

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
PUBLIC UTILITIES COMMISSION

IN RE: THE NARRAGANSETT ELECTRIC COMPANY :
d/b/a NATIONAL GRID – ELECTRIC AND GAS : DOCKET NO. 4770
DISTRIBUTION RATE FILING :

DIVISION'S RESPONSES TO THE
COMMISSION'S THIRD SET OF DATA REQUESTS

Allocated Cost of Service Study/Rate Design

- 3-1. Referencing Mr. Athos' supplemental testimony, page 4, he sets forth the changes that have been made to the allocated cost of service study (ACOSS) methodology since the 2012 study and agrees that those changes are appropriate. On page 8 of Mr. Athos' testimony and page 12 of his supplemental testimony, he notes the increased costs allocated to residential customers based on number of bills in the "secondary system." In both places he states, "this secondary System cost increase comes in Service Drop-related accounts. This suggests that an increase in monthly fixed charges would be consistent with cost causation principles of a cost of service study."
- a. Has National Grid made any other changes to the methodology since the 2012 ACOSS?
 - b. If so, please identify them and explain why Mr. Athos agrees they are reasonable, specifically addressing any demand related costs that may have been allocated differently in the 2017 ACOSS.

Response can be found on page 6

- 3-2. In his testimony, Mr. Lebel suggests that the only costs that should be allocated to the customer charge are those related to "the cost of connection for an individual customer, which is limited to the costs of a simple meter, billing expenses, the service drop, and certain elements of customer service." (Lebel direct at 22). He then disputes several items included in National Grid's definition of customer-related costs, including those related to the secondary system. (Lebel at 22-23). Please explain why Mr. Athos accepted inclusion of those disputed costs as customer-related costs in the 2017 ACOSS.

Response can be found on page 7

- 3-3. Please explain how the increase in the customer charge by the various rate classes per month on the electric bill might affect the Company's ability to achieve its energy efficiency goals.

Response can be found on page 8

- 3-4. Please explain how the increase in the customer charge by the various rate classes per month on the gas bill might affect the Company's ability to achieve its energy efficiency goals.

Response can be found on page 9

- 3-5. Please explain how the increase in the customer charge by the various rate classes per month on the electric bill might affect the growth of net metering adoption in Rhode Island.

Response can be found on page 10

- 3-6. Does an increased customer charge affect the Company's ability to meet demand reduction goals?

Response can be found on page 11

- 3-7. Does the ACOSS assume that there are different customer costs associated with residential customers living in single-family or multi-family dwellings or does it assume the costs associated with all A-16 or A-60 customers are the same for purposes of allocating costs?

Response can be found on page 12

- 3-8. Is the Division aware of any analysis of whether there are any differences in the cost of connecting the average low-income customer versus other customers? If so, please identify and summarize.

Response can be found on page 13

- 3-9. Is the Division aware of any analysis of whether there are different costs of connecting multi-family dwellings versus single family? If so, please identify and summarize and indicate whether the analysis of multi-family dwellings differentiates by overall size (ex: 4 dwelling units versus 50).

Response can be found on page 14

Low Income

- 3-10. In his testimony, Mr. Colton seems to suggest that the Company and hence, other ratepayers, receives a greater benefit of having more customers participate in an Arrearage Management Plan, offering more flexible payment plan opportunities, and a larger

percentage discount compared to the current structure given the cost of administering the terminations and collections process.

- a. Please quantify the benefits to all other customers resulting from each of these measures.
- b. Please specifically quantify how all other ratepayers benefit from Mr. Colton's proposed discount.

Response can be found on page 15

- 3-11. Were the analyses performed on pages 7-25 of Mr. Colton's testimony related only to low-income electric customers as is suggested on lines 7-8 of page 14 of his testimony? If so, why? If not, why does he only reference the A-60 customer class?

