

To: RHODE ISLAND PUBLIC UTILITIES COMMISSION

From: Richard Hahn, Matthew Loiacono, and Carlo Bencomo-Jasso, DAYMARK ENERGY ADVISORS

Date: March 31, 2017

**Subject: 2017 Retail Rates Filing – Docket No. 4691, and
2017 Renewable Energy Standard (RES) Charge and
Reconciliation Filing – Docket No. 4605**

INTRODUCTION

On February 16, 2017, National Grid (“NGrid” or the “Company”) filed its 2017 Retail Rate Filing. This filing consists of rate adjustments arising out of the reconciliation of the Company’s Standard Offer Service (SOS), SOS administrative costs, the non-bypassable transition charge, transmission service charge, the transmission-related uncollectible expense charge, the Net Metering Charge, and the Long-Term Contracting for Renewable Energy Recovery Factor (LTC Recovery Factor). The reconciliation period for the various costs in this filing is January 2016 through December 2016. The proposed rate adjustments are effective for usage on and after April 1, 2017. This filing was designated as Docket No. 4691.

On February 24, 2017, the Company filed its proposed 2017 RES Charge and RES Reconciliation. This filing consists of three attachments, which provide the calculation of the proposed RES Charge for 2017, the RES reconciliation for the period January 1, 2016 through December 31, 2016, and an analysis of the typical bill impacts of the proposed RES Charge. This filing was designated as Docket No. 4605.

On March 24, 2017, the Company filed its revised 2017 Retail Rate Filing. This filing was updated to include corrections to the original 2017 Retail Rate Filing submitted February 16, 2017. These corrections are reflected in this revised memo, but do not change the recommendations from the original memo.

The Rhode Island Division of Public Utilities and Carriers (the “Division”) has retained Daymark Energy Advisors to assist in its review of these filings to ensure the various reconciliations are accurately calculated and are in accordance with the relevant tariffs. We have outstanding questions about the

Block Island Transmission System (BITS) carrying charge and the increased overall investment of the Block Island Cable project. We have requested information about these items from the Company and we are still waiting on more detailed information about the carrying charge calculation and overall investment in the Block Island Cable project to review the validity of the transmission service charges. In summary, we find that NGrid calculated all the charges, besides the transmission service charge, appropriately based on the underlying data the Company presented and the Company's tariff. However, since the transmission service charge is set through reconcilable factors, we recommend that the Commission approve this charge subject to further review and adjustment over the next year. This memorandum presents the full results of our review.

STANDARD OFFER SERVICE ADJUSTMENT FACTORS

The Company is proposing to adjust two standard offer service ("SOS")-related rate charges: (1) an adjustment factor to collect (or refund) net under (or over) recovery of SOS expense and (2) the standard offer service administrative cost adjustment factor, which is the sum of an administrative cost factor designed to collect various projected administrative expenses related to the provision of SOS and an SOS administrative cost reconciliation adjustment factor, which accounts for any under- or over-recovery of prior period SOS administrative costs.

For the first charge, the SOS reconciliation adjustment, the filing at Schedule ASC-2, p. 1, shows a net over-recovery (with interest) of approximately \$16.2 million, compared to the over-recovery of approximately \$10.0 million in 2015. This 2016 total is a sum of the separately-calculated totals for each of the three SOS customer groups: residential, commercial, and industrial. These totals are then adjusted for additional interest during the recovery period and divided by forecasted customer group SOS kWh sales for April 2017-March 2018 to calculate three different adjustment factors, one for each procurement group. The residential, commercial, and industrial groups all had over-recoveries of approximately \$12.1 million, \$2.9 million, and \$1.2 million respectively.

