

Docket No. 4770
Seventh Set of Data Requests of the
Division of Public Utilities and Carriers to National Grid
January 5, 2018

Instruction: Each request for workpapers should be understood to include a request for all electronic spreadsheet files with all cell formulas and cell references in tact.

Regarding Gas Costs of Service and Rates

7-1. Re: the Direct Testimony of Witness Normand. Please provide electronic copies of workpapers relied upon by Witness Normand to generate his Class Cost of Service and rate design analyses presented in Schedules PMN-2 through PMN-9 including all supporting workpapers and electronic spreadsheet files used in the development of input data and allocation factors for the analyses presented in those exhibits.

Response can be found in Book 1 on Bates page(s) 1.

7-2. Re: the Direct Testimony of Witness Normand at page 9 of 31, lines 8-11. Please provide full documentation of each "special study" undertaken to replicate the intended use of specific plant or expenses.

Response can be found in Book 1 on Bates page(s) 2.

7-3. Re: the Direct Testimony of Witness Normand at page 9 of 31, lines 12-13. Please:

- a. Provide the workpapers, data, analyses, studies, and assumptions relied upon as the basis for his assertion that "the cost of processing a computer generated bill is the same for all classes."
- b. Provide an example of the current format for each gas service rate classification.
- c. Detail all changes in billing format that will be required to implement the proposed rates for each gas rate classification.
- d. Identify each element of billing information that must be processed to generate a bill for a customer in each rate classification.
- e. Identify each element of billing information that is stored by the Company for bills rendered to customers in each rate class.

Response can be found in Book 1 on Bates page(s) 3-34.

7-4. Re: the Direct Testimony of Witness Normand at page 9 of 31, line 19, through page 10, line 3. Please provide an explanation of the ratemaking principal that supports the use of “**some rational basis**” as a substitute for a more cost causative relationship.

Response can be found in Book 1 on Bates page(s) 35.

7-5. Re: the Direct Testimony of Witness Normand at page 10 of 31. Please:

- a. Identify the components of the costs that comprise Narragansett Gas’ Intangible Plant.
- b. Explain how the incurrence of costs for each component of Narragansett Gas’ Intangible Plant costs is cost-causatively related to:
 1. The Company’s incurrence of its “total plant” costs;
 2. The Company’s incurrence of “total labor” costs.

Response can be found in Book 1 on Bates page(s) 36.

7-6. Re: the Direct Testimony of Witness Normand at page 11 of 31, lines 5-16; Schedule PMN-3, Rate Design, pages 43 and 44 of 74; and Schedule PMN-9, pages 1-8. Please provide the electronic spreadsheet files, data, analyses, and assumptions used to compute the Distribution RSUM allocator for each rate class that Witness Normand has used in this proceeding.

Response can be found in Book 1 on Bates page(s) 37.

7-7. Re: the Direct Testimony of Witness Normand at page 12 of 31, lines 8-10. Please identify and document each “factor” taken from:

- a. Narragansett Gas’ continuing property records;
- b. Narragansett Gas’ general accounting records;
- c. Other available sources.

Response can be found in Book 1 on Bates page(s) 38.

7-8. Re: the Direct Testimony of Witness Normand at page 12 of 31, lines 13-15. Please provide the workpapers, data, analyses, and assumptions relied by to assess the “total number of services” for each rate class. Please include in the response to this request any and all information developed by or for the Company with respect to:

- a. The numbers instances in which more than one account is served through a single service line;
- b. The number accounts for each rate class that are served through shared service lines.

Response can be found in Book 1 on Bates page(s) 39.

- 7-9. Re: the Direct Testimony of Witness Normand at page 12 of 31, lines 15-17. Please provide the workpapers, data, analyses, and assumptions relied upon to assess “typical replacement costs for meters used to serve each rate class.”

Response can be found in Book 1 on Bates page(s) 40.

- 7-10. Re: the Direct Testimony of Witness Normand at page 13 of 31, lines 8-10. Please identify and quantify the “capitalized labor” costs by FERC account that are included in the development of Witness Normand’s LABOR allocator.

Response can be found in Book 1 on Bates page(s) 41.

