

Via Electronic Mail and Hand Delivery

September 6, 2019

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

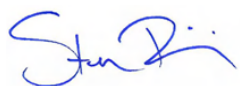
Re: **Docket 4963 - 2019 Gas Cost Recovery Filing
Responses to Division Data Requests - Set 1**

Dear Ms. Massaro:

Enclosed please find 10 copies of National Grid's¹ responses to data requests in the Division of Public Utilities and Carriers' (Division) First Set of Data Requests in the above referenced docket. The responses enclosed are to the following data requests: 1-3, 1-4, 1-6, 1-10, 1-12, 1-13, 1-14, 1-16, 1-22, 1-23, 1-24, 1-25, 1-26, 1-28, 1-31, 1-32, 1-33, 1-34 and 1-40. As agreed with the Division, the Company will submit its responses to the remaining data requests from the Division's First Set of Data Requests on a rolling basis with all responses completed on or before Thursday, September 12, 2019.

Thank you for your attention to this matter. If you have any questions, please contact me at 401-709-3359.

Very truly yours,



Steven J. Boyajian

¹ The Narragansett Electric Company d/b/a National Grid (the Company)



Luly E. Massaro, Commission Clerk
September 6, 2019
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Enclosures

Copy to: Docket 4963 Service List
Leo Wold, Esq.
Al Mancini, Division
John Bell, Division
Jerome D. Mierzwa, Consultant to the Division

Docket No. 4963 – National Grid – 2019 Annual Gas Cost Recovery Filing (GCR) - Service List as of 8/30/2019

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| File an original & nine (9) copies w/: Luly E. Massaro, Commission Clerk Margaret Hogan, Commission Counsel Public Utilities Commission 89 Jefferson Blvd. Warwick, RI 02888 | Luly.massaro@puc.ri.gov ; | 401-780-2107 |
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Division 1-3

Request:

Excluding those agreements which govern Canadians pipeline contracts, please provide a copy of each Asset Management Agreement in effect during the period April 1, 2018 through March 31, 2020.

Response:

During the period from April 1, 2018 to the present, the Company was not party to any Asset Management Agreements governing non-Canadian pipeline contracts. At this time, the Company has not finalized any Asset Management Agreements that will govern non-Canadian pipeline contracts from the date of this response through March 31, 2020. The Company will supplement its response to this data request if additional agreement(s) within the scope of this request are executed.

Division 1-4

Request:

Reference Table IV-A-2, page 1, of the 2019 Gas Long-Range Supply Plan:

- a. Please explain why LNG from storage is shown at less than the maximum withdrawal rate of 119 BBtu, but the Company is planning to contract for AGT Citygate supplies; and
- b. Please update the Table for any changes in Resources and provide a description of each change.

Response:

- a. On a peak day (Table IV-A-2: Design Day with Proposed Resources), LNG withdrawal is not shown as being maximized in Winter Seasons 2019/2020, 2021/2022, 2022/2023, and 2023/2024 because the SENDOUT model is conserving LNG for other cold days within the design season. Table IV-A-2: Design Heating Season (Nov-Mar) with Proposed Resources indicates LNG vaporization is maximized each year based on the LNG refill that is available for each applicable year. The variations in LNG withdrawals on the peak day are a result of both peak day need as well as design season need as simulated within the SENDOUT model. When the portfolio does not have adequate resources for peak day and/or peak season, the peak day LNG vaporization volume is the outcome of the model's result of balancing supply and demand across both peak day and peak season.
- b. Please see Attachment DIV 1-4 for an updated version of Table IV-A-2: Design Day with Proposed Resources.

Table IV-A-2 was generated after incorporating the following changes into the SENDOUT® model.

- 1. The demand forecast was re-issued on August 14, 2019.
- 2. The NYMEX strip was updated from July 10, 2019 forward curves to August 1, 2019 forward curves.
- 3. The model was not provided with unlimited supply from Dracut.

National Grid Rhode Island
Comparison of Resources and Requirements
Design Year (Sales and Customer Choice)
(BBtu)

| | | Design Day with Proposed Resources | | | | |
|---------------------------------|----------------------|------------------------------------|------------------|------------------|------------------|------------------|
| | | <u>2019-2020</u> | <u>2020-2021</u> | <u>2021-2022</u> | <u>2022-2023</u> | <u>2023-2024</u> |
| <u>REQUIREMENTS</u> | | | | | | |
| Firm Sendout | Valley | 67 | 67 | 68 | 68 | 69 |
| | Providence | 305 | 307 | 310 | 313 | 317 |
| | Warren | 11 | 11 | 11 | 11 | 12 |
| | Westerly | 7 | 7 | 7 | 7 | 7 |
| Fuel Reimbursement | | 5 | 6 | 6 | 6 | 6 |
| Underground Storage Refill | | 0 | 0 | 0 | 0 | 0 |
| LNG Refill | | 0 | 0 | 0 | 0 | 0 |
| TOTAL | | 394 | 397 | 401 | 405 | 411 |
| <u>RESOURCES</u> | | | | | | |
| TGP | Dawn PNGTS | 26 | 30 | 30 | 30 | 30 |
| | Dawn Iroquois | 1 | 1 | 1 | 1 | 1 |
| | Niagara | 1 | 1 | 1 | 1 | 1 |
| | Zone 4 | 41 | 41 | 41 | 41 | 41 |
| | Dracut | 23 | 0 | 0 | 0 | 0 |
| | TGP Citygate | 0 | 0 | 0 | 0 | 0 |
| | Everett Multi Year | 20 | 20 | 20 | 0 | 0 |
| | Everett Swing | 0 | 5 | 5 | 25 | 30 |
| | Storage | 11 | 11 | 11 | 11 | 11 |
| TET/AGT | M2 | 49 | 49 | 49 | 49 | 49 |
| | Dominion South Point | 1 | 1 | 1 | 1 | 1 |
| | TCO Appalachia | 41 | 41 | 41 | 41 | 41 |
| | TCO M3 | 8 | 8 | 8 | 8 | 8 |
| | Transco Leidy | 1 | 1 | 1 | 1 | 1 |
| | AIM (Ramapo) | 9 | 9 | 9 | 9 | 9 |
| | AIM (Millennium) | 9 | 9 | 9 | 9 | 9 |
| | M3 | 10 | 10 | 10 | 10 | 10 |
| | AGT Citygate | 4 | 14 | 14 | 14 | 0 |
| | Storage | 29 | 29 | 29 | 29 | 29 |
| Liquid for Portables and Refill | | 0 | 0 | 4 | 6 | 0 |
| LNG From Storage | | 111 | 119 | 119 | 119 | 119 |
| Unserved | Valley | 0 | 0 | 0 | 0 | 16 |
| | Providence | 0 | 0 | 0 | 1 | 4 |
| | Warren | 0 | 0 | 0 | 0 | 2 |
| | Westerly | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| | | 0 | 0 | 0 | 1 | 22 |
| TOTAL | | 394 | 397 | 401 | 405 | 411 |

National Grid Rhode Island
Comparison of Resources and Requirements
Design Year (Sales and Customer Choice)
(BBtu)

| |
|---------------------------------------------------------|
| Design Heating Season (Nov-Mar) with Proposed Resources |
|---------------------------------------------------------|

| | <u>2019-2020</u> | <u>2020-2021</u> | <u>2021-2022</u> | <u>2022-2023</u> | <u>2023-2024</u> |
|--|------------------|------------------|------------------|------------------|------------------|
|--|------------------|------------------|------------------|------------------|------------------|

REQUIREMENTS

| | | | | | | |
|----------------------------|------------|--------|--------|--------|--------|--------|
| Firm Sendout | Valley | 5,146 | 5,144 | 5,194 | 5,239 | 5,358 |
| | Providence | 23,556 | 23,546 | 23,774 | 23,983 | 24,529 |
| | Warren | 854 | 853 | 862 | 869 | 889 |
| | Westerly | 515 | 515 | 520 | 525 | 537 |
| Fuel Reimbursement | | 638 | 635 | 637 | 640 | 621 |
| Underground Storage Refill | | 0 | 0 | 0 | 0 | 0 |
| LNG Refill | | 90 | 90 | 10 | 8 | 0 |
| TOTAL | | 30,798 | 30,783 | 30,998 | 31,263 | 31,933 |

