State of Rhode Island
Division of Public Utilities & Carriers

To: **Rhode Island Public Utilities Commission**

From: **Division of Public Utilities and Carriers**

Date: **July 3, 2018**

Subject: **National Grid 2019 Standard Offer Supply & Renewable Energy Standard Procurement Plans, Docket No. 4809**

The Rhode Island Division of Public Utilities and Carriers ("Division") is pleased to provide the accompanying Memorandum of Daymark Energy Advisors, Inc. ("Daymark") in response to the Narraganset Electric Company's ("Company") 2019 Standard Offer Supply ("SOS") and Renewable Energy Standard ("RES") Procurement Plans that were filed on March 1, 2018. This memorandum provides the results of Daymark's review of the Company's SOS and RES plans.

In addition to review of the SOS and RES Procurements, the attached Memorandum includes two recommendations for Commission consideration. First, as the Commission deliberates on the structure of SOS or its replacement in the future, it may wish to consider procurement strategies in the context of time of use rates and advanced meter functionality as well as the evolving roles of the electric distribution company and competitive retail suppliers in Rhode Island. A potential docket in 2019 to evaluate advanced meter functionality, time varying rates and data governance may include in it as an important component the ground rules for supply procurement. Second, the Division recommends that the Commission order the Company to examine use of reverse auctions as a strategy to achieve lower-cost energy supply. The Commission could request a study by the Company, order a pilot, or open a docket to examine alternative procurement strategies.

Thank you,

Jonathan E. Schrag
Deputy Administrator

To: Rhode Island Division of Public Utilities and Carriers

From: Daymark Energy Advisors, Inc.

Date: July 2, 2018

Subject: National Grid 2019 Standard Offer Supply & Renewable Energy Standard Procurement Plans, Docket No. 4809

OVERVIEW

The Company's proposed 2019 SOS and RES plans are similar to the plans the Company utilized in 2018, with some new features. Most notably, the Company proposes in the 2019 SOS plan to modify the Full Requirement Service contract for the Residential and Commercial groups by removing capacity charges from the suppliers' responsibility. The supplier would no longer include capacity charges in the fixed $/MWh price but will pass through the capacity charges it receives from the Independent System Operator-New England ("ISO-NE") to the Company without any markup for margin or risk. This proposed change is discussed further in our findings below. Highlights of each of the proposed 2019 plans are as follows:

2019 SOS Plan Highlights:

- Continues separate procurements for each customer class (Residential, Commercial and Industrial).
- Continues the method of procuring SOS supply through Full Requirements Service contracts (100% for Industrial, 90% for Residential and Commercial).
  - Industrial Full Requirements Service contracts procured in three-month durations, solicited quarterly, for 100% of the load, consistent with the approved 2018 SOS plan. The final contract will be executed in the fourth quarter of 2019 for the three-month period ending March 31, 2020.
  - Repeating procurement schedule for Residential and Commercial Full Requirements Service contracts consisting of quarterly solicitations of four different durations and percentages of load (6, 12, 18, and 24 months), totaling 90% of load consistent with the remaining supply (10%) procured with ISO-NE spot market purchases. Contract

duration, frequency and dollar cost averaging approach is consistent with the approved 2018 SOS plan.

- The Company proposes to modify the Full Requirement Service contract for the Residential and Commercial groups by removing capacity charges from the suppliers' responsibility.
- The Company requests flexibility to modify the Residential and Commercial procurement schedules that end in March 2021 to end in December 2020 if the Company's requirement to supply SOS under Rhode Island General Laws §39-1-27.3 (b) is not extended by the Rhode Island legislature prior to the time of the RFP.
- The Company will voluntarily file a supply procurement plan by March 2019 if the law to supply in 2018 is not amended.

2019 RES Plan Highlights:

- Proposes to continue to procure using RECs through a combination of Long-Term Renewable Contracts, the RE Growth Program, RES RFPs or through brokers. Continue to use the current standard Certificate Purchase Agreement ("CPA") that is used to procure Renewable Energy Credits ("RECs") via the standalone RES Request for Proposals ("RFPs").
- The Company proposes to update the process that determines the actual value of RECs from the renewable generation projects to reconcile the Long-Term Contract Renewable for Renewable Energy Recovery Factor ("LTC Recovery Factor") and Renewable Energy Growth ("RE Growth").