- 7-11. Re: the Direct Testimony of Witness Normand at page 14 of 31, lines 8-10. Please:

- a. Verify that non-firm margins are no longer subject to sharing for the Company’s Rhode Island operations.
- b. Explain why Non-Firm Service is not shown as a separate class within the Company’s class cost of service allocation study.
- c. Specific all criteria that the witness believes would need to be met to Non-Firm Service to be treated in the same manner as firm service rate classifications within the Company’s class cost of service allocations.

Response can be found in Book 1 on Bates page(s) 42-43.

- 7-12. Re: the Direct Testimony of Witness Normand at page 14 of 31, lines 8-10. Please:

- a. Identify and quantify all elements of non-firm revenue that the Company includes within the “non-firm revenue margins” that are allocated among rate classes on the distribution DISTR allocator.
- b. Provide the workpapers, data, analyses, and assumptions relied upon to support the appropriateness of allocating non-firm revenue margins among the Company’s firm gas service rate classifications.

Response can be found in Book 1 on Bates page(s) 44.

- 7-13. Re: the Direct Testimony of Witness Normand at page 15 of 31, lines 3-5. Please identify and quantify each element of Operation and Maintenance expenses that the witness classifies as “plant-related capacity expenses.

Response can be found in Book 1 on Bates page(s) 45.

- 7-14. Re: the Direct Testimony of Witness Normand at page 16 of 31, lines 5-7. Please explain the meaning of the phrase “existing and equalized revenue requirement levels” as it is used by the witness. If “equalized revenue requirement levels” are intended to reference revenue requirements at equalized class rates of return, so state. If a different meaning is intended, please explain the intended meaning and document the witness’ determination of “equalized revenue requirement levels.”

Response can be found in Book 1 on Bates page(s) 46.

- 7-15. Re: the Direct Testimony of Witness Normand at page 16 of 31, lines 15-19. Please:
- a. Provide the witness’ quantification of the rates of return that the residential low-income classes would generate if shown separately in the Company’s Allocated Cost of Service Study.
 - b. Document and quantify the subsidies to low income residential classes (R11 and R13) that the witness has included in his cost studies.

Response can be found in Book 1 on Bates page(s) 47.

- 7-16. Re: the Direct Testimony of Witness Normand at page 20 of 31, lines 1-3 where reference is made to “some rather large increases.” Please:
- a. Identify all criteria used by Witness Normand to assess the acceptability of above average revenue increase percentages for each rate class.
 - b. Document and explain the witness’ rationale for when in the context of the Company’s overall revenue increase request in this proceeding an increase for an individual rate class becomes “rather large.”

Response can be found in Book 1 on Bates page(s) 48.

- 7-17. Re: the Direct Testimony of Witness Normand at page 21 of 31, line 1. Please document and explain the derivation of the 1.15 multiplier used to establish the proposed cap for percentage increases in revenue requirements by class.

Response can be found in Book 1 on Bates page(s) 49.

- 7-18. Re: the Direct Testimony of Witness Normand at page 22 of 31. Please explain why the Proposed “Total Narragansett Gas” increase shown on the last line of Table 1 is less than the “Total Narragansett Gas” Increase to Uniform ROR shown on the same line.

Response can be found in Book 1 on Bates page(s) 50.

- 7-19. Re: the Direct Testimony of Witness Normand at page 22 of 31. Please:
- a. Provide citation to, and the specific language of, the portion of the Commission’s order in Narragansett Gas’ 2012 Rate Case that approved the elimination of “all existing block structure” for gas service rate classes.
 - b. Verify that Narragansett Gas’ current rates include blocked distribution charges for Residential Heat and Small C&I customers served under Rates 12, 13, and 21.

Response can be found in Book 1 on Bates page(s) 51.

