National Grid USA and The Narragansett Electric Company
Division 9-1

Request:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-1.
National Grid USA and The Narragansett Electric Company
Division 9-2

Request:

This request to produce information referenced in [REDACTED] including the broadly framed request to produce requests the production of materials not relevant to this request or to the review by the Rhode Island Division of Public Utilities and Carriers pursuant to R.I. Gen. Laws §§ 39-3-24 and 39-3-25 of PPL Rhode Island Holdings, LLC’s acquisition of The Narragansett Electric Company (“Narragansett”) from National Grid USA pursuant to the Share Purchase Agreement dated March 17, 2021 (the “Transaction”), thereby imposing an undue burden on National Grid USA. Pursuant to the Hearing Officer’s Order in response to the Motion to Intervene, Strike and Recusal, Order No. 24109, the review of the Transaction is limited to “confirm[ing] that the facilities for furnishing service to the public will not thereby be diminished” and that the Transaction is “consistent with the public interest.” Notwithstanding the above, please refer to National Grid USA and Narragansett’s response to Data Request Division 6-4 Confidential for information about

Prepared by or under the supervision of: Legal Department
National Grid USA and The Narragansett Electric Company
Division 9-3

Request:

[Redacted]

Response:

This request to produce information [Redacted] requests the production of materials not relevant to this request or to the review by the Rhode Island Division of Public Utilities and Carriers pursuant to R.I. Gen. Laws §§ 39-3-24 and 39-3-25 of PPL Rhode Island Holdings, LLC’s acquisition of The Narragansett Electric Company (“Narragansett”) from National Grid USA pursuant to the Share Purchase Agreement dated March 17, 2021 (the “Transaction”), thereby imposing an undue burden on National Grid USA. Pursuant to the Hearing Officer’s Order in response to the Motion to Intervene, Strike and Recusal, Order No. 24109, the review of the Transaction is limited to “confirm[ing] that the ‘facilities for furnishing service to the public will not thereby be diminished’ and that the Transaction is ‘consistent with the public interest.’” Notwithstanding the above, please refer to National Grid USA and Narragansett’s response to Data Request Division 6-4 Confidential for information [Redacted].
National Grid USA and The Narragansett Electric Company
Division 9-4

Request:

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-4.
National Grid USA and The Narragansett Electric Company
Division 9-5

Request:

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-5.
Redacted

PPL CORPORATION, PPL RHODE ISLAND HOLDINGS, LLC, NATIONAL GRID USA, and THE NARRAGANSETT ELECTRIC COMPANY
Docket No. D-21-09
National Grid USA and The Narragansett Electric Company’s Responses to Division’s Ninth Set of Data Requests
Issued on October 1, 2021

National Grid USA and The Narragansett Electric Company
Division 9-6

Request:

[Redacted]

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-6.

Prepared by or under the supervision of: Pamela Viapiano
National Grid USA and The Narragansett Electric Company
Division 9-7

Request:

[Redacted]

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-7.
National Grid USA and The Narragansett Electric Company
Division 9-8

Request:

[Redacted]

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-8.

Prepared by or under the supervision of: Pamela Viapiano
National Grid USA and The Narragansett Electric Company

Division 9-9

Request:

[Redacted]

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-9.

Prepared by or under the supervision of: Pamela Viapiano
National Grid USA and The Narragansett Electric Company
Division 9-10

Request:

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-10.
Request:

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-11.
National Grid USA and The Narragansett Electric Company
Division 9-12

Request:

Response:

Prepared by or under the supervision of: Elizabeth Arangio
National Grid USA and The Narragansett Electric Company
Division 9-13

Request:

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-13.
PPL CORPORATION, PPL RHODE ISLAND HOLDINGS, LLC, NATIONAL GRID USA, and THE NARRAGANSETT ELECTRIC COMPANY
Docket No. D-21-09
National Grid USA and The Narragansett Electric Company’s Responses to Division’s Ninth Set of Data Requests
Issued on October 1, 2021

National Grid USA and The Narragansett Electric Company
Division 9-14

Request:

Response:
PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-14.

Prepared by or under the supervision of: Pamela Viapiano
National Grid USA and The Narragansett Electric Company
Division 9-15

Request:

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-15.

Prepared by or under the supervision of: Pamela Viapiano
National Grid USA and The Narragansett Electric Company
Division 9-16

Request:

[Redacted]

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-16.
PPL CORPORATION, PPL RHODE ISLAND HOLDINGS, LLC, NATIONAL GRID USA, and THE NARRAGANSETT ELECTRIC COMPANY
Docket No. D-21-09
National Grid USA and The Narragansett Electric Company’s Responses to Division’s Ninth Set of Data Requests
Issued on October 1, 2021

National Grid USA and The Narragansett Electric Company
Division 9-17

Request:

Response:
PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-17.
National Grid USA and The Narragansett Electric Company
Division 9-18

Request:

Response:
PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-18.
Request:

[Redacted]

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-19.
National Grid USA and The Narragansett Electric Company
Division 9-20

Request:

Response:
PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-20.
PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-21.
National Grid USA and The Narragansett Electric Company
Division 9-22

Request:

Response:

Prepared by or under the supervision of: Amy Smith and Nathan Kocon
PPL CORPORATION, PPL RHODE ISLAND HOLDINGS, LLC, NATIONAL GRID USA, and THE NARRAGANSETT ELECTRIC COMPANY
Docket No. D-21-09
National Grid USA and The Narragansett Electric Company’s Responses to Division’s Ninth Set of Data Requests
Issued on October 1, 2021

Prepared by or under the supervision of: Amy Smith and Nathan Kocon
National Grid USA and The Narragansett Electric Company
Division 9-24

Request:

Response:
National Grid USA and The Narragansett Electric Company
Division 9-25

Request:

[Redacted]

Response:

[Redacted]

Prepared by or under the supervision of: Amy Smith and Nathan Kocon
National Grid USA and The Narragansett Electric Company
Division 9-26

Request:

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-26.
National Grid USA and The Narragansett Electric Company
Division 9-27

Request:

Response:
PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-27.
Request:

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-28.
National Grid USA and The Narragansett Electric Company
Division 9-29

Request:

Response:
PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-29.
National Grid USA and The Narragansett Electric Company
Division 9-30

Request:

[Redacted]

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-30.

Prepared by or under the supervision of: Pamela Viapiano
National Grid USA and The Narragansett Electric Company
Division 9-31

Request:

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-31.

Prepared by or under the supervision of: Pamela Viapiano
PPL CORPORATION, PPL RHODE ISLAND HOLDINGS, LLC, NATIONAL GRID USA, and THE NARRAGANSETT ELECTRIC COMPANY

Docket No. D-21-09

National Grid USA and The Narragansett Electric Company’s Responses to Division’s Ninth Set of Data Requests
Issued on October 1, 2021

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Request:

[Redacted]

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-32.

Prepared by or under the supervision of: Pamela Viapiano
National Grid USA and The Narragansett Electric Company
Division 9-33

Request:

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-33.

Prepared by or under the supervision of: Pamela Viapiano
National Grid USA and The Narragansett Electric Company
Division 9-34

Request:

[Redacted]

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-34.

Prepared by or under the supervision of: Pamela Viapiano
National Grid USA and The Narragansett Electric Company
Division 9-35

Request:

Do PPL Corporation and PPL Rhode Island Holdings, LLC agree that any adjustments to restate the balance sheet assets and/or liabilities for pensions and other postretirement benefits, as referenced in the response to Division 4-9, will not increase Narragansett’s revenue requirement above what it would be absent the Transaction?

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-35.
National Grid USA and The Narragansett Electric Company  
Division 9-36

Request:

Please update National Grid’s response to Division 4-6.

Response:

The Narragansett Electric Company’s (“Narragansett”) balance of accumulated deferred income tax ("ADIT") as of June 30, 2021 is a deferred tax liability of $376,858,314. Included in this amount is a rate base ADIT liability of $367,965,445. The total ADIT, as adjusted, will be reversed at the time of the transaction. Adjustments to the ADIT balance will be booked from June 30, 2021 to the date of the closing of PPL Rhode Island Holdings, LLC’s acquisition of Narragansett from National Grid USA for activity that occurs during this period.
National Grid USA and The Narragansett Electric Company
Division 9-37

Request:

Please provide a breakout of the balance of accumulated deferred income taxes as of the latest date available, showing the gross balance before offset for net operating losses (NOLs), the offset for NOLs, and the balance net of NOLs.

Response:

The balance of accumulated deferred income tax ("ADIT") for The Narragansett Electric Company as of June 30, 2021, the most recently recorded accounting period, is as follows:

- ADIT Liability $(465,624,828)
- NOL Deferred Tax Asset $ 88,766,514
- Total ADIT, net of NOL $(376,858,314)
National Grid USA and The Narragansett Electric Company
Division 9-38

Request:

Please describe the effect that the Transaction will have on the balance of NOLs existing at the time of the Transaction.

Response:

At the time of the closing of PPL Rhode Island Holdings, LLC’s acquisition of The Narragansett Electric Company (“Narragansett”) from National Grid USA (the “Transaction”), all temporary net operating loss (“NOL”) differences at Narragansett will reverse and be reflected as current tax payables resulting from the taxable gain calculation. Available NOL carryforward balances will be utilized to offset and mitigate the taxable gain, and thus the deferred tax asset for NOL at National Grid USA will also reverse.
National Grid USA and The Narragansett Electric Company
Division 9-39

Request:

Please document any and all compensation that Narragansett and/or its gas system customers received when ownership of the Providence LNG Tank was transferred to National Grid’s NGLNG affiliate.

Response:

The Narragansett Electric Company (Narragansett”) (including its predecessor companies) never owned the liquefied natural gas (“LNG”) tank in Providence (the “Providence LNG Tank”), although Narragansett owns the land on which the Providence LNG Tank is located. The Providence LNG Tank was built by the Algonquin Gas Transmission Company (“Algonquin”) in the early 1970s on land leased from the New England Gas Company (previously, Providence Gas Company), which was owned and operated by Southern Union Company and subsequently acquired by Narragansett in 2006.

In 2002, Algonquin sold the Providence LNG Tank to subsidiaries of the KeySpan Corporation (“KeySpan”). This history can be found in Algonquin Gas Transmission, Co., 31 FERC ¶ 61,221 (1985); and KeySpan LNG, L.P., et al., 122 FERC ¶ 61,028 (2005).

In 2007, National Grid USA acquired KeySpan and the LNG company was subsequently renamed National Grid LNG LLC (“NGLNG”).

No compensation was paid to Narragansett in connection with the transfer of ownership of the NGLNG facility from KeySpan to National Grid USA.
National Grid USA and The Narragansett Electric Company
Division 9-40

Request:

Please identify the pipeline(s) through which natural gas will be delivered to the NGLNG liquefaction facility in RI for liquefaction, and provide the projected volumes of natural gas that will be delivered to that facility by month for each of the first five years of operation of that facility.

Response:

The natural gas will be transported to the National Grid LNG LLC (“NGLNG”) liquefaction facility in Providence through the Algonquin Gas Transmission interstate pipeline (“Algonquin Pipeline”), which is owned by Enbridge Inc. The Algonquin Pipeline interconnects with The Naragansett Electric Company at Dey Street in East Providence, where the natural gas is transported and delivered to the NGLNG liquefaction facility.

Please see Attachment NG-DIV 9-40 for the liquefaction customers’ contractual volumes of natural gas by month for each of the first five years of operation of the facility.
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* TNEC is The Narragansett Electric Company
Request:

For each pipeline that will be used to deliver natural gas to the NGLNG liquefaction facility in Rhode Island, please identify the entity that holds the pipeline entitlement.

Response:

The liquefaction customers will use their own capacity entitlements on the Algonquin Gas Transmission system to arrange for delivery of their natural gas to The Narragansett Electric Company (“Narragansett”) Dey Street interconnection. For the transportation segment on Narragansett’s distribution pipeline, National Grid LNG LLC (“NGLNG”) and Narragansett will amend their existing Displacement Agreement to cover that transportation, so that NGLNG will have the transportation rights for the deliveries to the liquefaction facility.
National Grid USA and The Narragansett Electric Company  
Division 9-42

Request:

For each pipeline that will be used to deliver natural gas to the NGLNG liquefaction facility in Rhode Island, please identify and provide all supporting documents showing the manner in which the holder(s) of the pipeline capacity entitlements will be compensated for the use of capacity to deliver natural gas to the NGLNG liquefaction facility.

