nationalgrid

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Senior Counsel

January 11, 2017

VIA HAND DELIVERY & ELECTRONIC MAIL

Luly E. Massaro, Commission Clerk
Rhode Island Public Utilities Commission
89 Jefferson Boulevard
Warwick, RI 02888

RE: Docket 4676-Proposed National Grid Proposal to Bid Capacity of Customer-Owned DG Facilities into the Forward Capacity Market
Responses to Division Data Requests – Set 2

Dear Ms. Massaro:

On behalf of National Grid,[1] I have enclosed the Company's responses to the second set of data requests issued by the Rhode Island Division of Public Utilities and Carriers in the above-referenced docket.

Thank you for your attention to this matter. If you have any questions, please contact me at 401-784-7288.

Very truly yours,

Jennifer Brooks Hutchinson

Enclosures

cc: Docket 4676 Service List
Leo Wold, Esq.
Jon Hagopian, Esq.
Steve Scialabba, Division

[1] The Narragansett Electric Company d/b/a National Grid (National Grid or Company).

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Certificate of Service

I hereby certify that a copy of the cover letter and any materials accompanying this certificate was electronically transmitted to the individuals listed below.

The paper copies of this filing are being hand delivered to the Rhode Island Public Utilities Commission and to the Rhode Island Division of Public Utilities and Carriers.

Joanne M. Scanlon

January 11, 2017
Date

Docket No. 4676 National Grid – Forward Capacity Market Proposal
Service List updated 12/7/16

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Division 2-1

Request:

Docket 4038, the Company proposed, and the Commission approved, a revised mechanism for sharing\revenues from the Natural Gas Portfolio Management Plan ("NGPMP") between customers and the company.

a. Please describe the resources (i.e., existing employees, new employees, contractors, etc.) used by the company to implement this plan.
b. Please provide the annual costs to implement this plan.
c. Please describe how these costs are recovered.
d. Are there any incremental costs to the company in implementing this program? If so, please describe in detail.

Response:

a. In Docket 4038 in 2009, the Company proposed managing the gas portfolio and the customer's daily supply requirements with in-house personnel instead of the outsourcing that was being used by the Company at the time of the merger with National Grid. The Company's Energy Procurement department was already in existence and was managing the gas portfolios of the five other National Grid gas utility subsidiaries in-house; the additional portfolio management work for the Company required no additional staff.

b. The Company does not specifically track the costs to manage the NGPMP, but the Company receives an allocation of labor-related costs of Energy Procurement's FTEs based on the application of a cost causal allocation percentage derived from the number of customers for all subsidiary utilities, with the Company's share currently at 7.36%.

c. Recovery of such costs are through the Company's gas distribution rates.

d. The revenue sharing mechanism proposed as part of the 2009 NGPMP filing did not require incremental personnel, contractors or introduce incremental administration costs. In March of 2016, the Public Utilities Commission approved a change to the revenue sharing calculation in the NGPMP. This change in the revenue sharing calculation did not change how the portfolio was managed nor did it introduce any incremental costs.

Prepared by or under the supervision of: Stephen A. McCauley

Division 2-2

Request:

In docket 4038, the approved sharing mechanism is described as follows: For revenues/savings up to $2 million, 100% goes to customers; between $2 million and $5 million, 80% goes to customers; for $5 million to $10 million, 90% goes to customers; and above $10 million, 94% goes to customers.

a. Did the company consider a similarly structured mechanism (i.e., varying sharing percentages based upon different revenues/savings thresholds) for its proposal in Docket 4676? Please explain why or why not.

Response:

Yes, the Company did consider a similarly structured tiered sharing mechanism; however, the Company determined that the symmetrical sharing of upside and downside risks and rewards, balanced with the 20% sharing of Net Market Proceeds, was the most appropriate arrangement to propose.

Participation in the forward capacity market (FCM) with solar distributed generation (DG) facilities entails a certain amount of risk because of the potential for Performance Incentive Penalties, as well as uncertainty of market revenues as a result of factors that are outside the Company's control, such as Forward Capacity Auction Prices, DG system performance, weather events, and other system contingencies that may result in Performance Incentive penalties or payments.