- 7-20. Re: the Direct Testimony of Witness Normand at page 23 of 31, determination of proposed customer charges for gas service customers. Please:
- a. Provide all actual cost data and analyses relied upon to assess the reasonableness and appropriateness of the \$735 per month customer charge for Non-Firm customers.
 - b. Verify that the Company’s current Gas Tariff includes three different levels of customer charges for Non-Firm Transportation (NFT) Service customers, and demonstrate the relationship between those current tariff charges and the \$625 per month “Current” customer charge for Non-Firm shown in Table 2.
 - c. Explain how the proposed customer charge for Non-Firm customers considers the provisions of the Company’s tariff that require that customers who take Non-Firm Transportation Service must have telemetering equipment in-place.
 - d. Explain how the proposed customer charge for Non-Firm customers the proposed requirement in Section 6, Transportation Terms and Conditions, Schedule C, Sheet 15, Item 2.02.0, Telemetering, that may require NFT customers to pay an “*initial lump sum fee*” for a meter equipped with a wireless module and pay an annual fee for a “data plan.”

Response can be found in Book 1 on Bates page(s) 52-53.

7-21. Re: Schedule PMN-7, Rate Design, page 3 of 6. Please:

- a. Provide the price elasticity analyses or other analyses relied upon by the Company to assess the expected impacts of the proposed changes in distribution charges on gas use for each rate class.
- b. Provide the Company's assessment of the expected impacts of its proposed rates and charges on gas use by rate class, as well as all supporting workpapers for that assessment.
- c. For C&I Small Sales and Transportation (FT-2) services, explain the rationale for the comparatively large percentage increases shown in Column (AA) for Off-Peak service and the comparatively small increases computed for On-Peak service.

Response can be found in Book 1 on Bates page(s) 54.

7-22. Re: Schedule PMN-9, page 2 of 136. Please:

- a. Provide the full supporting detail for the witness' determination of the "billing days" by month shown in the second column from the left in the lower portion of the presentation on page 2 of 136 in Schedule PMN-9.
- b. Document and explain the relationship between the "Normalized Sales (dth) Cycle Billed" shown in page 2 of 136 in Schedule PMN-9 and the "Normalized Sales (dth) Monthly Billed" shown on page 3 of 136.
- c. Verify that the RSUM Allocation Factor development is premised on average daily use within each "billing" or "cycle" month and does not address fluctuations in daily use (e.g., daily peak requirements) with a "billing" or "cycle" month.
- d. Please identify and explain the cost-causative relationship between normal weather daily average gas use by "billing month" and/or "cycle month" and the factors that determine the Company's sizing and costs for distribution mains.

Response can be found in Book 1 on Bates page(s) 55-57.

7-23. Re: the Direct Testimony of the Pricing Panel (Witnesses Leary and McCabe) at page 14 of 36, lines 15-16. For each of the last three years, please:

- a. Provide the number of Account Restoration Charges billed to customers served under each gas rate classification.
- b. Detail the Company's actual costs for Account Restoration activities.

- c. Provide the number of Returned Check Charges billed to customers served under each gas rate classification.
- d. Detail the Company's actual costs for processing Returned Checks.

Response can be found in Book 1 on Bates page(s) 58-59.

- 7-24. Re: the Direct Testimony of the Pricing Panel (Witnesses Leary and McCabe) at page 15 of 36, lines 14-18. For each of the last three years, please verify that the Company will have adequate AGT funding in the Rate Year to meet existing and anticipated AGT program commitments if the \$300,000 currently embedded in its base distribution rates is eliminated, and if not, provide the Company's current best estimate of the amount of additional funding through the DAC that will be required to make existing and anticipated funding requirements.

Response can be found in Book 1 on Bates page(s) 60.

- 7-25. Re: the Direct Testimony of the Pricing Panel (Witnesses Leary and McCabe) at page 20 of 36, lines 7-11. Please provide the workpapers, data, and assumptions relied upon to assess the extent to which "[c]easing the recovery of the discount through base distribution rates and eliminating the LIHEAP matching grant and Low Income Weatherization programs will **partially offset** the estimated annual discount during the Rate Year.

Response can be found in Book 1 on Bates page(s) 61-63.

- 7-26. Re: the Direct Testimony of the Pricing Panel (Witnesses Leary and McCabe) at page 21 of 36, line 16, through page 22 of 36, line 5. For Narragansett Gas, please:
- a. Verify that the proposed discount for low income gas service customers will apply equally to all months of the year.
 - b. Provide a comparison of the monthly distribution of benefits for a typical low income gas customer under the present low income programs and under the proposed rate discount.

