practice Under Section XI, Paragraph A(d) of the Port Authority Labor Relations Instruction, 194 N.J. 314, 332, cert. denied 555 U.S. 1069 (2008)(quoting In re Hunterdon County Bd. of Chosen Freeholders, 116 N.J. 322, 328 (1989)). Where expertise is not a "pertinent factor" in how the agency reached its decision, "no special deference need be afforded on that basis." 613 Corp. v. State, Div. of State Lottery, 210 N.J. Super 485, 496 (App. Div. 1986).

Thus, this Court's review should examine:

> (1) whether the agency's action violates express or implied legislative policies, that is, did the agency follow the law; (2) whether the record contains substantial evidence to support the findings on which the agency based its action; and (3) whether in applying the legislative policies to the facts, the agency clearly erred in reaching a conclusion that could not reasonably have been made on a showing of the relevant factors.
>
> In re Alleged Improper Practice, supra 194 N.J. at 331-332 (quoting In re Herrmann, 192 N.J. 19, 27, (2007)).

Where the agency's decision is "willful and unreasoning action, without consideration and in disregard of circumstances," it is arbitrary and capricious and should be overturned. In re Proposed Xanadu Redevelopment Project, 402 N.J. Super. 607, 642 (App. Div.), certif. denied 197 N.J. 260 (2008) (quoting Bayshore Sewer Co. v. Dept. of Envtl. Prot., 122 N.J. Super. 184, 199 (Ch. Div. 1973), aff'd 131 N.J. Super. 37 (App. Div.1974)).

Here, as will be argued below, the Board's determination to award ZECs to the Salem I, Salem II, and Hope Creek nuclear units was not based on its expertise. In fact, the decision was reached despite the expert conclusions reached by BPU Staff and the expert consultants hired by the Board. Moreover, the award of ZECs was based on the unit owners' threats to shut the units down, rather than on a proper analysis of the evidence in the record or the statutory criteria. As such, the Board's decision was arbitrary and capricious and should be overturned.

## POINT I

**THE BOARD'S DECISION TO APPROVE ZECs SHOULD BE REVERSED BECAUSE THE RECORD DOES NOT SUPPORT THE BOARD'S CONCLUSION THAT THE APPLICANTS SATISFIED THE STATUTORY CRITERIA. (Aa602-Aa603, Aa611-Aa614)**

In order to meet the financial criteria to qualify for ZECs, an applicant must:

> demonstrate to the satisfaction of the board ... that the nuclear power plant's fuel diversity, air quality, and other environmental attributes are at risk of loss because the nuclear power plant is projected to not fully cover its costs and risks, or alternatively is projected to not cover its costs including its risk-adjusted cost of capital, and that the nuclear power plant will cease operations within three years unless the nuclear power plant experiences a material financial change;
>
> N.J.S.A. 48:3-87.5(e)(3).

This provision allows the applicant to present its financial information in either of two ways, based on either "costs and risks" or "costs including its risk-adjusted cost of capital." The applicants here chose the former approach, including "operational risks" and "market risks" as part of each unit's "costs." (Aa674)

There is substantial analysis in the record on whether the applicants satisfy the financial criteria in the statute. PSEG's applications and discovery responses summarize the units' costs, including operation and maintenance costs and fuel costs. (Aca001-Aca007, Aca042-Aca048, Aca083-Aca089) PSEG also

"quantified" its operational risks by including a ten percent adder across the board to its projected operating costs.[10] (Aa543, Aca005, Aca046,Aca87) The applicants also attempted to "quantify" the "cost" of market risks, settling on a value of **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** (Aca014-Aca030, Aca055-Aca071, Aca096-Aca112) The company also calculated the subsidy claimed to be needed for each plant for the next five years in order to fully cover its costs and risks. (Aca008-013, Aca049-Aca054, Aca090-Aca095) Several other parties also conducted independent financial analyses and further reviewed the information submitted by the applicants. The IMM stated:

> The IMM's analysis focuses on the standard economics definition of whether an asset is receiving a retirement signal from the market. Under that definition, an asset is receiving a retirement signal from the market if the asset is not covering and is not expected to cover its avoidable costs on an annual basis. Avoidable costs are the costs incurred each year to keep a unit running. Avoidable costs include, for example, operation and maintenance expense but do not include the return on and of capital.
>
> (Aa153)(footnote omitted).

The IMM found that PSEG "understates forward energy revenues, understates capacity revenues, overstates costs and overstates the cost of risk," and concluded that "all three units are

[10] While the ten percent "adder" was claimed by PSEG Nuclear to be "confidential" in the application, PSEG Nuclear later disclosed this information in its Feburary 14, 2019 submission to the Board. (Aa543)

expected to more than cover their avoidable costs over the next three years," and that they "are expected to fully cover their costs and risks." (Aa156)

Similarly, Rate Counsel's consultants, Synapse Energy Economics, took issue with the applicants' calculation of forward energy and capacity prices and thus questioned PSEG's revenue estimates. (Aa488-Aa489, Aca252-Aca253) Rate Counsel's accounting consultant, Andrea Crane from the Columbia Group, questioned PSEG's exclusion of hedging revenues and tax benefits from the plants' projected revenues. (Aa471-Aa474, Aca235-Aca238) With regard to costs, Ms. Crane stated in her certification:

