THE NORTHBRIDGE GROUP

ECONOMIC & STRATEGIC CONSULTING

30 MONUMENT SQUARE
CONCORD, MA 01742
(781) 266-2600

FACSIMILE
(781) 266-2649

September 30, 2019

Via Electronic Delivery & Overnight Mail
Aida Camacho-Welch, Secretary
New Jersey Board of Public Utilities
44 South Clinton Avenue, 3rd Floor, Suite 314
P.O. Box 350
Trenton, New Jersey 08625-0350

Re: 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

Dear Secretary Camacho-Welch,

The NorthBridge Group ("NorthBridge") is submitting these comments in response the New Jersey Board of Public Utilities' ("Board") August 21, 2019 notice in the above-captioned matter.[1] The notice solicited public comments on several issues in connection with New Jersey's program to preserve at-risk nuclear generation that serves the State through the creation of Zero Emission Certificates ("ZECs"). NorthBridge commends the Board for taking the necessary steps to preserve New Jersey's nuclear assets, which continue to be the most economic source of carbon-free energy. We are providing these comments on the issue of the appropriate level for the ZEC payment for future eligibility periods. We have two primary comments:

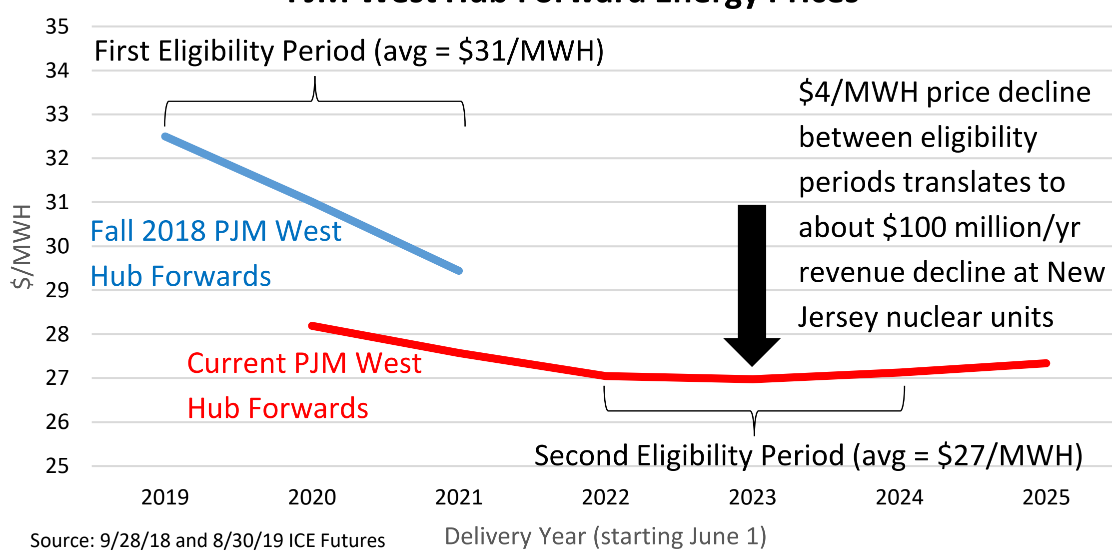
- The financial condition of New Jersey's nuclear units and nuclear units throughout PJM has deteriorated significantly over the last year; and

[1] NorthBridge is a consulting firm that provides economic and strategic advice to the electric and natural gas industries. NorthBridge has been involved in the New Jersey ZEC proceeding on behalf of Applicants, PSEG Nuclear LLC ("PSEG") and Exelon Generation Company, LLC ("Exelon Generation") and was previously involved in the establishment and implementation of ZEC programs in New York and Illinois.

- While the Board has the discretion to reduce the ZEC payment in the second eligibility period, the current financial condition of the nuclear units does not support such a reduction.

As part of the ZEC application process, PSEG Nuclear and Exelon Generation provided detailed information related to the financial condition of their New Jersey nuclear units. Energy revenues for the first eligibility period were based on forward market energy prices as of the fall of 2018. Since that time, forward energy prices throughout PJM have declined significantly. For example, as shown in Figure 1, the forward energy price at PJM Western Hub for the 2020 delivery year (starting June 1) was $31/MWH in the fall of 2018 and that has dropped by approximately 10% to $28/MWH today. For delivery years after 2020, the forward price curve goes down and prices average only $27/MWH during the second eligibility period.

Figure 1
PJM West Hub Forward Energy Prices



Source: 9/28/18 and 8/30/19 ICE Futures

The energy prices shown in Figure 1 are for PJM Western Hub, a liquid trading point in PJM for which forward prices are available several years into the future. The nodal energy prices at the New Jersey nuclear units will be lower than those at PJM Western Hub, reflecting transmission constraints across the PJM grid. For the most recent delivery year (June 2018 to May 2019), nodal spot prices at Salem and Hope Creek were $3.4/MWH lower than at the PJM Western Hub. This negative historical basis indicates that, based on current market conditions, the future energy prices received by the units during the second eligibility period will be less than $24/MWH.

These forward prices reflect current expectations about the impact of PJM market reforms and New Jersey joining RGGI. Yet, the prices have still declined due to low natural gas prices, no load growth, and persistent excess supply. As a result, based on current market conditions, the combined forward energy revenues for the New Jersey nuclear units for the second eligibility period would be about $4/MWH or $100 million per year lower than during the first eligibility period. This means that, without recognition of the value of carbon-free energy, these units would lose $100 million per year more than they would have based on the market conditions from just a year ago. In New Jersey and across PJM, the financial challenges for nuclear units continue to increase.

The New Jersey ZEC program was established to compensate these financially challenged nuclear units for their carbon-free energy. The ZEC charge was set by the Legislature at 0.4 cents per kWh, which is a value well below the emissions avoidance benefits associated with the continued operation of selected nuclear power plants. As part of the ZEC application process, PSEG provided detailed financial information that demonstrated that the plants were not economically viable without the ZEC payment and further demonstrated that with the 0.4 cents per kWh ZEC charge, the total revenues of the plants would be slightly below full cost plus risk. Further, PSEG certified that it would retire the units within three years absent a material financial change and stated that a ZEC payment was needed at all three units for the fleet to remain open.

The Legislature gave the Board discretion to reduce the charge starting in the second eligibility period provided that the Board determines that the reduced charge is sufficient to prevent the retirement of the nuclear power plants receiving ZEC payments. If the Board does consider reducing the ZEC charge notwithstanding the cost-effectiveness of the ZEC program as a means of meeting air quality goals, the most useful benchmark for determining whether a reduced charge is sufficient will be the market and financial conditions used for the initial applications in 2018. Both the New York and Illinois ZEC programs utilize this type of benchmark approach. To reduce the ZEC charge, the Board would need to demonstrate that the financial condition of the plants has materially improved from the time of the initial ZEC applications. But, in fact, the opposite is true. The financial condition of the plants has deteriorated, not improved, since the initial applications. Therefore, a reduction in the ZEC charge is not supported at this time.

Thank you for the opportunity to provide these comments. Should you have any questions about the foregoing, please do not hesitate to contact me at (781) 266-2607 or fsh@nbgroup.com.

Sincerely,

/s/ Frank Huntowski

Frank Huntowski, Director

cc: zec.comments@bpu.nj.gov