



**STATE OF NEW JERSEY**  
**Board of Public Utilities**  
44 South Clinton Avenue, 3<sup>rd</sup> Floor, Suite 314  
Post Office Box 350  
Trenton, New Jersey 08625-0350  
[www.nj.gov/bpu/](http://www.nj.gov/bpu/)

STATE ENERGY SERVICES

IN THE MATTER OF THE IMPLEMENTATION OF <u>L.</u>	)	ORDER DETERMINING THE
2018, <u>c.</u> 16 REGARDING THE ESTABLISHMENT OF A	)	FORWARD STEPS IN THE ZEC
ZERO EMISSION CERTIFICATE PROGRAM FOR	)	PROGRAM AND CURRENTLY
ELIGIBLE NUCLEAR POWER PLANTS	)	APPROVED APPLICATIONS
	)	
And	)	DOCKET NO. EO18080899
	)	
APPLICATION FOR ZERO EMISSION CERTIFICATES	)	DOCKET NO. EO18121338
OF SALEM 1 NUCLEAR POWER PLANT	)	
	)	
APPLICATION FOR ZERO EMISSION CERTIFICATES	)	DOCKET NO. EO18121339
OF SALEM 2 NUCLEAR POWER PLANT	)	
	)	
APPLICATION FOR ZERO EMISSION CERTIFICATES	)	
OF HOPE CREEK NUCLEAR POWER PLANT	)	DOCKET NO. EO18121337

**Parties of Record:**

**Matthew Weissman, Esq.**, General State Regulatory Counsel, Public Service Electric and Gas Company  
**Jeanne J. Dworetzky, Esq.**, Assistant General Counsel, Exelon Generation Company, LLC  
**Stefanie A. Brand, Esq.**, Director, New Jersey Division of Rate Counsel  
**Jeffrey W. Mayes, Esq.**, General Counsel, Monitoring Analytics, LLC  
**Steven S. Goldenberg, Esq.**, Counsel, New Jersey Large Energy Users Coalition  
**Jennifer Hsia, Esq.**, Counsel, NRG Energy, Inc.  
**William Harla, Esq.**, Counsel, PJM Power Providers Group  
**Philip J. Passanante, Esq.**, for Atlantic City Electric Company  
**Robert H. Oostdyk, Jr., Esq.**, for Butler Power and Light  
**Mark A. Mader**, Director, for Jersey Central Power & Light  
**Margaret Comes, Esq.**, Associate Counsel, for Rockland Electric Company

BY THE BOARD:

**I. BACKGROUND**

On May 23, 2018, Governor Phil Murphy signed into law L. 2018, c. 16 (C.48:3-87.3 to -87.7) ("Act"). The Act required the New Jersey Board of Public Utilities ("Board") to create a program and mechanism for the issuance of Zero Emission Certificates ("ZECs"), each of which

represents the fuel diversity, air quality, and other environmental attributes of one megawatt-hour of electricity generated by an eligible nuclear power plant selected by the Board to participate in the program. Under the program, certain eligible nuclear energy generators may be approved to provide ZECs for the State's energy supply, which in turn will be purchased by New Jersey's four (4) investor-owned electric distribution companies, i.e., Atlantic City Electric Company ("ACE"), Jersey Central Power & Light Company ("JCP&L"), Public Service Electric and Gas Company ("PSE&G"), and Rockland Electric Company ("RECO"), and municipal electric distribution company Butler Electric Utility ("Butler") (collectively, "EDCs"). The Act identified the basic steps required to establish this program, including program logistics, funding, costs, application, eligibility requirements, selection process, and the timeframes for meeting several undertakings or activities.

## II. PROCEDURAL HISTORY

On August 29, 2018, the Board approved an Order initiating the creation of the ZEC program.<sup>1</sup> Specifically, the Board (i) directed Board Staff ("Staff") to facilitate the establishment of a ZEC program and related Act activities, and take all necessary steps required per the Act, including scheduling public hearings, establishing a comment process, and preparing for consideration by the Board an application process by November 19, 2018; (ii) directed the EDCs to file tariffs in compliance with the Act by October 22, 2018, for approval by the Board; (iii) designated President Joseph L. Fiordaliso as the Presiding Officer, who was authorized to rule on all motions that arose during the pendency of final Board action as required under the Act and modify any schedules that may be set as necessary to secure a just and expeditious determination of the issues; and (iv) directed that any entities seeking to intervene or participate in the tariff portion of this matter file the appropriate motion with the Board by October 23, 2018.

The Act required that a formal program be established to receive and review applications, determine eligibility, and rank any eligible nuclear plants for receipt of credits. The application consisted of numerous and extensive questions and requirements for supporting documents, studies, certifications, and narratives. Staff developed the application after reviewing all stakeholder and public comments. The application was designed to thoroughly capture all information that the Board deems necessary and relevant to properly determine eligibility of an applicant unit.

In its November 19, 2018 Orders,<sup>2</sup> the Board approved the ZEC applications, the program process, and the tariffs associated with collection of the funds. Consistent with the Act, the

<sup>1</sup> In the Matter of the Implementation of L. 2018, c. 16 Regarding the Establishment of a Zero Emission Certificate Program for Eligible Nuclear Power Plants, BPU Docket No. EO18080899 (August 29, 2018).