Response can be found on page 16

- 3-12. On page 34, Mr. Colton stated that he only addressed electric bills in his testimony because "National Grid offers more assistance to its natural gas customers than it does to its electric customers. The bill affordability issues would thus appear to be less. In reaching this conclusion, I do not consider the level of LIHEAP which customers receive."
- a. Please provide the data and analysis Mr. Colton performed to reach the conclusion that the burden on low-income natural gas customers is less than electric.
 - b. Did Mr. Colton conduct any of the same analyses conducted in his testimony for natural gas customers? If so, please provide the results. If not, please explain why not.

Response can be found on page 17

- 3-13. Does the Division support a flat discount on the residential rate including the customer charge? If so, is the Division supporting the Company's proposed phase-in proposal (regardless of the ultimate customer charge approved)?

Response can be found on page 18

- 3-14. What is the Division's proposal for the low-income gas rate design? Please explain how the Division's proposed discount would work.
- a. Why is it different from the Division's proposal on the A-60 rate?
 - b. Why is this an appropriate discount?

Response can be found on page 19

- 3-15. Please confirm that the Division supports increasing the low income customer charge on the gas bills to match the residential non-low income rate. (Reference BRO-7, line10).

Response can be found on page 20

- 3-16. Did the Division do any analysis of the impact on low-income gas heating customers resulting from National Grid's proposal to eliminate the tail block pricing structure? If so, what were the results? If not, why not?

Response can be found on page 21

Revenue Requirement

- 3-17. On pages 21 and 22 of Mr. Oliver's testimony, he notes that there have been changes made to the Company's revenue requirement since the test year that could affect the necessary rate year revenue requirement. He expresses the concern that "including uncertain future levels of [revenue decoupling mechanism] revenue in Distribution rates in this proceeding increases the likelihood of mismatches between actual RDM revenue during the Rate Year and RDM revenue amounts included in base distribution rates." What is Mr. Oliver's proposal to address this concern?

Response can be found on page 22

Performance Incentive Mechanisms

- 3-18. Regarding the regulatory lag created by the Capital Efficiency Incentive:
- a. Assuming there is a \$1M penalty, please confirm whether National Grid will be allowed to include the penalty in a future (e.g., the subsequent) Infrastructure, Safety, and Reliability (ISR) revenue requirement for one year? If so, please explain how this is consistent with the statutory requirements of ISR rate setting.
 - b. Assuming there is a \$1M penalty that is not subsequently recovered through the following year's (or a future) ISR revenue requirement, please explain whether the Division would still describe this as a regulatory lag or a permanent penalty.
 - c. If the \$1M penalty can be recovered through a mechanism in the fourth year's revenue requirement, is it the Division's position that the Capital Efficiency Incentive is mimicking the value of a one-year regulatory lag rather than true regulatory lag?
 - d. Assuming National Grid is entitled to a \$1M incentive, please indicate in what year and through what mechanism the \$1M is recovered in the revenue requirement.

Response can be found on page 23

- 3-19. How will the three-year budget set in the Capital Efficiency Incentive be designed to ensure that the efficiencies were caused by National Grid's achievements and not by third parties (fewer customer requirements, for example) or through deferral of projects, timing of CIAC payments, etc.?

Response can be found on page 25

- 3-20. For all programs and sub-programs proposed by the Division that are associated with a performance incentive (excluding the Capital Efficiency Incentive), and that propose a range of achievement levels and associated incentives:
- a. Provide the \$/metric value for each proposed achievement level;
 - b. For any responses in part a that do not have a uniform \$/metric value for all achievement levels, please provide a justification for the variation.

Response can be found on page 26

PUC 3-1

Request:

Referencing Mr. Athos' supplemental testimony, page 4, he sets forth the changes that have been made to the allocated cost of service study (ACOSS) methodology since the 2012 study and agrees that those changes are appropriate. On page 8 of Mr. Athos' testimony and page 12 of his supplemental testimony, he notes the increased costs allocated to residential customers based on number of bills in the "secondary system." In both places he states, "this secondary System cost increase comes in Service Drop-related accounts. This suggests that an increase in monthly fixed charges would be consistent with cost causation principles of a cost of service study."