FINDINGS

2019 SOS Plan:

The Division concurs with the Company's proposal to continue to procure SOS service through full requirements service contracts for Industrial customers on a quarterly basis and for Commercial and Residential customers at various times through multiple procurements using the layering and laddering approach currently in place as previously approved by the Commission.

The Division also concurs with the Company's proposal to continue to group procurements by Residential, Commercial and Industrial customer groups, whereas the Industrial group is subject to quarterly rate periods and the Residential and Commercial groups are subject to semi-annual rate periods (October through March and April through September) as modified in the 2016 SOS rate plan.

However, as the Commission considers the structure of SOS or its replacement in the future, it may wish to consider rate structures in the context of time of use rates and advanced meter functionality as well as the evolving roles of the electric distribution company and competitive retail suppliers in Rhode Island consistent with the policies it has put in place through Docket 4600.

The Company has proposed a modification to the Residential and Commercial Full Requirements Service contracts by removing the capacity charges from the Supplier's responsibility. Under the Company's proposal, the supplier would no longer include capacity in the fixed $/MWh price but will pass through the capacity charges it receives from the ISO-NE to the Company without any markup for margin or risk. The Company's primary rationale for removing capacity from the Full Requirements Service contract is to remove the risk premiums associated with capacity from the suppliers' bid prices. The Company engaged Concentric Energy Advisors, Inc. ("Concentric") to complete a quantitative analysis of capacity risk premiums included in SOS bids to quantify risk premiums based on actual market data. The Concentric Report entitled *Rhode Island Full Requirement Service Risk Premiums* [1] concluded that the fixed price ($/MWh) will include risk premiums to address the economic consequences that the cost to serve the load may fluctuate. The premiums are meant to address several market-related risks including variations in prices, quantities and changes in system-wide coincident peak. A supplier will typically protect against unfavorable changes to the cost to serve the load by purchasing energy in advance to match the commitment in the Full Requirement Service. The costs of ancillary services and capacity are often left unhedged because the liquidity is limited (such as the case for ancillary services) or because there is no effective hedging mechanism (such as for capacity). Because ancillaries are a small percentage of the total Full Requirements Service charges (1%), the risk to suppliers is very small. However, capacity represents a much larger % of the Full Requirements Service charge (53%) resulting in a significant risk to suppliers.[2]

According to the Concentric report, because the unique administrative risks faced by suppliers associated with capacity are not easy to hedge, suppliers add substantial premium to protect themselves from financial loss.[3] The risk premium is greater as the delivery period is further into the future. Concentric's analysis of the January 10, 2018 RFP estimates the load weighted risk premium for the Industrial 3-month obligation at $.30/MWh. Whereas, for 24-month period, the load weighted risk premium for residential was estimated at $2.56/MWh and $3.33/MWh for Commercial.[4] Based on this

[1] Provided by the Company in response to data request Division 1-2

[2] Percentages as reported in the Concentric Report

[3] These risks are described in detail and quantified the Concentric report.

[4] Concentric Report, page 15.

report, the Company determined that removal of capacity from the Residential and Commercial Full Requirements Service contract would benefit SOS customers in Rhode Island by lowering prices through more competition and removal of capacity risk premium without unduly exposing customers to additional market risk.[5] Under the Company's proposal to remove capacity, any difference between estimates and actual costs would be recovered through the reconciliation. A secondary benefit of removing capacity is that it may increase competition by attracting suppliers that would not otherwise have bid due to the risk.

The Division has reviewed the Company's proposal to remove capacity charges from the Full Requirements Service Contract for Residential and Commercial customers as well as the Concentric Report and finds the proposed modification to be reasonable. However, should the Commission choose to approve this modification, the Division recommends that the Commission direct the Company, in its next SOS (or successor) rate filing, to submit an analysis of bids and the reconciliation of capacity to determine whether or not a lower risk factor and overall lower price to customers was achieved as expected.

The Company also proposes a modification to the Residential and Commercial procurement schedules to account for the expiration (under Rhode Island General Laws §39-1-27.3 (b)) of the Company's requirement to arrange for a standard power supply offer to customers that have not elected to enter into power supply arrangements with other nonregulated power suppliers supply. To the extent the law is not amended from 2020 to a later year prior to the RFP, the Company is seeking approval to change the end dates of the bid blocks that end in March 2021 to December 2020. This proposal appears a reasonable path in the context of a future proceeding to determine the successor regime to existing standard offer service.