<sup>2</sup> In the Matter of the Implementation of L. 2018, c. 16 Regarding the Establishment of a Zero Emission Certificate Program for Eligible Nuclear Power Plants, BPU Docket No. EO18080899 (November 19, 2018) (Agenda Item 9A: Order Establishing the Program, Application, and Procedural Process; I/M/O the Implementation of L. 2018, c. 16 Regarding the Establishment of a Zero Emission Certificate Program for Eligible Nuclear Power Plants and I/M/O the Application of Jersey Central Power and Light Company for Approval to Implement a Zero Emission Certificate ("ZEC") Charge and Tariff Page(s) Related Thereto in Support of the ZEC Program Authorized by N.J.S.A. 48:3-87.3 et seq. and a Board Order Initiating the ZEC Program, Dated August 29, 2018, BPU Docket Nos. EO18080899 & EO18091002 (Agenda Item 9C); I/M/O the Implementation of L. 2018, c. 16 Regarding the Establishment of a Zero Emission Certificate Program for Eligible Nuclear Power Plants and I/M/O the Application of Atlantic City Electric Company for Approval to Implement a Zero Emission Certificate ("ZEC") Charge and Tariff Page(s) Related Thereto in Support of the ZEC Program Authorized by N.J.S.A. 48:3-87.3 et seq. and a Board

Board sought stakeholder input on the method and application process for determining the eligibility and selection of nuclear power plants and on the establishment of a mechanism for each EDC to purchase ZECs from selected nuclear power plants. The Order additionally established the option for parties to the case, and anyone else, to provide comments by January 31, 2019 on each ZEC application for consideration by the Board. Comments received were for the aggregate of the applications and were not applicant-specific.

Two teams were established to evaluate the various requirements of the ZEC program and ensure proper review of submitted applications based on the five (5) criteria set forth in N.J.S.A. 48:3-87.5(e) in accordance with the November 19, 2018 Order. One team determined the eligibility of applicant units ("Eligibility Team"), and the other team scored and ranked eligible units ("Ranking Team"). A "ranked list" of eligible units, if any, would be recommended to the Board for its consideration by April 18, 2019 in accordance with the Act.

The Board set December 19, 2018 as the deadline for receipt of applications by each individual nuclear generating unit that sought ZECs. PSEG Nuclear LLC ("PSEG") filed three applications with the Board – Salem 1, Salem 2, and Hope Creek (collectively, "Applicants") – and Exelon Generation Company ("Exelon") submitted supplemental information in support of the Salem 1 and Salem 2 applications. Staff gave each application a separate docket number for the purposes of filing.

By its December 18, 2018 Order,<sup>3</sup> the Board approved the selection of Levitan & Associates, Inc. ("LAI") to serve as a consultant to Staff and directed Staff to execute a contract for services related to the ZEC program as described in the scope of work included in the Request for Qualifications.

Further reply comments from the New Jersey Division of Rate Counsel ("Rate Counsel"), the Independent Market Monitor ("IMM"), PJM Power Providers Group ("P3"), the New Jersey Large Energy Users Coalition ("NJLEUC") and PSEG to all of the previously submitted comments were received after the January 31, 2019 comment deadline. While these comments were not part of the procedural schedule, Staff reviewed all comments, including those received after the deadline, in its evaluation. Additionally, Rate Counsel and Staff submitted numerous discovery questions to PSEG and Exelon to which both companies provided responses. The questions and responses assisted Staff and LAI in the application evaluations

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Order Initiating the ZEC Program, Dated 8/29/18, BPU Docket Nos. EO18080899 & EO18091003 (Agenda Item 9D); I/M/O the Implementation of L. 2018, c. 16 Regarding the Establishment of a Zero Emission Certificate Program for Eligible Nuclear Power Plants and I/M/O Public Service Electric and Gas Company's Request for Approval of a Zero Emission Certificate Recovery Charge, BPU Docket Nos. EO18080899 & EO18091004 (Agenda Item 9E); I/M/O the Implementation of L. 2018, c. 16 Regarding the Establishment of a Zero Emission Certificate Program for Eligible Nuclear Power Plants and I/M/O Rockland Electric Company's Filing for Review and Approval of the Zero Emission Certificate Recovery Charge, BPU Docket Nos. EO18080899 & EO18091005 (Agenda Item 9F); I/M/O the Implementation of L. 2018, c. 16 Regarding the Establishment of a Zero Emission Certificate Program for Eligible Nuclear Power Plants and I/M/O the Application of Butler Electric Utility for Approval to Implement a Zero Emission Certificate ("ZEC") Charge and Tariff Page(s) Related Thereto in Support of the ZEC Program Authorized by N.J.S.A. 48:3-87.3 et seq. and a Board Order Initiating the ZEC Program, Dated August 29, 2018, BPU Docket Nos. EO18080899 & EO18091018 (Agenda Item 9G)

<sup>3</sup> I/M/O the Implementation of L. 2018, c. 16 Regarding the Establishment of a Zero Emission Certificate Program for Eligible Nuclear Power Plants, BPU Docket No. EO18080899 (December 18, 2018).

By its February 27, 2019 Order,<sup>4</sup> the Board approved the ranking criteria established to rank eligible units against one another to determine how many of the eligible units would receive ZECs without exceeding the cap established in the Act.

The Board determined on April 18, 2019 that the Hope Creek, Salem 1, and Salem 2 plants were eligible for the ZEC program and that the applicant units shall receive ZECs in accordance with the Act.<sup>5</sup> Consequently, the Board directed the EDCs to submit final tariffs consistent with the Board's Order, effective April 18, 2019. The Board additionally directed the EDCs to coordinate to calculate their respective monthly ZEC purchase requirements in accordance with the Act and send them for certification by Staff. The Board further directed Staff to return to the Board by July 31, 2019 with recommendations on the program's continued and forward implementation.