Response:

As explained in National Grid USA and The Narragansett Electric Company’s (“Narragansett”) response to Data Request Division 9-41, the liquefaction customers will be using their own interstate pipeline capacity to transport their natural gas for liquefaction, therefore, no compensation is required in this instance. For the transportation on Narragansett’s distribution pipeline, the Displacement Agreement between Narragansett and National Grid LNG LLC will be amended to specify the rates to be paid to Narragansett for that intrastate transportation.
National Grid USA and The Narragansett Electric Company  
Division 9-43

Request:

Please provide the contract under which Narragansett will be compensated for use of Narragansett’s pipeline entitlements to supply natural gas to the NGLNG liquefaction facility. Please explain in detail and provide an illustrative example of the manner in which Narragansett’s compensation will be determined.

Response:

National Grid LNG LLC (“NGLNG”) and The Narragansett Electric Company (“Narragansett”) are currently parties to a Displacement Agreement dated March 31, 1999, whereby Narragansett provides NGLNG transportation of re-vaporized liquefied natural gas, including boil off and flash gas, from NGLNG’s facility to the Algonquin Gas Transmission (“Algonquin”) system in order for NGLNG to facilitate service to its storage customers. NGLNG and Narragansett entered into a year-to-year extension effective March 31, 2019.

The Displacement Agreement and the extension is included hereto as Attachment NG-DIV 9-43 and sets forth the rate NGLNG shall pay Narragansett for such services. Upon the commencement of liquefaction services at the facility, NGLNG and Narragansett will enter into an amended and restated Displacement Agreement to also allow for Narragansett to transport natural gas vapor, including feed gas, from Algonquin to the NGLNG liquefaction facility.

NGLNG and Narragansett are presently negotiating the amended and restated Displacement Agreement.
DISPLACEMENT AGREEMENT

This Displacement Agreement (the "Displacement Agreement" or "Agreement") is entered into this 31st day of March, 1999, between Algonquin LNG, Inc. ("ALNG"), a Delaware corporation, and The Providence Gas Company ("PGC"), a Rhode Island corporation (ALNG and PGC are sometimes referred to collectively as the "Parties").

WHEREAS, ALNG and PGC have entered into a precedent agreement and a firm service agreement ("Service Agreement") dated December 11, 1998, that set forth the scope of certain undertakings by the Parties in connection with the liquefied natural gas ("LNG") storage facilities operated by ALNG; and

WHEREAS, ALNG desires to obtain, and PGC desires to provide transportation of revaporized LNG (including boil off and flash gas) from the ALNG facility to the Algonquin Gas Transmission Company ("AGT") system, which will facilitate ALNG's service to ALNG's LNG storage customers other than PGC;

NOW, THEREFORE, in consideration of the mutual covenants and agreements contained herein, ALNG and PGC agree as follows:

1. NATURE OF SERVICE

Service hereunder shall consist of:

1.1 Receipt by PGC, on a firm basis, of quantities of revaporized LNG up to the MDTQ at the interconnection of PGC's facilities and ALNG's vaporization facilities ("LNG Vapor Receipt Point") and boil off and flash gas at the interconnection of PGC's facilities and ALNG's boil off handling facilities ("Boil Off Receipt Point"). The LNG Vapor Receipt Point and the Boil Off Receipt Point are sometimes collectively referred to herein as the ("Receipt Points").

1.2 Contemporaneous delivery by PGC, on a firm basis, at the interconnections of the facilities of PGC and AGT at East Providence and Dey Street (the "Delivery Points") of a quantity of natural gas thermally equivalent to the quantity of revaporized LNG (including boil off and flash gas) received by PGC at the Receipt Points.

2. TERM

This Agreement shall become effective as of the date service commences under the Service Agreement (the "Effective Date"), and shall continue in effect through the day before the 20th anniversary of the Effective Date (the "Primary Term"). The Primary Term of this Agreement shall be divided into "Contract Years." The first Contract Year shall begin on the Effective Date and shall end on the day before the first anniversary of the Effective Date. All succeeding Contract Years shall begin on an anniversary of the Effective Date and shall end on the day before the next succeeding anniversary of the Effective Date. ALNG shall have the right to terminate this Agreement, by providing 9 months prior written notice to PGC, with such
termination to be effective at the end of the tenth Contract Year. ALNG shall have the right to extend this Agreement past the end of the Primary Tenn for an additional term of 10 years by providing written notice to PGC 12 months before the end of the Primary Term.

3. **QUANTITIES**

3.1 **Quantities.** PGC agrees to receive at the LNG Vapor Receipt Point and deliver at the Delivery Points, on a firm basis, up to 55,000 Dth per day of natural gas ("Vapor MDTQ"). PGC agrees to receive at the Boil Off Receipt Point and deliver at the Delivery Points, on a firm basis, up to 100 Dth per hour of natural gas ("Boil Off MHTQ"). PGC shall use its best efforts to receive boil off quantities in excess of the Boil Off MHTQ. Provided such quantities have been nominated in accordance with Section 12 of this Agreement, ALNG may tender quantities of gas in excess of the Vapor MDTQ on any day if transportation of such gas can be accomplished by PGC without detriment to any of PGC's other customers or PGC's system.

3.2 **Delivery Rates.** PGC shall receive at the Receipt Points and deliver at the Delivery Points, gas at an hourly rate equal to 1/24 of the daily nominated quantity on a firm basis, or at such other rate as is mutually agreed, provided, however, that PGC shall not be required to receive a quantity of gas in excess of the physical requirements of PGC at the Delivery Points absent this Agreement.

4. **RATES**

4.1 **Demand Charge.** ALNG shall pay PGC a monthly demand charge of $69,153.

4.2 **Usage Rates.** ALNG shall pay PGC $.25 per Dth for all quantities transported by PGC under this Agreement in excess of 1,659,664 Dth during any Contract Year.

5. **MEASUREMENT**

5.1 **Measurement Unit.** The unit of measurement of gas delivered by ALNG to PGC shall be the Dth.

5.2 **Determination of Dth Delivered.** The number of Dth delivered at the Receipt Points during any day shall be determined in accordance with the measurement provisions of ALNG's FERC Gas Tariff in effect from time to time.

5.3 **Measuring Stations.**

(a) At the Receipt Points, ALNG shall maintain and operate a measuring station properly equipped with metering devices, designed and installed in accordance with, but not limited to, the published recommendations of the American Gas Association and the American National Standards Institute as ALNG deems to be in accordance with accepted industry practice.
(b) PGC may install, operate and maintain, at its own expense, such check measuring equipment as it shall desire, provided that such equipment shall be so installed, maintained and operate so as not to interfere with the operation of ALNG's measuring equipment at or near the Receipt Points.

6. **RECEIPT PRESSURE**

Gas shall be delivered by ALNG at the LNG Vapor Receipt Point at a pressure equal to 200 pounds per square inch in gauge ("psig") or at such other pressure mutually agreed upon. Gas shall be delivered by ALNG at the Boil off Receipt Points at a pressure equal to 100 psig or at such other pressure mutually agreed upon.

7. **FORCEMAJEURE**

7.1 **Relief from Liability.** Neither party shall be taken to have breached its obligations under this Agreement by reason of any act, omission or circumstance occasioned by or in consequence of any acts of God, acts of public enemy, wars, blockades, insurrections, riots, or the binding order of any court or governmental authority which has been resisted in good faith by all reasonable legal means.

7.2 **Liabilities Not Relieved.** Such causes or contingencies affecting performance by either party, however, shall not relieve such party of liability to the extent of its concurring negligence or willful misconduct or in the event of its failure to use due diligence to remedy the situation and remove the cause in an adequate manner and with all reasonable dispatch.

8. **QUALITY**

8.1 **Heating Value.** The gas tendered by ALNG at the Receipt Points shall have a minimum total heating value of 967 Btu per cubic foot. PGC shall in good faith make every effort to receive and displace quantities of gas that have a total heating value in excess of 1150 Btu per cubic foot; provided, however, if despite such good faith efforts PGC determines that receipt of such quantities is incompatible with the safe operation of PGC's system, in PGC's sole discretion reasonably exercised, then at PGC's request ALNG shall adjust its vaporization rate to a rate that is then compatible with PGC's system operations. Any necessary reduction in vaporization on any day will be allocated as provided in ALNG's FERC Gas Tariff.

In the event that the vaporized LNG has a continuing total heating value in excess of 1150 Btu per cubic foot and, despite PGC's good faith efforts referenced above, PGC determines, in its sole discretion reasonably exercised, that its customers will experience safety related or operational problems with their natural gas equipment as a result of the Btu content of the vaporized LNG delivered by ALNG, upon written notice from PGC ALNG will as soon as reasonably practicable cause the total heating value to be reduced to a level identified in PGC's notice of ALNG as being consistent with the safe operation of PGC's system by taking such action as permitted under its FERC Gas Tariff to require ALNG's customers to take steps to
reduce the total heating value to the level specified in PGC's notice or in the event that these steps would not resolve such problems then ALNG will install and operate the necessary facilities or equipment to alleviate such problems, including the installation of temporary facilities, if required, to insure uninterrupted service to PGC's firm customers, subject to the receipt of any necessary regulatory authorizations.

8.2 Objectionable Properties. The gas tendered hereunder:

(a) Shall be commercially free from dust, gum, gum-forming constituents, and free liquids under continuous gas flow conditions at the pressure and temperature conditions in PGC's system at the Receipt Points;

(b) Shall not contain an amount of water vapor exceeding seven pounds per 1,000,000 cubic feet of gas volume as measured by methods in accordance with accepted industry practice, or by other methods mutually agreed upon by PGC and ALNG;

(c) Shall contain less than one grain of hydrogen sulphide per 100 cubic feet of gas volume as measured by methods in accordance with accepted industry practice, such as, but not limited to, lead acetate testing, analysis by titrator, analysis by chromatograph, or by other methods mutually agreed upon by PGC and ALNG;

(d) Shall be of a flowing temperature which is adequate to prevent interference with the proper operation of lines, regulators, meters and other equipment of PGC. PGC may impose restrictions on the temperature of the flowing gas that it receives when, in PGC's reasonable judgment, these restrictions are necessary to insure the proper operation of PGC's facilities.

8.3 Verification of Gas Quality. ALNG shall, upon request, provide PGC an analysis of the chemical composition of the LNG in the storage facility.

8.4 Failure To Conform to Specifications. If the gas tendered by ALNG for receipt by PGC shall fail at any time to conform to any of the specifications set forth in this Section 8, then PGC shall notify ALNG and may, at its option, refuse to accept nonconforming gas pending connection by ALNG.

9. BILLING.

9.1 Monthly Bill. PGC shall bill ALNG on or before the seventh day of each month for charges relating to services rendered during the preceding month.

9.2 Access to Billing Data. Both ALNG and PGC shall have the right to examine at reasonable times the books, records, and charts of the other to the extent necessary to verify the accuracy of any statement, charge, or computation made under or pursuant to any of the provisions hereof.
10. PAYMENT

10.1 Payment. On or before the twelfth day following the delivery by PGC of an invoice to ALNG, but in no event earlier than the nineteenth day of each month, ALNG shall pay PGC, by wire transfer of federal funds to an address designated by PGC, the amounts billed by PGC in said month pursuant to Section 9 of this Agreement; provided, however, that when the date on which such payment would otherwise be due falls on a day that is not a Business Day, such payment is due on the first Business Day following the nineteenth day of the month. Any payment shall be considered to have been made as of the time that such payment is wire-transferred by ALNG.

10.2 Late Payment. Should ALNG fail to make timely payment of any bill in whole or in part, the portion of any such unpaid amount that is not the subject of a dispute under Section 10.3 below shall be subject to interest from the due date of payment until the actual date of payment at an annual interest rate equal to the rate set forth in Section 154.501 of the regulations of the FERC, or any successor regulation.

10.3 Disputed Bills. If ALNG in good faith shall dispute the amount of any bill or parts thereof and shall pay PGC such amounts as it concedes to be correct, ALNG may withhold payment of the disputed amount; provided, however, that any portion of such withheld amount ultimately found due after a final determination which may be reached either by agreement or judgment of the courts shall be subject to interest as provided in Section 10.2.

10.4 Billing Errors. In the event an error is discovered in the amount hereunder, such error shall be adjusted within thirty days of the determination thereof.

11. POSSESSION OF GAS

11.1 Control. As between PGC and ALNG, PGC shall be deemed to be in control and possession of the gas hereunder upon receipt of such gas at the Receipt Points and until the delivery of such gas at the Delivery Points. ALNG shall be deemed to be in control and possession of such gas prior to receipt of the gas by PGC at the Receipt Points.

11.2 Responsibility. Neither Party shall have responsibility with respect to the gas or on account of anything done, occurring or arising with respect to gas while it is in the possession of the other Party.