RESOURCES

| | | | | | | |
|---------------------------------|----------------------|----------|----------|----------|----------|----------|
| TGP | Dawn PNGTS | 2,360 | 2,593 | 2,564 | 2,468 | 2,551 |
| | Dawn Iroquois | 77 | 79 | 76 | 76 | 77 |
| | Niagara | 164 | 163 | 139 | 133 | 140 |
| | Zone 4 | 5,372 | 5,350 | 5,412 | 5,382 | 5,486 |
| | Dracut | 233 | 0 | 0 | 0 | 0 |
| | TGP Citygate | 0 | 0 | 0 | 0 | 0 |
| | Everett Multi Year | 632 | 651 | 651 | 0 | 0 |
| | Everett Swing | 50 | 175 | 266 | 1,029 | 1,422 |
| | Storage | 1,334 | 1,334 | 1,334 | 1,334 | 1,334 |
| TET/AGT | M2 | 7,275 | 7,248 | 7,259 | 7,220 | 5,880 |
| | Dominion South Point | 83 | 82 | 82 | 82 | 66 |
| | TCO Appalachia | 5,837 | 5,748 | 5,756 | 5,748 | 5,457 |
| | TCO M3 | 488 | 476 | 491 | 577 | 677 |
| | Transco Leidy | 190 | 189 | 189 | 189 | 190 |
| | AIM (Ramapo) | 386 | 377 | 386 | 445 | 501 |
| | AIM (Millennium) | 1,379 | 1,345 | 1,355 | 1,369 | 1,367 |
| | M3 | 1,065 | 941 | 1,036 | 1,187 | 2,900 |
| | AGT Citygate | 419 | 415 | 526 | 489 | 0 |
| | Storage | 2,513 | 2,674 | 2,673 | 2,676 | 2,687 |
| Liquid for Portables and Refill | | 100 | 100 | 24 | 24 | 0 |
| LNG From Storage | | 843 | 843 | 763 | 761 | 753 |
| Unserved | Valley | 0 | 0 | 0 | 20 | 64 |
| | Providence | 0 | 0 | 17 | 53 | 379 |
| | Warren | 0 | 0 | 0 | 0 | 3 |
| | Westerly | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| | | 0 | 0 | 17 | 73 | 445 |
| TOTAL | | 30,798 | 30,783 | 30,998 | 31,263 | 31,933 |

National Grid Rhode Island
Comparison of Resources and Requirements
Design Year (Sales and Customer Choice)
(BBtu)

Design Non-Heating Season (Apr-Oct) with Proposed Resources

| | | <u>2019-2020</u> | <u>2020-2021</u> | <u>2021-2022</u> | <u>2022-2023</u> | <u>2023-2024</u> |
|---------------------------------|----------------------|------------------|------------------|------------------|------------------|------------------|
| <u>REQUIREMENTS</u> | | | | | | |
| Firm Sendout | Valley | 1,983 | 2,001 | 2,017 | 2,045 | 2,054 |
| | Providence | 9,077 | 9,159 | 9,235 | 9,360 | 9,403 |
| | Warren | 329 | 332 | 335 | 339 | 341 |
| | Westerly | 199 | 200 | 202 | 205 | 206 |
| Fuel Reimbursement | | 368 | 377 | 382 | 388 | 377 |
| Underground Storage Refill | | 3,919 | 4,021 | 4,097 | 4,119 | 4,032 |
| LNG Refill | | 887 | 887 | 887 | 887 | 887 |
| TOTAL | | 16,761 | 16,978 | 17,155 | 17,343 | 17,300 |
| <u>RESOURCES</u> | | | | | | |
| TGP | Dawn PNGTS | 450 | 23 | 26 | 29 | 30 |
| | Dawn Iroquois | 30 | 1 | 0 | 0 | 1 |
| | Niagara | 1 | 1 | 2 | 2 | 2 |
| | Zone 4 | 3,220 | 3,680 | 3,638 | 3,761 | 3,765 |
| | Dracut | 0 | 0 | 0 | 0 | 0 |
| | TGP Citygate | 0 | 0 | 0 | 0 | 0 |
| | Everett Multi Year | 0 | 0 | 0 | 0 | 0 |
| | Everett Swing | 0 | 0 | 0 | 0 | 0 |
| | Storage | 0 | 0 | 0 | 0 | 0 |
| TET/AGT | M2 | 8,113 | 7,277 | 6,397 | 7,179 | 7,091 |
| | Dominion South Point | 7 | 21 | 23 | 37 | 28 |
| | TCO Appalachia | 901 | 1,542 | 3,103 | 2,018 | 1,556 |
| | TCO M3 | 90 | 75 | 15 | 83 | 94 |
| | Transco Leidy | 243 | 267 | 267 | 267 | 267 |
| | AIM (Ramapo) | 31 | 34 | 20 | 13 | 15 |
| | AIM (Millennium) | 832 | 1,669 | 1,415 | 1,669 | 1,667 |
| | M3 | 2,130 | 2,240 | 2,025 | 2,043 | 2,637 |
| | AGT Citygate | 0 | 0 | 0 | 0 | 0 |
| | Storage | 71 | 13 | 89 | 108 | 12 |
| Liquid for Portables and Refill | | 508 | 0 | 0 | 0 | 0 |
| LNG From Storage | | 134 | 134 | 134 | 134 | 134 |
| Unserved | Valley | 0 | 0 | 0 | 0 | 0 |
| | Providence | 0 | 0 | 0 | 0 | 0 |
| | Warren | 0 | 0 | 0 | 0 | 0 |
| | Westerly | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| | | 0 | 0 | 0 | 0 | 0 |
| TOTAL | | 16,761 | 16,978 | 17,155 | 17,343 | 17,300 |

National Grid Rhode Island
Comparison of Resources and Requirements
Design Year (Sales and Customer Choice)
(BBtu)

| |
|---------------------------------------|
| Design Annual with Proposed Resources |
|---------------------------------------|

| | <u>2019-2020</u> | <u>2020-2021</u> | <u>2021-2022</u> | <u>2022-2023</u> | <u>2023-2024</u> |
|--|------------------|------------------|------------------|------------------|------------------|
|--|------------------|------------------|------------------|------------------|------------------|

REQUIREMENTS

| | | | | | | |
|----------------------------|------------|--------|--------|--------|--------|--------|
| Firm Sendout | Valley | 7,129 | 7,144 | 7,211 | 7,284 | 7,412 |
| | Providence | 32,633 | 32,705 | 33,010 | 33,343 | 33,932 |
| | Warren | 1,183 | 1,185 | 1,196 | 1,208 | 1,230 |
| | Westerly | 714 | 716 | 722 | 729 | 742 |
| | | | | | | |
| Fuel Reimbursement | | 1,006 | 1,012 | 1,019 | 1,027 | 997 |
| Underground Storage Refill | | 3,919 | 4,021 | 4,097 | 4,119 | 4,032 |
| LNG Refill | | 977 | 977 | 897 | 895 | 887 |
| | | | | | | |
| TOTAL | | 47,559 | 47,761 | 48,153 | 48,606 | 49,233 |

RESOURCES

| | | | | | | |
|---------------------------------|----------------------|----------|----------|----------|----------|----------|
| TGP | Dawn PNGTS | 2,809 | 2,617 | 2,590 | 2,498 | 2,580 |
| | Dawn Iroquois | 107 | 80 | 76 | 76 | 78 |
| | Niagara | 165 | 164 | 141 | 135 | 142 |
| | Zone 4 | 8,592 | 9,030 | 9,050 | 9,143 | 9,251 |
| | Dracut | 233 | 0 | 0 | 0 | 0 |
| | TGP Citygate | 0 | 0 | 0 | 0 | 0 |
| | Everett Multi Year | 632 | 651 | 651 | 0 | 0 |
| | Everett Swing | 50 | 175 | 266 | 1,029 | 1,422 |
| | Storage | 1,334 | 1,334 | 1,334 | 1,334 | 1,334 |
| | | | | | | |
| TET/AGT | M2 | 15,388 | 14,525 | 13,656 | 14,399 | 12,972 |
| | Dominion South Point | 89 | 103 | 105 | 119 | 95 |
| | TCO Appalachia | 6,738 | 7,290 | 8,860 | 7,766 | 7,014 |
| | TCO M3 | 578 | 551 | 506 | 660 | 770 |
| | Transco Leidy | 432 | 456 | 456 | 456 | 457 |
| | AIM (Ramapo) | 417 | 411 | 406 | 458 | 516 |
| | AIM (Millennium) | 2,210 | 3,014 | 2,771 | 3,038 | 3,034 |
| | M3 | 3,195 | 3,181 | 3,061 | 3,230 | 5,537 |
| | AGT Citygate | 419 | 415 | 526 | 489 | 0 |
| | Storage | 2,585 | 2,687 | 2,762 | 2,785 | 2,698 |
| | | | | | | |
| Liquid for Portables and Refill | | 608 | 100 | 24 | 24 | 0 |
| | | | | | | |
| LNG From Storage | | 977 | 977 | 897 | 895 | 887 |
| | | | | | | |
| Unserved | Valley | 0 | 0 | 0 | 20 | 64 |
| | Providence | 0 | 0 | 17 | 53 | 379 |
| | Warren | 0 | 0 | 0 | 0 | 3 |
| | Westerly | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| | | 0 | 0 | 17 | 73 | 445 |
| | | | | | | |
| TOTAL | | 47,559 | 47,761 | 48,153 | 48,606 | 49,233 |