### III. FORWARD REQUIREMENTS

The Act sets forth several requirements for the Board, the EDCs, and each unit deemed eligible to receive ZECs. Some are on an annual basis relating to the specific units receiving ZECs, and some are more generalized program requirements.

#### A. Initial Eligibility Period

Pursuant to N.J.S.A. 48:3-87.5(h)(1), selected nuclear power plants shall receive ZECs for an eligibility period that runs through the end of the first energy year in which the plant is selected, plus an additional three energy years. The three nuclear power plants that have been selected in the initial eligibility period shall therefore receive ZECs from April 18, 2019 through May 31, 2019, plus an additional three energy years, from June 1, 2019 through May 31, 2022. During this initial eligibility period, the following must occur:

- Annual determination by the Board of the ZEC price;
- Monthly purchases of ZECs by each EDC, with payment to selected units within 90 days after the conclusion of the first energy year in which selected units receive ZECs and within 90 days after the conclusion of each subsequent energy year;
- Annual certification by each selected nuclear power plant that it will continue operations at or near full capacity for the duration of its eligibility to receive ZECs;
- Annual revenue review by the Board for revenues received by each selected nuclear power plant for its fuel diversity, resilience, air quality, and/or other environmental attributes;
- Submission to the Board by the owner of each selected nuclear power plant of a personnel plan and an alternative economic development plan within two years after receiving ZECs; and

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<sup>4</sup> I/M/O the Implementation of L. 2018, c. 16 Regarding the Establishment of a Zero Emission Certificate Program for Eligible Nuclear Power Plants, BPU Docket No. EO18080899 (February 27, 2018).

<sup>5</sup> I/M/O the Implementation of L. 2018, c. 16 Regarding the Establishment of a Zero Emission Certificate Program for Eligible Nuclear Power Plants; Application for Zero Emission Certificates of Salem 1 Nuclear Power Plant; Application for Zero Emission Certificates of Salem 2 Nuclear Power Plant; Application for Zero Emission Certificates of Hope Creek Nuclear Power Plant, BPU Docket Nos. EO18121338, EO18121339, & EO18121337, Order dated April 18, 2019 (Order Determining the Eligibility of Hope Creek, Salem 1, and Salem 2 Nuclear Generators to Receive ZECs).

- Preparation by the owner of each selected nuclear power plant of a report regarding the optimal use of dry cask storage of spent nuclear fuel at its site within two years after receiving ZECs.

ZEC Price Determination

Pursuant to N.J.S.A. 48:3-87.5(i)(1), the Board shall determine the price of a ZEC in each energy year by a set calculation. The ZEC price is the total number of dollars held by the EDCs in the ZEC account established at N.J.S.A. 48:3-87.5 (j)(1) divided by the greater of: 40 percent of the total number of megawatt-hours of electricity distributed by the EDCs in the state in the prior energy year, or the number of megawatt-hours of electricity generated in the prior energy year by the selected nuclear power plants. Staff will therefore need the EDCs to provide the following information at the completion of an energy year: (a) amount of monies held in the ZEC account (“\$ZEC”), including interest collected; and (b) the total number of megawatt-hours (“MWh”) of electricity distributed (“MWh-DX”) by the EDCs in the prior energy year. Staff will need from the selected nuclear units the total MWh of electricity generated (“MWh-GEN”) by the units at the end of the same energy year, collectively. Staff suggests that this information should be certified and provided to the Board annually by July 30.

Staff will then utilize the information provided and the following calculation to determine the ZEC price for that year.

$$\text{Price of ZEC} = \frac{\$ZEC}{40\% \text{ of MWh-DX (greater of) MWh-GEN}}$$

For each full energy year, Staff will present the ZEC price for approval to the Board annually in August. The ZEC price will be used to determine the amount of ZECs required to be purchased by each EDC and paid to the participating nuclear units annually on September 1 following the completion of each energy year.

*“Stub” Period*

Pursuant to N.J.S.A. 48:3-87.5(g)(2), in the first energy year in which a nuclear power plant is selected, it shall receive a number of ZECs equal to the number of MWh of electricity it produced in that energy year starting on the date of its selection. In each energy year thereafter, each selected unit shall receive a number of ZECs equal to the number of MWh of electricity it produced in that energy year.

Due to the timing of the ZEC awards, a small payment and collection period was created between April 18, 2019 and the end of the energy year, May 31, 2019 (“stub period”). The Act defines the timing of ZEC payments and tariff collections by the EDCs on an energy year basis. In applying the Act’s requirements to the stub period, Staff recommends that the Board determine the price of a ZEC for the stub period by dividing the total number of dollars held by the EDCs in the ZEC account, including interest collected, between April 18 and May 31, 2019, by the greater of: 40 percent of the MWh-DX during the stub period, or the MWh-GEN in the stub period by the selected nuclear power plants. The ZEC price for the stub period will be prorated, in effect.

### Purchases and Payments of ZECs

In its April 18, 2019 Order certifying the eligibility of selected nuclear power plants, the Board directed the EDCs to submit final tariffs consistent with the order, effective the same day, and to therefore begin collecting from their retail distribution customers the approved ZEC charge.

Pursuant to N.J.S.A. 48:3-87.5(i)(2), each EDC shall purchase ZECs on a monthly basis from each selected nuclear power plant, with payment to follow within 90 days after the conclusion of each energy year in which selected units receive ZECs, i.e., by August 30 in the years 2019, 2020, 2021, and 2022. The number of ZECs an EDC shall be required to purchase shall equal the total number of ZECs received by the selected units in the prior energy year – which is equal to the number of MWh of electricity the units produced in that energy year starting on the date of the unit's selection, pursuant to N.J.S.A. 48:3-87.5(g)(2) – multiplied by the percentage of electricity distributed in the state by the EDC as compared to other EDCs in the state.