> a significant portion of the Company's overall claim for subsides relates not to objective and verifiable cost estimates, but to speculative risks. While the Legislature provided that these risks should be considered when evaluating whether or not a subsidy was required, they did not ensure recovery of these speculative costs from ratepayers.
>
> The Operational and Market Risks included in the Companies' analysis do not reflect an actual cost to the nuclear operators. Instead, these components are cost "cushions" designed to protect nuclear operators from potential additional costs (or lower revenues) if the Companies' forecasts turn out to be incorrect. Ratepayers should not be put in the position of having to guarantee owners of these deregulated facilities against either market uncertainty or operational risks, especially when the nuclear operators themselves control much of the risk relating to operations.
>
> (Aa460-Aa461, Aca224-Aca225)

Ms. Crane found the ten percent adder for operational risks to be arbitrary and one-sided, not taking into account the fact that operational costs could go down rather than up. (Aa461, Aca225) She also took issue with the quantification of market risks, which ignored the billions of dollars previously paid by ratepayers to address the risks to these plants when they were deregulated. (Aa462-Aa463, Aca226-Aca227) Further, she questioned PSEG's inclusion of capital expenditures on a "cash flow" basis rather than over their useful lives; the inclusion of a federal charge for spent fuel disposal even though that charge was suspended by Court Order in 2014; and the inclusion of costs for support services and overhead that would not be avoided if the nuclear units were to shut down. (Aa463-Aa471, Aca227-Aca235)

A certification submitted by P3 supported the IMM's position that the measure for determining whether a nuclear facility is sufficiently covering its costs and risks is to examine whether it is covering its avoidable costs. Utilizing publicly available data, P3's expert, Dr. Paul Sotkiewicz, the former Chief Economist in the Market Services Division of PJM, also concluded that the plants were covering their avoidable costs and thus the rational economic decision would be to keep the plants open. (Aa201-Aa203, Aa212-Aa219)

The Board's own Staff and its consultant, Levitan, also reviewed the information submitted by PSEG to quantify its costs and risks. Levitan found that some of the costs included by PSEG should be excluded, i.e., spent fuel costs, which it found are not true costs because they are "neither incurred nor accrued for future disbursement;" full labor costs at all three plants, since approximately half of the workforce would continue at the site for decommissioning; and non-labor costs, which Levitan estimated would also remain at a 50% level. (Aa675) Levitan also found that PSEG's quantification of market and operational risks should be excluded, stating:

> Operational and market risks are common and useful planning parameters but are not true costs that would be incurred by PSEG beyond their normal operations and maintenance ("O&M") costs. For example, historical PSEG financial data for Salem 1&2 and Hope Creek reflect actual costs incurred but do not include these risks as line item costs. We view operational and market risks as prudent downside contingencies that PSEG utilizes in its generation planning efforts, but not as true costs actually incurred.
>
> (Aa674-Aa675)

Levitan noted that PSEG's revenue projections had not reflected proposed changes in the PJM market which, if implemented, would provide an estimated combined benefit of approximately $12.3 million per year to the three nuclear units. (Aa675) Levitan concluded that once these adjustments were made, all three units are profitable. Levitan summarized its results as follows:

Table 2. Effect of Total Adjustments on Average Annual Plant Profitability, June 2019-May 2022
($ millions/year)

**[BEGIN CONFIDENTIAL]**

[redacted]

**[END CONFIDENTIAL]**
(Aca368)

Levitan also found a lack of compelling proof that the plants would close without subsidies, or, conversely that subsidies would assure continued operations. In support of this required showing the applicants presented a Certification that was supported, in part by three resolutions of the PSEG Board of Directors (Aa84, Aa100, Aa107) **[BEGIN CONFIDENTIAL]** [redacted]. **[END CONFIDENTIAL]** (Aca31-Aca24, Aca72-Aca82, Aca113-Aca123) One of these resolutions, quoted in Levitan's report, stated in part as follows:

**[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**

(Aca037, Aca078 Aca119, Aca386)

In addition, PSEG's 2018 10-K filing included a representation that the company would "take all necessary steps to retire all three plants" at or before their next scheduled refueling outages in the absence of ZECS. (Aa694) Generalized statements such as these are nothing more than threats. As Levitan noted, "[b]oards can change their minds, and we are not aware of any strict criteria to determine the materiality of a financial change ...." (Aa694) PSEG itself acknowledged that subsidies would not guarantee continued operations. As noted in Levitan's report, the Company's 2018 Form 10-K included a statement that the company would take steps to retire the plants notwithstanding the grant of ZECs in the event "the financial conditions of the plants is materially adversely impacted" by any of a number of potential developments. (Aa695)

BPU Staff also looked at the information provided by the applicants and agreed with Levitan's conclusion that the plants were profitable without subsidies. Staff analyzed what it described as "two seemingly inconsistent provisions of the statute" defining the operational and market risks to be considered, and utilized what it described as an analysis that "followed the logical flow of the Act as written and, based on thorough analysis, came to a determination regarding costs and risks that is consistent with prior Board decisions, established

best practices for ratemaking, and sound economic principles." (Aa627-Aa62, Aa644-Aa645)