The Company's FCM Proposal seeks to mitigate the market risks and maximize FCM revenue for the benefit of its customers. A tiered sharing mechanism, similar to that which was approved in Docket 4038, may incent different behaviors under varying market conditions. The Company's proposed symmetrical sharing arrangement in which it retains 20 percent of the Net FCM Proceeds, whether a cost or benefit, would appropriately align the interests of the Company and its customers under all market conditions and would effectively incent the Company to balance market risk with the potential for increased FCM revenue. Also, as discussed in the Company's pre-filed testimony, an additional benefit of the Company's proposed sharing mechanism is that the Company would share 20 percent of any net annual FCM cost, thereby lowering customers' exposure to risk.

Prepared by or under the supervision of: Ian Springsteel and Stefan Nagy

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Division 2-3

Request:

In Docket 4654, the Commission approved a settlement regarding the ENERGY EFFICIENCY PROGRAM PLAN FOR 2017 ("EEPP"). On page 21 of that settlement, it states that "*Consistent with the PUC's Standards, the EE Procurement Plan, and PUC decisions regarding energy efficiency program plans since 2008, the Company and the Parties recommend that kW-demand savings achieved via the electric energy efficiency and Combined Heat and Power programs continue to participate in the FCM as Passive On-Peak Demand Resources. The demand savings attributed to energy efficiency measures and Combined Heat and Power facilities will be reported by the Company to ISO-NE as Energy Efficiency and Distributed Generation, respectively. All revenue received from participation in the FCM will be reinvested as a funding source for energy efficiency*."

a. Please list all energy efficiency and CHP facilities that the company has qualified and/or managed participation in the FCM since 2008.
b. Please provide the resources (i.e., staffing, contractors, etc.) and costs to qualify these facilities.
c. Could these same resources also be used to qualify and manage facilities that will participate in the FCM pursuant to the company's proposal in docket 4676? Please explain why or why not.
d. For each year since 2008, provide the number of resources that participated in the FCM and the total MW of Capacity Supply Obligation

Response:

a. Table 1 below lists the energy efficiency and CHP resources that the Company has qualified or managed in the FCM since 2008. Please refer to Attachment DIV 2-3[1] for a detailed list of the energy efficiency[2] and CHP facilities that the Company has enrolled in the FCM since 2008.

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[1] Attachment DIV 2-3 has been submitted as an Excel file on CD-ROM due to the voluminous nature of the file.
[2] Please note that the energy efficiency measures represent the measures that have been reported to ISO-NE. ISO-NE uses adjusted gross demand savings, which do not account for the effects of free-ridership and spillover to determine the performance of energy efficiency measures in the FCM. As a result, the savings that are reported for the energy efficiency measures in Attachment DIV 2-3 may vary from the net savings that are reported in the Company's annual Year-End Reports for its Energy Efficiency programs since 2008.

Table 1: Narragansett Electric Company Energy Efficiency and CHP FCM Resources

Resource Name	Resource ID	Technology
ngrid ri odr eeproject_1[3]	9116	Energy Efficiency
ngrid_ri_fca1_eeodr	12672	Energy Efficiency
RI CHP	38217	CHP

b. The Company utilizes internal staff and vendors to qualify and manage its portfolio of energy efficiency and CHP resources in the FCM. Table 2 below lists the annual costs to qualify and manage these facilities in the FCM since 2008. Prior to 2013, the Company utilized existing Energy Efficiency employees to manage its participation in the FCM. In 2013, the Company expanded its FCM participation to begin qualifying CHP facilities that were funded through the Energy Efficiency programs and maximize the value of Energy Efficiency and CHP resources. In October 2013, the Company hired a full-time employee to focus on the management of its expanded participation in the FCM with Energy Efficiency and CHP resources in Rhode Island and Massachusetts.

Table 2: Historic FCM Administrative Costs for Energy Efficiency and CHP Resources

Year	Administrative Cost
2008	$5,989.37
2009	$7,672.71
2010	$11,141.47
2011	$13,128.28
2012	$11,594.61
2013	$17,285.85
2014	$62,451.91
2015	$43,755.29
2016	$70,794.23

[3] Please note that the resource "ngrid_ri_odr_eeproject_1" was not included in the list of resources that the Company has qualified in the FCM, which the Company provided in its response to Division 1-6. This is because the list of resources in Attachment DIV 1-6 included resources which the Company qualified in the FCM. The resource "ngrid_ri_odr_eeproject_1" is comprised of measures that were installed prior to the implementation of the Forward Capacity Market and was carried into the Forward Capacity Market by ISO-NE as an Existing Resource, as explained in the Company's response to Division 1-22.