- a. Has National Grid made any other changes to the methodology since the 2012 ACOSS?
- b. If so, please identify them and explain why Mr. Athos agrees they are reasonable, specifically addressing any demand related costs that may have been allocated differently in the 2017 ACOSS.

Response:

- a. The Company filed it in Book 12 the testimony of Howard Gorman on page 17 lines 6 through 17 provide the small changes made within the ACOSS.
- b. Mr. Athas believes from his review of the testimony that the costs within the changes references in "a" above are legitimately associated with the allocators chosen by the Company.

Prepared by John Athas

PUC 3-2

Request:

In his testimony, Mr. Lebel suggests that the only costs that should be allocated to the customer charge are those related to “the cost of connection for an individual customer, which is limited to the costs of a simple meter, billing expenses, the service drop, and certain elements of customer service.” (Lebel direct at 22). He then disputes several items included in National Grid’s definition of customer-related costs, including those related to the secondary system. (Lebel at 22-23). Please explain why Mr. Athas accepted inclusion of those disputed costs as customer-related costs in the 2017 ACOSS.

Response:

Mr. Athas did not evaluate the position taken by Mr. Lebel. Mr. Lebel appears to be adopting a policy position to limit fixed charges to the cost of connection only, a position which may be inconsistent with past PUC precedent. In any event, there are costs that vary with the number of customers beyond those related to the cost of connection. It is common for the monthly fixed charge to each customer to be established to recover all costs that relate to the number of customers. If the Commission adopts a policy that narrows collection within a monthly fixed charge to each customer to be the cost of connection only, then Mr. Lebel’s categorization may be reasonable, but Mr. Athas has not performed this evaluation.

Prepared by John Athas

PUC 3-3

Request:

Please explain how the increase in the customer charge by the various rate classes per month on the electric bill might affect the Company's ability to achieve its energy efficiency goals.

Response:

If the increase in monthly customer charge by the various rate classes results in lower volumetric charges it would reduce the benefits of the purchase and use of more efficient equipment, thus the Company's energy efficiency programs could see lower participation. Assuming no adjustment is made in the design of the energy efficiency program it may make achievement of energy efficiency goals more difficult.

Prepared by John Athas

PUC 3-4

Request:

Please explain how the increase in the customer charge by the various rate classes per month on the gas bill might affect the Company's ability to achieve its energy efficiency goals.

Response:

If the increase in monthly customer charge by the various rate classes results in lower volumetric charges it would reduce the benefits of the purchase and use of more efficient equipment thus the Company's energy efficiency programs could see lower participation. Assuming no adjustment is made in the design of the energy efficiency program it may make achievement of energy efficiency goals more difficult.

Prepared by John Athas

PUC 3-5

Request:

Please explain how the increase in the customer charge by the various rate classes per month on the electric bill might affect the growth of net metering adoption in Rhode Island.

Response:

The increase in the customer charge at the level proposed by the Company in this case may not materially affect net metering in Rhode Island. However, to the extent there is a larger shift in the future from volumetric to fixed charges, the value of the net metering credit would be reduced. Mr. Athas does not have any studies that show what if any impact small changes have on the growth of net metering.

Prepared by John Athas

PUC 3-6

Request:

Does an increased customer charge affect the Company's ability to meet demand reduction goals?

Response:

Under current distribution rate design, the rates charged to residential customers are not based on time-of-use. For that reason, a shift from volumetric to fixed charges in distribution rates will not increase the Company's ability to meet demand reduction goals for residential classes. However, even if time-of-use rates are adopted for application on the distribution side of the electric bill, shifting to fixed charges could affect the economic signal during peak hours to the extent the peak volumetric charge is lower than it otherwise would have been.

For rate classes with demand charges, demand reduction could be affected if an increase in fixed charges results in lower demand charges. This too would not increase the Company's ability to meet its demand reduction goals.

Prepared by John Athas

PUC 3-7

Request:

Does the ACOSS assume that there are different customer costs associated with residential customers living in single-family or multi-family dwellings or does it assume the costs associated with all A-16 or A-60 customers are the same for purposes of allocating costs?