Staff found that PSEG's estimation of operational and market risks "do not distinguish between avoidable and non-avoidable costs." (Aa631, Aa648, Aa665) Staff agreed with Levitan, concluding that because operational and market risks are not "true cost[s] that [are] incurred," they are "not cost[s] that would be avoided by ceasing operations." Thus, Staff excluded both of these "costs" in its evaluation of the unit's avoidable costs. Staff also agreed with Levitan regarding the exclusion of 50% of the claimed labor and non-labor costs, noting that "PSEG did not provide a breakdown of what costs would be avoided if the units ceased operation." (Aa632, Aa649, Aa666) Staff also agreed with Levitan that the suspended federal spent fuel charge should be excluded. (Aa631-Aa632, Aa649, Aa665-Aa666) Staff concluded for each of the three units that "the unit does not satisfy the financial criteria of the Act once adjusted for avoided costs and properly represented." (Aa633, Aa651, Aa668) With adjustments to correct for the overstated costs, Staff concluded that the projected revenues from each of the three units was more than sufficient to cover the units' avoidable costs from June 2019 through May 2022. (Aa632-Aa633, Aa650, Aa666-Aa667)

In addition, Staff noted that even these adjusted "costs" reflected some "inconsistencies or questionable approaches" such as (1) assuming that the costs of all capital projects including multi-year projects would be fully charged or accrued and fully recovered, in the year the project was initiated; and (2) including projected costs for "Support Service and Fully Allocated Overhead" that were not consistent with historical costs. (Aa633, Aa650-Aa651, Aa667) Such "unusual treatments of costs" led Staff to conclude that "as a general matter, the costs provided by [the applicants] appear to be inflated to maximize higher projected costs that are contrary to their own historical representations." (Aa633, Aa651, Aa667) Finally, Staff noted that its calculation of the units' profitability did not consider the potential additional revenues that would result from market changes under consideration by PJM, or revenues that could result if the Hope Creek unit continues its past practice of selling excess capacity from the Hope Creek unit into the New York market. (Aa632-Aa633, Aa650, Aa666-Aa667) Staff accordingly noted that its estimates of the plants' profitability were "low-side" estimates of near-term profitability. (Aa633, Aa650, Aa667)

Staff concluded:

> Staff has fully read and interpreted the Act and believes that the intention was to provide financial support to a nuclear unit needing financial assistance

> to continue operating while providing New Jersey with carbon-free emissions benefits, improved air quality and environmental attributes, and continued baseload generation resources. However, based on Staff's review of the application and all relevant data, Staff concludes that the applicant fails to meet the financial need demonstration required by the Act and is not an eligible nuclear power plant for the purpose of participating in the ZEC program.
>
> (Aa636, Aa653, Aa669-Aa670)

No evidentiary hearings were held by the Board to resolve any factual disputes. Indeed, the Board did not appear to reject Levitan's or Staff's analyses as a matter of fact. Instead, it appeared to consider itself bound to accept the applicants' presentations at face value, with no analysis of any of the concerns raised by the parties, Levitan, or its own Staff. Further, the Board appeared to allow considerations beyond the five statutory criteria to color its analysis.

The Board's "Discussion and Findings" initially focused on Levitan's and Staff's recommendation to exclude operational and market risks from the applicants' asserted costs. The Board expressed its disagreement with these recommendations, finding that "these factors must be considered in determining eligibility for ZECs." (Aa612) The Board stated:

> Based on the specific language in the Act, therefore, the Board believes that the Legislature specifically intended that these considerations be accounted for in the Board's review of the ZEC applications and that the Board must consider these risks along with other outside factors, including fuel diversity, resiliency, and the impact of nuclear power plant retirement on

> RGGI, New Jersey's economy, carbon, and the Global Warming Response Act. Had the Eligibility team and [Levitan] considered the two risk factors as well as the other externalities, and had they reviewed the financial filings as submitted by the applicants, the plants would have been deemed eligible to receive subsidies, as a matter of fact.
>
> (Aa613)

The remaining two paragraphs of the Order were devoted to discussion of the State's fuel diversity, fuel security and environmental policy goals and the economic impacts on Salem County if the plants were to close. (Aa613)

The Board's conclusion is deficient on a number of levels. First, it misstates the criteria set forth in the statute to determine eligibility. The ZEC Statute includes five separate eligibility criteria, all of which must be met in order for a nuclear plant to qualify to receive ZECS. N.J.S.A. 48:3-87.5(e). Those eligibility criteria include in pertinent part (1) whether the applicant "makes a significant and material contribution to the air quality in the State by minimizing emissions" and that if the nuclear plant were to retire it "would significantly and negatively impact New Jersey's ability to comply with State air emissions reduction requirements;" and (2) that the nuclear power plant's "fuel diversity, air quality and other environmental attributes are at risk of loss because the nuclear power plant is projected to not fully cover its costs and risks … and that the nuclear power plant will cease

operations within three years unless the nuclear power plant experiences a material financial change;.... " Id. The statutory eligibility criteria make no mention of "resiliency, and the impact of nuclear power plant retirement on RGGI, [or] New Jersey's economy." The only mention of "fuel diversity" is as an attribute that could be lost, not as an eligibility criterion per se. By including consideration of these externalities, the Board exceeded the statutory language and went beyond the permissible eligibility criteria.