12. NOMINATIONS

12.1 General. If ALNG desires the delivery of gas on any day, ALNG shall give notice to PGC, nominating the specific quantity of gas ALNG requests for such day. Subject to Section 3 of this Agreement, ALNG may request specific hourly delivery quantities other than 1/24 of the nominated daily quantity, which PGC shall use reasonable efforts to deliver. To the extent
ALNG desires to change its nomination for any day(s), ALNG shall submit a new nomination for such day(s) or for the remainder of such day and such changed nomination shall become effective subject to four (4) hours notice.

12.2 Nominations Deadline. The nomination of deliveries for any day, and any change in ALNG's nomination for a day, including intra-day changes, shall be submitted to PGC no later than one hour subsequent to the corresponding deadline set forth in Section 22 of AGT's General Terms and Conditions.

13. MISCELLANEOUS

13.1 Notices. Except as herein otherwise provided, any notice, request, demand, statement or bill provided for in this Agreement, or any other written communication which a party may desire to give to the other parties, shall be in writing and shall be considered as duly delivered when mailed by registered or certified mail to the address of the parties hereto as follows:

To ALNG:
Vice President Marketing
Algonquin LNG Inc.
1284 Soldiers Field Road
Boston, MA 02135

To PGC:
The Providence Gas Company
100 Weybosset Street
Providence, RI 02903

13.2 Successors in Interest: Any company which shall succeed by purchase, merger, consolidation or otherwise to the properties substantially as an entirety, of PGC or ALNG, used or intended to be used for rendering gas service authorized by the Commission, shall be entitled to the rights and shall be subject to the obligations of its predecessors in title under this Agreement. Either Party may, without relieving itself of its obligations under this Agreement assign any of its rights and obligations hereunder to another entity, but no assignment of this Agreement, or of any of the rights or obligations thereunder shall be made unless there first shall have been obtained the consent thereto of the non-assigning Party which consent shall not be unreasonably withheld.

13.3 Waiver. No waiver by any party of any default in performance nor any noncompliance with this Agreement will operate or be construed as a waiver of any future default or noncompliance, whether of a like or different character.

13.4 Modification. No modification, amendment or change in this Agreement may be made except in writing signed by both parties to this Agreement or except as provided in Article 9 herein.
IN WITNESS WHEREOF, the parties hereto have caused this Displacement Agreement to be executed by their respective agents thereunto duly authorized, the day and year first above written.

ALGONQUIN LNG, INC.
By: [Signature]
Title: Vice President

THE PROVIDENCE GAS COMPANY
By: [Signature]
Title: Executive Vice President
March 29, 2019

Joseph Murphy
National Grid LNG
280 Melrose Street
Providence RI 02907

Re: Displacement Agreement dated March 31, 1999

Dear Mr. Murphy:

The Narragansett Electric Company d/b/a National Grid (Narragansett) and National Grid LNG (NGLNG) hereby acknowledge that they have been negotiating in order to amend the Displacement Agreement between Algonquin LNG, Inc. and The Providence Gas Company dated March 31, 1999 (Displacement Agreement) to, among other things, accommodate liquefaction. In order to continue those negotiations, Narragansett and NGLNG hereby agree to extend the Term of the Displacement Agreement past the end of the Primary Term on a year to year basis, with either party having the right to terminate the Displacement Agreement by providing thirty (30) days prior written notice, with such termination to be effective at the end of the thirty (30) day period.

Capitalized terms not defined in this Letter Agreement shall have the meaning set forth in the Displacement Agreement.

Kindly indicate your agreement by having this Letter Agreement executed on behalf of National Grid LNG.

Sincerely,

John Vaughn
Authorized Signatory

Consented and Agreed:

NATIONAL GRID LNG

By

Name: [Signature]
Title: [Signature]
National Grid USA and The Narragansett Electric Company
Division 9-44

Request:

Please provide the Total Projected Design Day throughput and sendout for National Grid RI Gas for 2021/2022, showing separately sendout volumes for:

a. Pipeline;
b. Underground Storage; and
c. LNG.

Response:

The table below provides the total projected design day throughput and sendout volumes (in dekatherms) for National Grid USA’s gas operations in Rhode Island for 2021/2022.

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<td>LNG/Peaking:</td>
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National Grid USA and The Narragansett Electric Company  
Division 9-45

Request:

Please provide the Total Projected Design Day throughput and sendout for National Grid RI Gas for 2020/2021, showing separately sendout volumes for:

a. Pipeline;
b. Underground Storage; and
c. LNG.

Response:

The table below provides the total projected design day throughput and sendout volumes (in dekatherms) for National Grid USA’s gas operations in Rhode Island.

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National Grid USA and The Narragansett Electric Company
Division 9-46

Request:

Please provide the Total Projected Design Day throughput and sendout for National Grid RI Gas for 2019/2020, showing separately sendout volumes for:

a. Pipeline;
b. Underground Storage; and
c. LNG.

Response:

The table below provides the total projected design day throughput and sendout volumes (in dekatherms) for National Grid USA’s gas operations in Rhode Island for 2019/2020.

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National Grid USA and The Narragansett Electric Company  
Division 9-47

Request:

Referencing National Grid’s Attachment NG-DIV 5-1-1, please provide resumes showing the full educational and employment histories of the following employees:

a. Cindy Caine;  
b. Nicholas Dube; and  
c. Any other employee listed in the referenced Attachment that holds at least a bachelor’s degree in engineering or relevant technical discipline.

Response:

a. Please see Attachment NG-DIV 9-47-1 for a copy of Cindy Caine’s resume.

b. Please see Attachment NG-DIV 9-47-2 for a copy of Nicholas Dube’s resume.

c. There are no other employees listed in Attachment NG-DIV 5-1-1 who hold at least a bachelor’s degree in engineering or relevant technical discipline.
Cynthia L. Caine

EXPERIENCE

2021 to Present
National Grid/Senior Supervisor LNG
Cumberland, RI 02864
- Assign and supervise maintenance personnel and contractors
- Ensure all plant records are up to date and accurate
- Maintain regulatory compliance by meeting all regulatory requirements effectively and in a timely manner
- Ensure efficient plant operation within all allocated budgetary requirements
- Compliance with all safety policies, standards, and processes to promote a safe work environment and minimize occupational risks
- Schedule plant shift personnel and direct activities to meet all peak shaving operation and maintenance requirements timely, reliably, and efficiently

2002 to 2018
Brayton Point Station / Salem Harbor Station/Maintenance Supervisor
Somerset, MA 02726
- Assign and supervise maintenance personnel and contractors
- Schedule vendors, create requisitions, assign & process for materials and services
- Develop and track costs reports for overhauls and weekly maintenance
- Create work order packages, ensure material availability
- Maintain Asbestos program/records for the station
- LOTO, Co-Chair Safety Committee, Pre/Post Job Briefings
- Six Sigma Black Belt for special projects
- MA Asbestos Inspector and MA Asbestos Supervisor

2000 to 2002
PG&E National Energy Group/Maintenance Planner
Lake Road Generating/Dayville, CT 06241
- Assign and supervise maintenance personnel
- Schedule vendors, create requisitions, assign & process for materials and services
- Track Construction outage work in Primavera
- Construct and maintain the equipment database in SAP
- Build, and maintain preventive maintenance plans and work order packages
- Quote, purchase, and set up spare parts inventory in SAP
- Develop and track costs reports for overhauls and budgeted items
- Create Bill of Materials and PM Assembly BOM’s in SAP
- Set up new warehouse, bin locations, racking systems and locations
- SAP Super user, PM user group, Implementation team for SAP 4.6c
1994  PG&E National Energy Group  Maintenance Analyst
     to
     Manchester Street Station
     2000  Providence, RI  02903

  • Provide support to Maintenance/Overhaul Planner for weekly planning
  • Schedule major projects and overhauls with Primavera software
  • Construct, evaluate and manage a spare parts database
  • Obtain quotes, purchase, and set up spare parts inventory in SAP
  • Overhaul and Forced Outage equipment internal inspections and evaluations to include ABB Steam Turbine, Condenser, Siemens Combustion Turbine, HRSG, Circulating Water Tunnel, and Air Intake
  • Build and maintain preventative maintenance plans and work order packages
  • Maintain and update an equipment database in SAP
  • Created bill of materials and spare part assemblies in SAP for equipment database
  • Develop and track costs reports for overhauls
  • Schedule vendors and create requisitions for services and materials
  • Maintain procedures in Document Management System
  • SAP Super Users Group, Business Process Improvement Team

1989  New England Power Company  Database Administrator
     to
     Brayton Point Station
     1994

  • Implementation of the Maintenance Management System
  • Developed and maintained a preventive maintenance multi-database
  • Trained Maintenance Management System users
  • Designed and implemented a tracking system for maintenance procedures
  • Designed and generated management reports
  • Maintained and updated an equipment database

**COMPUTER SKILLS**  Word, Excel, Projects, Primavera Project Planner, Access, SAP, Mini Tab, Main Saver, People Soft, ADP, and Maximo

**EDUCATION**  Bristol Community College – Business Entrepreneurship, AS
                 Bristol Community College – Project Management Certificate
                 Dominion Energy – Six Sigma Black Belt
HIGHLIGHTS OF QUALIFICATION

• Manage LNG Facilities (Permanent and Portable)
• First Line supervisor of operations, maintenance, planning and support personnel
• Labor Relations and contract experience
• Familiarity with LOTO and switching and tagging
• Experience in operations and maintenance of generation facilities (nuclear and natural gas)
• Exceptional leadership, detail attentive, results oriented professional
• Skilled in Peoplesoft and Microsoft applications (Word, Excel, Outlook, PowerPoint)
• Skilled in Human Performance principles and practices

PROFESSIONAL EXPERIENCE:

National Grid- LNG Senior Supervisor (2020-Present)
• Manage LNG Sites- permanent and portable
• Operations lead for LNG Capital Projects
• Responsible for Capital and O&M budget spending
• Responsible for Site operations, maintenance, budget, contractor oversight, work planning, audits and safety

Cogentrix- Rhode Island State Energy Center
  Maintenance Planner (2019-2020)
• Assist development of long-range facility planning
• Manage project workload, manpower scheduling, planning and budget
• Procedure development owner
• Manage maintenance work orders and assign work
• Proposal & Purchase Order Development and Contract negotiation
• Site lead for Peoplesoft Work Management program and Maximo transition

Shift Supervisor (2015-2019)
• Manage Operations and Maintenance personnel
• Qualified as Control Room Operator, 600 MW Combined Cycle Power Plant
• Switching and Tagging coordinator
• Operate the power plant/steam plant in compliance with procedures, tech manuals and environmental permits
• Develop and lead safety meetings for the crew
• Review Fleet Human Performance and OE bulletins with team
• Manage operations scheduling and coverage assignments
• Contractor Coordinator (Siemens, GE, NDE, Scaffolding, Insulation)

• Have completed 3 refueling outages as Plant Operator
• Operate, monitor and troubleshoot plant equipment
• Knowledgeable in all areas of Human Performance and Configuration Control
• Qualified on the Site Fire Brigade
• Qualified Lockout/Tagout
Exelon Nuclear- Pennsylvania (Outage Services) – First Line Supervisor (2010-2012)
• Have completed 8 maintenance outages as Refuel Supervisor, managing maintenance technicians, decontamination technicians and contractors
• Manage project workload, manpower, schedule, planning and budget throughout the year
• Effectively supervise personnel to ensure all assigned activities are performed safe and event free
• Performed quality inspection of all incoming materials
• Lead meetings with management and senior staff on work scheduling, planning and resolution of issues and potential conflict
• Schedule and Develop employee training

• Provide first line supervision of a team of approximately 20 personnel including nuclear worker techs, quality inspectors, mechanics, radcon techs, crane operators and riggers
• Operational Lead overseeing all functions involved in the processing of spent nuclear fuel and dry storage program
• Coordinate preventative and corrective maintenance for Dry Storage production
• Responsible for scheduling and manning of staff
• Work in parallel with two separate unions, contract workers and exempt employees

Pall Corporation- New York (R&D) - Engineering Aide (2005-2007)
• Assist all levels of engineers with assigned tasks and assignments
• Experience in Quality Systems, Risk Analysis, Validation and problem-solving while working with Product Engineering, Process Engineering and Quality Engineering
• Performed quality inspection of all R&D process material

• Supervised and coordinated complex work procedures, maintenance and repairs to ensure correct and efficient execution
• Supervised and instructed, (as Chief Reactor Watch), a team of five personnel during daily plant operations and casualties
• Established and managed inventory control program for reactor plant maintenance and test equipment and repair/consumable parts inventory
• Led preventative maintenance program
• Monitored and conducted troubleshooting and repairs of reactor auxiliary systems
• Appointed to senior operating positions in all aspects of plant operation
• Qualified Quality Assurance Inspector

EDUCATION
• Exelon Supervisory Development Program
• Excelsior College (NY), Associate Degree of Science in Technology
• Naval Nuclear Power Training Program
National Grid USA and The Narragansett Electric Company  
Division 9-48

Request:

Referencing National Grid’s response to DIV 5-7, please provide the volumes of LNG and natural gas equivalents that Narragansett expects to receive from the NGLNG Fields Point Liquefaction Project in each month of calendar years 2022 and 2023.

