To: RHODE ISLAND PUBLIC UTILITIES COMMISSION

From: RICHARD HAHN, DAYMARK ENERGY ADVISORS

Date: DECEMBER 7, 2017

Subject: LONG-TERM CONTRACTING FOR RENEWABLE ENERGY RECOVERY FACTOR FOR EFFECT JANUARY 1, 2018 – DOCKET 4775

INTRODUCTION

On November 15, 2017, National Grid (the "Company") filed a request with the Rhode Island Public Utilities Commission (the "Commission") seeking approval of a long-term contracting for renewable energy recovery ("LTCRER") factor to be effective for the period beginning January 1, 2018 and June 30, 2018. The Company seeks to recover approximately $18 million in above market costs related the Company's contracts to purchase the output from certain renewable energy projects. The proposed factor is $0.00622 per KWH, compared to a factor of $0.00664 per KWH for the June 2017 to December 2017 period, a decrease of $0.00042 per KWH.

The Division of Public Utilities and Carriers (the "Division") requested that Daymark Energy Advisors ("Daymark") review this filing. This memorandum represents the result of our efforts

Based upon our review, we recommend that the proposed factor be approved as filed, as discussed further in the remainder of this memorandum.

DISCUSSION

We reviewed the filing and responses to data requests that were submitted to the Company. We also used external independent data sources to investigate some of the underlying assumptions used by the Company. Based upon that information and our review, we reached the following conclusions.

- The capacity factors for the Rhode Island Landfill Gas project, the Wind Energy Development project, the Black Bear Hydro project, the DeepWater Wind project and the solar projects to be reasonable;

- The contract prices are reasonable, based upon contracts provided with previous filings;
- The energy futures for the ISO New England Hub as of 11/7/2017 that were used by the Company to determine a market proxy energy price were verified and are still reasonable to use;
- The REC price of $18.40 assumed by the Company was found to be consistent with market data and is reasonable to use;
- The capacity obligation of Rhode Island Landfill Gas project of 26.0 MW was verified, and is reasonable to use;
- The capacity prices for the Rhode Island Landfill Gas project and the Black Bear Hydro project were verified, and is reasonable to use;
- The calculations in the excel file provided by the Company were spot checked, and no discrepancies were found.

Based upon the above, we find that many of the assumptions and calculations that were used by the Company to determine the proposed factor are reasonable. There were several small issues that we identified, and a conference call was held with the Company on December 6, 2017 to successfully resolve them. Those issues and the Company's response are discussed in the following bullet points.

- In its filing, the Company assumed a zero capacity factor for Orbit Energy, despite a Commercial Operation Date ("COD") of 8/24/2017. On the conference call, the Company explained that, despite having met the contractual obligations required to establish a COD, the project was commissioned on natural gas and is now preparing to switch to biogas. The project has not yet produced commercial energy and the Company has not made any payments to Orbit Energy. Based upon this explanation, we find the Company's assumption regarding Orbit Energy's capacity factor to be reasonable.
- We could not verify capacity values for the Black Bear Hydro project. The Company's filing states that these are based upon ISO New England Seasonable Claimed Capability (SCC) reports, but does not state which specific report was used. The responses to Division Data Requests show that the Company used a winter capability of 3.03 MW and a summer capability of 3.29 MW. The ISO NE November 2017 SCC report shows 3.543 and 3.252 respectively. The Company explained that it based its estimate of the capacity obligation for the Black Bear Hydro project on the SCC report that would have existed when this project would have qualified for a capacity obligation. This SCC report was from 2014. We find this approach to be reasonable.

- The filing contains an estimate of Forward Capacity Market ("FCM") revenues from 19 Distributed Generation ("DG") projects for the month of June 2018 of $30,497, with 90% being credited to customers. According to the Company, this value is based upon (a) an "estimate clearing price from the third annual reconfiguration auction ("ARA3") for the 2018/2019 capacity commitment period" of $3.628 per KW-month and (b) a total of 8.406 MW for the 19 projects. We identified two concerns here. We couldn't verify the price, as it is our understanding that ISO will not issue results from ARA3 until March 2018. Prices for ARA1 And ARA2 were much higher than $3.628. NGRID acknowledged that the ARA3 price has not yet been issued, and clarified that its assumed price was a forecast of that parameter that had been used in Docket 4676. In addition, the filing and responses to Division data requests do not specify where the capacity assumptions for the 19 DG projects came from. The Company explained that it based its estimate on the FCA qualified capacity for FCA-12 that was approved by ISO-NE for the 19 projects. It is our understanding that ISO-NE does has not published qualified capacity for such individual projects, so this data may not be publicly available. We note that the capacity values for these projects in the November 2017 SCC report total 7.616 MW, which compares favorably to the 8.406 MW assumed by the Company. Based upon this information, we find the Company's estimate of capacity revenues for these DG projects to be reasonable.

Given that all issues raised in our review of this filing have been successfully resolved, we recommend that the LTCRER factor be approved as filed.