Opportunity for Reverse Auctions

As noted previously in the Division's comments in the Memorandum for Narragansett Electric – Standard Offer Rate Filing (Docket No. 4692)[6], the Division is interested in exploring whether using a technology supported auction-based approach to procure electricity supply might achieve lower cost supply outcomes for Rhode Island ratepayers.

[5] Under the Company's proposal to remove capacity, any difference between estimates and actual costs would be recovered through the reconciliation, as described beginning on page 24, line 7 of Mr. McCauley's testimony.

[6] Docket No. 4692: Division of Public Utilities and Carriers Memorandum (Narragansett Electric – Standard Offer Rate Filing) to the Commission; March 1, 2018

As it relates to reverse auctions, the Company asserts that it "has considered and continues to consider, the use of reverse auction procurement methods."[7] The Company further explains that it has twice attended presentations from a vendor that provides a platform that implements reverse auctions and while the presentations claim to result in lower costs, they did not provide any proof or evidence.[8]

Despite the Company's skepticism about the benefits of a reverse auction, the Division believes that technology enabled auctions, if designed appropriately, can be a valuable tool in identifying the lowest cost suppliers. Descending-clock auction formats (also referred to as reverse auctions) have been utilized successfully to procure electric default service supply in New Jersey, Ohio and Delaware for many years with positive results.

In a recent review of New Jersey's procurement of Basic Generation Service (BGS), the New Jersey Board of Public Utilities ("Board") found its auction process has worked well and has resulted in the best prices possible at the time. The following is an excerpt from the Board's Decision and Order:

> "Specifically, the Board afforded an opportunity for parties to file alternatives to be considered by the Board on how to procure the BGS requirements for the RSCP and CIEP customer classes for the period beginning June 1, 2018. At this time, while the Board has again been presented with recommendations to modify certain elements of the auction process, there have been no fully developed, concrete proposals to cage the basic descending-clock Auction design. The Board believes that the Auction process that was implemented in 2002 Auction and which has since been modified to include a BGS-RSCP and BGS-CIEP Auction, has worked well and has resulted in the best prices possible at the time."[9]

In reply comments to the Massachusetts Department of Public Utilities' Request for Reply Comments, Charles River Associates, Inc. (CRA) strongly recommended adopting the formal auction process for procurements modeled after those in Ohio and New Jersey based on the success experienced in those jurisdictions.[10]

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[7] Company response to data request Division 1-10.

[8] Ibid.

[9] State of New Jersey Board of Public Utilities Decision and Order in the Matter of the Provision of Basic Generation Service for the Period Beginning June 1, 2018, dated December 1, 2017, Page 6.

[10] In the Investigation by the Department on its own Motion into the Provision of Basic Service, DPU 15-40; June 22, 2015

In a reverse auction, registered vendors are invited to submit their bids online. As the reverse auction progresses, bidders can compare their most recent bid with the current low bid. Most commonly, the online reverse auction platform only shows bid amounts but conceals the names of the vendors submitting the bids. Unlike most other solicitation methods, vendors participating in a reverse auction may submit multiple bids, adjusting their prices lower in response to their competitors' offers[11]. An important advantage of the descending-clock auction process is price transparency. For example, in a descending-clock auction, potential suppliers are able to review the set of announced prices in each round and adjust the amount bid in response to the relative price of offered products. Products that were less attractive initially may become more attractive later in the auction as prices separate in response to supply and demand conditions. Careful auction design can mitigate the risk that one or more products clear at a price that is not reflective of true market conditions. For example, Ohio underwent a reverse auction with results submitted in March 2018 and the assessment of the auction conduct was found to be open, fair, transparent, and competitive[12]. New Jersey Board of Public Utilities submitted a final report for auctions held in February 2016 where it was reported that the auction was open, fair, transparent as well as sufficiently competitive[13].

Daymark's own procurement and portfolio management ("PPM") experts have successfully utilized reverse auctions for retail and wholesale power supply procurements, and while client, product and pricing data are confidential, Daymark has documented savings vs. more traditional approaches such as electronic sealed bids.