It is also clear, though not stated in the Order, that the Board's decision was based on a fear that regardless of whether the eligibility criteria were met, the Commissioners believed that PSEG would close the plants if it did not get subsidies for all three units. At the Board's Agenda meeting, BPU President Joseph Fiordaliso stated, "PSEG has made it quite clear that they will not continue to operate the nuclear facilities absent the subsidies." (Aa734) Commissioner Gordon stated, "I would characterize the choices we face as genuinely awful. On the one hand, we could reject the mandated subsidy and see the three plants shut down. And I have no doubt that the owners would carry out their threat." (Aa741) Commissioner Solomon referred to the issue before them as a "Hobson's choice." (Aa739) However, as a legal matter, the eligibility criteria set forth in the statute and the record developed in these proceedings

must form the basis for the Board's decision. Policy cannot be based on a threat by the applicants or by a fear that they will follow through with that threat. If we allow these concerns to trump the statutory eligibility criteria, then ratepayers truly are being held hostage and they will be again in the future if this is viewed as a reasonable basis for determining eligibility.

Second, the Board's decision fails to acknowledge that each of the five eligibility criteria must be met. The Board is not free under the statute to dismiss the failure to satisfy the financial criterion because of its concern about fuel diversity, fuel security, resiliency or the impact on Salem County's economy. While those factors may have influenced the legislature when it passed the statute, the legislature did not include those factors as eligibility criteria. The finding that a plant will close because it is "projected to not fully cover its costs and risks" must be made separately and distinctly from the findings on the other statutory criteria. N.J.S.A. 48:3-87.5(e). While the financial criteria are intended to avoid the risk of closure of the State's nuclear plants, the consequences of closure are an entirely different issue from the likelihood this will occur. Based on the explicit language contained in the statute, the Board may only grant subsidies based on a determination that a plant will close because its projected

revenues will not cover its "costs and risks" even if all of the other criteria are met.

Furthermore, the Board's finding that Levitan and Staff did not consider operational and market risks is simply false. As is apparent from the discussion above, these factors were considered, and were discounted because PSEG Nuclear failed to demonstrate that they were true costs. (Aa691, Aa693) Levitan also noted the lack of evidence that "costs of risk" are a factor in the decision of any merchant plant to offer output into the PJM energy market. As Levitan explained, "[i]t is economic for merchant generators to sell energy whenever the price they receive covers their variable operating costs," as any revenues above this level are available to offset fixed operating cost and contribute to a return on capital investments. (Aa691) There was no showing that this fundamental economic reality was any different for the three nuclear units seeking subsidies in the proceedings below. (Aa691-Aa692, Aa693).

Levitan's and Staff's concerns about quantifying operational and market risks as "costs" were echoed in the submissions of Rate Counsel, the IMM and P3, but were not addressed in the Board's "Discussion and Findings." (Aa156, Aa201-Aa203, Aa212-Aa291, Aa459-Aa463, Aca222-Aca227) The Board acknowledged its authority to "determine the weight that should

be given to these factors." (Aa612) There is, however, no indication that it made such a determination based on the record before it. The remainder of the Board Order contained no attempt to quantify the profitability of the three nuclear plants. Indeed, the remainder of the Board's Order contained no discussion whatsoever of revenues or costs.

In this regard, the basis for the Board's conclusion that "[h]ad the Eligibility team and [Levitan] considered the two risk factors as well as the other externalities, and had they reviewed the financial filings as submitted by the applicants, the plants would have been deemed eligible to receive subsidies, as a matter of fact" is nowhere to be found in the Order. (Aa613) The Board cites nothing to support this proposition. The only possible explanation for this conclusion would be that the Board determined to simply accept the financial information "as submitted by the applicants." However, given that at least four separate independent analyses came to the same conclusion that the financial information submitted did not satisfy the statutory criteria, it is unclear how the Board could rationally reach a conclusion that the financial information submitted by the applicant should be accepted on its face. In the absence of any justification articulated by the Board, and in the face of its rejection of the expert analysis in the record, its apparent determination to accept the applicants' asserted "costs" of risk

at face value is not entitled to deference and cannot be sustained. 613 Corp. v. State, Div. of State Lottery, supra, 210 N.J. Super. at 496.

What the record does support, if the "externalities" are not permitted to outweigh the actual financial analysis of everyone but the applicants, is the finding reached by Staff that the financial criterion has not been met. In fact, even if Staff's adjustment to eliminate the applicants' claimed "costs" of operational and market risks is rejected, the plants are still profitable. Staff's analysis found that projected revenues exceed costs by the following amounts:

- Salem I: **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL**
- Salem 2: **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**
- Hope Creek: **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**

(Aca328, Aca344, Aca360)

Staff's adjustments for operational and market risks, which it based on Levitan's data, were:

- Salem 1: **[BEGIN CONFIDENTIAL]** [redacted] [END **CONFIDENTIAL]**

- Salem 2: **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**
- Hope Creek: **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**

(Aca328, Aca344, Aca359, Aca367)[11]

Thus, eliminating this adjustment would not have changed Staff's conclusion that all three units are profitable.

The Board's Order mentions Staff's other adjustments, but these are not even considered in the Board's Discussion and Findings. Thus, the Board appears to have weighed the "other factors" discussed in the final two paragraphs of its Order against an inadequate financial showing. If the Board intended instead to reject some other components of Levitan's and Staff's financial analysis, this cannot be ascertained from the Order.