National Grid Rhode Island
Comparison of Resources and Requirements
Normal Year (Sales and Customer Choice)
(BBtu)

Normal Heating Season (Nov-Mar) with Proposed Resources

| | | <u>2019-2020</u> | <u>2020-2021</u> | <u>2021-2022</u> | <u>2022-2023</u> | <u>2023-2024</u> |
|---------------------------------|----------------------|------------------|------------------|------------------|------------------|------------------|
| <u>REQUIREMENTS</u> | | | | | | |
| Firm Sendout | Valley | 4,411 | 4,410 | 4,452 | 4,491 | 4,592 |
| | Providence | 20,483 | 20,476 | 20,673 | 20,853 | 21,323 |
| | Warren | 718 | 718 | 725 | 731 | 748 |
| | Westerly | 448 | 448 | 452 | 456 | 466 |
| Fuel Reimbursement | | 580 | 576 | 579 | 570 | 574 |
| Underground Storage Refill | | 0 | 0 | 0 | 0 | 0 |
| LNG Refill | | 0 | 0 | 0 | 14 | 0 |
| TOTAL | | 26,641 | 26,628 | 26,882 | 27,116 | 27,704 |
| <u>RESOURCES</u> | | | | | | |
| TGP | Dawn PNGTS | 1,635 | 1,807 | 1,792 | 1,806 | 1,931 |
| | Dawn Iroquois | 49 | 49 | 47 | 47 | 55 |
| | Niagara | 164 | 163 | 131 | 121 | 134 |
| | Zone 4 | 4,636 | 4,609 | 4,717 | 4,756 | 4,876 |
| | Dracut | 233 | 0 | 0 | 0 | 0 |
| | TGP Citygate | 0 | 0 | 0 | 0 | 0 |
| | Everett Multi Year | 537 | 569 | 613 | 0 | 0 |
| | Everett Swing | 0 | 0 | 0 | 0 | 29 |
| | Storage | 1,334 | 1,334 | 1,334 | 1,334 | 1,334 |
| TET/AGT | M2 | 7,171 | 7,174 | 7,178 | 7,187 | 5,850 |
| | Dominion South Point | 82 | 81 | 80 | 82 | 65 |
| | TCO Appalachia | 5,756 | 5,636 | 5,633 | 5,569 | 5,312 |
| | TCO M3 | 81 | 83 | 94 | 350 | 450 |
| | Transco Leidy | 190 | 189 | 189 | 189 | 190 |
| | AIM (Ramapo) | 21 | 37 | 46 | 104 | 268 |
| | AIM (Millennium) | 1,356 | 1,286 | 1,315 | 1,369 | 1,320 |
| | M3 | 447 | 391 | 449 | 725 | 2,447 |
| | AGT Citygate | 0 | 0 | 0 | 0 | 0 |
| | Storage | 2,523 | 2,684 | 2,690 | 2,685 | 2,690 |
| Liquid for Portables and Refill | | 0 | 0 | 0 | 24 | 0 |
| LNG From Storage | | 426 | 536 | 575 | 767 | 753 |
| Unserved | Valley | 0 | 0 | 0 | 0 | 0 |
| | Providence | 0 | 0 | 0 | 0 | 0 |
| | Warren | 0 | 0 | 0 | 0 | 0 |
| | Westerly | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| | | 0 | 0 | 0 | 0 | 0 |
| TOTAL | | 26,641 | 26,628 | 26,882 | 27,116 | 27,704 |

National Grid Rhode Island
Comparison of Resources and Requirements
Normal Year (Sales and Customer Choice)
(BBtu)

Normal Non-Heating Season (Apr-Oct) with Proposed Resources

| | | <u>2019-2020</u> | <u>2020-2021</u> | <u>2021-2022</u> | <u>2022-2023</u> | <u>2023-2024</u> |
|---------------------------------|----------------------|------------------|------------------|------------------|------------------|------------------|
| <u>REQUIREMENTS</u> | | | | | | |
| Firm Sendout | Valley | 1,829 | 1,846 | 1,861 | 1,886 | 1,895 |
| | Providence | 8,494 | 8,571 | 8,642 | 8,758 | 8,798 |
| | Warren | 298 | 301 | 303 | 307 | 309 |
| | Westerly | 186 | 187 | 189 | 191 | 192 |
| Fuel Reimbursement | | 302 | 339 | 350 | 375 | 367 |
| Underground Storage Refill | | 3,904 | 4,057 | 4,076 | 4,097 | 4,047 |
| LNG Refill | | 560 | 671 | 709 | 887 | 887 |
| TOTAL | | 15,573 | 15,971 | 16,130 | 16,502 | 16,495 |
| <u>RESOURCES</u> | | | | | | |
| TGP | Dawn PNGTS | 297 | 7 | 10 | 13 | 14 |
| | Dawn Iroquois | 30 | 1 | 0 | 0 | 0 |
| | Niagara | 1 | 1 | 1 | 1 | 1 |
| | Zone 4 | 2,771 | 3,255 | 3,329 | 3,518 | 3,522 |
| | Dracut | 0 | 0 | 0 | 0 | 0 |
| | TGP Citygate | 0 | 0 | 0 | 0 | 0 |
| | Everett Multi Year | 0 | 0 | 0 | 0 | 0 |
| | Everett Swing | 0 | 0 | 0 | 0 | 0 |
| | Storage | 0 | 0 | 0 | 0 | 0 |
| TET/AGT | M2 | 8,106 | 7,088 | 6,157 | 7,024 | 6,945 |
| | Dominion South Point | 4 | 16 | 18 | 28 | 23 |
| | TCO Appalachia | 765 | 1,523 | 2,983 | 1,933 | 1,528 |
| | TCO M3 | 50 | 44 | 8 | 47 | 56 |
| | Transco Leidy | 238 | 267 | 267 | 267 | 267 |
| | AIM (Ramapo) | 14 | 17 | 5 | 5 | 5 |
| | AIM (Millennium) | 756 | 1,669 | 1,409 | 1,669 | 1,665 |
| | M3 | 1,851 | 1,911 | 1,758 | 1,785 | 2,312 |
| | AGT Citygate | 0 | 0 | 0 | 0 | 0 |
| | Storage | 47 | 39 | 52 | 78 | 23 |
| Liquid for Portables and Refill | | 508 | 0 | 0 | 0 | 0 |
| LNG From Storage | | 134 | 134 | 134 | 134 | 134 |
| Unserved | Valley | 0 | 0 | 0 | 0 | 0 |
| | Providence | 0 | 0 | 0 | 0 | 0 |
| | Warren | 0 | 0 | 0 | 0 | 0 |
| | Westerly | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| | | 0 | 0 | 0 | 0 | 0 |
| TOTAL | | 15,573 | 15,971 | 16,130 | 16,502 | 16,495 |