Response can be found in Book 1 on Bates page(s) 64-70.

- 7-27. Re: the Direct Testimony of the Pricing Panel (Witnesses Leary and McCabe) at page 22 of 36, lines 3-5. Please provide the Company's assessment of the needs of Low Income gas customers in Rhode Island for gas service rate assistance and the extent to which the rate discount proposed (i.e., 15%) will address those needs.

Response can be found in Book 1 on Bates page(s) 71-72.

7-28. Re: the Direct Testimony of the Pricing Panel (Witnesses Leary and McCabe) at page 22 of 31, line 7. The table for Narragansett Gas shows an Estimated Annual Discount at 10% of \$2,126,195. Footnote 5 at the bottom of the page indicates that a 10% discount in the 2012 Rate Case represented only \$959,194. Please:

- a. Reconcile these amounts and explain in detail the factors that have caused the costs of a 10% discount to more than double in roughly five years.
- b. Provide the workpapers, data, analyses and assumptions that underlie the values for “Estimated Annual Discount” presented in the referenced table.
- c. Provide the workpapers, data, analyses and assumptions relied upon to compute the value of a 10% discount in the 2012 rate case.

Response can be found in Book 1 on Bates page(s) 73-75.

7-29. Re: the Direct Testimony of the Pricing Panel (Witnesses Leary and McCabe) at page 22 of 36, the table for Narragansett Gas at line 7. Please explain why the low income weatherization funding is not included in the “Low Income Value Provided in 2012 Rate Case.”

Response can be found in Book 1 on Bates page(s) 76.

7-30. Re: the Direct Testimony of The Pricing Panel (Witnesses Leary and McCabe) at page 23 of 36, lines 3-13. Please:

- a. Provide the percentage discount approved in Massachusetts for National Grid’s Low Income gas service customers.
- b. Indicate whether the “percentage off of the total bill at full residential rates” for National Grid’s Low Income customers in Massachusetts applies the discount to Gas Costs, and if so, whether gas cost discounts are recovered through a Distribution Adjustment Charge (DAC) or through a Gas Cost Recovery (GCR) mechanism.
- c. Describe any and all changes in the Low Income rate discount program for National Grid customers in Massachusetts since its initial approval by the DPU in 2009.

Response can be found in Book 1 on Bates page(s) 77-78.

7-31. Re: the Direct Testimony of the Pricing Panel at page 35 of 36, lines 9-12. Please:

- a. Provide documentation of the Company's costs for installation of an IP wireless service.
- b. Provide documentation of the Company's costs for the "associated data plan for FT-1 transportation customers.
- c. Identify the IP wireless service provider and provide a copy of the contract under which the referenced IP wireless services will be provided.
- d. Indicate the term (in years and/or months) of the data plan that the Company will use for FT-1 customers.
- e. Indicate whether a FT-1 Transportation customer will have the options of:
 1. Purchasing and installing their own IP wireless device;
 2. Establishing IP wireless data service plans separate from the plan offered by the Company.
- f. If FT-1 customers will not be provided the options of purchasing and installing their own IP wireless device and/or obtaining their own wireless data plans, please explain why the provision of such options is not reasonable and appropriate.

Response can be found in Book 1 on Bates page(s) 79-81.

Corrected and Supplemental Response can be found on Bates Page(s) 1-4.

7-32. Re: the Direct Testimony of the Pricing Panel (Witnesses Leary and McCabe) at page 36 of 36, lines 4-5. Please explain why the Company proposes to place its line extension policies in a separate section (Section 8) of its tariff rather than including those provisions in Section 1 General Rules and Regulations.

Response can be found in Book 1 on Bates page(s) 82.

7-33. Re: Schedule PP-1(a)-GAS, Development of Narragansett Gas Rate Year Distribution Revenue, page 2 of 2, line (25). Please:

- a. Provide actual Non-Firm Margin revenue by month for each month of calendar year 2017 and each month of each of the three preceding calendar years on a customer-by-customer basis using a format comparable to that provided in Schedule SLN-6, pages 4 of 5 and 5 of 5, in Docket No. 4634.
- b. Document the development of the "Normal" revenue amount for Non-Firm Transportation shown on line (25), Column (f), and explain in detail all factors

considered in the development of the “Normal” Non-Firm Margin shown.