On a per kWh basis, the charge with the largest magnitude SOS adjustment is the 0.507 cents/kWh (credit) for the industrial class, although the SOS adjustment is like those of the residential and commercial classes (credits of 0.465 cents/kWh and 0.304 cents/kWh respectively). This refund rate is 50% less than the high refund rate the industrial class experienced in 2015 (1.014 cents/kWh), which was explained by NGrid witness Mr. Cray as a combination of customer migration to alternative suppliers due to the winter of 2014-2015, invoicing errors, and a decrease in forecasted deliveries based on the prior year's customer migration. Based on the Company's experience of lost kWh sales over the last couple of years, it has further decreased the industrial SOS kWh forecast for April 2017-March 2018, as shown in the table below.

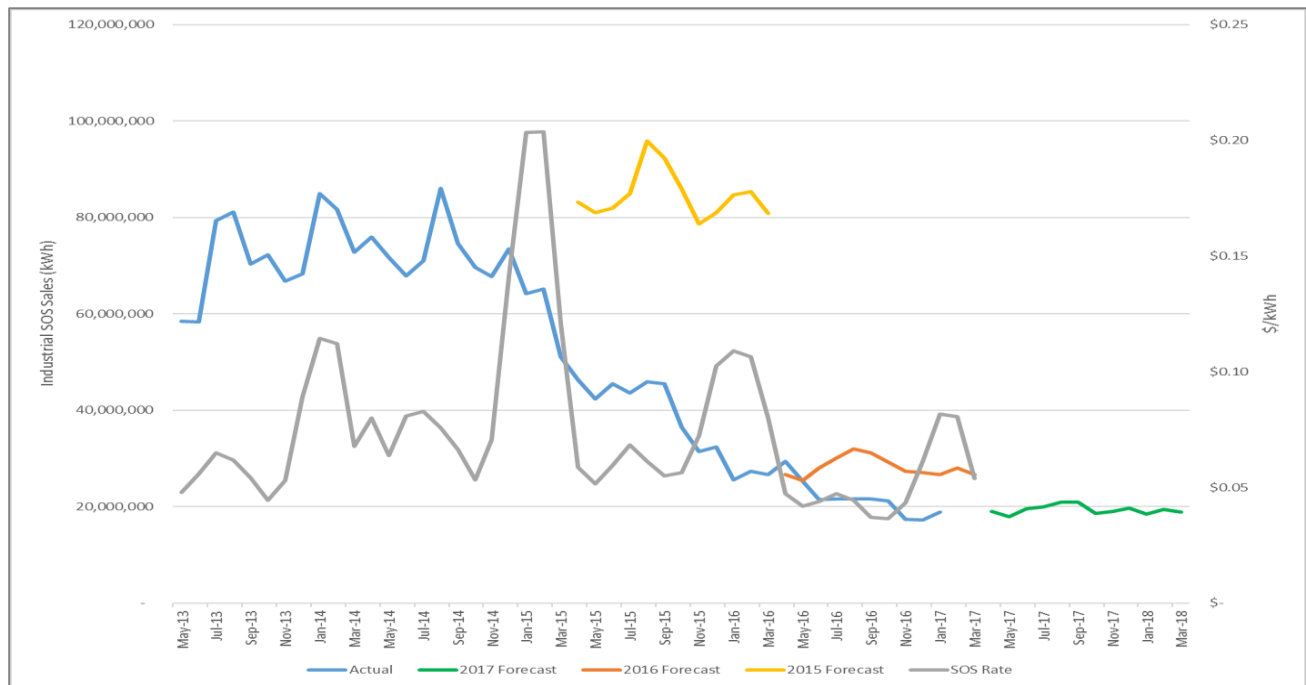


Figure 1. Actual and project SOS sales for the industrial class compared to industrial SOS rates.

One additional comment we have is that the commercial class is proposed to receive a credit of 0.304 cents/kWh compared to the current charge of 0.206 cents/kWh. This change in the commercial class SOS adjustment factor was due to a transition period of the Company switching from pricing periods of January to June and July to December (2015) to periods from January to September and October to March (2016-2017). During the transition period, the first three months are expected to have an over-recovery due to variable rates being lower than the per kWh charge. The second three months of the transition period are expected to have higher variable rates, leading to an under-recovery. NGrid expects these to balance out during the transition period and not continue after. Our review indicates the SOS reconciliation adjustment factors are consistent with the underlying data and tariff R.I.P.U.C. No. 2113 and are reasonable.