National Grid Rhode Island
Comparison of Resources and Requirements
Normal Year (Sales and Customer Choice)
(BBtu)

| | | Normal Annual with Proposed Resources | | | | |
|---------------------------------|----------------------|---------------------------------------|------------------|------------------|------------------|------------------|
| | | <u>2019-2020</u> | <u>2020-2021</u> | <u>2021-2022</u> | <u>2022-2023</u> | <u>2023-2024</u> |
| <u>REQUIREMENTS</u> | | | | | | |
| Firm Sendout | Valley | 6,241 | 6,256 | 6,313 | 6,377 | 6,487 |
| | Providence | 28,978 | 29,047 | 29,315 | 29,612 | 30,121 |
| | Warren | 1,016 | 1,019 | 1,028 | 1,039 | 1,056 |
| | Westerly | 634 | 635 | 641 | 648 | 659 |
| Fuel Reimbursement | | 881 | 915 | 930 | 945 | 941 |
| Underground Storage Refill | | 3,904 | 4,057 | 4,076 | 4,097 | 4,047 |
| LNG Refill | | 560 | 671 | 709 | 901 | 887 |
| TOTAL | | 42,214 | 42,598 | 43,013 | 43,618 | 44,199 |
| <u>RESOURCES</u> | | | | | | |
| TGP | Dawn PNGTS | 1,932 | 1,814 | 1,802 | 1,819 | 1,945 |
| | Dawn Iroquois | 80 | 50 | 47 | 47 | 55 |
| | Niagara | 165 | 164 | 132 | 122 | 135 |
| | Zone 4 | 7,407 | 7,864 | 8,046 | 8,274 | 8,398 |
| | Dracut | 233 | 0 | 0 | 0 | 0 |
| | TGP Citygate | 0 | 0 | 0 | 0 | 0 |
| | Everett Multi Year | 537 | 569 | 613 | 0 | 0 |
| | Everett Swing | 0 | 0 | 0 | 0 | 29 |
| | Storage | 1,334 | 1,334 | 1,334 | 1,334 | 1,334 |
| TET/AGT | M2 | 15,277 | 14,263 | 13,336 | 14,211 | 12,795 |
| | Dominion South Point | 86 | 97 | 98 | 110 | 88 |
| | TCO Appalachia | 6,522 | 7,158 | 8,616 | 7,503 | 6,840 |
| | TCO M3 | 131 | 127 | 101 | 397 | 506 |
| | Transco Leidy | 428 | 456 | 456 | 456 | 457 |
| | AIM (Ramapo) | 35 | 54 | 51 | 109 | 274 |
| | AIM (Millennium) | 2,112 | 2,954 | 2,724 | 3,038 | 2,986 |
| | M3 | 2,299 | 2,302 | 2,207 | 2,510 | 4,758 |
| | AGT Citygate | 0 | 0 | 0 | 0 | 0 |
| | Storage | 2,570 | 2,722 | 2,742 | 2,762 | 2,713 |
| Liquid for Portables and Refill | | 508 | 0 | 0 | 24 | 0 |
| LNG From Storage | | 560 | 671 | 709 | 901 | 887 |
| Unserved | Valley | 0 | 0 | 0 | 0 | 0 |
| | Providence | 0 | 0 | 0 | 0 | 0 |
| | Warren | 0 | 0 | 0 | 0 | 0 |
| | Westerly | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| TOTAL | | 42,214 | 42,598 | 43,013 | 43,618 | 44,199 |

National Grid Rhode Island
Comparison of Resources and Requirements
Cold Snap (Sales and Customer Choice)
(BBtu)

Cold Snap Heating Season (Nov-Mar) with Proposed Resources

| | | <u>2019-2020</u> | <u>2020-2021</u> | <u>2021-2022</u> | <u>2022-2023</u> | <u>2023-2024</u> |
|---------------------------------|----------------------|------------------|------------------|------------------|------------------|------------------|
| <u>REQUIREMENTS</u> | | | | | | |
| Firm Sendout | Valley | 4,618 | 4,618 | 4,662 | 4,703 | 4,808 |
| | Providence | 21,441 | 21,442 | 21,649 | 21,838 | 22,323 |
| | Warren | 752 | 752 | 759 | 766 | 783 |
| | Westerly | 470 | 470 | 474 | 478 | 489 |
| Fuel Reimbursement | | 594 | 589 | 593 | 602 | 582 |
| Underground Storage Refill | | 0 | 0 | 0 | 0 | 0 |
| LNG Refill | | 82 | 82 | 24 | 24 | 0 |
| TOTAL | | 27,957 | 27,953 | 28,162 | 28,411 | 28,984 |
| <u>RESOURCES</u> | | | | | | |
| TGP | Dawn PNGTS | 1,769 | 1,880 | 1,907 | 1,888 | 2,007 |
| | Dawn Iroquois | 53 | 53 | 50 | 49 | 57 |
| | Niagara | 164 | 163 | 131 | 124 | 134 |
| | Zone 4 | 4,648 | 4,659 | 4,732 | 4,770 | 4,886 |
| | Dracut | 233 | 0 | 0 | 0 | 0 |
| | TGP Citygate | 0 | 0 | 0 | 0 | 0 |
| | Everett Multi Year | 632 | 651 | 651 | 0 | 0 |
| | Everett Swing | 4 | 73 | 89 | 517 | 729 |
| | Storage | 1,334 | 1,334 | 1,334 | 1,334 | 1,334 |
| TET/AGT | M2 | 7,170 | 7,181 | 7,186 | 7,194 | 5,855 |
| | Dominion South Point | 82 | 81 | 80 | 82 | 65 |
| | TCO Appalachia | 5,756 | 5,637 | 5,633 | 5,569 | 5,312 |
| | TCO M3 | 248 | 243 | 255 | 389 | 482 |
| | Transco Leidy | 190 | 189 | 189 | 189 | 190 |
| | AIM (Ramapo) | 182 | 178 | 189 | 282 | 333 |
| | AIM (Millennium) | 1,356 | 1,285 | 1,315 | 1,369 | 1,320 |
| | M3 | 681 | 569 | 665 | 782 | 2,507 |
| | AGT Citygate | 11 | 158 | 232 | 306 | 0 |
| | Storage | 2,508 | 2,684 | 2,685 | 2,684 | 2,690 |
| Liquid for Portables and Refill | | 100 | 100 | 24 | 24 | 0 |
| LNG From Storage | | 835 | 835 | 777 | 777 | 753 |
| Unserved | Valley | 0 | 0 | 7 | 0 | 13 |
| | Providence | 0 | 0 | 32 | 82 | 316 |
| | Warren | 0 | 0 | 0 | 1 | 3 |
| | Westerly | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| | | 0 | 0 | 39 | 83 | 332 |
| TOTAL | | 27,957 | 27,953 | 28,162 | 28,411 | 28,984 |

National Grid Rhode Island
Comparison of Resources and Requirements
Cold Snap (Sales and Customer Choice)
(BBtu)

Cold Snap Non-Heating Season (Apr-Oct) with Proposed Resources

| | | <u>2019-2020</u> | <u>2020-2021</u> | <u>2021-2022</u> | <u>2022-2023</u> | <u>2023-2024</u> |
|---------------------------------|----------------------|------------------|------------------|------------------|------------------|------------------|
| <u>REQUIREMENTS</u> | | | | | | |
| Firm Sendout | Valley | 1,829 | 1,846 | 1,861 | 1,886 | 1,895 |
| | Providence | 8,494 | 8,571 | 8,642 | 8,758 | 8,798 |
| | Warren | 298 | 301 | 303 | 307 | 309 |
| | Westerly | 186 | 188 | 189 | 192 | 193 |
| Fuel Reimbursement | | 356 | 367 | 369 | 375 | 367 |
| Underground Storage Refill | | 3,890 | 4,057 | 4,076 | 4,097 | 4,047 |
| LNG Refill | | 887 | 887 | 887 | 887 | 887 |
| TOTAL | | 15,941 | 16,217 | 16,328 | 16,503 | 16,495 |
| <u>RESOURCES</u> | | | | | | |
| TGP | Dawn PNGTS | 424 | 7 | 10 | 13 | 14 |
| | Dawn Iroquois | 30 | 1 | 0 | 0 | 0 |
| | Niagara | 1 | 1 | 1 | 1 | 1 |
| | Zone 4 | 3,026 | 3,453 | 3,451 | 3,518 | 3,522 |
| | Dracut | 0 | 0 | 0 | 0 | 0 |
| | TGP Citygate | 0 | 0 | 0 | 0 | 0 |
| | Everett Multi Year | 0 | 0 | 0 | 0 | 0 |
| | Everett Swing | 0 | 0 | 0 | 0 | 0 |
| | Storage | 0 | 0 | 0 | 0 | 0 |
| TET/AGT | M2 | 8,103 | 7,118 | 6,211 | 7,024 | 6,945 |
| | Dominion South Point | 4 | 17 | 19 | 28 | 23 |
| | TCO Appalachia | 754 | 1,523 | 2,983 | 1,933 | 1,528 |
| | TCO M3 | 49 | 44 | 8 | 47 | 56 |
| | Transco Leidy | 238 | 267 | 267 | 267 | 267 |
| | AIM (Ramapo) | 14 | 17 | 5 | 5 | 5 |
| | AIM (Millennium) | 756 | 1,669 | 1,411 | 1,669 | 1,665 |
| | M3 | 1,852 | 1,928 | 1,771 | 1,784 | 2,312 |
| | AGT Citygate | 0 | 0 | 0 | 0 | 0 |
| | Storage | 47 | 39 | 57 | 79 | 23 |
| Liquid for Portables and Refill | | 508 | 0 | 0 | 0 | 0 |
| LNG From Storage | | 134 | 134 | 134 | 134 | 134 |
| Unserved | Valley | 0 | 0 | 0 | 0 | 0 |
| | Providence | 0 | 0 | 0 | 0 | 0 |
| | Warren | 0 | 0 | 0 | 0 | 0 |
| | Westerly | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| | | 0 | 0 | 0 | 0 | 0 |
| TOTAL | | 15,941 | 16,217 | 16,328 | 16,503 | 16,495 |