### Continued Operations Certification

Pursuant to N.J.S.A. 48:3-87.5(h)(3), the selected nuclear unit(s) must annually “certify to the [B]oard that it will continue operations at full or near full capacity for the duration of the period of its eligibility to receive ZECs, except with respect to nuclear power plant shutdowns for necessary maintenance and refueling.” However, the Act does not define what constitutes “near full” capacity. Staff recommends that the definition of “near full capacity” be discussed and reviewed during the below-mentioned stakeholder process with regard specifically to the ZEC program.

Additionally during the below-mentioned stakeholder process, the method for this certification; i.e. how the certification is prepared, submitted and validated, will be discussed.

The Board will retain the option to reduce the “full or near full capacity” requirement if the unit’s owner substantiates the need for and impact of scheduled refueling and maintenance on operations. Staff recommends that the certification be submitted to the Secretary of the Board annually by July 30 following the completion of an energy year during the initial eligibility period.

### Annual Revenue Review

Pursuant to N.J.S.A. 48:3-87.5(e)(4) and N.J.S.A. 48:3-87.5(i)(3), the Board is required to annually review the dollar amount received, in the form of any direct or indirect payment or credit, by to the unit(s) for fuel diversity, resilience, air quality, and/or other environmental attributes, under a law, rule, regulation, tariff, order, or other action of the State, another state, the federal government, or a regional compact.

Such a review will require the unit owner(s) to submit all financial documents pertaining to payments, credits, and revenues received by the unit(s) for generation in the prior energy year. Additionally, the Board must determine what qualifies as the “dollar amount received” for “fuel diversity, resilience, air quality, or other environmental attributes” at N.J.S.A. 48:3-87.5(i)(3). The Board will perform a detailed review of how changes to fuel resiliency, market reforms, and changes to the PJM market, as these decisions are finalized by FERC, would fall into or equate with what the Act considers “double-payment” for these attributes. In addition, if the Board determines that a selected unit receives such revenues, the process by which the Board would reduce the number of ZECs received by a unit needs to be determined.

Staff recommends that this issue – including questions about what information should be submitted to the Board, what will qualify as revenues for these attributes, and how the Board would reduce the number of ZECs – be included in the below-described stakeholder process to obtain valuable and pertinent information to best inform this requirement.

#### Personnel Plan

Pursuant to N.J.S.A. 48:3-87.5(k)(3), a selected power plant, shall, within two years of receiving ZECs, submit a plan to the Board to retain, retrain, or compensate personnel whose employment would be eliminated as a direct result of the cessation of the selected nuclear power plant's operations, including an alternative economic development plan for communities that rely on the selected nuclear power plant for a substantial portion of their tax revenues. This study shall therefore be due to the Board by April 18, 2021.

#### *Lay-off Certifications*

Pursuant to N.J.S.A. 48:3-87.5(l), a selected nuclear power plant shall not lay off any personnel unless the lay-off is due to employee misconduct or underperformance issues, or due to the cessation of the nuclear power plant's operations as provided by the Act.

#### Dry Cask Study

Pursuant to N.J.S.A. 48:3-87.5(m), within two years of receiving ZECs, i.e., by April 18, 2021, the owner of a unit selected to receive ZECs shall conduct a study and prepare a written report in cooperation with selected experts to determine the optimal use of dry cask storage of spent nuclear fuel on site. The New Jersey Department of Environmental Protection should also be consulted on this matter and included in all steps of this study process to ensure the best interests of New Jersey residents. The study shall consider environmental impacts, worker safety, and cost impacts.

The Act provides no additional details on the scope of the study, the process for conducting the study, or who should receive the report. Staff recommends that this item be included in the below-mentioned stakeholder process to address the logistics and parameters required to complete the task.

#### Excuse from Performance

In addition to setting forth the requirements for the initial eligibility period, the Act addresses when a selected nuclear power plant shall be excused from performance, including but not limited to the sale of ZECs. N.J.S.A. 48:3-87.5(k). The Act also specifies the consequences if a selected unit ceases operations during an eligibility period for any reason other than those specified in the Act. Ibid.

#### **B. Second and Subsequent Three-Year Eligibility Periods**

The Act addresses subsequent three-year eligibility periods and evaluation of the ZEC program after ten years. Staff recommends that all applications should be submitted and reviewed pursuant to the established program guidelines and rules.

### Certifications of Eligibility for Receipt of ZECs

Pursuant to N.J.S.A. 48:3-87.5(h)(2), no later than 13 months prior to the conclusion of the initial eligibility period and no later than 13 months prior to the conclusion of each three-year eligibility period thereafter, a nuclear power plant may demonstrate its eligibility to the Board, and the Board may certify the nuclear power plant's eligibility to receive ZECs for additional eligibility periods of three energy years, consistent with the provisions of the Act.

The initial eligibility period concludes on May 31, 2022; therefore, Staff suggests that the Board must receive a unit's demonstration of eligibility by April 30, 2021 for the next three-year eligibility period. Determination by the Board for continued eligibility will require a full application analysis and ranking as was done for the initial period. Therefore the timing will be critical. Staff suggests that the ZEC application process for the second three-year eligibility period should include a procedural schedule that allows for a comment period, public hearings, application review timeframe, and eligibility determinations, in a way that is substantially comparable to the application process established by the Board in its August 29, 2018 and November 19, 2018 Orders.<sup>6</sup> Given the importance of the certification, review required by the Board, and timing required for eligibility determinations for the second eligibility period, Staff recommends that the Board seek stakeholder review and discussion of the schedule for eligibility determination for the second eligibility period.