Response:

The ACOSS study has only one residential rate class, making no distinction between single and multi-family dwellings. To make such a distinction, one or more additional residential rate classes would have to be created, including capturing any load pattern differences, and the ACOSS study performed again with the new rate class or classes taken into account.

Prepared by John Athas

PUC 3-8

Request:

Is the Division aware of any analysis of whether there are any differences in the cost of connecting the average low-income customer versus other customers? If so, please identify and summarize.

Response:

No.

Prepared by John Athas

PUC 3-9

Request:

Is the Division aware of any analysis of whether there are different costs of connecting multi-family dwellings versus single family? If so, please identify and summarize and indicate whether the analysis of multi-family dwellings differentiates by overall size (ex: 4 dwelling units versus 50).

Response:

No.

Prepared by John Athas

PUC 3-10

Request:

In his testimony, Mr. Colton seems to suggest that the Company and hence, other ratepayers, receives a greater benefit of having more customers participate in an Arrearage Management Plan, offering more flexible payment plan opportunities, and a larger percentage discount compared to the current structure given the cost of administering the terminations and collections process.

- a. Please quantify the benefits to all other customers resulting from each of these measures.
- b. Please specifically quantify how all other ratepayers benefit from Mr. Colton's proposed discount.

Response:

Mr. Colton did not quantify the benefits to all other customers resulting from increasing income eligible subsidies but did explain that the rationale behind increasing the income eligible discount would result in more consistent, timely payments with minimum collection intervention.

Prepared by Roger Colton

PUC 3-11

Request:

Were the analyses performed on pages 7-25 of Mr. Colton's testimony related only to low-income electric customers as is suggested on lines 7-8 of page 14 of his testimony? If so, why? If not, why does he only reference the A-60 customer class?

Response:

Mr. Colton's analyses throughout his testimony related only to the Income eligible electric customers. As Mr. Colton explained on pg. 34 of his testimony, National Grid offers more assistance to its natural gas customers. See response to National Grid 4-1 for additional explanation.

PUC 3-12

Request:

On page 34, Mr. Colton stated that he only addressed electric bills in his testimony because “National Grid offers more assistance to its natural gas customers than it does to its electric customers. The bill affordability issues would thus appear to be less. In reaching this conclusion, I do not consider the level of LIHEAP which customers receive.”

- a. Please provide the data and analysis Mr. Colton performed to reach the conclusion that the burden on low-income natural gas customers is less than electric.
- b. Did Mr. Colton conduct any of the same analyses conducted in his testimony for natural gas customers? If so, please provide the results. If not, please explain why not.

Response:

Mr. Colton did not perform any analysis regarding National Grid's gas customers.

Prepared by Roger Colton

PUC 3-13

Request:

Does the Division support a flat discount on the residential rate including the customer charge? If so, is the Division supporting the Company's proposed phase-in proposal (regardless of the ultimate customer charge approved)?

Response:

The Division does support the flat discount on the residential rate including the customer charge but does not agree with the proposed increase or phase-in of the customer charge.

Prepared by Roger Colton

PUC 3-14

Request:

What is the Division's proposal for the low-income gas rate design? Please explain how the Division's proposed discount would work.

- a. Why is it different from the Division's proposal on the A-60 rate?
- b. Why is this an appropriate discount?

Response:

The Division accepts the Company's proposal for a uniform 15% discount to the entire bill for each low-income gas customer. The Division believes that the uniform application of such a discount to a low-income customer's entire bill will: (1) provide increased assistance to such customers; and (2) improve the understandability of charges for those customers.

Prepared by Bruce Oliver

PUC 3-15

Request:

Please confirm that the Division supports increasing the low income customer charge on the gas bills to match the residential non-low income rate. (Reference BRO-7, line10).

Response:

In the context of a uniform percentage discount for low-income service, the Division confirms that it would support increasing the low income customer charge on the gas bills to match the residential non-low income rate.