The administrative cost factor includes an allowance for SOS uncollectible expense and several administrative cost elements (chief of which is cash working capital). The 2017 filing shows total administrative expense of approximately \$5.8 million compared to approximately \$8.7 million in the 2016 filing. Uncollectible expense is much lower than last year due to lower projected SOS rates. The cash working capital requirement is lower than in the 2016 filing, but still substantially high because of an \$80.7 million adjustment to the Customer Accounts Receivable balance in December 2014 labeled in

NGrid's workpapers from Docket No. 4559 as due to reclassifying gas to electric. Even though the total expenses in the 2017 filing were lower than the 2016 filing, the administrative expenses in the 2017 filing were impacted by March administrative expenses totaling \$167,405.58. This expense is more than five times the average monthly expense for 2016. NGrid explained that the expense was incurred due to it receiving the final remaining invoice from the Northbridge Study which was booked in March.

As with the SOS adjustment factor, separate cost factors are calculated for the three customer groups. Reconciliation of these costs is added to these totals for each customer group. For the 2017 filing, the Company reports an over-collection of 2016 administrative costs of approximately \$0.5 million. This over-collection is largely due to a combination of higher revenues than expenses coupled with the December 2014 adjustment to the cash working capital requirement.

Both the estimated administrative costs and over-collection of 2016 administrative costs are divided by the forecast SOS kWh sales by customer group to arrive at three different factors. We find NGrid's calculation of these charges appears to be supported by the data and should be approved.

TRANSITION CHARGE

NGrid is requesting changes to both the transition charge and transition adjustment charge, which is used to account for prior under- or over-collection of these costs. For 2017, the adjustment charge is due to an under-collection of charges in calendar year 2016. The transition adjustment charge is calculated by dividing the under-recovery balance from 2016 by the forecasted GWh deliveries during the recovery period, April 2017 through March 2018. This adjustment incorporates the final balance of over-recovery incurred in 2014.

The transition charge itself is a function of the contract termination charges ("CTC") billed to NGrid by NEP and Montaup. The CTC charge is calculated by aggregating the individual CTC charges and dividing them by the total GWh deliveries, resulting in a weighted average base Transition Charge. The previous transition "charge" was a credit primarily because NEP and Montaup received net credits for actual nuclear decommissioning and other post shut-down costs, which were estimated to be zero starting in 2011. Connecticut Yankee, Maine Yankee, and Yankee Atomic filed suit against the DOE for the DOE's failure to remove the Yankees' respective spent nuclear fuel stores as required by law. Money was awarded in two Phases, covering different time periods. NEP and Montaup received credits for Phase I and Phase II between 2013 and 2015, with no credits returned by NEP and Montaup from October 1, 2015 through September 30, 2016. However, NEP received \$5.9 million in credits and Montaup received \$1.7 million in credits in December of 2016, which they will return to customers in the next year's CTC reconciliation. Therefore, the total proposed transition charge for the upcoming year is 0.009 cents/kWh.

When combined with the transition adjustment charge, the net transition charge is 0.057 cents/kWh. The change in the net transition charge compared to last year's filing is due to the changes in credits being returned to customers during calendar year 2016.

Overall, we find the transition charge to be consistent with the NEP charges reported in the NEP and Montaup CTC Reconciliation Reports. We also find that the adjustment charge to be consistent with the underlying data presented and the Company's tariff. We recommend that both charges be approved.

TRANSMISSION SERVICE CHARGE

The Company has estimated its 2017 costs for transmission service to be \$212.7 million, as described by the testimony of Ms. Forsyth. Table 1 below provides a summary of this estimate, and compares it to previous estimates used to establish transmission service charges in the two previous years. The forecasted transmission costs from 2015 to 2016 increased by \$21.7 million (14%), while the 2017 projected value increases the transmission costs further by \$34.6 million (19%) over the 2016 transmission costs.