Prepared by or under the supervision of: Stefan Nagy

c. The Company could utilize the same employees that manage the participation of the Company's Energy Efficiency and CHP resources in the FCM to qualify and manage the facilities that will participate in the FCM pursuant to the Company's proposal in this proceeding. However, as noted in the Company's response to Division 1-24, if the Company were to re-assign employees that currently contribute to the Company's Energy Efficiency programs in Rhode Island and Massachusetts, and for whom the costs are currently recovered through the respective Energy Efficiency programs in Rhode Island and Massachusetts, those positions would need to be backfilled.

d. Please refer to Attachment DIV 1-6 for a detailed list of the resources that the Company qualified in each Forward Capacity Auction. Please refer to Attachment DIV 2-3 for the number of resources that participated in the FCM and the total Capacity Supply Obligations in Commitment Period 1 (June 1, 2010 – May 31, 2011) through Commitment Period 10 (June 1, 2019 – May 31, 2020).

Prepared by or under the supervision of: Stefan Nagy

Division 2-4

Request:

On page 21 of the settlement in docket 4654, it also states that "*The Parties fully agree that the Company should recover all prudently incurred FCM expenses from ISO-NE capacity-payment revenue generated by the demand savings from efficiency programs represented by the Company. The Company expects that capacity payments received from the ISO-NE will exceed its administrative and Measurement and Verification (M&V) compliance costs of participation in the FCM, and will result in additional funds being made available to fund efficiency programs for customers. If these participation costs exceed the capacity payments, the Parties agree that the Company may recover its prudently incurred costs from the energy efficiency program fund. The Parties reserve the right to examine the actions and expenses of the Company to ensure that only prudently incurred expenses are deducted from ISO-NE capacity payments or the energy efficiency program fund.*"

a. Is it accurate to interpret this text as meaning that the Company is allowed to recover its prudently incurred costs, but receives no share of any FCM revenues from EE and CHP facilities? Please explain why or why not.
b. Did the company consider this type of mechanism for its proposal in docket 4676? Please explain why or why not.

Response:

a. It would be accurate to state that the Company is allowed to recover its prudently incurred costs, but receives no share of the net forward capacity market (FCM) proceeds from Energy Efficiency and Combined Heat and Power (CHP) facilities. As stated on page 21 of the settlement in Docket 4654, the Company recovers all prudently incurred FCM expenses from the FCM revenue and re-invests the net revenue received from participation in the FCM with Energy Efficiency and CHP facilities as a funding source for its Energy Efficiency programs. If the participation costs were to exceed the capacity payments, the Company would recover its prudently incurred costs from the energy efficiency program fund.

b. The Company did consider this type of mechanism for its proposal in Docket 4676; however, it ultimately determined that the symmetrical sharing of upside and downside risks and rewards, balanced with the 20% sharing of Net Market Proceeds, was the most appropriate arrangement to propose.

Prepared by or under the supervision of: Stefan Nagy and Jeremy Newberger

Division 2-4, page 2

The participation of solar distributed generation (DG) facilities in the FCM entails significant risk[1] and requires active oversight to mitigate those risks. As outlined on page 15 of the Company's pre-filed testimony, solar DG facilities that acquire a Capacity Supply Obligation will be exposed to the risk of Performance Incentive penalties during Capacity Scarcity Conditions under ISO-NE's Pay for Performance Rules. As a result, each solar DG facility that is qualified in the FCM must be actively monitored and managed, as outlined in the Company's pre-filed testimony, in order to mitigate the risks Performance Incentive penalties.

Energy Efficiency resources, on the other hand, are not exposed to the same risks of Performance Incentive penalties, nor do they require ongoing active monitoring to mitigate the risk of incurring penalties. Energy Efficiency resources are qualified as passive On-Peak Demand Resources that are compensated in the FCM based on the demand reductions provided during the Demand Resource On-Peak Hours.[2] Energy Efficiency resources are credited with performance in the FCM during all Demand Resource On-Peak Hours at 100% of the evaluated demand reduction value for the entire useful life of the underlying measures and receive special treatment under ISO-NE's Pay for Performance rules, which only requires them to perform during Capacity Scarcity Conditions that occur during the Demand Resource On-Peak Hours.[3] As a result, as long as the Energy Efficiency Resource delivers enough capacity to meet its Capacity Supply Obligation, it is always considered to be delivering 100% of its Capacity Supply Obligation and is not exposed to the risk of Performance Incentive penalties. In addition, since the performance of an Energy Efficiency resource is pre-determined for the useful life of the underlying efficiency measures, once an Energy Efficiency resource has been qualified in the FCM and is commercially operational, the existing resource requires very little ongoing management.