National Grid Rhode Island
Comparison of Resources and Requirements
Cold Snap (Sales and Customer Choice)
(BBtu)

| |
|------------------------------------------|
| Cold Snap Annual with Proposed Resources |
|------------------------------------------|

| | | <u>2019-2020</u> | <u>2020-2021</u> | <u>2021-2022</u> | <u>2022-2023</u> | <u>2023-2024</u> |
|---------------------------------|----------------------|------------------|------------------|------------------|------------------|------------------|
| <u>REQUIREMENTS</u> | | | | | | |
| Firm Sendout | Valley | 6,447 | 6,464 | 6,524 | 6,589 | 6,702 |
| | Providence | 29,935 | 30,013 | 30,291 | 30,596 | 31,121 |
| | Warren | 1,050 | 1,053 | 1,062 | 1,073 | 1,092 |
| | Westerly | 656 | 658 | 664 | 670 | 682 |
| Fuel Reimbursement | | 950 | 957 | 962 | 977 | 948 |
| Underground Storage Refill | | 3,890 | 4,057 | 4,076 | 4,097 | 4,047 |
| LNG Refill | | 970 | 970 | 911 | 911 | 887 |
| TOTAL | | 43,898 | 44,170 | 44,490 | 44,914 | 45,479 |
| <u>RESOURCES</u> | | | | | | |
| TGP | Dawn PNGTS | 2,194 | 1,887 | 1,917 | 1,900 | 2,020 |
| | Dawn Iroquois | 84 | 54 | 50 | 49 | 57 |
| | Niagara | 165 | 164 | 132 | 125 | 135 |
| | Zone 4 | 7,674 | 8,112 | 8,184 | 8,288 | 8,408 |
| | Dracut | 233 | 0 | 0 | 0 | 0 |
| | TGP Citygate | 0 | 0 | 0 | 0 | 0 |
| | Everett Multi Year | 632 | 651 | 651 | 0 | 0 |
| | Everett Swing | 4 | 73 | 89 | 517 | 729 |
| | Storage | 1,334 | 1,334 | 1,334 | 1,334 | 1,334 |
| TET/AGT | M2 | 15,272 | 14,299 | 13,397 | 14,218 | 12,800 |
| | Dominion South Point | 86 | 98 | 99 | 110 | 88 |
| | TCO Appalachia | 6,511 | 7,159 | 8,616 | 7,503 | 6,840 |
| | TCO M3 | 298 | 287 | 262 | 436 | 538 |
| | Transco Leidy | 428 | 456 | 456 | 456 | 457 |
| | AIM (Ramapo) | 196 | 195 | 194 | 287 | 338 |
| | AIM (Millennium) | 2,112 | 2,954 | 2,726 | 3,038 | 2,986 |
| | M3 | 2,532 | 2,497 | 2,436 | 2,566 | 4,818 |
| | AGT Citygate | 11 | 158 | 232 | 306 | 0 |
| | Storage | 2,556 | 2,722 | 2,742 | 2,762 | 2,713 |
| Liquid for Portables and Refill | | 608 | 100 | 24 | 24 | 0 |
| LNG From Storage | | 970 | 970 | 911 | 911 | 887 |
| Unserved | Valley | 0 | 0 | 7 | 0 | 13 |
| | Providence | 0 | 0 | 32 | 82 | 316 |
| | Warren | 0 | 0 | 0 | 1 | 3 |
| | Westerly | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| | | 0 | 0 | 39 | 83 | 332 |
| TOTAL | | 43,898 | 44,170 | 44,490 | 44,914 | 45,479 |

National Grid Rhode Island
Comparison of Resources and Requirements
Design Year (Sales Only)
(BBtu)

Design Day with Proposed Resources

2019-2020 2020-2021 2021-2022 2022-2023 2023-2024

REQUIREMENTS

| | | | | | | |
|----------------------------|------------|-----|-----|-----|-----|-----|
| Firm Sendout | Valley | 55 | 56 | 57 | 57 | 58 |
| | Providence | 254 | 256 | 259 | 262 | 266 |
| | Warren | 9 | 9 | 9 | 9 | 10 |
| | Westerly | 6 | 6 | 6 | 6 | 6 |
| Fuel Reimbursement | | 5 | 5 | 5 | 5 | 5 |
| Underground Storage Refill | | 0 | 0 | 0 | 0 | 0 |
| LNG Refill | | 0 | 0 | 0 | 0 | 0 |
| TOTAL | | 328 | 332 | 335 | 339 | 344 |

RESOURCES

| | | | | | | |
|---------------------------------|----------------------|----------|----------|----------|----------|----------|
| TGP | Dawn PNGTS | 26 | 30 | 30 | 30 | 30 |
| | Dawn Iroquois | 1 | 1 | 1 | 1 | 1 |
| | Niagara | 1 | 1 | 1 | 1 | 1 |
| | Zone 4 | 32 | 32 | 32 | 32 | 32 |
| | Dracut | 14 | 0 | 0 | 0 | 0 |
| | TGP Citygate | 0 | 0 | 0 | 0 | 0 |
| | Everett Multi Year | 20 | 20 | 20 | 0 | 0 |
| | Everett Swing | 0 | 5 | 5 | 25 | 30 |
| | Storage | 10 | 10 | 10 | 10 | 10 |
| TET/AGT | M2 | 29 | 29 | 29 | 29 | 29 |
| | Dominion South Point | 1 | 1 | 1 | 1 | 1 |
| | TCO Appalachia | 38 | 38 | 38 | 38 | 38 |
| | TCO M3 | 7 | 7 | 7 | 7 | 7 |
| | Transco Leidy | 1 | 1 | 1 | 1 | 1 |
| | AIM (Ramapo) | 7 | 8 | 8 | 8 | 8 |
| | AIM (Millennium) | 9 | 9 | 9 | 9 | 9 |
| | M3 | 7 | 7 | 7 | 7 | 7 |
| | AGT Citygate | 0 | 14 | 14 | 14 | 0 |
| | Storage | 25 | 25 | 25 | 25 | 25 |
| Liquid for Portables and Refill | | 0 | 0 | 0 | 2 | 0 |
| LNG From Storage | | 99 | 94 | 98 | 99 | 99 |
| Unserved | Valley | 0 | 0 | 0 | 0 | 0 |
| | Providence | 0 | 0 | 0 | 0 | 16 |
| | Warren | 0 | 0 | 0 | 0 | 0 |
| | Westerly | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| | | 0 | 0 | 0 | 0 | 16 |
| TOTAL | | 328 | 332 | 335 | 339 | 344 |

National Grid Rhode Island
Comparison of Resources and Requirements
Design Year (Sales Only)
(BBtu)