NARRAGANSETT ELECTRIC COMPANY							
SUMMARY OF TRANSMISSION COSTS							
Ln #	Item	Feb-15	Feb-16	Incr/(Decr)	Feb-17	Incr/(Decr)	% Change
NEP Charges							
1	Non-PTF	\$ 33,236,569	\$ 34,823,146	\$ 1,586,577	\$ 31,259,601	\$ (3,563,545)	-10%
2	Other NEP Charges	\$ (131,003)	\$ 451,891	\$ 582,894	\$ 496,093	\$ 44,202	10%
3	Refund Charges	\$ (1,016,281)	\$ -	\$ 1,016,281	\$ -	\$ -	-
4	BITS Surcharge	\$ -	\$ -	\$ -	\$ 32,680,356	\$ 32,680,356	-
5	Subtotal	\$ 32,089,285	\$ 35,275,038	\$ 3,185,752	\$ 64,436,050	\$ 29,161,012	83%
ISO Charges							
6	PTF	\$ 120,411,979	\$ 135,274,142	\$ 14,862,163	\$ 140,564,339	\$ 5,290,197	4%
7	Scheduling & Dispatch	\$ 2,108,615	\$ 2,091,045	\$ (17,570)	\$ 2,308,148	\$ 217,103	10%
8	Black Start	\$ 883,699	\$ 923,415	\$ 39,716	\$ 969,522	\$ 46,107	5%
9	Reactive Power	\$ 1,378,968	\$ 1,457,844	\$ 78,876	\$ 1,371,053	\$ (86,791)	-6%
10	Resettlement Charges	\$ (3,017,660)	\$ -	\$ 3,017,660	\$ -	\$ -	-
11	Subtotal	\$ 121,765,601	\$ 139,746,446	\$ 17,980,845	\$ 145,213,062	\$ 5,466,616	4%
ISO Administrative							
12	Sched 1 Schedul/Disp	\$ 2,637,859	\$ 2,895,142	\$ 257,283	\$ 2,778,212	\$ (116,930)	-4%
	Sched 3 Rel Admin Ser	\$ -	\$ 188,658	\$ 188,658	\$ 190,145	\$ 1,487	1%
13	Sched 5 NESCOE	\$ -	\$ 46,152	\$ 46,152	\$ 104,564	\$ 58,412	127%
14	Subtotal	\$ 2,637,859	\$ 3,129,952	\$ 492,093	\$ 3,072,921	\$ (57,031)	-2%
15	Total Expenses	\$ 156,492,745	\$ 178,151,436	\$ 21,658,691	\$ 212,722,033	\$ 34,570,597	19%

Table 1. Summary of 2017 Transmission Costs

Table 2 below provides a recapitulation of the proposed increased by major cost drivers. Of the \$34.6 million increase, \$32.7 million is due solely to the BITS Surcharge. The remaining balance is mainly

composed of the increased cost for the use of the PTF transmission system (\$5.3 million). PTF Demand charges increased due to a RNS Schedule 9 rate increase related to higher transmission revenue requirements of ISO-NE transmission owners based on estimated plant investments expected to be in-service in 2017. However, the remaining balance is significantly offset by the decrease in Non-PTF transmission system usage charges (\$3.6 million). The decrease in Non-PTF Demand charges is due to a lower estimated revenue requirement because the Company had collected higher revenues from the regional rates.

RECAP OF DIFFERENCES	
Item	Incr/(Decr)
PTF	\$ 5,290,197
Non-PTF	\$ (3,563,545)
Other NEP Charges	\$ 44,202
BITS Surcharge	\$ 32,680,356
ISO Charges	\$ 119,388
	<hr/> \$ 34,570,597
Resettlement Charges	\$ -
Refund Charges	\$ -
	<hr/> \$ -
	<hr/> <hr/> \$ 34,570,597