[1] While the Company's pre-filed testimony estimates that the risks associated with the participation of solar DG Facilities in the FCM are such that there is less than a 1.5% probability of realizing a net loss in the market from Performance Incentive Penalties, this estimate is predicated upon the application of the Company's strategy to actively monitor and manage resources in order to mitigate the risk of penalties.

[2] The performance of Energy Efficiency resources is based on evaluation studies that measure the demand reductions provided by specific types of efficiency measures during the summer and winter Demand Resource On-Peak Hours of 1:00 p.m. to 5:00 p.m., during June, July and August and 5:00 p.m. to 7:00 p.m., during December and January.

[3] For a detailed description of the treatment of Energy Efficiency resources under ISO-NE's Pay for Performance rules, please refer to Section III.13.7.2.4 of ISO-NE's compliance filing on the rule change, "ISO New England Inc., Docket Nos. ER14-2419-__, EL14-52-__; 30-Day Compliance Filing to Revise Tariff section III.13.7" at https://www.iso-ne.com/static-assets/documents/2014/11/er14-2419-002_11-3-14_two-settlement_market_compliance_filing.pdf;

Division 2-4, page 3

Similarly, the Company's CHP resources are qualified in the FCM as passive On-Peak Demand Resources and have limited exposure to the risk of Performance Incentive penalties. The performance of CHP resources in the FCM is based on the interval-metered output of the underlying CHP units during the Demand Resource On-Peak Hours. While CHP resources, unlike Energy Efficiency resources, do not receive special treatment under the Pay for Performance rules and are required to be performing during all Capacity Scarcity Conditions, the load profile of these resources limits the risk of incurring Performance Incentive penalties. The Company's CHP resources are typically base-loaded to meet a constant onsite load and, as a result, are expected to be performing at or above the level of their Capacity Supply Obligation in all hours, limiting the risks associated with Performance Incentive penalties.

As noted in the Company's response to Division 1-29, the Company considered a variety of sharing arrangements. After considering these options and weighing the unique risks of participating in the FCM with solar DG facilities, as well as the ongoing management activity needed to mitigate those risks, the Company determined that the symmetrical sharing of upside and downside risks and rewards, set at 20% of the Net Market Proceeds, would most appropriately align the interests of the Company and its Customers and effectively incent the Company to maximize the value of its DG FCM portfolio for the benefit of its customers.

Division 2-5

Request:

On page 21-22 of the settlement in docket 4654, it also states that "*In addition, as part of the FCM, all qualified auction participants are required to post Financial Assurance to provide security that the promised resource will deliver the promised MW at the promised time. If, as a result of circumstances beyond the Company's control, the Company is unable to provide all or a portion of the megawatts of capacity proposed in its qualification packages and capacity auction bids, some or all of the financial assurance monies would be forfeited*."

a. Did the company have to increase its posted Financial Assurance with ISO-NE as a result of having these EE and CHP facilities participate in the FCM? If so, please explain in detail and provide and annual incremental Financial Assurance amounts since 2008.
b. Under the EEPP, have any Financial Assurance monies been forfeited? If so, please explain in detail and provide the amounts forfeited.
c. Under the EEPP, who pays for any forfeited Financial Assurance monies – Customers or the Company?

Response:

a. The Company has not had to increase its posted Financial Assurance with ISO-NE solely as a result of its participation in the FCM with EE and CHP facilities.

b. The Company has never forfeited Financial Assurance deposits as a result of its participation in the FCM with Energy Efficiency and CHP resources.

c. Under the Energy Efficiency Program Plan that was approved by the PUC in Docket 4654, if the Company were to forfeit Financial Assurance deposits, the cost of those deposits would be recovered as an expense of its participation in the FCM, as outlined on page 21 of the settlement in Docket 4654.

Prepared by or under the supervision of: Stefan Nagy and Jeremy Newberger