Design Heating Season (Nov-Mar) with Proposed Resources

| | | <u>2019-2020</u> | <u>2020-2021</u> | <u>2021-2022</u> | <u>2022-2023</u> | <u>2023-2024</u> |
|---------------------------------|----------------------|------------------|------------------|------------------|------------------|------------------|
| <u>REQUIREMENTS</u> | | | | | | |
| Firm Sendout | Valley | 4,115 | 4,119 | 4,167 | 4,211 | 4,318 |
| | Providence | 18,835 | 18,855 | 19,075 | 19,275 | 19,766 |
| | Warren | 683 | 683 | 691 | 699 | 716 |
| | Westerly | 412 | 413 | 417 | 422 | 432 |
| Fuel Reimbursement | | 510 | 510 | 512 | 513 | 504 |
| Underground Storage Refill | | 0 | 0 | 0 | 0 | 0 |
| LNG Refill | | 90 | 90 | 14 | 12 | 0 |
| TOTAL | | 24,645 | 24,670 | 24,877 | 25,132 | 25,737 |
| <u>RESOURCES</u> | | | | | | |
| TGP | Dawn PNGTS | 2,494 | 2,731 | 2,682 | 2,537 | 2,628 |
| | Dawn Iroquois | 57 | 57 | 58 | 59 | 62 |
| | Niagara | 164 | 163 | 128 | 118 | 130 |
| | Zone 4 | 3,869 | 3,787 | 3,859 | 3,862 | 3,949 |
| | Dracut | 164 | 0 | 0 | 0 | 0 |
| | TGP Citygate | 0 | 0 | 0 | 0 | 0 |
| | Everett Multi Year | 632 | 651 | 651 | 0 | 0 |
| | Everett Swing | 50 | 92 | 172 | 829 | 1,200 |
| | Storage | 1,187 | 1,259 | 1,259 | 1,259 | 1,259 |
| TET/AGT | M2 | 4,367 | 4,337 | 4,357 | 4,306 | 3,521 |
| | Dominion South Point | 83 | 82 | 82 | 82 | 67 |
| | TCO Appalachia | 5,474 | 5,420 | 5,427 | 5,425 | 5,144 |
| | TCO M3 | 471 | 460 | 471 | 550 | 665 |
| | Transco Leidy | 190 | 188 | 188 | 188 | 190 |
| | AIM (Ramapo) | 329 | 320 | 332 | 384 | 443 |
| | AIM (Millennium) | 1,379 | 1,351 | 1,363 | 1,369 | 1,373 |
| | M3 | 636 | 630 | 733 | 927 | 2,023 |
| | AGT Citygate | 178 | 193 | 321 | 438 | 0 |
| | Storage | 2,137 | 2,164 | 2,161 | 2,167 | 2,169 |
| Liquid for Portables and Refill | | 100 | 100 | 24 | 24 | 0 |
| LNG From Storage | | 684 | 684 | 608 | 607 | 594 |
| Unserved | Valley | 0 | 0 | 0 | 0 | 1 |
| | Providence | 0 | 0 | 0 | 0 | 318 |
| | Warren | 0 | 0 | 0 | 0 | 0 |
| | Westerly | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| | | 0 | 0 | 0 | 0 | 319 |
| TOTAL | | 24,645 | 24,670 | 24,877 | 25,132 | 25,737 |

National Grid Rhode Island
Comparison of Resources and Requirements
Design Year (Sales Only)
(BBtu)

Design Non-Heating Season (Apr-Oct) with Proposed Resources

| | | <u>2019-2020</u> | <u>2020-2021</u> | <u>2021-2022</u> | <u>2022-2023</u> | <u>2023-2024</u> |
|---------------------------------|----------------------|------------------|------------------|------------------|------------------|------------------|
| <u>REQUIREMENTS</u> | | | | | | |
| Firm Sendout | Valley | 1,392 | 1,408 | 1,421 | 1,444 | 1,454 |
| | Providence | 6,371 | 6,444 | 6,506 | 6,608 | 6,656 |
| | Warren | 231 | 234 | 236 | 239 | 241 |
| | Westerly | 139 | 141 | 142 | 145 | 146 |
| Fuel Reimbursement | | 258 | 277 | 286 | 288 | 288 |
| Underground Storage Refill | | 3,376 | 3,454 | 3,495 | 3,487 | 3,495 |
| LNG Refill | | 709 | 709 | 709 | 709 | 709 |
| TOTAL | | 12,476 | 12,668 | 12,796 | 12,919 | 12,988 |
| <u>RESOURCES</u> | | | | | | |
| TGP | Dawn PNGTS | 256 | 21 | 23 | 27 | 29 |
| | Dawn Iroquois | 30 | 0 | 0 | 0 | 0 |
| | Niagara | 0 | 0 | 0 | 0 | 0 |
| | Zone 4 | 2,436 | 2,856 | 2,868 | 2,916 | 2,954 |
| | Dracut | 0 | 0 | 0 | 0 | 0 |
| | TGP Citygate | 0 | 0 | 0 | 0 | 0 |
| | Everett Multi Year | 0 | 0 | 0 | 0 | 0 |
| | Everett Swing | 0 | 0 | 0 | 0 | 0 |
| | Storage | 0 | 0 | 0 | 0 | 0 |
| TET/AGT | M2 | 5,340 | 4,412 | 4,165 | 4,622 | 4,559 |
| | Dominion South Point | 6 | 24 | 26 | 43 | 31 |
| | TCO Appalachia | 881 | 1,363 | 2,651 | 1,633 | 1,414 |
| | TCO M3 | 97 | 96 | 26 | 106 | 111 |
| | Transco Leidy | 193 | 266 | 266 | 266 | 266 |
| | AIM (Ramapo) | 38 | 37 | 20 | 24 | 25 |
| | AIM (Millennium) | 874 | 1,670 | 1,135 | 1,671 | 1,661 |
| | M3 | 1,650 | 1,777 | 1,426 | 1,436 | 1,756 |
| | AGT Citygate | 0 | 0 | 0 | 0 | 0 |
| | Storage | 52 | 31 | 74 | 60 | 67 |
| Liquid for Portables and Refill | | 508 | 0 | 0 | 0 | 0 |
| LNG From Storage | | 115 | 115 | 115 | 115 | 115 |
| Unserved | Valley | 0 | 0 | 0 | 0 | 0 |
| | Providence | 0 | 0 | 0 | 0 | 0 |
| | Warren | 0 | 0 | 0 | 0 | 0 |
| | Westerly | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| | | 0 | 0 | 0 | 0 | 0 |
| TOTAL | | 12,476 | 12,668 | 12,796 | 12,919 | 12,988 |

National Grid Rhode Island
Comparison of Resources and Requirements
Design Year (Sales Only)
(BBtu)

| | | Design Annual with Proposed Resources | | | | |
|---------------------------------|----------------------|---------------------------------------|------------------|------------------|------------------|------------------|
| | | <u>2019-2020</u> | <u>2020-2021</u> | <u>2021-2022</u> | <u>2022-2023</u> | <u>2023-2024</u> |
| <u>REQUIREMENTS</u> | | | | | | |
| Firm Sendout | Valley | 5,506 | 5,527 | 5,588 | 5,654 | 5,772 |
| | Providence | 25,206 | 25,300 | 25,582 | 25,883 | 26,422 |
| | Warren | 914 | 917 | 927 | 938 | 958 |
| | Westerly | 551 | 554 | 560 | 566 | 578 |
| Fuel Reimbursement | | 768 | 787 | 799 | 801 | 792 |
| Underground Storage Refill | | 3,376 | 3,454 | 3,495 | 3,487 | 3,495 |
| LNG Refill | | 799 | 799 | 723 | 722 | 709 |
| TOTAL | | 37,121 | 37,338 | 37,673 | 38,051 | 38,725 |
| <u>RESOURCES</u> | | | | | | |
| TGP | Dawn PNGTS | 2,750 | 2,752 | 2,705 | 2,564 | 2,657 |
| | Dawn Iroquois | 88 | 57 | 58 | 59 | 62 |
| | Niagara | 164 | 163 | 128 | 118 | 130 |
| | Zone 4 | 6,305 | 6,642 | 6,726 | 6,778 | 6,903 |
| | Dracut | 164 | 0 | 0 | 0 | 0 |
| | TGP Citygate | 0 | 0 | 0 | 0 | 0 |
| | Everett Multi Year | 632 | 651 | 651 | 0 | 0 |
| | Everett Swing | 50 | 92 | 172 | 829 | 1,200 |
| | Storage | 1,187 | 1,259 | 1,259 | 1,259 | 1,259 |
| TET/AGT | M2 | 9,707 | 8,749 | 8,523 | 8,928 | 8,080 |
| | Dominion South Point | 89 | 107 | 108 | 125 | 98 |
| | TCO Appalachia | 6,355 | 6,783 | 8,078 | 7,058 | 6,558 |
| | TCO M3 | 569 | 557 | 497 | 656 | 776 |
| | Transco Leidy | 383 | 455 | 455 | 455 | 456 |
| | AIM (Ramapo) | 368 | 357 | 353 | 407 | 468 |
| | AIM (Millennium) | 2,252 | 3,021 | 2,498 | 3,041 | 3,035 |
| | M3 | 2,286 | 2,406 | 2,159 | 2,363 | 3,779 |
| | AGT Citygate | 178 | 193 | 321 | 438 | 0 |
| Storage | | 2,189 | 2,195 | 2,235 | 2,227 | 2,236 |
| Liquid for Portables and Refill | | 608 | 100 | 24 | 24 | 0 |
| LNG From Storage | | 799 | 799 | 723 | 722 | 709 |
| Unserved | Valley | 0 | 0 | 0 | 0 | 1 |
| | Providence | 0 | 0 | 0 | 0 | 318 |
| | Warren | 0 | 0 | 0 | 0 | 0 |
| | Westerly | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| | | 0 | 0 | 0 | 0 | 319 |
| TOTAL | | 37,121 | 37,338 | 37,673 | 38,051 | 38,725 |