Response:

For calendar year 2022, The Narragansett Electric Company (“Narragansett”) forecasts receiving zero dekatherms (“Dth”) from the National Grid LNG LLC (“NGLNG”) Fields Point Liquefaction Project.

For calendar year 2023, Narragansett has a precedent agreement with NGLNG for liquefaction services for up to 2,616 Dth per day and 507,504 Dth per refill season. The volume of liquefied natural gas (“LNG”) summer refill is dependent upon the level of withdrawals from the prior winter season. As such, the volume of liquefaction services for calendar year 2023 will depend upon withdrawals from the 2022/23 winter season, not to exceed 507,504 Dth.
National Grid USA and The Narragansett Electric Company
Division 9-49

Request:

For each contractor currently providing environmental cleanup/remediation services for Narragansett’s gas system, please indicate whether the contract will be carried forward after the acquisition of Narragansett by PPL without change or whether the contract will either be terminated or will require renegotiation. If renegotiation is required, please indicate when PPL expects that such renegotiation will be required and provide PPL’s assessment of the manner in which the scope of services provided by the contractor and/or the costs of the contractor’s services will be impacted.

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-49.
National Grid USA and The Narragansett Electric Company  
Division 9-50

Request:

Referencing the response to DIV 1-28, which discusses the Transition Services Agreement and identifies the services that may be provided on Day 1 by the Service Company and will subsequently be transitioned to PPL, please:

a. Confirm that PPL currently expects that on Day 1 following a closing of the Transaction, the Service Company will provide Supplier Services and perform related functions for the Retail Choice Programs for natural gas and electricity for Narragansett;

b. Provide PPL’s current expectation for the transition to PPL of Supplier Services and related functions for the Retail Choice Programs for natural gas and electricity during the two-year transition period; and

c. If the Service Company will not perform these responsibilities on Day 1, please explain how these functions will be performed on Day 1.

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-50.

Prepared by or under the supervision of: Pamela Viapiano
National Grid USA and The Narragansett Electric Company  
Division 9-51

Request:

Please state whether the Service Company currently provides to Narragansett Supplier Services and related functions for Retail Choice Programs.

Response:

Supplier Services is a centralized function through National Grid USA Service Company, Inc. Members of the Supplier Services team manage relationships with third-party suppliers across all National Grid USA entities, including The Narragansett Electric Company (“Narragansett”), and assist with their billing issues. Retail Choice Programs will be part of the Energy Procurement Transition Services Agreement between National Grid USA and PPL Corporation. Please refer to National Grid USA and Narragansett’s response to Data Request Division 7-36, at Attachment NG-DIV 7-36-2-3, for additional information.
National Grid USA and The Narragansett Electric Company
Division 9-52

Request:

Please describe the steps that PPL has taken to develop a business continuity plan to ensure that the Transaction will not alter the current operation of the competitive energy market, and provide all relevant documents setting forth this plan.

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-52.
National Grid USA and The Narragansett Electric Company
Division 9-53

Request:

Please confirm that PPL intends to maintain the protocols that Narragansett has in place to ensure that customers’ ability to participate in the competitive energy market is unaffected and uninterrupted, and explain how PPL intends to do so. The response should address billing; staffing levels and other resources that can affect customer service; communications between energy suppliers and the utility; the assignment of customers; electronic data interchange protocols; access to customer usage information; enrollment procedures; availability of electronic bulletin boards and the posting of nominations.

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-53.
National Grid USA and The Narragansett Electric Company
Division 9-54

Request:

As compared to staffing levels of Narragansett, please describe in detail the staffing levels that PPL plans to use to support the Supplier Services functions and Retail Choice Programs for the electricity and natural gas competitive markets.

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-54.
Request:

Referencing the organizational chart provided in response to DIV 2-24, please identify the PPL positions that will perform Supplier Services and Retail Choice Program functions for electricity and natural gas and the individual(s) on the leadership team listed in the response to whom these positions will report.

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-55.
Request:

Please describe any changes that PPL intends to make to the Supplier Services functions or Retail Choice Programs and indicate whether such changes may disrupt the availability of or access to competitive supply services purchased by customers in the competitive energy market.

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-56.
National Grid USA and The Narragansett Electric Company
Division 9-57

Request:

Does PPL intend to adopt and maintain the same electronic data interchange (EDI) protocols for the exchange of information with competitive energy suppliers that Narragansett has in place? If not, please describe the protocols PPL plans to adopt and maintain.

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-57.
National Grid USA and The Narragansett Electric Company
Division 9-58

Request:

Please indicate whether PPL intends to maintain the same protocols that Narragansett follows to exchange data with competitive energy suppliers that is necessary to bill customers receiving competitive supply services. If not, please describe the protocols PPL plans to adopt.

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-58.
National Grid USA and The Narragansett Electric Company  
Division 9-59

Request:
State whether competitive energy suppliers be required to “retest” EDI transactions with PPL. If retesting is planned, please indicate when retesting will begin. If retesting is not planned, please explain how PPL intends to ensure compatibility.

Response:
PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-59.
Request:

State whether competitive energy suppliers will be required to execute new supplier and billing service agreements with PPL in order to continue servicing customers.

a. If this is planned, please provide a timeline for providing proposed service agreements to competitive energy suppliers; and

b. If this is not planned, please explain how PPL intends to ensure that each trading partner understands its rights and obligations.

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-60.
Request:

Does PPL intend to maintain the same level of communication protocols between energy suppliers and the utility that Narragansett currently has in place, such as for the posting of gas nominations and operational flow orders, and the use of the Electronic Bulletin Board? If not, please describe the communication protocols that PPL plans to implement and explain when such protocols will be conveyed to competitive energy suppliers.

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-61.
National Grid USA and The Narragansett Electric Company  
Division 9-62

Request:

Referencing RIPUC Docket No. 5073 regarding Purchase of Receivables (POR) and Record Request No. 4 in that proceeding, in which National Grid noted its expectation that its costs for billing system upgrades needed to implement the POR to be recovered over a three-year period, please explain in detail how the costs for billing upgrades prior to the PPL acquisition will be tracked and recovered to ensure that electric suppliers are not billed twice for these costs.

Response:

The Narragansett Electric Company (“Narragansett”) is currently incurring, and will continue to incur, POR implementation costs leading up to PPL Rhode Island Holdings, LLC’s (“PPL Rhode Island”) acquisition of Narragansett (the “Transaction”) as it strives to implement a POR program in Rhode Island by January 23, 2022.1 Narragansett is tracking these POR implementation costs by creating an investment plan project for the implementation of the program. The work order(s) created to track costs will not be classified as recoverable from customers and will be manually removed from all reports utilized to track customer recoverable costs. A similar method was successfully utilized when Narragansett’s Massachusetts affiliate implemented a POR program.

Subject to the approval of tariff language that is currently pending before the PUC, Narragansett’s POR implementation costs will fall under the umbrella of POR administrative costs. All POR implementation related administrative costs will be amortized over three years and recovered annually from participating electric suppliers through a discount rate. The discount rate will be applied to the amounts electric suppliers will receive when they sell their accounts receivable to Narragansett. The electric suppliers will receive slightly less than the face value of their accounts receivable partly due to the recovery of each month’s portion of the administrative costs incurred by Narragansett. The difference between the amount paid for the electric suppliers’ accounts receivable and the face value of the accounts receivable attributable to the recovery of administrative costs will reduce the amount of administrative costs remaining to be paid by the electric suppliers. For additional details on how administrative costs will be

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1 At an Open Meeting on July 23, 2021, the Rhode Island Public Utilities Commission (“PUC”) approved a Term Sheet (with several modifications) that included a provision that Narragansett would implement a POR program in Rhode Island within 180 days of PUC approval of the Term Sheet (January 23, 2022).

Prepared by or under the supervision of: Donald Kirley
recovered, please see the proposed tariff language that is currently pending before the PUC in Docket No. 5073.\(^2\)

Once the Transaction is complete, the remaining balance of the POR implementation costs to be recovered from electric suppliers will transfer to PPL Rhode Island, and all subsequent recoveries of this amount of POR administrative costs from electric suppliers through the discount rate will be realized by PPL Rhode Island. Narragansett’s interest in recovering its POR implementation costs would be satisfied, as such interest is factored into the purchase price of Narragansett. Therefore, the costs incurred by Narragansett would not be recovered twice from electric suppliers.

As mentioned in Narragansett’s response to Record Request 4 in PUC Docket No. 5073, it is likely that PPL Rhode Island will incur its own POR implementation costs (potentially duplicative of the POR implementation costs incurred by Narragansett) as it upgrades its own billing system to accommodate the POR program. Based on commentary from an Open Meeting on July 23, 2021, the PUC is aware of this potential for duplicative POR implementation costs and stated that they would consider the issue at a later date when/if PPL Rhode Island incurs such costs and elects to seek recovery from electric suppliers.

PPL CORPORATION, PPL RHODE ISLAND HOLDINGS, LLC, NATIONAL GRID USA, and THE NARRAGANSETT ELECTRIC COMPANY
Docket No. D-21-09
National Grid USA and The Narragansett Electric Company’s Responses to Division’s Ninth Set of Data Requests
Issued on October 1, 2021

National Grid USA and The Narragansett Electric Company
Division 9-63

Request:

PPL’s response to DIV 7-9 states (at 1) that the total cost of the LG&E main replacement program was $287 million; the total of the programs for which costs are provided appears to be approximately $208 million. Please:

a. Verify that the difference between the total cost cited and the sum of the costs for the listed programs represents costs for pipe replacement prior to 2010, and if that is not correct document and explain the source of the difference between the cited total cost and the costs of the programs for which yearly detail is provided.

b. Indicate the portion of the $287 million that was incurred by LG&E prior to its acquisition by PPL.

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-63.
National Grid USA and The Narragansett Electric Company
Division 9-64

Request:

PPL’s response to DIV 7-9 states (at 1) that a total of more than 70,000 services have been replaced by LG&E. The data included in PPL’s response appears to identify less than 30,000 services replaced in the years 2010-2020. Please document the number of services that were replaced by LG&E by program prior to LG&E’s acquisition by PPL.

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-64.
National Grid USA and The Narragansett Electric Company  
Division 9-65

Request:

PPL’s response to Division Data Request 7-4 states that with, respect to National Grid’s non-public forecasting and planning information, “[s]ome of this information is confidential and is not expected to be shared with PPL until PPL owns Narragansett.” With respect to that statement, please:

a. Identify in as much detail as possible the nature the confidential information that will not be shared with PPL until PPL owns Narragansett; and

b. Explain why the non-public information being withheld could not be provided to PPL under a non-disclosure agreement or other protective agreement.

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-65.
National Grid USA and The Narragansett Electric Company
Division 9-66

Request:

PPL’s response to Division Data Request 7-20(a) states: “[d]uring the transition period, PPL will work with National Grid and Narragansett to full understand best practices they utilize in forecasting and planning for Narragansett system needs.” With respect to that statement, please:

a. Identify each element of the forecasting methods currently used by National Grid and/or Narragansett that has been identified represented to PPL as a “best practice”; and

b. For each forecasting element identified as a “best practice” in response to subpart (a) of this request, provide the documents, studies, and analyses relied upon by National Grid or Narragansett to characterize the forecasting method as a “best practice.”

Response:


b. Please see National Grid USA and Narragansett’s response to Data Request Division 5-5, at Attachment NG-DIV 5-5 Confidential, for a full copy of Narragansett’s Gas Long Range Plan filed with the PUC in Docket No. 5043. The forecast methodology is described in Section III of the Gas Long Range Plan.
National Grid USA and The Narragansett Electric Company
Division 9-67

Request:

PPL’s response to DIV 7-29 states that “[i]t is anticipated that PPL Rhode Island will offer positions to as many as 350-400 National Grid Service Company employees.” Please:

a. Provide PPL’s best estimates of:

i. The numbers of current union employees of the National Grid Service Company that are expected to be offered positions with PPL Rhode Island;

ii. The numbers of current non-union employees of the National Grid Service Company that are expected to be offered positions with PPL Rhode Island; and;

iii. The numbers of current non-union employees of the National Grid Service Company that are expected to be offered positions with PPL entities other than PPL Rhode Island; and

b. Indicate whether PPL intends to offer any financial incentives to encourage current National Grid Service Company employees to transfer to PPL or PPL Rhode Island. If yes, please provide PPL’s current best estimates for the costs of such financial incentives for:

i. Employees to be engaged in electric system operations;

ii. Employees to be engaged in gas system operations; and

iii. Employees to be engaged in general administrative functions.