Table 2. Reasons for the 2017 Increase in Transmission Costs

As shown in the table above, the BITS Surcharge is a newly implemented NEP charge to NGrid. This surcharge was approved by the FERC, under Schedule-21 of the ISO/RTO Tariff, to recover the Company's share of the costs for the Block Island Cable and associated facilities linked with the Town of New Shoreham Project. This project is a public policy undertaking that allows for the construction of a small-scale offshore wind demonstration project off the coast of Block Island. Annual costs of these facilities will be recovered through a reconciling rate adjustment from NGrid's customers and/or from the Block Island Power Company (BIPCo). The BITS Surcharge allocation to NGrid is calculated by multiplying the integrated facilities credit received by the Company through NEP's FERC Electric Tariff No. 1 (IFA Facilities

Credit), updated around June each year, by NGrid's Load Share Percentage (one (1) less BIPCo's Load Share Percentage based on the prior year's load data).

Schedule TMF-7 provides the estimated annual surcharge calculation, which is passed through to customers under the Transmission Service Cost Adjustment. NEP will start billing NGrid for its portion of the Block Island Cable project's costs in April 2017, with charges going back to November 1, 2016. Consequently, the Company is planning to allocate six (6) months of the estimated annual surcharge to customers in April 2017, while the other eleven (11) months will be each allocated \$1.92 million. NGrid explained that this allocation is based on the applicable rate period and that future rate periods would have the allocation of the charge equally balanced between all twelve (12) months. In addition, NGrid explained that the annual surcharge is subject to change based on the carrying charge, currently 18.42%, which is updated each year and is calculated using Narragansett's CY 2015 FERC Form 1 data per the provisions of NEP's Electric Tariff No.1 (Line 2 note in Schedule TMF-7).

The Company developed its projection of PTF costs from a presentation by the Pool Transmission Owners Administrative Committee ("PTO AC") Rates Working Group's presentation to the NEPOOL Reliability Committee/Transmission Committee at the summer meeting on August 9-10, 2016. We have reviewed this presentation and find it to be a reasonable source for a 2017 rate for Regional Network ("RNS").

The estimate of Non-PTF costs incorporates NGrid's estimates of Non-PTF plant additions. These costs are estimated on a project-by-project basis. We have reviewed these estimates and find them to be reasonable.

The Company proposes to recover the estimated 2017 costs via demand and energy charges, as appropriate for each rate class. Schedule ASC-11 provides the details of this allocation. The allocators used to assign estimated transmission costs to each rate class are a weighted average of energy use for 12 months ending 12/31/2008 and 12 months ending 11/30/2011 as these are years with relatively normal weather. Using a representative sample analysis, we find the calculations in Schedule ASC-11 to be accurate.

Based upon the above discussion, we find the Company's forecast of 2017 transmission cost and the rates designed to recover that amount to be reasonable. However, the carrying charge of 18.42% is higher than in prior presentations. In addition, the estimated gross plant investment in the Block Island Cable has now reached about \$125.6 million, which is higher than earlier estimates provided to the Commission and Division, and is still subject to final reconciliation. We requested additional information about these items from the Company and are awaiting a response. Since this charge is reconcilable, we

recommend that the Commission approve the charge subject to further review and possible adjustment over the next year or in the next retail rate filing, if warranted.

TRANSMISSION SERVICE RECONCILIATION

The previous year's forecast of transmission service charges is reconciled against 2016 actual transmission service revenues and expenses. Schedules ASC-12 and ASC-13 provide the basis for this reconciliation. As of the beginning of 2017, the cumulative variance between revenues and expenses including interest is an over-collection of \$6,444,184, as calculated in ASC-12. The Company will refund this over-collection over the period of April 1, 2017 through March 31, 2018. Additional interest during this period is estimated by the Company to be \$79,090, bringing the total to be refunded to \$6,523,274. Schedule ASC-13 determines the cent per KWH rate for each customer class that will refund each class share of the over-collection. Using a representative sample analysis, we find the calculations in Schedule ASC-11 to be accurate.

We find the Company's 2017 transmission reconciliation over-recovery and the rates designed to refund that amount to be reasonable and recommend that they be approved.