Prepared by Bruce Oliver

PUC 3-16

Request:

Did the Division do any analysis of the impact on low-income gas heating customers resulting from National Grid's proposal to eliminate the tail block pricing structure? If so, what were the results? If not, why not?

Response:

As evidenced by the usage levels for low-income customers recently transferred from Residential Non-Heating to Residential Heating Service, the usage of low-income Residential Heating Service customers can be greater than the average for the overall Residential Heating class. This makes low-income Residential Heating customers potentially more susceptible to greater than average rate increases under a scenario in which tail block rates are eliminated. Thus, a more gradual adjustment of tail block rates is appropriate. The Division also notes that concerns regarding the impacts on low income customers are amplified by the recent deferral of GCR costs for recovery through future GCR rates which can be expected to further increase gas service costs for low-income customers having greater than average gas use requirements. Again, the Company's filed bill comparisons do not address anticipated changes in GCR rates during the rate effective period.

Prepared by Bruce Oliver

PUC 3-17

Request:

On pages 21 and 22 of Mr. Oliver's testimony, he notes that there have been changes made to the Company's revenue requirement since the test year that could affect the necessary rate year revenue requirement. He expresses the concern that "including uncertain future levels of [revenue decoupling mechanism] revenue in Distribution rates in this proceeding increases the likelihood of mismatches between actual RDM revenue during the Rate Year and RDM revenue amounts included in base distribution rates." What is Mr. Oliver's proposal to address this concern?

Response:

Mr. Oliver's position is that the Company's RDM and ISR adjustments to test year revenue are not appropriate. The purpose of the ISR and RDM is to provide for annual adjustments to revenues. Building those adjustments into test year revenue before they effectively "puts the cart before the horse," and inappropriately biases the rate determination process. Speculative *a priori* adjustments to revenue requirements for determinations that will be made at future points in time should be avoided.

PUC 3-18

Request:

Regarding the regulatory lag created by the Capital Efficiency Incentive:

- a. Assuming there is a \$1M penalty, please confirm whether National Grid will be allowed to include the penalty in a future (e.g., the subsequent) Infrastructure, Safety, and Reliability (ISR) revenue requirement for one year? If so, please explain how this is consistent with the statutory requirements of ISR rate setting.
- b. Assuming there is a \$1M penalty that is not subsequently recovered through the following year's (or a future) ISR revenue requirement, please explain whether the Division would still describe this as a regulatory lag or a permanent penalty.
- c. If the \$1M penalty can be recovered through a mechanism in the fourth year's revenue requirement, is it the Division's position that the Capital Efficiency Incentive is mimicking the value of a one-year regulatory lag rather than true regulatory lag?
- d. Assuming National Grid is entitled to a \$1M incentive, please indicate in what year and through what mechanism the \$1M is recovered in the revenue requirement.

Response:

- (a) No. The penalty would NOT be recoverable from ratepayers through the ISR or any other mechanism. It would be a one-time penalty permanently absorbed by shareholders.
- (b) It is a permanent penalty. The use of the term "regulatory lag" was merely an analogy that may have caused confusion, rather than clarity.

When the Division indicated the penalty would be similar to partial regulatory lag, what the Division meant was the penalty would result in the utility crediting customers an amount of money that has a one-time negative financial effect on the Company. This financial penalty would be similar to the financial effect on the utility if the utility experienced a one or two-year loss of revenue requirement caused from regulatory lag on a portion of its revenue requirement associated with capital investment in projects that are placed in service before the costs are allowed in rates.

- (c) No. The penalty is never recovered from customers. The penalty is a separate calculation based on a separate metric and formula designed to reward or penalize the Company for achieving or missing the three-year budget target.

- (d) An incentive would be a one-time financial reward that is credited to the Company in such manner as the Commission allows during the year following the measurement of performance. Since performance against the three-year aggregate budget is measured after the third fiscal year of the ISR (i.e., after FY 2021), the reward would be credited to the Company near the end of the three-year rate plan. The choices of timing and how this incentive could be received by the Company are numerous and likely would be proposed in any settlement for Commission consideration. For example, the reward could be (i) netted against refunds otherwise owed to ratepayers, (ii) included in an annual filing that coincides with other changes in rates, or (iii) deferred as a credit applied in the next three-year plan, among other alternatives, among other possible alternatives.