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-67.

Prepared by or under the supervision of: Pamela Viapiano
National Grid USA and The Narragansett Electric Company
Division 9-68

Request:

PPL’s response to DIV 7-31 states: “PPL intends to continue to utilize best practices already established by National Grid USA.” With respect to that statement, please:

a. identify each National Grid “best practice” with respect to gas system planning, operations, and maintenance known to PPL; and

b. For each “best practice” identified in response to subpart a. of this request, provide the documents, studies, and analyses relied upon by National Grid or Narragansett to characterize the practice as a “best practice.”

Response:

a. Please see PPL Corporation and PPL Rhode Island Holdings, LLC’s (collectively, “PPL”) response to Data Request Division 9-68, subpart (a), for the requested information.

b. The parties have not participated in or undertaken a “best practice” benchmarking exercise with each other for The Narragansett Electric Company’s (“Narragansett”) gas system planning, operations, and maintenance. Moreover, National Grid USA and Narragansett have not characterized to PPL any particular practices as “best practices.” Narragansett’s best practices for its gas system planning, operations, and maintenance are summarized best in its annual gas Infrastructure, Safety, and Reliability Plan (“Gas ISR Plan”) to address work on gas infrastructure and other areas related to maintaining the safety and reliability of Narragansett’s gas distribution system. Through the Gas ISR Plan, Narragansett maintains and upgrades its gas delivery system by proactively replacing leak-prone pipe; upgrading the gas delivery system’s custody transfer stations, pressure regulating facilities, and peak shaving plants; responding to emergency leak situations; and addressing infrastructure conflicts that arise out of state, municipal, and third-party construction projects. Narragansett achieves its safety and reliability goals through a cost-effective, coordinated work plan. The level of work that the Gas ISR Plan provides, sustains, and enhances the safety and reliability of the Rhode Island gas pipeline infrastructure; promotes efficiency in the management and operation of the gas distribution system; and directly benefits Rhode Island gas customers. Please refer to Rhode Island Public Utilities Commission Docket No. 5099 for Narragansett’s fiscal year 2022 Gas ISR plan.
National Grid USA and The Narragansett Electric Company  
Division 9-69

Request:

Narragansett presently benefits from National Grid’s sharing of spare equipment across three operating companies, particularly with respect to spare power transformers from National Grid’s Massachusetts operating company that are made available to, and are used, in Rhode Island. Please:

a. Explain how will PPL achieve this synergy post-Transaction;

b. Provide a detailed description and the additional capital and costs of duplicating materials and spare equipment for Narragansett Electric which are now provided through centralized inventory that is shared with Massachusetts and New York;

c. Explain how PPL will minimize excess outage hours if equipment must come from Pennsylvania or Kentucky as compared to the current situation under National Grid ownership;

d. Provide the anticipated increased cost to Narragansett for mobile transformers post-Transaction; and

e. Explain how PPL will mitigate the outage duration impact of mobile transformers coming from Pennsylvania and Kentucky versus from Massachusetts.

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-69.
In National Grid’s response to DIV 7-34, National Grid estimates that approximately 300-370 Service Company employees will provide support associated with the TSA, either part-time or full time, and “teams from the relevant Service Company functions will support PPL during the transition, and specific individuals will assist in the support as-needed. For example, Employee X will not be specifically assigned to support PPL on a full-time or part-time basis; however, Employee X’s team will support PPL during the transition. National Grid USA will retain the resource capacity of the Service Company’s functional teams to support the TSA.” Please:

a. Explain how PPL intends to create the level of support provided by teams comprised of 300-370 part-time or full time Service Company employees post-Transaction;

b. Provide an estimate of the number of employees PPL expects will be required to replicate the services, both part-time and full time, once the TSA period has ended; and

c. State whether PPL expects the functions provided by National Grid’s Service Company can be replicated with the same or less resource man-hours and cost than National Grid Service Company currently provides.

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-70.
National Grid USA and The Narragansett Electric Company
Division 9-71

Request:

Is PPL aware that the RIPUC has stayed its Docket No. 5113 filing for Advanced Metering Functionality?

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-71.
National Grid USA and The Narragansett Electric Company  
Division 9-72

Request:

The TSA establishes a 24-month period that National Grid USA Service Company will provide transition services to PPL. Please:

a. State whether PPL intends to recover the costs paid to the Service Company pursuant to the TSA in Rhode Island rates and, if so, explain how the costs will be recovered;

b. Explain in detail how pricing is set under the TSA;

c. Explain how PPL employees or resources will manage, assist, shadow or otherwise coordinate with Service Company training teams or employees during the TSA’s term in order to successfully transition services to PPL, including:

i. How PPL will track the activities and costs associated with PPL employees or resources that train under the Service Company during the transition period; and

ii. Whether PPL intends to recover the costs of those activities described in subpart (i) in Rhode Island rates and provide an estimate of those costs and the proposed recovery mechanism; and

d. Explain whether PPL expects duplication of services or resources to enable continuity in operations throughout the separation process. If yes, explain why; if no, explain why not.

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-72.
National Grid USA and The Narragansett Electric Company
Division 9-73

Request:

Please provide the proposed new location for the PPL Control Center.

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-73.
National Grid USA and The Narragansett Electric Company
Division 9-74

Request:

Please identify the communication paths and technologies that will create all the interconnection with the existing National Grid equipment to provide full intelligence to the control center.

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-74.
Request:

Please identify what GIS and OMS systems will be integrated with the control center.

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-75.
National Grid USA and The Narragansett Electric Company
Division 9-76

Request:

Please explain how the new Control Center will manage outage restoration and specifically major storm response after the end of the TSA 24 month transition period.

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-76.
National Grid USA and The Narragansett Electric Company
Division 9-77

Request:

Provide the number of mobile transformers National Grid has in each of its New York, Massachusetts, and Rhode Island territories.

Response:

National Grid USA has 26 mobile substations owned by its New York affiliate and strategically stored across its territory. National Grid USA has 17 mobile substations owned by its affiliates that are stored in Massachusetts. Lastly, National Grid USA has two mobile substations owned by its Rhode Island affiliate and stored in Massachusetts.
National Grid USA and The Narragansett Electric Company
Division 9-78

Request:

How many spare transformers does National Grid have in each of its New York, Massachusetts, and Rhode Island territories.

Response:

National Grid USA has 95 spare transformers owned by its New York affiliate and strategically located throughout its territory. National Grid USA has 54 spare transformers owned by its affiliates and that are stored in Massachusetts, which includes 32 transformers designated as transmission and 22 transformers designated as distribution. Lastly, National Grid USA has 11 spare transformers owned by The Narragansett Electric Company, which consists of 10 transformers stored in Rhode Island and 1 transformer stored in Massachusetts. The spare transformers in Rhode Island are comprised of seven distribution units and four transmission units.
National Grid USA and The Narragansett Electric Company
Division 9-79

Request:

In the past ten years, how many times has National Grid called upon a spare transformer from Massachusetts or New York to be utilized in Rhode Island?

Response:

Over the past ten years, three spare transformers owned and stored in Massachusetts have been utilized in Rhode Island. There have been zero spare transformers owned and stored in New York utilized in Rhode Island.
National Grid USA and The Narragansett Electric Company
Division 9-80

Request:

In the past ten years, how many times has National Grid called upon a mobile transformer from New York or Massachusetts to be utilized in Rhode Island?

Response:

In the past ten years, National Grid USA utilized a mobile substation owned and stored in New York twice for Rhode Island. Over the same time period, National Grid USA has utilized a mobile substation owned and stored in Massachusetts 13 times for Rhode Island.
National Grid USA and The Narragansett Electric Company

Division 9-81

Request:

Concerning the transmission to distribution substations in Rhode Island:

a. How many substations are in Narragansett’s system?
b. How many of the substations have SCADA systems fully installed and implemented?
c. How many of these substations have the SCADA system communications interconnected to the SCADA master control facilities and/or a control center?
d. What is the location (city and state) of the SCADA master control system?
e. How many electromechanical relays remain in the substations?
f. How many electronic or solid state relays are in the substations?
g. How many of the relays in the substations are integrated to the SCADA system?
h. What are the various communication networks being used to communicate between the substation remote terminal units (RTU) and the SCADA master and control center?

Response:

a. The Narragansett Electric Company (“Narragansett”) has 105 substations that serve distribution customers.
b. Of the total number of substations, Narragansett has 83 substations with a remote terminal unit (“RTU”) that communicates to the Control Center Energy Management System (“EMS”), which provides either analog telemetry or control, or both.
c. Please see the response to subpart (b), above.
d. Narragansett’s primary Supervisory Control and Data Acquisition (“SCADA”) system is located in Northborough, Massachusetts.
e. There are 3,473 electromechanical relays in the substations.
f. There are 1,215 electronic or solid-state relays in the substations.
g. Most of the relays identified in response to subpart (f) are integrated into the SCADA system, where relays provide information to communication processors and RTUs. Providing a more specific count would require a significant effort to review the wiring diagrams in each case.

Prepared by or under the supervision of: Michael Gallagher
h. At substations with SCADA, National Grid USA uses DNP3 protocol to communicate between control centers and RTUs. The actual medium in how the communication is achieved varies among the following:

- Private fiber infrastructure or Verizon MPLS circuits;
- Cellular routers (Verizon);
- 9.6k modems (over Verizon phone circuits); or
- Microwave communication.
National Grid USA and The Narragansett Electric Company
Division 9-81 Supplemental

Request:

Concerning the transmission to distribution substations in Rhode Island:

a. How many substations are in Narragansett’s system?
b. How many of the substations have SCADA systems fully installed and implemented?
c. How many of these substations have the SCADA system communications interconnected to the SCADA master control facilities and/or a control center?
d. What is the location (city and state) of the SCADA master control system?
e. How many electromechanical relays remain in the substations?
f. How many electronic or solid state relays are in the substations?
g. How many of the relays in the substations are integrated to the SCADA system?
h. What are the various communication networks being used to communicate between the substation remote terminal units (RTU) and the SCADA master and control center?

Original Response:

a. There are 105 Narragansett substations serving distribution customers.
b. For this count the Company counted all stations with an RTU that communicates to the Control Center Energy Management System (EMS) providing either analog telemetry or control, or both. There are 83 substations that communicate to the EMS.
c. Same answer as part b above.
d. The location of the primary SCADA system is in Northborough, Massachusetts.
e. There are 3,473 electromechanical relays in the substations.
f. There are 1,215 electronic or solid-state relays in the substations.
g. Most of the relays that are identified in answer to question f are integrated into the SCADA system where relays provide information to Communication processors and RTU. Providing a more specific count would require a significant effort to review the wiring diagrams in each case.

Prepared by or under the supervision of: Alan LaBarre
h. At substations with SCADA National Grid uses DNP3 protocol to communicate between control centers and RTU’s. The actual medium in how that is achieved varies among the following:

   a. Private fiber infrastructure or Verizon MPLS circuits.
   b. cellular routers (Verizon).
   c. 9.6k modems (over Verizon phone circuits).
   d. Microwave communication.

Supplemental Response:

h. At substations with SCADA National Grid uses DNP3 protocol to communicate between control centers and RTU’s. The actual medium in how that is achieved varies among the following:

   a. Private fiber infrastructure or Verizon MPLS circuits.
   b. cellular routers (Verizon).
   c. 9.6k modems and 1200 baud modems (over Verizon phone circuits).
   d. Microwave communication.
National Grid USA and The Narragansett Electric Company
Division 9-82

Request:

How many staff members/employees are responsible for the SCADA system and control center operations and are these National Grid service company employees? Please:

a. State whether these employees are shared between multiple states and if so which states;

b. Provide the annual cost for the full operation of the SCADA system and control center;

c. Identify what percentage of the total operating cost for the SCADA system and control center is allocated to Narragansett;

d. Provide the annual operating cost for the control center allocated to Narragansett;

e. Provide the book value of the portion of the control center in Northborough, Massachusetts that is assigned to Narragansett;

f. Provide the book value of the control center in Lincoln, RI assigned to Narragansett; and

g. Provide the total book value of the Lincoln, RI control center.