- c. If Test Year and/or Rate Year volumes (Dth) for Non-Firm Service customers are weather-normalized, provide the workpapers, data, analyses, and assumptions used to compute weather-normalized throughput volumes for the Company’s non-firm gas service customers. If Test Year and/or Rate Year volumes (Dth) for Non-Firm Service customers are NOT weather-normalized, explain why the presentation of weather-normalize non-firm service volumes and revenues is not necessary or appropriate in the context of this proceeding.

Response can be found in Book 1 on Bates page(s) 83-98.

7-34. Re: Schedule PP-5-GAS, Section 1, Schedule A, Sheet 7, Item 12.0, Schedule of Administrative Fees and Charges, Schedules PP-3(a)-Gas, PP-3(b)-Gas and PP-3(c)-Gas. Please:

- a. Provide the workpapers, data, assumptions, analyses, studies and other documents relied upon to support the development of input data used in the determination of:
 1. The Account Restoration Charge of \$96.00;
 2. The “Paperless Billing Credit” for gas service customers of \$0.37 per bill per month;
 3. The Return Check Charge of \$7.00;
 4. The Daily Metered Equipment Fee of \$1,239.00;
 5. The Daily Metered Data Plan Fee of \$17.00;
 6. The AMR Opt-Out Fees
 - i. \$74.00 for Removal of AMR Meter/Installation of Non-AMR Meter,
 - ii. \$13.00 for Monthly Meter Reading Fee, and
 - iii. \$74.00 for Reinstallation of AMR Meter.
 7. The Residential and Non-Residential Credit Card Payment Fees including:
 - i. Explanation and justification for the application of higher fees to Non-Residential Customers comparable size transactions;
 - ii. The basis for the \$600 threshold for application of additional fees to Residential customers;
 - iii. The basis for the \$1,000 threshold for application of additional fees to Non-Residential customers.
- b. Document and explain why the Labor Overhead rate associated with Labor used for Account Restoration is 69.44% and the Labor Overhead rate associated with the installation of an IP Wireless Device is 95.88%.

Response can be found in Book 1 on Bates page(s) 99-116.

7-35. Re: Workpaper Schedule PP-1(a)-Gas. Please:

- a. Provide the electronic spreadsheet files used to generate the referenced workpapers.
- b. Provide a proof of revenue for each gas rate class (including the Company's Non-Firm Service rate classifications) for the Rate Year:
 1. At present rates
 2. At the Company's proposed rates.

Response can be found in Book 1 on Bates page(s) 117-118.

7-36. Re: Schedule PP-3(a), Account Restoration Fee, page 1 of 2. Please:

- a. Document and explain the derivation of the "labor time" required for:
 1. Meter Off Due to Non Payment;
 2. Meter On Due to Customer Payment.
- b. Provide the actual numbers of Account Restoration Fees billed by rate class by month for each month of the calendar year 2017 and each month of the three preceding calendar years.
- c. Document the determination of the \$8.22 average hourly rate that is used in the determination of Transportation Costs.

Response can be found in Book 1 on Bates page(s) 119-122.

7-37. Re: Schedule PP-3(b), page 1 of 2, Proposed Fee for IP Wireless Device. Please:

- a. Document and explain the derivation of the "Incremental Cost of Meter Equipped with a Wireless Module.
- b. Explain why it is necessary and appropriate for the Company to collect the proposed \$1,285 incremental cost for a Meter Equipped with a Wireless Module and the costs associated with installation of such a meter through a "Lump Sum Fee."
- c. Explain in detail how the capabilities of the referenced meter equipped with a wireless module differ from the capabilities of the Telemetry equipment required for Non-Firm Transportation Service customers.
- d. With respect to the Cost of the Data Plan:
 1. Provide the usage parameters for:
 - i. The Low End plan

- ii. The High End plan
- 2. Indicate the factors that would determine whether a customer requires a Low End plan, a High End plan, or a plan which is between the Low End plan and the High End plan.
- 3. Provide the workpapers, data, analyses and assumptions relied upon to compute:
 - i. Average Travel Time
 - ii. Average Install Time.
- 4. Indicate whether a customer with multiple gas and/or electric service accounts that require meters with wireless modules and data plans will require a separate data plan for each account, and if so, explain why separate data plans are necessary.
- 5. Document the development of the \$39.62 Hourly Rate used and the cost components included in that rate. Also, explain why a separate hourly Transportation Cost is not shown.
- 6. Provide the workpapers, data, analyses, and assumptions relied upon to develop the "Weighting" factors used to compute the Weighted Average Monthly Cost.