Prepared by Tim Woolf and Jonathan Schrag

PUC 3-19

Request:

How will the three-year budget set in the Capital Efficiency Incentive be designed to ensure that the efficiencies were caused by National Grid's achievements and not by third parties (fewer customer requirements, for example) or through deferral of projects, timing of CIAC payments, etc.?

Response:

There would be a provision that allows the Division and the Company to adjust the final target for known conditions outside of the Company's control, subject to Commission approval. As a practical matter, each year during the ISR process, a review of the conditions can take place.

The Division contemplates an annual process that allows adjustments to be made for relatively obvious conditions that unfairly skew the original intent of the budgetary target. But in order to send an effective financial signal, the Division realizes we must accept that some conditions having nothing to do with actual utility behavior will occur that may affect outcomes to one degree or another. Absent a very granular, micro-review of every project, it is not possible as a practical matter to address every circumstance that may have been fortuitously beneficial or unfortunately detrimental to the utility because it results in lower or higher costs outside of the utility's control. But the risk is symmetrical. Nevertheless, the Division sees a significant benefit resulting from the financial signal to the utility that encourages the Company to be as efficient as possible in managing its capital investments. The risks of over-rewarding or over-penalizing also can be managed by placing caps or other parameters around the reward/penalty mechanism.

Prepared by Tim Woolf and Jonathan Schrag

PUC 3-20

Request:

For all programs and sub-programs proposed by the Division that are associated with a performance incentive (excluding the Capital Efficiency Incentive), and that propose a range of achievement levels and associated incentives:

- a. Provide the \$/metric value for each proposed achievement level;
- b. For any responses in part a that do not have a uniform \$/metric value for all achievement levels, please provide a justification for the variation.

Response:

a) The dollar per metric value for each proposed achievement level is provided in the table below.

			Incentives (\$/metric)					
			2019	2019	2020	2020	2021	2021
Performance Incentive Mechanism	Metric	\$/metric unit	Medium	High	Medium	High	Medium	High
System Efficiency								
Transmission Peak Demand Reduction	MW Trans	\$/kW Trans	10	14	11	15	12	15
FCM Peak Demand Reduction	MW FCM	\$/kW FCM	18	24	30	40	42	56
Distributed Energy Resources								
Demand Response - Residential	MW Peak	\$/kW peak	64	34	37	28	31	26
Demand Response - C&I	MW Peak	\$/kW peak	20	17	31	29	41	41
Electric Heat Initiative	Tons CO2	\$/ton CO2	0.41	0.50	0.39	0.46	0.39	0.46
Electric Vehicle Initiative	Tons CO2	\$/ton CO3	0.27	0.22	0.26	0.22	0.26	0.23
Behind-the-Meter Storage	MW Peak	\$/kW peak	78	78	104	104	137	137
Utility-Scale Storage	MW Peak	\$/kW peak	65	65	119	119	182	182
Non-Wires Alternatives	MW Peak	\$/kW peak	36	36	56	56	81	81

b) The variation in the \$/metric value across different achievement levels (i.e., Medium versus High) is due to the incentives for unquantified benefits that were assigned to the different achievement levels. Table 5 in the Exhibit Synapse-03 presents the incentives for unquantified benefits that were assigned to every PIM proposed by the Division. As indicated in that table, the variation in the incentives for unquantified benefits across different achievement levels are not proportional to the variation of the metric.

For example, the Residential Demand-Response PIM is assigned one basis point for the unquantified benefits for both the Medium and the High levels of achievement, but the High level target (and thus benefits, and thus incentive) is twice that of the Medium level.

The Utility-Scale Storage and the NWA PIMs, on the other hand, have consistent \$/metric values at different achievement levels. In these cases, the incentives for unquantified benefits increase in the High case by the same proportion as the metric themselves (i.e., by a factor of two).

Prepared by Tim Woolf