Response:

National Grid USA has 123 control center employees and 17 employees responsible for the Supervisory Control and Data Acquisition ("SCADA") system, all of whom are National Grid USA Service Company, Inc. employees.

a. The above-referenced employees are shared between Rhode Island and Massachusetts.

b. The annual cost for labor, hardware, software, and communications required to support the SCADA system is $5.6 million. Annual costs for the Control Center are $14.4 million.

c. Twenty-one percent of the SCADA system support costs and twenty-seven percent of the control center costs are allocated to The Narragansett Electric Company ("Narragansett").

Prepared by or under the supervision of: Michael Gallagher
d. The annual SCADA and control center operating costs allocated to Narragansett is approximately $5 million.

e. The original book cost of the portion of the electric transmission and distribution control centers in Northborough, Massachusetts assigned to Narragansett is $544,000.

f. The original book cost of the Lincoln, Rhode Island facility is $10.5 million. National Grid USA is unable to break out a cost specific to the electric transmission and distribution control centers.

g. See the response to subpart (f), above.
National Grid USA and The Narragansett Electric Company  
Division 9-83

Request:

National Grid’s response to DIV 7-30 states that areas not transferred to PPL on Day 1 will be gradually transitioned as specified in the TSA, and that National Grid USA is identifying the appropriate training that will be required during the transition through the Day 1 planning process.

a. What is National Grid’s cost estimate to provide services to PPL under the TSA?

b. What, if any, of these costs would National Grid incur if PPL were not proposing to acquire Narragansett Electric?

c. Does National Grid consider the Service Company training of PPL personnel an incremental cost? Why or why not?

Response:

a. Please see Attachment NG-DIV 9-83 for National Grid USA’s cost estimate to provide services to PPL Corporation ("PPL") under the Transition Services Agreement ("TSA").

b. The costs identified in Attachment NG-DIV 9-83 are the cost of providing those identified services to The Narragansett Electric Company ("Narragansett") currently (excluding the five percent mark-up on the Fully Loaded Costs (as such term is defined in the Share Purchase Agreement)). Such costs would be the same if PPL does not acquire Narragansett.

c. National Grid USA expects many of the employees currently working on Narragansett’s business (both directly employed by Narragansett and indirectly through National Grid USA Service Company, Inc. ("Service Company")) will continue to work on Narragansett business following the close of PPL Rhode Island Holdings, LLC’s acquisition of Narragansett from National Grid USA (the “Transaction”) because they will be transferring to PPL on Day 1. These employees currently perform work on behalf of Narragansett and/or have detailed knowledge of the systems and processes in the functional areas that will be transferred to PPL on Day 1. The areas that are not transferred to PPL on Day 1 will gradually transition to PPL as specified in the TSA. National Grid USA does not consider the Service Company training of PPL personnel as an incremental cost for the training services included in Attachment NG-DIV 9-83. In a small number of areas where PPL will take on the responsibility, but where the resources are not conveying, the parties are building in knowledge transfer transition services into
the TSA schedules. The knowledge transfer transition services will enable PPL to access subject matter experts that will help to build PPL’s knowledge following the close of the Transaction. The costs for such services are not expected to be incremental because the training activity will be provided by the National Grid USA employees who will be providing the underlying transition service. Please see the following TSA schedules provided in National Grid USA and Narragansett’s response to Data Request Division 7-36 for examples of knowledge transfer transition services:

- Attachment NG-DIV 7-36-2-3 – 103B-EP: Energy Transactions (Financial), page 12;
- Attachment NG-DIV 7-36-2-4 -087-GO: Consultancy Services for Dispatch Supervision, page 3; and

The work associated with the scope of transition services is ongoing and currently undergoing further review, refinement, and finalization; therefore, these TSA schedules are subject to change.
Rhode Island Transition

Indicative TSA pricing post Day 1 planning
DRAFT
September 2021
## Indicative TSA pricing summary

### Annualised TSA prices including administration fee and inflation adjustment

<table>
<thead>
<tr>
<th>Function</th>
<th>Opex FY21</th>
<th>Opex Y1</th>
<th>Opex Y2</th>
<th>Capex FY21</th>
<th>Capex Y1</th>
<th>Capex Y2</th>
<th>Totex FY21</th>
<th>Totex Y1</th>
<th>Totex Y2</th>
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<td><strong>157.7</strong></td>
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<td><strong>214.1</strong></td>
<td><strong>218.6</strong></td>
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</tbody>
</table>

Notes: (1) A 5% administration margin has been added to actual labor costs included within the TSA price, as per Schedule 2 of the Master Services Agreement. (2) A 2% inflation assumption has been applied to the FY21 recharges to calculate the Year One and Year Two TSA prices.
### Procure to Pay

Annualised TSA prices including administration fee and inflation adjustment

<table>
<thead>
<tr>
<th>TSA Title</th>
<th>Duration</th>
<th>Annualised TSA price (US$m)¹,²</th>
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</thead>
<tbody>
<tr>
<td></td>
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<td>Opex FY21</td>
</tr>
<tr>
<td>Supply Chain Master Data Management</td>
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<td>Accounts payable</td>
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<tr>
<td>Transactional Procurement</td>
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<tr>
<td>Manage Procure to Pay (P2P)</td>
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<td>Procure to Pay (P2P) system</td>
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<td>Storm Filing process support</td>
<td>24 months</td>
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<tr>
<td>Capital Delivery and Shop on behalf of / Receive on behalf of (SOBO/ ROBO)</td>
<td>24 months</td>
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<tr>
<td>Card and expenses administration</td>
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<td>-</td>
</tr>
<tr>
<td>Total TSA price</td>
<td></td>
<td>1.2</td>
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</tbody>
</table>

Notes: (1) A 5% administration margin has been added to actual labor costs included within the TSA price, as per Schedule 2 of the Master Services Agreement. (2) A 2% inflation assumption has been applied to the FY21 recharges to calculate the Year One and Year Two TSA prices.
# Employee Services

Annualised TSA prices including administration fee and inflation adjustment

<table>
<thead>
<tr>
<th>TSA Title</th>
<th>Duration</th>
<th>Opex FY21</th>
<th>Opex Y1</th>
<th>Opex Y2</th>
<th>Capex FY21</th>
<th>Capex Y1</th>
<th>Capex Y2</th>
<th>Totex FY21</th>
<th>Totex Y1</th>
<th>Totex Y2</th>
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<tbody>
<tr>
<td>Employee Services Support Center</td>
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<td>0.6</td>
<td>0.6</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.6</td>
<td>0.6</td>
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<tr>
<td>Human Resources Administration</td>
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<td>-</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>HRIS - Organisation and Position management</td>
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<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
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<tr>
<td>HRIS - Reporting</td>
<td>24 months</td>
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<td>-</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>HRIS - Technology Support Services</td>
<td>24 months</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
<td>Employee Records &amp; Information requests</td>
<td>24 months</td>
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<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
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<tr>
<td>Benefits administration</td>
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<td>0.4</td>
<td>0.4</td>
<td>-</td>
<td>-</td>
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<td>0.4</td>
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<tr>
<td>401k administration</td>
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<td>0.1</td>
<td>0.1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
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<tr>
<td>Pension administration</td>
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<td>-</td>
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<tr>
<td>Retirement administration</td>
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<td>0.3</td>
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<td>Year End Tax Form (W-2) processing</td>
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<tr>
<td>Total TSA price</td>
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<td>1.4</td>
<td>1.5</td>
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<td>0.4</td>
<td>0.4</td>
<td>1.7</td>
<td>1.8</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Notes: (1) A 5% administration margin has been added to actual labor costs included within the TSA price, as per Schedule 2 of the Master Services Agreement. (2) A 2% inflation assumption has been applied to the FY21 recharges to calculate the Year One and Year Two TSA prices.
## Facilities & Property Services

### Annualised TSA prices including administration fee and inflation adjustment

<table>
<thead>
<tr>
<th>TSA Title</th>
<th>Duration</th>
<th>Opex FY21</th>
<th>Opex Y1</th>
<th>Opex Y2</th>
<th>Capex FY21</th>
<th>Capex Y1</th>
<th>Capex Y2</th>
<th>Totex FY21</th>
<th>Totex Y1</th>
<th>Totex Y2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repair &amp; Maintenance, internally managed &amp; third party facility management providers</td>
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<td>3.9</td>
<td>4.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>3.9</td>
<td>3.9</td>
<td>4.0</td>
</tr>
<tr>
<td>Massachusetts and New York offices</td>
<td>12 months</td>
<td>4.7</td>
<td>4.8</td>
<td>4.9</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4.7</td>
<td>4.8</td>
<td>4.9</td>
</tr>
<tr>
<td>Massachusetts operations facilities</td>
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<td>1.6</td>
<td>1.7</td>
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<td>-</td>
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<td>1.6</td>
<td>1.6</td>
<td>1.7</td>
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<td>0.9</td>
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<td><strong>16.1</strong></td>
<td><strong>16.5</strong></td>
<td><strong>16.8</strong></td>
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</tbody>
</table>

Notes: (1) A 5% administration margin has been added to actual labor costs included within the TSA price, as per Schedule 2 of the Master Services Agreement. (2) A 2% inflation assumption has been applied to the FY21 recharges to calculate the Year One and Year Two TSA prices.
## HSE (incl. Environment, Compliance, Training & Security)

Annualised TSA prices including administration fee and inflation adjustment

<table>
<thead>
<tr>
<th>TSA Title</th>
<th>Duration</th>
<th>Annualised TSA price (US$m)</th>
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<tr>
<td></td>
<td>Opex FY21</td>
<td>Opex Y1</td>
</tr>
<tr>
<td>Field Safety support</td>
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<tr>
<td>Site security services</td>
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</tr>
<tr>
<td>Health services</td>
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<td>Total TSA price</td>
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</tbody>
</table>

Notes: (1) A 5% administration margin has been added to actual labor costs included within the TSA price, as per Schedule 2 of the Master Services Agreement. (2) A 2% inflation assumption has been applied to the FY21 recharges to calculate the Year One and Year Two TSA prices.
### Regulatory Support

Annualised TSA prices including administration fee and inflation adjustment

<table>
<thead>
<tr>
<th>TSA Title</th>
<th>Duration</th>
<th>Annualised TSA price (US$m)¹,²</th>
<th>Opex FY21</th>
<th>Opex Y1</th>
<th>Opex Y2</th>
<th>Capex FY21</th>
<th>Capex Y1</th>
<th>Capex Y2</th>
<th>Totex FY21</th>
<th>Totex Y1</th>
<th>Totex Y2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulatory support - General</td>
<td>6 months</td>
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<td>2.8</td>
<td>2.9</td>
<td>3.0</td>
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<td>-</td>
<td>-</td>
<td>2.8</td>
<td>2.9</td>
<td>3.0</td>
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<td>Regulatory support - Reporting &amp; filing - Transmission</td>
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<td>0.6</td>
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<td>-</td>
<td>0.6</td>
<td>0.6</td>
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<tr>
<td>Regulatory Support – New England Power Company Services on Behalf of NECO – Transmission</td>
<td>6 months</td>
<td></td>
<td>-</td>
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</tr>
<tr>
<td>Regulatory Support – Stakeholder Group Participation – Transmission</td>
<td>6 months</td>
<td></td>
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<tr>
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<td>3.4</td>
<td>3.5</td>
<td>3.6</td>
</tr>
</tbody>
</table>

Notes: (1) A 5% administration margin has been added to actual labor costs included within the TSA price, as per Schedule 2 of the Master Services Agreement. (2) A 2% inflation assumption has been applied to the FY21 recharges to calculate the Year One and Year Two TSA prices.
## Procurement

### Annualised TSA prices including administration fee and inflation adjustment

<table>
<thead>
<tr>
<th>TSA Title</th>
<th>Duration</th>
<th>Opex FY21</th>
<th>Opex Y1</th>
<th>Opex Y2</th>
<th>Capex FY21</th>
<th>Capex Y1</th>
<th>Capex Y2</th>
<th>Totex FY21</th>
<th>Totex Y1</th>
<th>Totex Y2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Procurement</td>
<td>6 months</td>
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<td>1.9</td>
<td>1.9</td>
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</tbody>
</table>

Notes: (1) A 5% administration margin has been added to actual labor costs included within the TSA price, as per Schedule 2 of the Master Services Agreement. (2) A 2% inflation assumption has been applied to the FY21 recharges to calculate the Year One and Year Two TSA prices.
### Inventory, Warehouse & Fleet Management