For all of these reasons, the Board's Order is arbitrary and capricious and not supported by the record. The record clearly demonstrates that the applicants failed to satisfy the financial eligibility criteria in the statute and that the Board Staff's recommendation should have been adopted. The Board's decision to reject the analyses of Staff, Levitan, the IMM, Rate

[11] Levitan's adjustments to PSEG's claimed costs and revenues are detailed in Table 1 at page 3 of Levitan's report. (Aca367) Staff adopted these adjustments with the exception of Levitan's adjustments to revenues. (Aa632, Aa650, Aa606, Aca328, Aca344, Aca360)

Counsel, and P3 by granting greater weight to factors not included in the statutory criteria exceeds its authority under the statute. See, TAC Associates v. NJDEP, 202 N.J. 533, 541 (2010). The Board's determination should therefore be rejected and its order reversed.

## POINT II

### THE BOARD ERRED BY FAILING TO ENSURE THAT THE RATE ESTABLISHED IN THE ZEC STATUTE IS JUST AND REASONABLE (Aa602-Aa603, Aa611-Aa614)

The BPU has long had an explicit statutory mandate to ensure that the rates it sets are just and reasonable. See, N.J.S.A. 48:2-21(b) (which obligates the BPU to ensure that any rates it approves are "just and reasonable") and N.J.S.A. 48:3-1 (which prohibits utilities from charging rates that are unjust or unreasonable). It has no authority under governing law to approve a rate that is unjust or unreasonable. In the proceedings below, the applicants argued that the rate set in the statute was immutable and that, while the BPU had authority to deny a ZEC, it did not have authority to reduce the ZEC rate if it found that a subsidy is warranted under the statutory criteria. While several Commissioners expressed concerns about the rate set forth in the statute, they appear to have accepted this argument, as the Board – without comment or any analysis in the Order – simply applied the statutory rate. However, the ZEC Statute did not repeal the provisions of Title 48 that require rates set by the Board to be just and reasonable. The ZEC Statute also provided no explanation, much less a justification, for the statutory rate. The Board's decision in this regard is therefore arbitrary and capricious and without foundation in the law or the record.

The Legislature's goal in enacting the ZEC Statute was not to repeal existing principles governing electricity generation and utility rate setting or overturn EDECA, but to provide limited relief for the claimed financial hardship of nuclear plants in order to prevent them from shutting down, threatening existing jobs and environmental goals. The $0.004 per kilowatt-hour rate set by the Legislature in the statute purports to "reflect[] the emissions avoidance benefits associated with the continued operation of selected nuclear power plants." N.J.S.A. 48:3-87.5(j)(1). However, there is nothing in the statute that quantifies those "benefits" or explains how the rate was calculated. Indeed, the statute was written before any proceedings occurred to review any factual information and before any units were selected. Thus, there is no way that the $0.004 rate could have been set based on any factual record establishing "emissions avoidance benefits" or analyzing what would be needed to alleviate any financial hardship sufficient to keep the plants open and avoid any purported increase in emissions.[12]

[12] In fact, the original version of the bill described the certificates, then called "Nuclear Diversity Certificates," as representing the "environmental and fuel diversity attributes of one mega-watthour of electricity" generated by a nuclear plant. https://www.njleg.state.nj.us/2016/Bills/S4000/3560_I1.HTM . When the bill was reintroduced in the 2018-2019 legislative session, the certificates became known as "Zero Emission Certificates" purportedly representing the "emissions avoidance

There is nothing in the statute that repeals the Board's overall regulatory authority to establish rates or its regulatory duty to ensure that rates are just and reasonable. To the contrary, the legislative hearings included many statements from legislators and proponents of the bill that demonstrate that the intent was to permit the BPU to exercise its broad discretion to look at the financial status of the plants and establish just and reasonable rates. For example, at the December 20, 2017 hearing on the original version of the bill, Primary Sponsor Senator Sweeney stated: "There has been a lot of discussion about – that this is an automatic hand-out to the utility. That is not true. This bill creates a process for the BPU to review the finances of the utility to make sure that it can function and stay operational."[13] Thus, even if the

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benefits" of keeping the nuclear plants open. However, even though the certificates were representing the value of different things under different versions of the bill, the $0.004 per kilowatt hour rate remained the same. This is further evidence that the rate was not based on any particular valuation of "fuel diversity," "environmental attributes," or "emissions avoidance benefits."

[13]Tr. 12/20/17, p. 2. Transcript available at: https://www.njleg.state.nj.us/legislativepub/pubhear/senatu12202017.pdf. Additional examples can be found in the audio of the hearing before the Senate Energy and Environment Committee, on January 25, 2018, https://www.njleg.state.nj.us/media/mp.asp?M=A/2018/SEN/0125-1000AM-M0-1.M4A&S=2018, where Primary Sponsor and Committee Chairman Smith stated (at 12:56) that the newly revised bill gives "greater powers to the BPU with regard to the request for support." A press release issued by Primary Sponsor Senator Kip Bateman on the original version of the bill stated, "I support

statutory language appears to impose the $0.004 rate without allowing the BPU to change it, the statute cannot be read to allow approval of an unjust or unreasonable rate. As the New Jersey Supreme Court has held:

> The system of rate regulation and the fixing of rates thereunder are related to constitutional principles which no legislative or judicial body may overlook. For if the rate for the service supplied be unreasonably low it is confiscatory of the utility's right of property, and if unjustly and unreasonably high (bottomed as it is on the exercise of the police power of the state), it cannot be permitted to inflict extortionate and arbitrary charges upon the public. And this is so even where the rate or limitation on the rate is established by the Legislature itself.
>
> In re Proposed Increased Intrastate Industrial Sand Rates, 66 N.J. 12, 23-24 (1974)(citations omitted).