### Reduction of Per Kilowatt-Hour Charge

Pursuant to N.J.S.A. 48:3-87.5(j)(3), starting in the second three-year eligibility period and for each subsequent three-year eligibility period thereafter, the Board may reduce the non-bypassable, irrevocable, per kilowatt-hour charge ("ZEC charge") imposed on electric public utilities' retail distribution customers pursuant to N.J.S.A. 48:3-87.5(j)(1). The Board may reduce the charge in its discretion in order to ensure that the ZEC program remains affordable to New Jersey retail distribution customers, provided that the Board determines that a reduced charge will be sufficient to achieve the State's air quality and other environmental objectives by preventing the retirement of eligible nuclear power plants.

If the Board reduces the per kilowatt-hour charge, the Board shall make its determination no later than 13 months prior to the start of the next eligibility period – that is, by April 30, 2021 – and the reduction shall be applicable to the next eligibility period only. The Act also specifies at N.J.S.A. 48:3-87.5(j)(3)(c) that, if the Board does not certify any nuclear power plants for a subsequent eligibility period, the Board may reduce the per kilowatt-hour charge in the final year of the first eligibility period.

Staff recommends that the Board seek stakeholder input about on what basis the Board may modify the ZEC charge.

### Renewal Fee

Pursuant to N.J.S.A. 48:3-87.5(j)(3)(d), for the second three-year eligibility period and every subsequent eligibility period thereafter, a selected nuclear power plant shall pay a fee to the

<sup>6</sup> I/M/O the implementation of L. 2018, c. 16 Regarding the Establishment of a Zero Emission Certificate Program for Eligible Nuclear Power Plants, BPU Docket No. EO18080899, Orders dated August 29, 2018 and November 19, 2018.

Board in an amount to be determined by the Board, which shall not exceed \$250,000, to be used to defray the costs incurred by the Board to administer the ZEC program. In its December 2018 Order, the Board determined that the application fee would be \$250,000. The renewal fee will be consistent and the same amount.

### C. Long-Term Program Requirements

#### ZEC Program 10 Year Evaluation

As required by N.J.S.A. 48:3-87.6, the Board shall perform a study within 10 years after May 23, 2018 of the "efficacy" of the ZEC program and report its findings to the Governor and Legislature. In preparation for this task, Staff suggests that the following information should be tracked and saved by the owner of each selected unit and that Staff be provided access to the information:

- Annual revenue stream;
- FERC-regulated Capacity and Electricity Market pricing;
- Unit bids into the FERC-regulated Capacity and Electricity markets;
- FERC-regulated manual changes and design modifications;
- Changes to the Locational Margin Pricing and energy and capacity payments to the unit due to PJM market modifications, FERC decisions, and any other revenue received by the unit for environmental benefits; and
- Any additional information to be determined.

Staff recommends that the Board seek stakeholder input about the parameters of the study and what information should be collected to inform the study about the efficacy of the ZEC program.

### D. Stakeholder Process

Staff proposes to open a stakeholder process to the public and all interested parties and allow for verbal and written comments on the appropriate information required for the Board's evaluation of topics identified in this Order. Staff proposes to issue notification of this process that includes a problem statement and specific questions addressing the annual revenue review, definition of the term "near full capacity," dry cask storage study, schedule for eligibility determinations for the second eligibility period, modification of the per-kilowatt hour charge, program evaluation, and potentially other topics, with goals clearly defined. Staff proposes the schedule below (subject to change) for this process:

- September: Stakeholder meeting properly noticed with the problem statement included in the notice
- September/October 2019: Deadline for written comments
- December 2019: Staff presentation to the Board with formal recommendations on the identified topics

At the completion of this process, and with Board approval thereof, the going forward criteria will be established for continued operation of the ZEC program.

#### IV. DISCUSSION AND FINDINGS

In order to comply with the Act and to further the ZEC program in an effective manner, the Board **AGREES** that the remaining tasks identified in the Act, having not been previously addressed, need to be formalized and finalized.

##### ZEC Price Determination

Pursuant to N.J.S.A. 48:3-87.5(i)(1), the Board **FINDS** that the ZEC pricing methodology and schedule outlined herein are appropriate. The Board therefore **DIRECTS** the EDCs to provide the following information: (a) amount of monies held in the ZEC account (“\$ZEC”), including interest collected, established in N.J.S.A. 48:3-87.5(j)(1); and (b) the total number of megawatt-hours (“MWh”) of electricity distributed (“MWh-DX”) by the EDCs in the prior energy year. The Board also **DIRECTS** the owners of the selected nuclear units to provide the total MWh of electricity generated (“MWh-GEN”) by the units in the prior energy year, collectively. This information must be certified and provided to the Board annually by July 30 in the years 2020, 2021, and 2022 for the initial eligibility period. The Board **DIRECTS** Staff to present the ZEC price annually in August of each year that selected units are eligible to receive ZECs, based on the following calculation:

$$\text{Price of ZEC} = \frac{\$ZEC}{\text{greater of } 40\% \text{ of MWh-DX } \text{ or } \text{ MWh-GEN}}$$

The Board **ACCEPTS** Staff’s recommendation that, for the stub period between April 18 and May 31, 2019, each selected unit receive ZECs equal to the number of MWh of electricity it produced in that period and that the ZEC price in the stub period be the amount of monies held in the ZEC account (“\$ZEC”), including accrued interest, during that period divided by the greater of: 40 percent of the MWh-DX during the stub period, or the MWh-GEN in the stub period by the selected nuclear power plants.