**Annualised TSA prices including administration fee and inflation adjustment**

<table>
<thead>
<tr>
<th>TSA Title</th>
<th>Duration</th>
<th>Opex FY21</th>
<th>Opex Y1</th>
<th>Opex Y2</th>
<th>Capex FY21</th>
<th>Capex Y1</th>
<th>Capex Y2</th>
<th>Totex FY21</th>
<th>Totex Y1</th>
<th>Totex Y2</th>
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</thead>
<tbody>
<tr>
<td>Inventory management</td>
<td>12 months</td>
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<td>0.5</td>
<td>0.5</td>
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<td><strong>Total TSA price</strong></td>
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<td>3.1</td>
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<td>3.2</td>
</tr>
</tbody>
</table>

**Notes:**
1. A 5% administration margin has been added to actual labor costs included within the TSA price, as per Schedule 2 of the Master Services Agreement.
2. A 2% inflation assumption has been applied to the FY21 recharges to calculate the Year One and Year Two TSA prices.
### Electricity Operations (1 of 2)

#### Annualised TSA prices including administration fee and inflation adjustment

<table>
<thead>
<tr>
<th>TSA Title</th>
<th>Duration</th>
<th>Opex FY21</th>
<th>Opex Y1</th>
<th>Opex Y2</th>
<th>Capex FY21</th>
<th>Capex Y1</th>
<th>Capex Y2</th>
<th>Totex FY21</th>
<th>Totex Y1</th>
<th>Totex Y2</th>
</tr>
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<tbody>
<tr>
<td>Asset management and planning transmission</td>
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<td>Distribution asset management and planning</td>
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<td></td>
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<tr>
<td>Maintenance Strategy Engineering and Technical Services</td>
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<td>1.1</td>
<td>1.2</td>
<td>1.4</td>
<td>1.4</td>
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<tr>
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<tr>
<td>Codes &amp; Standards</td>
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<td>-</td>
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<tr>
<td>Electric Lab &amp; Field Testing</td>
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<tr>
<td>Electric Meter Shop</td>
<td>24 months</td>
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<td>-</td>
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<td>-</td>
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<tr>
<td>Investment Management, Workplan Development</td>
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<td>0.2</td>
<td>0.2</td>
<td>0.6</td>
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<td>0.1</td>
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<td>Electric transmission Network Control</td>
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<td>0.5</td>
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<td>0.5</td>
<td>6.5</td>
<td>6.6</td>
<td>6.7</td>
</tr>
</tbody>
</table>

Notes: (1) A 5% administration margin has been added to actual labor costs included within the TSA price, as per Schedule 2 of the Master Services Agreement. (2) A 2% inflation assumption has been applied to the FY21 recharges to calculate the Year One and Year Two TSA prices.
## Electricity Operations (2 of 2)

### Annualised TSA prices including administration fee and inflation adjustment

<table>
<thead>
<tr>
<th>TSA Title</th>
<th>Duration</th>
<th>Opex FY21</th>
<th>Opex Y1</th>
<th>Opex Y2</th>
<th>Capex FY21</th>
<th>Capex Y1</th>
<th>Capex Y2</th>
<th>Totex FY21</th>
<th>Totex Y1</th>
<th>Totex Y2</th>
<th>Total TSA price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vegetation management</td>
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<td>Meter Data Services</td>
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<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
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<td>0.2</td>
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</tr>
<tr>
<td>Emergency planning and Operations</td>
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<td>Shared Telecom Network (STN)</td>
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<td>1.8</td>
<td>1.8</td>
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<tr>
<td>New - Distribution Pole Attachments Program</td>
<td>6 months</td>
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<td></td>
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<tr>
<td>Radio and Microwave Systems</td>
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<td></td>
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<tr>
<td>Electric Distribution Control Centre</td>
<td>24 months</td>
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<td></td>
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<tr>
<td>Electric Distribution Control Centre back up</td>
<td>24 months</td>
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<td></td>
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<tr>
<td>Total TSA price</td>
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<td>77.6</td>
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</tbody>
</table>

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### Gas Operations

Annualised TSA prices including administration fee and inflation adjustment

<table>
<thead>
<tr>
<th>TSA Title</th>
<th>Duration</th>
<th>Opex FY21</th>
<th>Opex Y1</th>
<th>Opex Y2</th>
<th>Capex FY21</th>
<th>Capex Y1</th>
<th>Capex Y2</th>
<th>Totex FY21</th>
<th>Totex Y1</th>
<th>Totex Y2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas control center operations</td>
<td>24 months</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
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<td>0.1</td>
<td>0.1</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
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<tr>
<td>Total TSA price</td>
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<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
</tbody>
</table>

Notes: (1) A 5% administration margin has been added to actual labor costs included within the TSA price, as per Schedule 2 of the Master Services Agreement. (2) A 2% inflation assumption has been applied to the FY21 recharges to calculate the Year One and Year Two TSA prices.
Energy Procurement
Annualised TSA prices including administration fee and inflation adjustment

| TSA Title                        | Duration | Annualised TSA price (US$m)| | | |
|----------------------------------|----------|----------------------------|---|---|---|---|---|---|---|---|---|---|
|                                  |          | Opex FY21 | Opex Y1 | Opex Y2 | Capex FY21 | Capex Y1 | Capex Y2 | Totex FY21 | Totex Y1 | Totex Y2 |
| Gas load forecasting             | 24 months| 0.1       | 0.1     | 0.1     | 0.3        | 0.3      | 0.3      | 0.4        | 0.4      | 0.3      |
| Electric load forecasting        | 24 months| 0.5       | 0.5     | 0.5     | -          | -        | -        | 0.5        | 0.5      | 0.5      |
| Gas procurement services - General| 24 months| 0.3       | 0.3     | 0.3     | -          | -        | -        | 0.3        | 0.3      | 0.3      |
| Energy transactions (physical transactions) | 24 months| 0.1       | 0.1     | 0.1     | -          | -        | -        | 0.1        | 0.1      | 0.1      |
| Energy transactions (financial)  | 24 months| 0.2       | 0.2     | 0.2     | -          | -        | -        | 0.2        | 0.2      | 0.2      |
| Retail choice programs           | 24 months| 0.3       | 0.3     | 0.3     | -          | -        | -        | 0.3        | 0.3      | 0.3      |
| Clean energy supply              | 24 months| 0.4       | 0.4     | 0.4     | -          | -        | -        | 0.4        | 0.4      | 0.4      |
| Electric procurement             | 24 months| 1.9       | 1.9     | 2.0     | 0.3        | 0.3      | 0.3      | 2.1        | 2.2      | 2.2      |
| **Total TSA price**              |          | 1.9       | 1.9     | 2.0     | 0.3        | 0.3      | 0.3      | 2.1        | 2.2      | 2.2      |

Notes: (1) A 5% administration margin has been added to actual labor costs included within the TSA price, as per Schedule 2 of the Master Services Agreement. (2) A 2% inflation assumption has been applied to the FY21 recharges to calculate the Year One and Year Two TSA prices.
# HR

## Annualised TSA prices including administration fee and inflation adjustment

<table>
<thead>
<tr>
<th>TSA Title</th>
<th>Duration</th>
<th>Annualised TSA price (US$m)(^{1,2,3})</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Opex FY21</td>
<td>Opex Y1</td>
</tr>
<tr>
<td>Labour and Employee Relations</td>
<td>3 months</td>
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</tr>
<tr>
<td>Training (Learning and Development)</td>
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</tr>
<tr>
<td>Talent acquisition (recruitment)</td>
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</tr>
<tr>
<td>Onboarding</td>
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<tr>
<td>Workforce planning and people analytics</td>
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</tr>
<tr>
<td>Talent and Performance Management</td>
<td>12 months</td>
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</tr>
<tr>
<td>Total TSA price</td>
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</tr>
</tbody>
</table>

Notes: (1) A 5% administration margin has been added to actual labor costs included within the TSA price, as per Schedule 2 of the Master Services Agreement. (2) A 2% inflation assumption has been applied to the FY21 recharges to calculate the Year One and Year Two TSA prices.
## Finance

### Annualised TSA prices including administration fee and inflation adjustment

<table>
<thead>
<tr>
<th>TSA Title</th>
<th>Duration</th>
<th>Opex FY21</th>
<th>Opex Y1</th>
<th>Opex Y2</th>
<th>Capex FY21</th>
<th>Capex Y1</th>
<th>Capex Y2</th>
<th>Totex FY21</th>
<th>Totex Y1</th>
<th>Totex Y2</th>
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<tr>
<td>Middle Office support for gas procurement activities</td>
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<td>0.3</td>
<td>0.3</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
<td>Back-Office support for energy procurement activities</td>
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<td>-</td>
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<tr>
<td>Tax consulting services</td>
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</tr>
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<td>Property tax services</td>
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<td>-</td>
<td>-</td>
<td>0.2</td>
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<td><strong>Total TSA price</strong></td>
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<td><strong>10.8</strong></td>
<td><strong>11.1</strong></td>
<td><strong>0.5</strong></td>
<td><strong>0.5</strong></td>
<td><strong>0.5</strong></td>
<td><strong>11.1</strong></td>
<td><strong>11.4</strong></td>
<td><strong>11.6</strong></td>
</tr>
</tbody>
</table>

Notes: (1) A 5% administration margin has been added to actual labor costs included within the TSA price, as per Schedule 2 of the Master Services Agreement. (2) A 2% inflation assumption has been applied to the FY21 recharges to calculate the Year One and Year Two TSA prices.
### IT (1 of 2)

#### Annualised TSA prices including administration fee and inflation adjustment

<table>
<thead>
<tr>
<th>TSA Title</th>
<th>Duration</th>
<th>Annualised TSA price (US$m)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Opex FY21</td>
</tr>
<tr>
<td>Business application services</td>
<td>24 months</td>
<td>8.8</td>
</tr>
<tr>
<td>Service desk and service management integration services</td>
<td>24 months</td>
<td>13.2</td>
</tr>
<tr>
<td>Collaboration services (email)</td>
<td>24 months</td>
<td>1.5</td>
</tr>
<tr>
<td>Data center services</td>
<td>24 months</td>
<td>2.4</td>
</tr>
<tr>
<td>Client services</td>
<td>24 months</td>
<td>1.2</td>
</tr>
<tr>
<td>Commercial services</td>
<td>24 months</td>
<td>0.7</td>
</tr>
<tr>
<td>Infrastructure services</td>
<td>24 months</td>
<td>2.4</td>
</tr>
<tr>
<td>Network support</td>
<td>24 months</td>
<td>2.7</td>
</tr>
<tr>
<td>IT Energy Management System (EMS) - Supervisory control and data acquisition (SCADA) systems</td>
<td>24 months</td>
<td>2.4</td>
</tr>
</tbody>
</table>

Notes: (1) A 5% administration margin has been added to actual labor costs included within the TSA price, as per Schedule 2 of the Master Services Agreement. (2) A 2% inflation assumption has been applied to the FY21 recharges to calculate the Year One and Year Two TSA prices.
### IT (2 of 2)

**Annualised TSA prices including administration fee and inflation adjustment**

<table>
<thead>
<tr>
<th>TSA Title</th>
<th>Duration</th>
<th>Annualised TSA price (US$m)$^{1,2}$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Opex FY21</td>
</tr>
<tr>
<td>Security services</td>
<td>24 months</td>
<td>3.4</td>
</tr>
<tr>
<td>Emergency response services</td>
<td>24 months</td>
<td>-</td>
</tr>
<tr>
<td>Exit migration services</td>
<td>24 months</td>
<td>-</td>
</tr>
<tr>
<td>Service charge for use of National Grid ServCo shared assets</td>
<td>24 months</td>
<td>32.4</td>
</tr>
<tr>
<td>Total TSA price</td>
<td></td>
<td>71.0</td>
</tr>
</tbody>
</table>

**Notes:**
1. A 5% administration margin has been added to actual labor costs included within the TSA price, as per Schedule 2 of the Master Services Agreement.
2. A 2% inflation assumption has been applied to the FY21 recharges to calculate the Year One and Year Two TSA prices.
## Billing and Collections