Response can be found in Book 1 on Bates page(s) 123-126.

- 7-38. Re: Schedule PP-3(c)-Gas, page 1 of 2, Proposed Fee Returned Checks. Please:
- a. Explain the acronym "JPCM."
 - b. Explain the roles of "JPCM" and "TransCentra" in the Company's processing of returned checks.
 - c. For calendar year 2017 and for each of the three immediately preceding calendar years, provide by rate class by month the numbers of returned checks processed by or for the Company.
 - d. Document the development of the Company Estimates for:
 - 1. Base Labor
 - 2. Labor Overheads.
 - e. Verify that the Total Cost on line (21) divided by the Test Year Returned Items on line (22) yields a result of \$7.95 per item and explain why it is appropriate to truncate that result to a proposed Return Check Fee of \$7.00.
 - f. Explain why the Internal Costs for processing Returned Checks for Narragansett Gas include Labor Overheads but the Internal Costs for Narragansett Electric do not include Labor Overheads.

Response can be found in Book 1 on Bates page(s) 127-131.

- 7-39. Re: Schedule PP-5-GAS, Section 1, Schedule A, Sheet 3, Item 3.1, System Pressure Factor. Please:
- a. Indicate how, when, and in what forum the referenced “forecast of gas supply costs that are required to maintain pressure on the Company’s distribution system” will be determined.
 - b. Explain why the methods for determining forecasted gas supply costs required to maintain pressure on the Company’s distribution system” are not, and should not be, included in the Company’s tariff.

Response can be found in Book 1 on Bates page(s) 132-133.

- 7-40. Re: Schedule PP-5-GAS, Section 1, Schedule A, Sheet 3, Item 3.1, System Pressure Factor, definition of “GCSP.” Please identify the manner in which the Company identifies and determines the dollar amounts for:
- a. Demand costs to be included in the GCSP;
 - b. Commodity costs to be included in the GCSP.

Response can be found in Book 1 on Bates page(s) 134.

- 7-41. Re: Schedule PP-5-GAS, Section 1, Schedule A, Sheets 4 and 5, Item 5.0 Service Supplied. Please explain why this section includes no reference to the Company’s line extension policies and why at least a reference to those policies in this paragraph is not necessary and appropriate or at least helpful to customers trying to understand CIAC for main and service extensions.

Response can be found in Book 1 on Bates page(s) 135.

- 7-42. Re: Schedule PP-5-GAS, Section 1, Schedule B, Sheets 4 and 5. Please provide the monthly rates applicable for each of month of the last three calendar years for:
- a. The “monthly short term borrowing rate defined as the Company’s money pool rate” as part of the definition of “Hedge Collateral Carrying Costs;”
 - b. The Bank of America Prime Rate less 200 basis points as referenced in the definition of “Balance.”

Response can be found in Book 1 on Bates page(s) 136-137.

7-43. Re: Schedule PP-5-GAS, Section 2, Gas Charge, Schedule A, Sheet 4, Total Fixed Costs, TC_{FC} . Please:

- a. Explain why it is necessary and appropriate that the level of supply-related local production and storage costs be determined in the Company's most recent general rate case, as opposed to have those costs determined in annual GCR proceedings.
- b. Provide detailed documentation of the supply-related local production and storage costs for which the Company seeks approval in this proceeding.
- c. Given outstanding considerations regarding long-term plans for replacement of supplies from the Cumberland LNG tank, explain the manner in which changes in the Company's current supply-related local production and storage costs will be addressed in future GCR and/or base rate proceedings.

Response can be found in Book 1 on Bates page(s) 138-139.