##### Purchases and Payments of ZECs

Pursuant to N.J.S.A. 48:3-87.5(i)(2), the Board **DIRECTS** each EDC to purchase the number of ZECs that are equal to the total number of ZECs received by each selected unit for the prior energy year multiplied by the percentage of electricity distributed in the state by the EDC. The Board also **DIRECTS** each EDC to pay ZECs to each selected unit by August 30 in the years 2019, 2020, 2021, and 2022 or in each year that the unit is eligible to receive ZECs. Payment may be in the form of a wire transfer or check.

##### Continued Operations Certification

Pursuant to N.J.S.A. 48:3-87.5(h)(3), the Board **DIRECTS** that the owner of each selected unit shall submit a signed and certified notification of continued operations to the Board by July 30 of 2020 and 2021 during the initial eligibility period. The Board also **DIRECTS** the owner of each selected unit to substantiate the need for and impact of scheduled refueling and maintenance on operations if the unit owner seeks approval to reduce this requirement.

Regarding the selected units' annual output capacity certifications, the Board **ACCEPTS** Staff's recommendation that the term "near full" capacity at N.J.S.A. 48:3-87.5(h)(3) needs to be fully defined as it relates to the ZEC program and that it is appropriate to include this matter in the stakeholder process.

#### Personnel Plan

The Board **DIRECTS** the owner of each selected unit to submit a personnel plan pursuant to N.J.S.A. 48:3-87.5(k)(3) by April 18, 2021.

The Board **DIRECTS** the owner of each selected unit to submit to the Board, by July 30 of each year that the unit is eligible to receive ZECs, a lay-off certification that no employees have been laid off by the unit except for reasons enumerated in the Act, pursuant to N.J.S.A. 48:3-87.5(l).

#### Stakeholder Input

The Board **DETERMINES** that the Board would benefit from obtaining stakeholder input about the following questions:

- (1) The logistics and parameters of the dry cask study;
- (2) The revenue information that should be submitted to the Board annually by selected units; what monies will qualify as revenues for fuel diversity, resilience, air quality, or other environmental attributes; and by what methodology the Board would reduce the number of ZECs received by the selected unit(s);
- (3) The definition of "near full" capacity;
- (4) The timeline and submission schedule for applications for the second ZEC eligibility period;
- (5) The basis on which and by how much the Board would modify the ZEC charge; and
- (6) The parameters of the 10-year study about the efficacy of the ZEC program and what information should be collected to inform the study.

The Board **HEREBY DIRECTS** Staff to implement the stakeholder process pursuant to the schedule above and to return to the Board with final recommendations in December 2019.

#### Second and Subsequent Three-Year Eligibility Periods: Certifications of Eligibility

The Board **DIRECTS** Staff to present to the Board recommendations for an updated ZEC application, as well as updated eligibility and ranking criteria, which will enable nuclear power plants to demonstrate eligibility to the Board for the second three-year eligibility period by April 30, 2021.

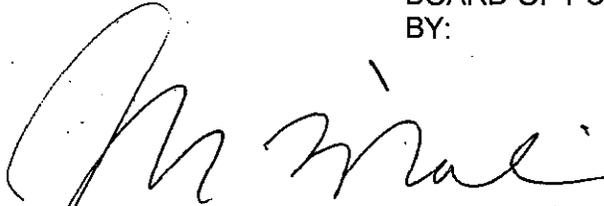
#### ZEC Program Ten-Year Evaluation

Additionally, the Board **AGREES** that the ten-year ZEC efficacy study requirement be revisited after completion of the first ZEC eligibility period.

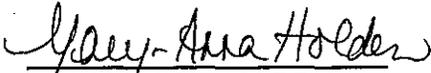
This Order shall be effective on July 20, 2019.

DATED: 7/16/19

BOARD OF PUBLIC UTILITIES  
BY:



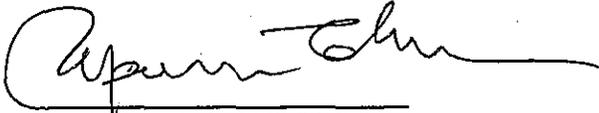
JOSEPH L. FIORDALISO  
PRESIDENT



MARY-ANNA HOLDEN  
COMMISSIONER



DIANNE SOLOMON  
COMMISSIONER

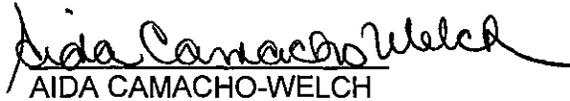


UPENDRA J. CHIVUKULA  
COMMISSIONER



ROBERT M. GORDON  
COMMISSIONER

ATTEST:



AIDA CAMACHO-WELCH  
SECRETARY

I HEREBY CERTIFY that the within  
document is a true copy of the original  
in the files of the Board of Public Utilities.