National Grid Rhode Island
Comparison of Resources and Requirements
Normal Year (Sales Only)
(BBtu)

Normal Heating Season (Nov-Mar) with Proposed Resources

| | | <u>2019-2020</u> | <u>2020-2021</u> | <u>2021-2022</u> | <u>2022-2023</u> | <u>2023-2024</u> |
|---------------------------------|----------------------|------------------|------------------|------------------|------------------|------------------|
| <u>REQUIREMENTS</u> | | | | | | |
| Firm Sendout | Valley | 3,496 | 3,500 | 3,541 | 3,578 | 3,669 |
| | Providence | 16,234 | 16,253 | 16,443 | 16,615 | 17,036 |
| | Warren | 569 | 570 | 577 | 583 | 598 |
| | Westerly | 356 | 356 | 360 | 364 | 373 |
| Fuel Reimbursement | | 458 | 458 | 461 | 458 | 464 |
| Underground Storage Refill | | 0 | 0 | 0 | 0 | 0 |
| LNG Refill | | 0 | 0 | 0 | 14 | 0 |
| TOTAL | | 21,113 | 21,137 | 21,382 | 21,613 | 22,139 |
| <u>RESOURCES</u> | | | | | | |
| TGP | Dawn PNGTS | 1,681 | 1,837 | 1,844 | 1,905 | 2,051 |
| | Dawn Iroquois | 18 | 19 | 19 | 22 | 27 |
| | Niagara | 164 | 163 | 113 | 94 | 116 |
| | Zone 4 | 3,304 | 3,235 | 3,337 | 3,359 | 3,455 |
| | Dracut | 0 | 0 | 0 | 0 | 0 |
| | TGP Citygate | 0 | 0 | 0 | 0 | 0 |
| | Everett Multi Year | 482 | 432 | 473 | 0 | 0 |
| | Everett Swing | 0 | 0 | 0 | 0 | 23 |
| | Storage | 1,187 | 1,259 | 1,259 | 1,259 | 1,259 |
| TET/AGT | M2 | 4,274 | 4,281 | 4,301 | 4,282 | 3,497 |
| | Dominion South Point | 82 | 82 | 81 | 82 | 66 |
| | TCO Appalachia | 5,411 | 5,351 | 5,348 | 5,313 | 5,003 |
| | TCO M3 | 86 | 77 | 86 | 349 | 480 |
| | Transco Leidy | 190 | 188 | 189 | 189 | 190 |
| | AIM (Ramapo) | 21 | 31 | 36 | 98 | 254 |
| | AIM (Millennium) | 1,363 | 1,313 | 1,338 | 1,369 | 1,338 |
| | M3 | 304 | 308 | 366 | 487 | 1,613 |
| | AGT Citygate | 0 | 0 | 0 | 0 | 0 |
| | Storage | 2,145 | 2,176 | 2,176 | 2,173 | 2,173 |
| Liquid for Portables and Refill | | 0 | 0 | 0 | 24 | 0 |
| LNG From Storage | | 401 | 384 | 416 | 608 | 594 |
| Unserved | Valley | 0 | 0 | 0 | 0 | 0 |
| | Providence | 0 | 0 | 0 | 0 | 0 |
| | Warren | 0 | 0 | 0 | 0 | 0 |
| | Westerly | 0 | 0 | 0 | 0 | 0 |
| TOTAL | | 21,113 | 21,137 | 21,382 | 21,613 | 22,139 |

National Grid Rhode Island
Comparison of Resources and Requirements
Normal Year (Sales Only)
(BBtu)

Normal Non-Heating Season (Apr-Oct) with Proposed Resources

| | | <u>2019-2020</u> | <u>2020-2021</u> | <u>2021-2022</u> | <u>2022-2023</u> | <u>2023-2024</u> |
|---------------------------------|----------------------|------------------|------------------|------------------|------------------|------------------|
| <u>REQUIREMENTS</u> | | | | | | |
| Firm Sendout | Valley | 1,274 | 1,288 | 1,301 | 1,321 | 1,330 |
| | Providence | 5,913 | 5,981 | 6,039 | 6,133 | 6,177 |
| | Warren | 207 | 210 | 212 | 215 | 217 |
| | Westerly | 130 | 131 | 132 | 134 | 135 |
| Fuel Reimbursement | | 217 | 245 | 250 | 276 | 278 |
| Underground Storage Refill | | 3,388 | 3,461 | 3,498 | 3,476 | 3,501 |
| LNG Refill | | 516 | 499 | 531 | 709 | 709 |
| TOTAL | | 11,646 | 11,816 | 11,962 | 12,264 | 12,348 |
| <u>RESOURCES</u> | | | | | | |
| TGP | Dawn PNGTS | 177 | 10 | 11 | 13 | 14 |
| | Dawn Iroquois | 30 | 0 | 0 | 0 | 0 |
| | Niagara | 0 | 0 | 0 | 0 | 0 |
| | Zone 4 | 2,122 | 2,542 | 2,536 | 2,727 | 2,770 |
| | Dracut | 0 | 0 | 0 | 0 | 0 |
| | TGP Citygate | 0 | 0 | 0 | 0 | 0 |
| | Everett Multi Year | 0 | 0 | 0 | 0 | 0 |
| | Everett Swing | 0 | 0 | 0 | 0 | 0 |
| | Storage | 0 | 0 | 0 | 0 | 0 |
| TET/AGT | M2 | 5,343 | 4,240 | 4,047 | 4,491 | 4,430 |
| | Dominion South Point | 4 | 22 | 23 | 40 | 26 |
| | TCO Appalachia | 748 | 1,283 | 2,525 | 1,580 | 1,378 |
| | TCO M3 | 56 | 51 | 9 | 57 | 65 |
| | Transco Leidy | 187 | 266 | 266 | 266 | 266 |
| | AIM (Ramapo) | 19 | 20 | 4 | 8 | 9 |
| | AIM (Millennium) | 816 | 1,669 | 1,121 | 1,669 | 1,653 |
| | M3 | 1,465 | 1,573 | 1,241 | 1,255 | 1,553 |
| | AGT Citygate | 0 | 0 | 0 | 0 | 0 |
| | Storage | 56 | 26 | 63 | 43 | 68 |
| Liquid for Portables and Refill | | 508 | 0 | 0 | 0 | 0 |
| LNG From Storage | | 115 | 115 | 115 | 115 | 115 |
| Unserved | Valley | 0 | 0 | 0 | 0 | 0 |
| | Providence | 0 | 0 | 0 | 0 | 0 |
| | Warren | 0 | 0 | 0 | 0 | 0 |
| | Westerly | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| | | 0 | 0 | 0 | 0 | 0 |
| TOTAL | | 11,646 | 11,816 | 11,962 | 12,264 | 12,348 |

National Grid Rhode Island
Comparison of Resources and Requirements
Normal Year (Sales Only)
(BBtu)