For these reasons, regardless of the statutory provision and whose role it is to procure supply, the Division believes that a technology enabled auction is an important tool that can improve the competitive procurement process and lead to savings for Rhode Island ratepayers. If the Commission chooses to proceed along this path, it may want to consider one of the following options:

- Open a docket to obtain stakeholder feedback on alternative procurement processes or more specifically the use of reverse auctions
- Ask the Company in conjunction with the Division to conduct a study and/or propose a pilot auction

[11] Office of Legislative Oversight: Report Number 2018-4: Reverse Auction Purchasing, December 12, 2017 https://www.montgomerycountymd.gov/OLO/Resources/Files/2018%20Reports/ReverseAuctionPurchasing2018-4.pdf

[12] Duke Energy Ohio, Inc,'s Competitive Bidding Process Auction Results, February 20, 2018

[13] Annual final Report on the BGS and CIEP Auctions presented to the New Jersey Board of Public Utilities

2019 RES Plan

The Division concurs with the Company's proposal to continue the practice of procuring RECs through a combination of Long-Term Renewable Contracts, the RE Growth Program, RES RFPs or through brokers as outlined in its 2019 RES plan[14]. As approved in the 2018 Res plan, New RECs obtained through its Long-Term Renewable Contracts and RE Growth Program will be used to satisfy its RES obligations. The remaining RECs required to meet its RES obligations will be procured through a series of standalone RFPs issued by the Company. The Company may also evaluate unsolicited offers from brokers or third-parties if the offers are less than the available market pricing.

Based on generation and load data estimates, the Company expects the New RECs obtained from Long-Term Renewable Contracts and RE Growth RECs will exceed the New REC RES obligation in 2019 plan. Once the New RECs obtained exceed the RES obligation and banking allowance, it will be necessary to sell the excess New RECs in the market in order to monetize the REC's value for customers. The Company proposes to credit these revenues from the sale of the New RECs to delivery customers through the LTC Recovery Factor and the RE Growth Factor reconciliation.

The Division concurs with the Company's proposal to bank any excess New RECs beyond the RES Requirements for future obligations and sell any remaining New REC's into the market (through RFP, participation in auctions or engaging a third-party to broker the sale).

The Company is proposing to modify the process that determines the actual value of RECs from the renewable generation projects for reconciling the LTC Recovery Factor and the RE Growth Factor. Under this proposal, the Company will continue to charge SOS customers the same amount that is credited against the cost of the Long-Term Renewable Contracts and the RE Growth Program.

In 2019 the Company expects the New RECs obtained from the Long-Term Renewable Contracts and the RE Growth Program will exceed the RES obligation and the banking allowance and it will be necessary to sell the excess New RECs in the market in order to monetize the RECs' value. The Company proposes to use the average sales price of excess New RECs transacted in the market during a quarter as the transfer price for New RECs. If there are no sales of excess New RECs in a quarter the Company will determine the actual value of these RECs for the purpose of reconciling the LTC Recovery Factor and the RE Growth Factor by using the same procedure established and approved in Docket No. 4338.

Although the Company's proposal seems reasonable, the Division has some concern about transfer price being potentially determined by a limited number of sale transactions or the timing of such sale

[14] Schedule 7 of McCauley's testimony in this case.

transactions that may not reflect market. To alleviate this concern and ensure fairness of the transfer price for both distribution customers and SOS customers, the Division recommends that if the average sale price of excess New RECs in a quarter ("Quarterly Sale Price") differs more than 20% from the transfer price under the approved method in the 2018 RES plan, then the Company calculate a transfer price based on the sum of 50% of the Quarterly Sale Price and 50% of the transfer price under the method approved in the 2018 plan.

In conclusion, Daymark recommends that the Commission approve the 2019 SOS and RES procurement plans, with the following modifications:

- For SOS supply, reverse auctions should be further investigated as a tool to procure electricity to achieve lower cost supply for ratepayers.
- Direct the Company, in its next SOS (or successor) rate filing, to submit an analysis of bids and the reconciliation of capacity to determine whether or not a lower risk factor and overall lower price to customers was achieved as expected.
- Consider opening a proceeding to examine alternative procurement strategies including reverse auctions, or in the alternative, order the Company to undertake a study or pilot of reverse auction procurement strategies.
- Integrate consideration of a successor regime to existing standard offer service with a future docket for the design of time varying rates in the context of advanced meter functionality.
- Modify the transfer price for New RECS, such that if the average sale price of excess New RECs in a quarter ("Quarterly Sale Price") differs more than 20% from the transfer price under the approved method in the 2018 RES plan, then the Company calculate a transfer price based on the sum of 50% of the Quarterly Sale Price and 50% of the transfer price under the method approved in the 2018 plan.