**In the Matter of the Implementation of L. 2018, c. 16 Regarding the Establishment of a  
Zero Emission Certificate Program for Eligible Nuclear Power Plants**

**AND**

**Application for Zero Emissions Certificates of Salem 1 Nuclear Power Plant**

**Application for Zero Emissions Certificates of Salem 2 Nuclear Power Plant**

**Application for Zero Emissions Certificates of Hope Creek Nuclear Power Plant**

BPU DOCKET NOS. EO18080899,  
EO18121338, EO18121339, & EO18121337

SERVICE LIST

**Division of Rate Counsel**

Post Office Box 003  
Trenton, NJ 08625-0003

Stefanie A. Brand, Esq., Director  
[sbrand@rpa.nj.gov](mailto:sbrand@rpa.nj.gov)

Brian O. Lipman, Esq., Litigation Manager  
[blipman@rpa.nj.gov](mailto:blipman@rpa.nj.gov)

Felicia Thomas-Friel, Esq.  
Managing Attorney – Gas  
[ftthomas@rpa.nj.gov](mailto:ftthomas@rpa.nj.gov)

Ami Morita, Esq.  
Assistant Deputy Rate Counsel  
[amorita@rpa.nj.gov](mailto:amorita@rpa.nj.gov)

Diane Schulze, Esq.  
Assistant Deputy Rate Counsel  
[dschulze@rpa.nj.gov](mailto:dschulze@rpa.nj.gov)

Sarah H. Steindel, Esq.  
Assistant Deputy Rate Counsel  
[ssteinde@rpa.nj.gov](mailto:ssteinde@rpa.nj.gov)

Debora Layugan, Paralegal  
[dlayugan@rpa.nj.gov](mailto:dlayugan@rpa.nj.gov)

Celeste Clark, Legal Secretary  
[cclark@rpa.nj.gov](mailto:cclark@rpa.nj.gov)

**Board of Public Utilities**

Post Office Box 350  
Trenton, NJ 08625-0350

Aida Camacho-Welch, Secretary of the Board  
[aida.camacho@bpu.nj.gov](mailto:aida.camacho@bpu.nj.gov)

Paul Flanagan, Executive Director  
[paul.flanagan@bpu.nj.gov](mailto:paul.flanagan@bpu.nj.gov)

Benjamin Witherell, Chief Economist  
[benjamin.witherell@bpu.nj.gov](mailto:benjamin.witherell@bpu.nj.gov)

Stacy Ho Richardson, Esq., Legal Specialist  
[stacy.richardson@bpu.nj.gov](mailto:stacy.richardson@bpu.nj.gov)

Ilene Lampitt, Esq., Legal Specialist  
[ilene.lampitt@bpu.nj.gov](mailto:ilene.lampitt@bpu.nj.gov)

Thomas Walker, Director  
Office of State Energy Services  
[thomas.walker@bpu.nj.gov](mailto:thomas.walker@bpu.nj.gov)

Stacy Peterson, Director, Division of Energy  
[stacy.peterson@bpu.nj.gov](mailto:stacy.peterson@bpu.nj.gov)

Kevin Nedza  
Director of Special Projects  
[kevin.nedza@bpu.nj.gov](mailto:kevin.nedza@bpu.nj.gov)

Charles Gurkas, Paralegal  
[charles.gurkas@bpu.nj.gov](mailto:charles.gurkas@bpu.nj.gov)

**Rate Counsel Consultants**

Andrea Crane  
The Columbia Group  
2805 East Oakland Park Blvd, #401  
Ft. Lauderdale, FL 33306  
[ctcolumbia@aol.com](mailto:ctcolumbia@aol.com)

Max Chang  
Bob Fagan  
Synapse Energy Economics, Inc.  
485 Massachusetts Ave., Suite 2  
Cambridge, MA 02139  
[mchang@synapse-energy.com](mailto:mchang@synapse-energy.com)  
[rfagan@synapse-energy.com](mailto:rfagan@synapse-energy.com)

**Exelon Generation Company, LLC**

Jeanne J. Dworetzky, Esq.  
Assistant General Counsel  
101 Constitution Avenue, NW, Suite 400E  
Washington, DC 20001  
[jeanne.dworetzky@exeloncorp.com](mailto:jeanne.dworetzky@exeloncorp.com)

James B. Blackburn IV, Esq.  
Day Pitney LLP  
Counsel to Exelon Generation Company, LLC  
1100 New York Avenue NW  
Washington, DC 20005  
[jblackburn@daypitney.com](mailto:jblackburn@daypitney.com)

Florence K.S. Davis, Esq.  
Day Pitney LLP  
Counsel to Exelon Generation Company, LLC  
242 Trumbull Street  
Hartford, CT 06103  
[fkdavis@daypitney.com](mailto:fkdavis@daypitney.com)

Naju R. Lathia, Esq.  
Day Pitney LLP  
Counsel to Exelon Generation Company, LLC  
One Jefferson Road  
Parsippany, NJ 07054-2891  
[nlathia@daypitney.com](mailto:nlathia@daypitney.com)

**Division of Law**

Post Office Box 45029  
Newark, NJ 07101-45029

Joseph Snow, AAG  
[joseph.snow@law.njoag.gov](mailto:joseph.snow@law.njoag.gov)

Caroline Vachier, SC, DAG  
[caroline.vachier@law.njoag.gov](mailto:caroline.vachier@law.njoag.gov)

Geoffrey Gersten, DAG  
[geoffrey.gersten@law.njoag.gov](mailto:geoffrey.gersten@law.njoag.gov)

Alex Moreau, DAG  
[alex.moreau@law.njoag.gov](mailto:alex.moreau@law.njoag.gov)

Renee Greenberg, DAG  
[renee.greenberg@law.njoag.gov](mailto:renee.greenberg@law.njoag.gov)

Patricia Krogman, DAG  
[patricia.krogman@law.njoag.gov](mailto:patricia.krogman@law.njoag.gov)

Peter Van Brunt, DAG  
[peter.vanbrunt@law.njoag.gov](mailto:peter.vanbrunt@law.njoag.gov)