See also, State v. Trenton, 97 N.J.L. 241, 247 (E. & A. 1922)("rates fixed by legislation must be reasonable, and to that end must be subject to judicial review").

Nor can there be any legitimate argument that this charge is not a "rate" that must be just and reasonable. In re Redi-Flo Corp., 76 N.J. 21, 40-41 (1978) (holding that N.J.S.A. 48:2-21(d) defines a rate from the standpoint of the consumer

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the checks and balances in the legislation that will allow the BPU to review PSEG's financials. This will help us to minimize the impact on ratepayers and ensure that the nuclear plants are only getting what they need to stay in the black." https://www.senatenj.com/print/release.php?postid=36046

and that any increase that causes an increase in the consumer's out-of-pocket expenditure is a "rate increase" under the statute). See also, In re Board's Investigation of Local Exchange Carrier Intrastate Access Rates, 2012 N.J. Super Unpub., LEXIS 1430 at *42 ("The requirement for 'just and reasonable' rates applies whether the BPU is setting rates under a traditional methodology or under a plan of alternative regulation"(citations omitted)). Thus, any interpretation of the ZEC Statute as stripping away the power or duty of the Board to ensure that the rate charged is just and reasonable would directly conflict with existing statutory mandates that are derived from "constitutional principles." Industrial Sand Rates, supra, at 23-24.

It is well established that when two statutory provisions appear to conflict, they should be harmonized and read in pari materia so that the meaning and purpose of each is respected. As the Appellate Division stated in In re Public Service Elec. and Gas Company's Rate Unbundling, Stranded Costs and Restructuring Filings, supra, 330 N.J. Super. at 103 ("Statutory interpretations should turn on the breadth of the legislative objectives and the common sense of the situation"). Id. (citing County of Camden v. South Jersey Port Corp., 312 N.J. Super. 387, 396 (App.Div.), certif. denied, 157 N.J. 542(1998)). Also, "[o]ur task is to harmonize the individual sections and read the

statute in the way that is most consistent with the overall legislative intent." Id. (citing Fiore v Consolidated Freightways, 140 N.J. 452, 466 (1995)). See also, Application of Saddle River, 71 N.J. 14, 17 (1976) ("our concern in interpreting the statute must be to effectuate the public policy of the state as a whole").

Here, the Board made no attempt whatsoever to harmonize these two statutory mandates. Instead, the Board chose to ignore its statutory obligation to ensure that rates are just and reasonable and simply apply the rate set in the statute without discussion. While the Board's Order mentions that Rate Counsel raised the fact that the Board was obligated by statute to ensure the rate was just and reasonable (Aa603), there is no finding in the Order that the rate is just and reasonable or any analysis of what a reasonable rate would be. It appears the Board simply read the constitutionally-based requirement that rates be just and reasonable out of existence, in favor of a rate set in the statute that is of unknown origin and unknown reasonableness. As the Supreme Court stated in In re Petition of Elizabethtown Water, 107 N.J. 440, 450 (1987), "[o]ne of the BPU's most important functions is to fix 'just and reaonable' rates." The Board is not free to ignore that essential function.

Though not stated, the Board's decision appears to be based on PSEG Nuclear's argument that "BPU has no authority to change the amount of the ZEC payment during initial application process." (Aa570) PSEG Nuclear argued that rate setting is a legislative function and that "BPU's authority to set rates is determined by the scope of the grant made by the legislature." (Aa570) While this may be true, PSEG Nuclear's arguments – and the Board's decision – fail to recognize that our Supreme Court has held that rates must be just and reasonable "even where the rate or limitation on the rate is established by the Legislature itself." Industrial Sand Rates, supra, 66 N.J. at 23-24 (emphasis added).

Here, the Board did not make findings sufficient to support a conclusion that the rate is just and reasonable. There is nothing in the statute that explains where or how the rate was derived.[14] According to PSEG Nuclear, it "is not a function of the financial condition of the nuclear plants that receive the payments ... but rather is a function of the social cost of carbon that customers are paying to avoid the degradation of the air they breathe." (Aa571) However, the Board's decision does

[14] The only indication we have of the origin of the rate is via an April 18, 2019 newspaper column in which Senator Smith, a prime sponsor of the bill is quoted as saying "he set the level of subsidy at $300 million after Ralph Izzo, the CEO of PSEG, convinced him it was the right number." https://www.nj.com/opinion/2019/04/on-nuke-rescue-pseg-stands-to-make-a-killing-at-our-expense-moran.html

not adequately demonstrate how the rate corresponds to the social cost of carbon or the air that we breathe. In fact, the record contains conflicting information on the "air emissions benefits" of these plants and the value of those benefits.