Annualised TSA prices including administration fee and inflation adjustment

<table>
<thead>
<tr>
<th>TSA Title</th>
<th>Duration</th>
<th>Annualised TSA price (US$m)</th>
<th>Opex FY21</th>
<th>Opex Y1</th>
<th>Opex Y2</th>
<th>Capex FY21</th>
<th>Capex Y1</th>
<th>Capex Y2</th>
<th>Totex FY21</th>
<th>Totex Y1</th>
<th>Totex Y2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Billing Operations</td>
<td>24 months</td>
<td>11.7</td>
<td>4.5</td>
<td>4.6</td>
<td>4.7</td>
<td>-</td>
<td>-</td>
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<td>4.5</td>
<td>4.6</td>
<td>4.7</td>
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<tr>
<td>SAP (Non-Utility) Billing Operations</td>
<td>24 months</td>
<td>4.5</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.2</td>
<td>0.2</td>
<td>0.3</td>
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<tr>
<td>Payment Processing</td>
<td>24 months</td>
<td>4.5</td>
<td>1.0</td>
<td>1.0</td>
<td>1.1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.0</td>
<td>1.0</td>
<td>1.1</td>
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<tr>
<td>Credit &amp; Collections</td>
<td>24 months</td>
<td>4.5</td>
<td>3.5</td>
<td>3.6</td>
<td>3.6</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>3.5</td>
<td>3.6</td>
<td>3.6</td>
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<tr>
<td>Revenue assurance</td>
<td>24 months</td>
<td>4.5</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>-</td>
<td>-</td>
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<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
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<tr>
<td>Financial transactions</td>
<td>24 months</td>
<td>4.5</td>
<td>2.2</td>
<td>2.3</td>
<td>2.3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2.2</td>
<td>2.3</td>
<td>2.3</td>
</tr>
<tr>
<td>High volume residential billing</td>
<td>24 months</td>
<td>4.5</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
<td>Complex billing account management</td>
<td>24 months</td>
<td>4.5</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Protections</td>
<td>24 months</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Service Applications Manger (SAM)</td>
<td>24 months</td>
<td>4.5</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Account Data Maintenance (ADM)</td>
<td>24 months</td>
<td>4.5</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Advanced Consumption, Long-Term</td>
<td>24 months</td>
<td>4.5</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Estimates, Leave On For Landlord</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total TSA price</td>
<td></td>
<td>4.5</td>
<td>11.7</td>
<td>11.9</td>
<td>12.1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>11.7</td>
<td>11.9</td>
<td>12.2</td>
</tr>
</tbody>
</table>

Notes: (1) A 5% administration margin has been added to actual labor costs included within the TSA price, as per Schedule 2 of the Master Services Agreement. (2) A 2% inflation assumption has been applied to the FY21 recharges to calculate the Year One and Year Two TSA prices.
### Customer Service

**Annualised TSA prices including administration fee and inflation adjustment**

<table>
<thead>
<tr>
<th>TSA ID</th>
<th>TSA Title</th>
<th>Duration</th>
<th>Opex FY21</th>
<th>Opex Y1</th>
<th>Opex Y2</th>
<th>Capex FY21</th>
<th>Capex Y1</th>
<th>Capex Y2</th>
<th>Totex FY21</th>
<th>Totex Y1</th>
<th>Totex Y2</th>
</tr>
</thead>
<tbody>
<tr>
<td>039-CS</td>
<td>Call Center Operations</td>
<td>24 months</td>
<td>8.4</td>
<td>8.6</td>
<td>8.8</td>
<td>0.7</td>
<td>0.8</td>
<td>0.8</td>
<td>9.2</td>
<td>9.4</td>
<td>9.5</td>
</tr>
<tr>
<td></td>
<td>Total TSA price</td>
<td></td>
<td>8.4</td>
<td>8.6</td>
<td>8.8</td>
<td>0.7</td>
<td>0.8</td>
<td>0.8</td>
<td>9.2</td>
<td>9.4</td>
<td>9.5</td>
</tr>
</tbody>
</table>

Notes: (1) A 5% administration margin has been added to actual labor costs included within the TSA price, as per Schedule 2 of the Master Services Agreement. (2) A 2% inflation assumption has been applied to the FY21 recharges to calculate the Year One and Year Two TSA prices.
National Grid USA and The Narragansett Electric Company
Division 9-84

Request:

Provide a list of each interconnection of devices and functions such as T&D substation SCADA that will need to be transitioned from the National Grid control center to the PPL control center in the 24 month transition period. Include a list of each communication network and the number of communication paths that will need to be transferred.

Response:

As stated in National Grid USA and The Narragansett Electric Company’s (“Narragansett”) response to Data Request Division 9-81, 83 Narragansett substations communicate to the National Grid USA Supervisory Control and Data Acquisition (“SCADA”) system. These substations use the DNP3 protocol over a combination of private fiber infrastructure, Verizon MPLS circuits, cellular routers (Verizon), 9.6k modems and 1200 baud modems (over Verizon phone circuits), or microwave communication.

After PPL Rhode Island Holdings, LLC’s acquisition of Narragansett from National Grid USA Transaction closes, the PPL Corporation (“PPL”) control center will continue to use the legacy National Grid USA SCADA system under a Transition Services Agreement (“TSA”), transitioning over a period of time to the PPL SCADA system. Details of the cutovers to the PPL system will be determined by PPL after the close.
National Grid USA and The Narragansett Electric Company
Division 9-85

Request:

With reference to Attachment PPL-DIV 1-54-1, please provide:

a. the date on which the document was prepared; and

b. the authors of the document.

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-85.
Request:

With reference to Attachment PPL-DIV 1-54-1, please provide all documents, including analyses, studies, and internal communications that concern or relate to the conclusions reached in Attachment PPL-DIV 1-54-1, including but not limited to the assertion (at page 18) that: “Using the methodologies described in this document, PPL’s anticipated Narragansett operating costs of $273.6M are approximately $12M lower than National Grid’s current Narragansett operating costs of $285.5 M[.]”

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-86.
National Grid USA and The Narragansett Electric Company
Division 9-87

Request:

Please explain why the document in Attachment PPL-DIV 1-54-1 was prepared. What is the purpose of the report?

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-87.
National Grid USA and The Narragansett Electric Company
Division 9-88

Request:

Attachment PPL-DIV 1-54-1, states (at 2) that “[t]his analysis demonstrates that the Transaction will not result in increased costs to operate Narragansett and therefore will not increase rates for the current electric and gas distribution services.” Please:

a. confirm that this conclusion does not reflect or account for the capital expenditures necessary to “allow PPL to establish the infrastructure required to operate Narragansett independently” (Attachment DIV 1-54-1 at 3 n.1); and

b. provide any studies or analyses related to estimated capital expenditures necessary “to allow PPL to establish the infrastructure required to operate Narragansett independently,” (id.) including, if available, projections regarding the impact of such costs on Rhode Island ratepayers.

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-88.

Prepared by or under the supervision of: Pamela Viapiano
PPL CORPORATION, PPL RHODE ISLAND HOLDINGS, LLC, NATIONAL GRID USA, and THE NARRAGANSETT ELECTRIC COMPANY
Docket No. D-21-09
National Grid USA and The Narragansett Electric Company’s Responses to Division’s Ninth Set of Data Requests
Issued on October 1, 2021

National Grid USA and The Narragansett Electric Company
Division 9-89

Request:

The document in Attachment PPL-DIV 1-54-1 states (at 4):

PPL integration teams developed a Rhode Island organizational structure by functional area that reflects the staffing levels expected to operate the business once fully transitioned from National Grid. PPL also developed the corporate and administrative services and associated costs necessary to operate Narragansett.

Please provide the referenced “organizational structure by functional area” that was developed by the “PPL integration teams.”

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-89.
National Grid USA and The Narragansett Electric Company
Division 9-90

Request:

The document in Attachment PPL-DIV 1-54-1 states (at 8) that in “developing PPL’s anticipated costs to operate Narragansett, PPL first refined its intended operating model for the Rhode Island utility.” Please explain what “refine[ments]” were made to the “intended operating model” and why PPL concluded that each was necessary.

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-90.
National Grid USA and The Narragansett Electric Company  
Division 9-91

Request:

The document in Attachment PPL-DIV 1-54-1 states (at 8) that PPL’s “Rhode Island-focused operating model will also drive additional investment in the State.” Please provide the “Rhode Island-focused operating model,” and specify each component of the “additional investment” that PPL anticipates will be needed to implement its “Rhode-Island focused operating model.”

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-91.
National Grid USA and The Narragansett Electric Company
Division 9-92

Request:

The document in Attachment PPL-DIV 1-54-1 includes (at 14-16) a listing of activities that PPL “will perform on a centralized basis to support Narragansett.” The document states (at 16): “PPL developed an estimate of the costs in each of these functions that includes any incremental costs to support Narragansett.” Please provide each of these cost estimates.

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-92.
National Grid USA and The Narragansett Electric Company
Division 9-93

Request:

The document in Attachment PPL-DIV 1-54-1 states (at 16) that “PPL then applied its cost allocation methodology to assign and allocate costs to Narragansett.” Please provide that “cost allocation methodology.”

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-93.
National Grid USA and The Narragansett Electric Company
Division 9-94

Request:

The document in Attachment PPL-DIV 1-54-1 provides (at pages 19-25), a set of “Functional Cost Summary Comparisons” and “Corporate Cost Summary Comparisons.” To the extent not provided in response to previous data requests, please provide all documents, including analyses, studies, and internal communications that concern or relate to the conclusions reached with respect to each of the areas for which cost comparisons were conducted.

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-94.
Request:

In response to DIV 2-28, PPL states “PPL and PPL RI will evaluate on a case-by-case basis whether they will seek to recover costs necessary to separate Narragansett from National Grid USA and integrate Narragansett into PPL, consistent with the guidance of the Policy Statement.” Please supplement this response to reflect any hold harmless commitments to Rhode Island ratepayers with respect to PPL’s recovery of capital costs necessary “allow PPL to establish the infrastructure required to operate Narragansett independently.”

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-95.
Request:

In response to DIV 1-42(c), PPL states: “PPL and PPL RI do not plan to seek recovery from ratepayers for the costs associated with the [Gas Control Center (GCC)] that do not relate to new or improved technology capabilities to Narragansett, or for costs related to capital investments that would not have been made in the normal course of business for reasons including but not limited to obsolescence. These costs would be recoverable in the ordinary course of business in the absence of PPL RI’s purchase of Narragansett, subject to ordinary regulatory and prudency review. PPL and PPL RI will seek recovery for any such costs pursuant to the appropriate cost recovery mechanisms Narragansett already has in place with the Rhode Island Public Utilities Commission and the Rhode Island Division of Public Utilities and Carriers, under existing statutes, rules, and tariffs.” Please identify:

a. Any “new or improved technology capabilities” PPL expects the GCC to provide to Narragansett; and

b. The specific types of capital investments associated with the GCC that PPL expects to recover as having “been made in the normal course of business for reasons including but not limited to obsolescence.”

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-96.
National Grid USA and The Narragansett Electric Company  
Division 9-97

Request:

In response to DIV 1-42(b), PPL states: “PPL and PPL RI do not currently have cost estimates for the GCC. Once PPL and PPL RI have prepared such cost estimates, they will provide a supplemental response to this data request.” Please supplement PPL’s response to provide an updated cost estimate if available.

Response:

PPL Corporation and PPL Rhode Island Holdings, LLC have responded to this request in their response to Data Request Division 9-97.
National Grid USA and The Narragansett Electric Company
Division 9-98

Request:

Various of the Applicants’ responses to earlier data requests propounded by the Division offered to supplement responses as necessary—for example, when additional information became available, once studies or analyses were performed, or when plans were formulated. Please update or supplement all earlier responses as necessary.

Response:

National Grid USA and The Narragansett Electric Company (“Narragansett”) have supplemented the following responses as part of this proceeding:

<table>
<thead>
<tr>
<th>Original Response</th>
<th>Supplemental Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division 1-27</td>
<td>Division 7-30</td>
</tr>
<tr>
<td>Division 1-28</td>
<td>Division 7-36</td>
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<tr>
<td>Division 1-29</td>
<td>Division 7-39</td>
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<tr>
<td>Division 2-17</td>
<td>Division 7-36</td>
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<tr>
<td>Division 2-18</td>
<td>Division 7-35 and 7-36</td>
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<td>Division 2-22</td>
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<td>Division 2-25</td>
<td>Division 7-37</td>
</tr>
<tr>
<td>Division 7-33</td>
<td>Division 7-33 Supplemental</td>
</tr>
</tbody>
</table>

At this time, National Grid USA and Narragansett do not have any additional information to add to their responses to Data Requests Division 2-27 and Division 2-42.

In addition, National Grid USA and Narragansett’s response to Data Request Division 7-36 states that “National Grid USA and Narragansett expect to continue to update the TSA schedules until the closing of PPL Rhode Island Holdings, LLC’s acquisition of Narragansett from National Grid USA and will supplement this response accordingly.” National Grid USA and Narragansett anticipate the next meaningful update to the Transition Services Agreement schedules will be in early-December 2021 and will supplement their response to Data Request Division 7-36 at that time.