7-44. Re: Schedule PP-5-GAS, Section 2, Gas Charge, Schedule A, Sheet 4, Credits to Fixed Costs, TR_{FC} . Please identify all "gas costs relating to supplies required to maintain system pressures on the Company's distribution system":

- a. As its distribution system and its gas supply portfolio are presently configured;
- b. As may be changed by any currently planned or proposed changes in its distribution system or portfolio of gas supply resources.

Response can be found in Book 1 on Bates page(s) 140.

7-45. Re: Schedule PP-5-GAS, Section 3, Distribution Adjustment Charge, Schedule A, Sheet 4, Item 3.2, AGT Factor. Please:

- a. Explain in what forum the "Approved AGT budget" will be determined.
- b. To the extent that the "Approved AGT budget" will be determined outside of a base rate case, does the Company accept an expansion of the language of the AGT Factor to address possible changes in future AGT budget amounts.

Response can be found in Book 1 on Bates page(s) 141-142.

7-46. Re: Schedule PP-5-GAS, Section 3, Distribution Adjustment Charge, Schedule B, Sheet 7, Target Revenue per Customer. Please:

- a. Explain how the Target Revenue per Customer for the period beginning January 2018 will be determined prior to the conclusion of this proceeding (i.e., Docket No. 4770).
- b. Noting that no change in this tariff provision would be effective prior to a final order in this proceeding, would the Company accept an alternative the definition for “*Target Revenue Per Customer*” that reads, “*The target revenue per customer for each rate class will be the Target Revenue per Customer established based on the Commission’s Final Order in the Company’s most recently decided base rate case.*”

Response can be found in Book 1 on Bates page(s) 143.

7-47. Re: Schedule PP-5-GAS, Section 6, Non-Firm Transportation, Schedule A, Sheet 2, Distribution Charge. Please:

- a. Provide the numbers of NFT customers billed in each usage category in each month of calendar year 2017 and in each month of each of the three immediately preceding calendar years.
- b. Provide the results of the annual reviews of NFT customer usage performed after the August billing period in 2017 and in each of the three immediately preceding years indicating the numbers of customers that were moved from one usage category to another specifying the customers’ former usage category and the usage category to which the customer was moved.
- c. In the Company’s annual review of NFT customer usage for 2017, identify any and all adjustments to customer usage that were made to reflect periods of service interruption or curtailment.

Response can be found in Book 1 on Bates page(s) 144-146.

Gas Business Enablement Program

7-48. Referring to the pending rate case of the Company’s electric and gas distribution affiliate in upstate New York, Niagara Mohawk Power Corporation (Niagara Mohawk), in New York Public Service Commission Cases 17-E-0238 and 17-G-0239, please provide copies of

- a. all pre-filed testimony filed by Niagara Mohawk and any other parties in that case relating to the subject matter of the Gas Business Enablement Program,

- b. all information request responses of Niagara Mohawk and any other parties in that case relating to the subject matter of the Gas Business Enablement Program, and
- c. any transcripts of live testimony relating to the subject matter of the Gas Business Enablement Program.

Response can be found in Book 2 part 1 on Bates page(s) 1-Book 2 part 6 on Bates pages(s) 200.

7-49. Referring to the pending rate case of the Company's gas distribution affiliates in Massachusetts, Boston Gas Company and Colonial Gas Company (Gas Companies), in Department of Public Utilities docket 17-170, please provide copies of

- a. all pre-filed testimony filed by the Gas Companies and any other parties in that case relating to the subject matter of the Gas Business Enablement Program,
- b. all information request responses of the Gas Companies and any other parties in that case, relating to the subject matter of the Gas Business Enablement Program, and
- c. any transcripts of live testimony relating to the subject matter of the Gas Business Enablement Program.

Response can be found in Book 2 part 6 on Bates page(s) 201-288.

REDACTED

Division 7-31 CORRECTED AND SUPPLEMENTAL

Request:

Re: the Direct Testimony of the Pricing Panel at page 35 of 36, lines 9-12. Please:

- a. Provide documentation of the Company's costs for installation of an IP wireless service.
- b. Provide documentation of the Company's costs for the "associated data plan for FT-1 transportation customers.
- c. Identify the IP wireless service provider and provide a copy of the contract under which the referenced IP wireless services will be provided.
- d. Indicate the term (in years and/or months) of the data plan that the Company will use for FT-1 customers.
- e. Indicate whether a FT-1 Transportation customer will have the options of:
 1. Purchasing and installing their own IP wireless device;
 2. Establishing IP wireless data service plans separate from the plan offered by the Company.
- f. If FT-1 customers will not be provided the options of purchasing and installing their own IP wireless device and/or obtaining their own wireless data plans, please explain why the provision of such options is not reasonable and appropriate.