Determining the reasonableness of the rates based on the value of the "emissions avoidance benefits" of these plants is confusing and difficult. In its application, PSEG (Aa097-Aa098) relies on studies it commissioned by two consultants to justify the rate by saying that the increased CO2 emissions for "the eastern interconnection"[15] if all three plants retire would be 34,308,000 metric tons, and that the Environmental Protection Agency says the social cost of carbon is $42 per metric ton leading to a total savings of $1.44 billion for the 3 plants over the 3 year study period of 2019-2022. (Aa097)

BPU Staff looked at what the projected carbon emissions increases would be in New Jersey, rather than the eastern interconnection. (Aa624-Aa625, Aa641-Aa642, Aa658-Aa659) Staff cited the report of PA Consulting, one of the companies hired by PSEG Nuclear, and its conclusion that if all three plants shut down there would be an increase of in-state emissions of 5.8 million metric tons over the same three year period, which represents 9.6% more emissions than if the plants continued to

[15] The "eastern interconnection" encompasses the area east of the Rocky Mountains and a portion of Northern Texas. https://www.eia.gov/todayinenergy/detail.php?id=27152

operate. (Aa624, Aa641, Aa658) For 2020, BPU Staff concluded that the in-state increase would be 0.73 million metric tons (0.8 million short tons) or approximately 4% more emissions than projected if the plants stayed open. BPU's consultant Levitan concluded that PSEG Nuclear overstated the emissions savings, but agreed that if all three plants shut down there would be an additional 5.8 million metric tons of carbon emitted in New Jersey. (Aa683) Using Staff's emissions numbers and the $42 per metric ton utilized by PSEG Nuclear, the savings would be $243,600,000 over the same 3 year study period, rather than PSEG Nuclear's $1.44 billion. [16]

The Board did nothing to resolve these factual differences. It made no finding as to which analysis was correct. It did, however, confirm Staff's finding that

> The impact to New Jersey from loss of three units would be an increase of approximately 9.6% of in-state emissions of carbon dioxide over the New Jersey aggregate base case over the three-year period of June 2019 through May 2022 or an increase of approximately 11% of in-state emissions of carbon dioxide equivalent over the New Jersey electric generation base case for 2020.
>
> (Aa607)

[16] The appropriate value per ton for the "social cost of carbon" is an evolving and often debated number. See, https://www.epa.gov/sites/production/files/2016-12/documents/social cost of carbon fact sheet.pdf. For purposes of this discussion only, we will utilize PSE&G's $42 per metric ton number.

Thus, if the rate is intended to compensate for the social cost of increased carbon emissions in New Jersey, and the emissions numbers calculated by Staff, Levitan and Associates and PA Consulting are adopted, the rate in the statute is providing a payment of approximately $900 million for a social cost of carbon of approximately $243.6 million.[17] This does not appear to be proportional or reasonable. The rate only becomes reasonable if you accept PSEG Nuclear's calculations for the added emissions in the eastern interconnection. Further, even though the Board does find the projected emissions provided by PSEG Nuclear's consultants to be "reasonable," the Board does not discuss whether it is referring to in-state estimates or the broader eastern interconnection estimates. There is simply nothing in the Board's Order to explain how the Board resolved these numbers or why the statutory subsidy fairly reflects the "social cost of carbon" or "emissions avoidance benefits" of these plants.

The Board also failed to consider the fairness of requiring additional subsidies from ratepayers for these deregulated plants. As explained in the Statement of Facts and Procedural

[17] These numbers all assume that the plants would be closed for the entire three-year study period. Given that these plants cleared the 2018 PJM Base Residual Auctions, committing them to provide capacity for the 2021/2022 capacity period in PJM, and given that PJM requires 90 days notice before a plant can shut down, it is unlikely that the plants would in fact close for that entire period.

History section above, PSEG Nuclear's utility affiliate, PSE&G, has already recovered approximately $2.94 billion in stranded costs for its former electric generating units, including the Salem 1 and 2 and Hope Creek nuclear units, as a result of a non-unanimous Stipulation adopted by the Board. The Board justified its decision to use the Stipulation as a framework to resolve the matter in part because it reflected a negotiated resolution that included terms that benefitted ratepayers. The key elements of the resolution, as summarized by the Board, included the following:

> 27) In order to ensure that PSE&G does not retain any risks or liabilities associated with the electric generation business after the Generating Facilities have been transferred, the Board hereby orders that all contracts (except for the NUG contracts) associated with the electric generating business, including, but not limited to, wholesale electric purchase and sales agreements, fuel contracts, real and personal property interests, and other contractual rights and liabilities, be transferred from PSE&G to [PSEG Power] simultaneous with the transfer of all generating assets, and substitute [PSEG Power] as the party(s) to any such contracts.
>
> PSE&G Unbundling Order, supra, 1999 N.J. PUC Lexis 11 at *307—08 (emphasis added).

This language reflects that a fundamental element of the transaction was a complete transfer of the generation assets, including the risks of ownership and operation. In other words, the unregulated affiliate's assumption of those risks was recognized as an essential element of a transaction that allowed

PSEG Power to earn unregulated rates of return on the assets being transferred. Now, after ratepayers have fulfilled their end of the bargain through their payment of surcharges on their utility bills and PSEG Power has earned substantial profits on assets that have turned out to be worth far more than the administratively determined values that were set by the Board in 1999, the Board has fundamentally changed the bargain to the detriment of ratepayers.