TRANSMISSION-RELATED UNCOLLECTIBLE EXPENSE

The Company's Transmission Service Cost Adjustment Provision (TSCAP) allows it to collect from customers an estimate of transmission-related uncollectible accounts receivable, currently equal to 1.25% of the estimated amount of transmission costs to be incurred during 2017. Schedule ASC-14 provides the calculation of this amount. The TSCAP also requires the Company to reconcile its forecast of the transmission-related uncollectible accounts receivable for 2016. This reconciliation occurs only for actual 2016 revenue. Schedule ASC-15 provides these reconciliations calculations. Using a representative sample analysis, we find the calculations in Schedule ASC-14 and ASC-15 to be accurate, and recommend that the rates contained therein be approved.

NET METERING CHARGE

The net metering charge recovers the costs of renewable net metering credits and payments to qualifying facilities in excess of payments the Company receives from ISO-NE for the sale of this energy in the market. The company is proposing a Net Metering charge change to 0.023 cents/kWh from 0.007 cents/kWh. NGrid's calculation of this charge appears to be supported by the data and should be approved.

LONG-TERM CONTRACTING FOR RENEWABLE ENERGY RECOVERY RECONCILIATION FACTOR

The current LTC Recovery Factor is a 0.551 cent/kWh charge. NGrid proposes to add to this a 0.103 cent/kWh charge as an LTCRER reconciliation factor in accord with tariff R.I.P.U.C. No. 4673. The LTCRER reconciliation factor is used to collect (or refund) any under- (or over-) recovery of LTCRER expenses. For 2016, NGrid reports an under-recovery of approximately \$7.6 million compared to \$8.8 million in 2015. The under-recovery amount is net of REC proceeds from RECs purchased through long-term contracts for renewable energy. To estimate the REC proceeds, NGrid must calculate a transfer price. NGrid provided the transfer price in its workpapers, and it appears to be reasonable. NGrid's calculation of the LTCRER reconciliation factor appears to be supported by the data provided and is in accordance with R.I.P.U.C. No. 4673. The proposed rate should be approved.

RENEWABLE ENERGY STANDARD CHARGE AND RECONCILIATION

In its February 24, 2017 filing in Docket 4605, the Company seeks approval for a proposed 2017 Renewable Energy Standard (RES) Charge of \$0.00040 per kWh. The charge consists of two components. The first component is the estimated cost of complying with the RES for 2017, estimated by NGrid to be \$0.00264 per kWh. The second component is the adjustment charge to reconcile previous estimates of the cost of complying with prior years' RES with actual costs.

The first component - \$0.00264 per kWh – is based upon estimated REC prices of \$25.88 for new RECs and \$1.11 for existing RECs. These prices are consistent with recent actual purchases made by the Company and our outlook of the current REC market, and we find them to be reasonable. The proposed charge is based upon the 2017 RES values that require new RECs to be 9.5% of supply obligation and existing RECs to be 2.0%. Using the above assumptions, we concur with the Company's calculation of the \$0.00264 per kWh figure.

The proposed adjustment charge is (\$0.00224) per kWh, which means that the adjustment charge is a credit. The cumulative over-collection as of December 31, 2016 is \$11,626,376. The Company estimates that it will spend an additional amount of \$2,984,908 in the first half of 2017 to complete the acquisition of the remaining RECs needed for the 2016 RES obligation. We examined in detail the calculation of the cumulative over-collection and the estimate of the remaining 2017 costs for 2016 compliance. We found that the amount of over-recovery carried over from 2015 to 2016 was close to the amount of over-recovery carried over from 2016 to 2017. NGrid explained that the continuation of similar over-recovery between the two years was a product of REC market prices significantly dropping compared to the Company's estimation of REC prices. This trend has continued over the last couple years. The Company

provided confidential data on its REC revenue and purchases. Due to the confidentiality of this data, we will not summarize it here. We have performed a sufficiently robust investigation to verify the reasonableness of this information.

Based upon the above discussion, we find the proposed 2017 Renewable Energy Standard (RES) Charge of \$0.00040 per kWh to be reasonable and recommend that it be approved.