Response:

- a. Please see Attachment DIV 7-34-4 included in the Company's response to Division 7-34, part a, subparts 4 and 5 for the requested information.
- b. Please see Attachment DIV 7-37-2 included in the Company's response to Division 7-37, part d, subpart 1. The costs of the Low End Data Plan [REDACTED]
[REDACTED] High End costs can vary per month and are based on [REDACTED]
[REDACTED] The Company estimated an average High End cost of [REDACTED] based on an estimate for multi-channel accounts. On a monthly basis, the monthly charges could be greater or less than the [REDACTED] based on the data being

collected, which can vary based on the particular account and the operation of the meter data collection device.

- c. National Grid USA Service Company, Inc. (the Service Company) has a contract with Verizon Wireless to provide wireless data service, which would include data services required for the operation of the IP wireless device. Please see Confidential Attachment DIV 7-31 for a copy of the contract.
- d. Please see Confidential Attachment DIV 7-31, Page 8. The agreement between the Service Company and Verizon Wireless [REDACTED]
- e.
 - 1. No, FT-1 transportation service customers would not have the option of purchasing and installing their own IP wireless device. The digital security required to read external wireless devices over secured networks is very complex, and it would be cost-prohibitive for the Company to allow customers to purchase their own wireless devices.
 - 2. No, FT-1 transportation service customers would not have the option to establish data service plans separate from the plan to be used by Narragansett Gas. For the devices to communicate using a wireless protocol, IP devices need to be assigned and firewall rules need to be configured for a device to communicate with the Meter Collection Systems. Narragansett Gas utilizes IP addresses provided exclusively to them by Verizon Wireless to communicate with external meter reading devices.
- f. The cost to provide secure and accurate meter data collection on a timely basis would be cost-prohibitive for the Company in terms of supporting multiple vendors with different communication protocols. Separate hardware and software would be required to support each protocol, which would potentially increase the risk of cyber intrusion from non-approved external entities. In addition, pursuant to Item 2.02.0 of the Transportation Terms and Conditions of Narragansett Gas' tariff (Bates Pages 93 and 244 of Book 17), Narragansett Gas provides the equipment required for telemetering for FT-1 transportation service, and the proposal is to continue this practice of Narragansett Gas providing the equipment (the IP wireless device) to FT-1 transportation service customers. Not only will this ensure the integrity, timeliness, and security of meter data collection, but also that the equipment does not interfere with the operation of Narragansett Gas' meter or fail to operate as a result of changes in technology. Also pursuant to Item 2.02.0, under the telemetering requirement, the customer is required to

arrange for a telephone service through a landline, keep current with monthly landline bills, and be responsible for ensuring that the landline functions properly. In the recent past, Narragansett Gas has experienced issues with meter data collection and, after inspection, has found some of those issues to be the result of an inoperable landline. Because the landline is under the control of the customer, Narragansett Gas has limited ability to require remediation. The proposal is to have Narragansett Gas use its data service plan to ensure the ability for it to remediate any meter data collection issues on a timely basis.

Supplemental Response:

- c. National Grid USA Service Company, Inc. has a contract with Verizon Wireless to provide wireless data service, which would include data services required for the operation of the IP wireless device. Please see Confidential Attachment DIV 7-31 Supplemental for an updated copy of the Acknowledgement section (pages 1-3) of the contract.

Confidential Attachment DIV 7-31 Supplemental – REDACTED INFORMATION

Attachment DIV 7-31 Supplemental is comprised of the updated copy of the Agreement between Verizon Wireless and National Grid USA Service Company, Inc. to provide wireless data service including the updated Acknowledgement contained in the first three pages. The Company has requested protective treatment of the seventy-two (72)-page document in its entirety.