In the proceedings below, Rate Counsel argued that given EDECA's provisions deregulating PSEG's generation assets, ratepayers should not be asked to cover the company's market risks, and that ratepayers' previous payments to PSE&G for "stranded costs" should be taken into account when establishing the eligibility for and the amount of any ZEC subsidy. As stated by Rate Counsel expert, Andrea Crane:

> [R]atepayers should not be the guarantors of last resort for all possible contingent risks related to operating revenues. The fact is that the nuclear units at issue have been deregulated for approximately 20 years. At the time of deregulation, ratepayers paid hundreds of millions of dollars in stranded costs to the owners of the nuclear facilities, based on perceived risks and expectations that market prices would not be high enough to allow owners to recover all of their investment. However, as shown in Rate Counsel's comments, since deregulation the nuclear operators have generally done very well, with actual costs falling far below market

> prices, resulting in significant profits from these nuclear units.
>
> (Aa462)

Ms. Crane also noted that, PSEG has elected to continue its investments in the nuclear plants in the years since 1999. Ms. Crane specifically noted PSEG's decision in 2009 to seek extensions of the operating licenses for the three units.

> Moreover, the original operating licenses for the three units at issue were all due to expire after 40 years of operation. Under the original operating licenses, Salem 1 would have been shut down by now, and Salem 2 and Hope Creek would be retired in 2021 and 2026 respectively. In 2009, PSEG requested authorization to extend the operating licenses of these units. Although the units were originally regulated, by the time that PSEG requested an extension of their operating licenses the units were deregulated and presumably PSEG made a calculated business decision to request an extension in the operating licenses. At that time, the Companies presumably were more than satisfied with the level of earnings being generated by these nuclear units. Now that market conditions have changed and energy revenues have declined, it is unreasonable to require ratepayers to provide millions of dollars of subsidies without consideration of the substantial benefits that the nuclear operators have enjoyed in the past.
>
> (Aa462)

Ms. Crane concluded:

> If the BPU permits the nuclear operators to charge ratepayers for subsidies that include Operational and Market Risks, then it should also reduce those subsidies to take into account prior benefits enjoyed by shareholders.
>
> (Aa463)

She noted that the benefits of deregulation, in addition to the ability to earn non rate-regulated profits, include "other financial benefits, such as the retention of excess deferred income taxes and other tax benefits" which were discussed in detail elsewhere in her Certification. (Aa463)

In its Order, the Board acknowledged these arguments made by Rate Counsel. (Aa602) The Board stated that Rate Counsel argued that "having ratepayers provide out-of-market subsidies to deregulated generating plants would be inconsistent with [EDECA], the operation of federal wholesale markets, and basic principles of ratemaking," and that granting ZECs "would put ratepayers in the position of assuming all of the risks from the plants without gaining credit for any of the profits they made in the past or will make going forward." (Aa602) The Board acknowledged that Rate Counsel asked the Board to consider this in deciding whether ZECs were appropriate and deduct amounts already paid from any ZECs awarded.

However, the Board made absolutely no mention of this history or of Rate Counsel's arguments in the findings and discussion portion of its Order. The Board did note that the "process and procedures outlined in the Act are a deviation from the usual process and procedures that the Board follows when the Board receives an application from the utilities it regulates," and that the Act's requirements "are made more difficult to

implement by the fact that the applicants for ZECs are not regulated utilities and therefore are not subject to the Board's regulations." (Aa612) However, the Board did not accept or reject or make any findings regarding these arguments. While the Legislature certainly can provide for modifications of EDECA by passing new legislation such as the ZEC Act, it has not repealed EDECA, and thus efforts should be made by the Board to harmonize these two statutes. In re Public Service Elec. and Gas Company's Rate Unbundling, Stranded Costs and Restructuring Filings, supra, 330 N.J. Super. at 103. This is particularly important when the Board is considering an action that will undermine the Board's own justification for a prior Order that imposed substantial costs on ratepayers that have already been paid in full.

The Board has made no effort to harmonize the ZEC Statute with EDECA or with its own prior Order, and has made no effort at all to consider the arguments that were raised below by Rate Counsel. This failure renders the Board's decision arbitrary and capricious.

In sum, the BPU Order is arbitrary and capricious in that it fails to ensure that the rate set forth in the statute is just and reasonable. Instead, the Board mechanistically applied the statutory rate, abandoning its obligation to ensure that rates charged to ratepayers are just and reasonable. N.J.S.A.

47: 48:2-21(b). That obligation applies even when the rate is set by the Legislature in the statute. Industrial Sand Rates, supra, 66 N.J. at 23-24. Here, there is conflicting evidence in the record regarding the valuation of the "emissions avoidance benefits" the ZEC is intended to represent, but an analysis of the social cost of carbon for emissions in New Jersey over the three year ZEC period suggests that the rate is not just and reasonable. Moreover, the Board's decision unfairly upends the "bargain" approved in its prior decision awarding PSE&G $2.94 billion in stranded costs – relieving PSEG from its obligations after ratepayers have already satisfied their obligations. The Board's failure to resolve these issues and ensure that the rate is just and reasonable is reversible error.

## CONCLUSION

For the all of the reasons stated above, the Board's decision below should be reversed.

Respectfully submitted,

STATE OF NEW JERSEY
DIVISION OF RATE COUNSEL

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On Behalf of Appellant,
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