Emma Yao Xiao, DAG  
[emma.xiao@law.njoag.gov](mailto:emma.xiao@law.njoag.gov)

**PJM Power Providers Group**

Decotiis, Fitzpatrick, Cole & Giblin, LLP  
Glenpointe Centre West  
500 Frank W. Burr Boulevard  
Teaneck, NJ 07666

William Harla, Esq.  
[wharla@decotiislaw.com](mailto:wharla@decotiislaw.com)

Alice M. Bergen, Esq.  
[abergen@decotiislaw.com](mailto:abergen@decotiislaw.com)

**Independent Market Monitor for PJM**

Jeffrey W. Mayes  
General Counsel  
Monitoring Analytics, LLC  
2621 Van Buren Avenue, Suite 160  
Eagleville, PA 19403  
[jeffrey.mayes@monitoringanalytics.com](mailto:jeffrey.mayes@monitoringanalytics.com)

**Atlantic City Electric Company**

500 N. Wakefield Drive  
PO Box 6066  
Newark, DE 19714-6066

Philip J. Passanante, Esq.  
Mailstop 92DC42  
[philip.passanante@pepcoholdings.com](mailto:philip.passanante@pepcoholdings.com)

Susan DeVito  
Director, Pricing and Regulatory Services  
Mailstop 92DC56  
[susan.devito@pepcoholdings.com](mailto:susan.devito@pepcoholdings.com)

**Public Service Electric and Gas Company**

PSEG Services Corporation  
80 Park Plaza, T5G  
PO Box 570  
Newark, NJ 07102-4194

Joseph F. Accardo, Jr., Esq.  
Deputy General Counsel and  
Chief Regulatory Officer  
[joseph.accardojr@pseg.com](mailto:joseph.accardojr@pseg.com)

Matthew Weissman, Esq.  
General State Regulatory Counsel  
[matthew.weissman@pseg.com](mailto:matthew.weissman@pseg.com)

Justin B. Incardone, Esq.  
Associate General Regulatory Counsel  
[justin.incardone@pseg.com](mailto:justin.incardone@pseg.com)

Stephen Swetz  
Senior Director, Corporate Rates and  
Revenue Requirements  
[stephen.swetz@pseg.com](mailto:stephen.swetz@pseg.com)

Michele Falcao  
Regulatory Filings Supervisor  
[michele.falcao@pseg.com](mailto:michele.falcao@pseg.com)

Caitlyn White  
Regulatory Case Coordinator  
[caitlyn.white@pseg.com](mailto:caitlyn.white@pseg.com)

Michael J. Ash, Esq.  
Attorney for Monitoring Analytics, LLC  
Carlin & Ward, P.C.  
P.O. Box 751  
25A Vreeland Road  
Florham Park, NJ 07932  
[michael.ash@carlinward.com](mailto:michael.ash@carlinward.com)

**Butler Electric Utility**

Robert H. Oostdyk, Jr., Esq.  
Murphy McKeon, P.C.  
51 Route 23 South  
P.O. Box 70  
Riverdale, NJ 07457  
[roostdyk@murphymckeonlaw.com](mailto:roostdyk@murphymckeonlaw.com)

Jason Lampmann  
Borough Administrator  
One Ace Road  
Butler, NJ 07405  
[jlampmann@butlerborough.com](mailto:jlampmann@butlerborough.com)

**New Jersey Large Energy Users Coalition**

Steven S. Goldenberg, Esq.  
Giordano, Halleran & Ciesla, P.C.  
125 Half Mile Road, Suite 300  
Red Bank, NJ 07701-6777  
[sgoldenberg@ghclaw.com](mailto:sgoldenberg@ghclaw.com)

Paul F. Forshay, Esq.  
Eversheds Sutherland (US) LLP  
700 Sixth Street, N.W., Suite 700  
Washington, D.C. 20001-3980  
[paulforshay@eversheds-sutherland.com](mailto:paulforshay@eversheds-sutherland.com)

**NRG Energy, Inc.**

Jennifer Hsia, Esq.  
Counsel  
804 Carnegie Center  
Princeton, NJ 08540  
[jennifer.hsia@nrg.com](mailto:jennifer.hsia@nrg.com)

Michael McFadden  
[michael.mcfadden@pseg.com](mailto:michael.mcfadden@pseg.com)

Bernard Smalls  
[bernard.smalls@pseg.com](mailto:bernard.smalls@pseg.com)

**Jersey Central Power & Light**

300 Madison Avenue  
PO Box 1911  
Morristown, NJ 07962-1911

Mark A. Mader  
Director, Rates & Regulatory Affairs – NJ  
[mamader@firstenergycorp.com](mailto:mamader@firstenergycorp.com)

Tom Donadio  
[tdonadio@firstenergycorp.com](mailto:tdonadio@firstenergycorp.com)

Sally Cheong  
[scheong@firstenergycorp.com](mailto:scheong@firstenergycorp.com)

Gregory Eisenstark  
Windels Marx Lane & Mittendorf, LLP  
120 Albany Street Plaza  
New Brunswick, NJ 08901  
[geisenstark@windelsmarx.com](mailto:geisenstark@windelsmarx.com)

**Rockland Electric Company**

4 Irving Place  
New York, NY 10003

Margaret Comes, Esq.  
Associate Counsel  
[comesm@coned.com](mailto:comesm@coned.com)

William Atzl  
Director – Rate Engineering  
[atzlw@coned.com](mailto:atzlw@coned.com)

Cheryl Ruggiero  
[ruggieroc@coned.com](mailto:ruggieroc@coned.com)