| | | Normal Annual with Proposed Resources | | | | |
|---------------------------------|----------------------|---------------------------------------|------------------|------------------|------------------|------------------|
| | | <u>2019-2020</u> | <u>2020-2021</u> | <u>2021-2022</u> | <u>2022-2023</u> | <u>2023-2024</u> |
| <u>REQUIREMENTS</u> | | | | | | |
| Firm Sendout | Valley | 4,770 | 4,789 | 4,842 | 4,899 | 4,999 |
| | Providence | 22,147 | 22,235 | 22,482 | 22,748 | 23,213 |
| | Warren | 777 | 780 | 789 | 798 | 814 |
| | Westerly | 485 | 487 | 493 | 498 | 509 |
| Fuel Reimbursement | | 675 | 703 | 711 | 734 | 742 |
| Underground Storage Refill | | 3,388 | 3,461 | 3,498 | 3,476 | 3,501 |
| LNG Refill | | 516 | 499 | 531 | 723 | 709 |
| TOTAL | | 32,759 | 32,954 | 33,344 | 33,877 | 34,487 |
| <u>RESOURCES</u> | | | | | | |
| TGP | Dawn PNGTS | 1,857 | 1,847 | 1,856 | 1,918 | 2,065 |
| | Dawn Iroquois | 48 | 19 | 19 | 22 | 27 |
| | Niagara | 164 | 163 | 113 | 94 | 116 |
| | Zone 4 | 5,426 | 5,777 | 5,873 | 6,086 | 6,225 |
| | Dracut | 0 | 0 | 0 | 0 | 0 |
| | TGP Citygate | 0 | 0 | 0 | 0 | 0 |
| | Everett Multi Year | 482 | 432 | 473 | 0 | 0 |
| | Everett Swing | 0 | 0 | 0 | 0 | 23 |
| | Storage | 1,187 | 1,259 | 1,259 | 1,259 | 1,259 |
| TET/AGT | M2 | 9,616 | 8,522 | 8,349 | 8,773 | 7,927 |
| | Dominion South Point | 86 | 103 | 104 | 122 | 92 |
| | TCO Appalachia | 6,159 | 6,634 | 7,874 | 6,892 | 6,381 |
| | TCO M3 | 142 | 128 | 95 | 406 | 546 |
| | Transco Leidy | 377 | 454 | 454 | 454 | 456 |
| | AIM (Ramapo) | 40 | 52 | 41 | 106 | 263 |
| | AIM (Millennium) | 2,179 | 2,982 | 2,459 | 3,038 | 2,991 |
| | M3 | 1,769 | 1,881 | 1,607 | 1,742 | 3,166 |
| | AGT Citygate | 0 | 0 | 0 | 0 | 0 |
| | Storage | 2,201 | 2,202 | 2,238 | 2,216 | 2,242 |
| Liquid for Portables and Refill | | 508 | 0 | 0 | 24 | 0 |
| LNG From Storage | | 516 | 499 | 531 | 723 | 709 |
| Unserved | Valley | 0 | 0 | 0 | 0 | 0 |
| | Providence | 0 | 0 | 0 | 0 | 0 |
| | Warren | 0 | 0 | 0 | 0 | 0 |
| | Westerly | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| TOTAL | | 32,759 | 32,954 | 33,344 | 33,877 | 34,487 |

Division 1-6

Request:

Reference the first full paragraph of the 2019 Gas Long-Range Supply Plan on page 30, last two sentences. Please explain whether Algonquin or Tennessee is requiring the Company to address the hourly imbalances. Provide supporting documentation/communications.

Response:

The first full paragraph of the 2019 Gas Long-Range Supply Plan on page 30, last two sentences, state: "The results show an hourly imbalance at several of the Company's gate stations on both Algonquin and Tennessee. As discussed above, the Company will need to contract for additional resources to meet forecasted peak hour requirements for the upcoming 2019/20 winter season, as well as all subsequent winters of the forecast period."

On July 18, 2019, Algonquin held a meeting to discuss commercial operations for the upcoming winter season (2019/20). As part of this discussion, Algonquin provided draft posting language for Operational Flow Orders (OFO), including a discussion of how Algonquin plans to roll out OFOs this winter. Please see Attachment DIV 1-6-1 for the slide deck Algonquin presented at the meeting; Attachment DIV 1-6-2 for a draft exemplar Daily Lateral OFO; Attachment DIV 1-6-3 for a draft exemplar Daily Lateral Hourly Warning; and Attachment DIV 1-6-4 for a draft exemplar Hourly Lateral OFO.

Both Algonquin's tariff and Tennessee's tariff allow for the imposition of hourly flow restrictions. Tennessee has not issued any warnings regarding potential hourly limitations, informed its customers of any intention to implement hourly OFOs, nor shared draft language and associated protocols for how it would implement such OFOs. Before last winter, Algonquin had not implemented such warnings and/or OFOs. The Narragansett Electric Company d/b/a National Grid nevertheless must be prepared for such a circumstance on both pipelines going forward, as the interstate pipelines feeding New England are constrained and continue to be more constrained each year.

Algonquin Commercial Operations – Winter 19/20



July 18, 2019

Agenda



- Safety moment
- Atlantic Bridge project & outages updates
- Communication Plan
- Winter Operations
 - OFOs and implementation plan
- AGT Customer Group Short Term Question Discussion
- Feedback and discussion on next steps

Communications Plan – Winter 19/20



- Notification of Meeting
 - Based on weather, either EHDD of single day, series of days, or transition temperatures
 - Intent to schedule calls two days before weather event with gas control, scheduling and commercial coordination
- Conference Call Format:
 - Algonquin to provide publicly available information and current status of the AGT system
 - Each company represented to present Winter Operations Status update to provide AGT with a working knowledge of potential issues and solutions for the upcoming weather event
 - List LNG/CNG availability & system ready status (i.e. manned)
 - Current/projected system challenges & issues
 - Projected load forecast

Winter Operations – OFO implementation

- Communications Procedure for weather events
- Implementation plan for OFO’s
 - Standard system-wide daily OFO with penalties (as seen winter 2018-2019)
 - If necessary, we will issue the “Daily – [G/J/C, etc] Lateral OFO” to penalize short positions on the specific lateral on a daily basis
 - If the lateral-specific OFO is not sufficient, and if there is enough time to provide a warning - “Warning - Hourly – Lateral 6%...” to warn shippers about their hourly takes on the laterals.
 - This may be done at the same time as the lateral daily OFO due to the timing issues if events arise suddenly.
 - If the daily lateral OFO’s and hourly warning are not sufficient or if customers are not reacting as required, we will issue the “Hourly – Lateral OFO” posting



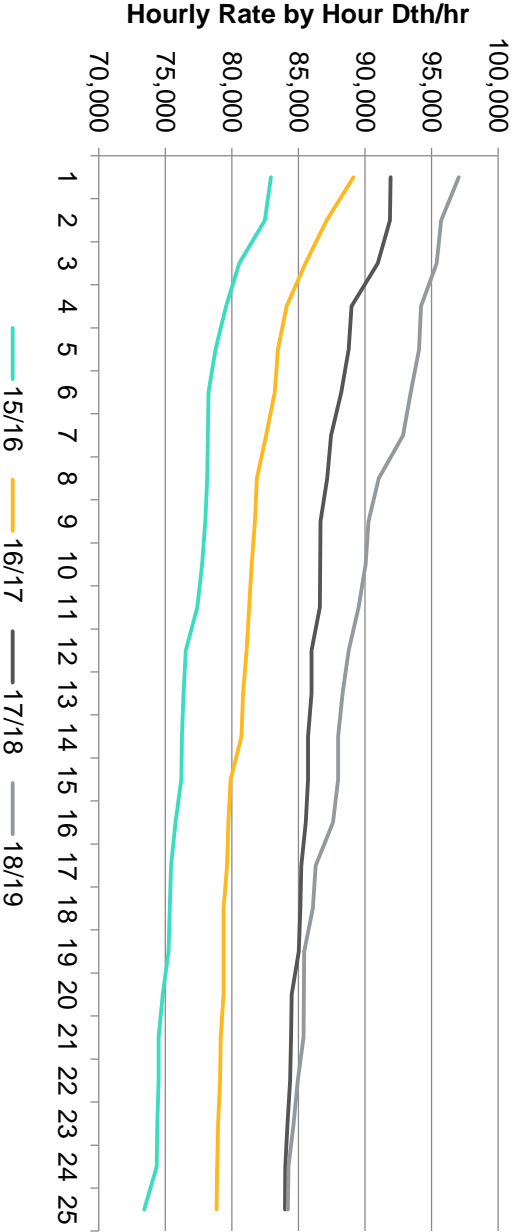
AGT Hourly Rate – Winter hourly load data

Example of Hourly Data from Chart + power plant data

| Winter 18/19 LDC flows Top 25 | | | |
|-------------------------------|-----------------|-------------------------|------------------------|
| Gas Date | Production Time | Actual Quantity (DTH/D) | Actual Quantity Dth/hr |
| 1/20/2019 | 06:00 AM | 2,328,737 | 97,031 |
| 1/30/2019 | 06:00 AM | 2,297,095 | 95,712 |
| 1/20/2019 | 07:00 AM | 2,288,916 | 95,371 |
| 1/20/2019 | 05:00 AM | 2,260,932 | 94,205 |
| 1/30/2019 | 05:00 AM | 2,257,608 | 94,067 |

| Power Plant hourly data corresponding to LDC Top 25 peak hours | | | |
|----------------------------------------------------------------|-----------------|-------------------------|------------------------|
| Gas Date | Production Time | Actual Quantity (DTH/D) | Actual Quantity Dth/hr |
| 1/20/2019 | 06:00 AM | 527,770 | 21,990 |
| 1/30/2019 | 06:00 AM | 741,168 | 30,882 |
| 1/20/2019 | 07:00 AM | 582,891 | 24,287 |
| 1/20/2019 | 05:00 AM | 455,504 | 18,979 |
| 1/30/2019 | 05:00 AM | 617,418 | 25,726 |

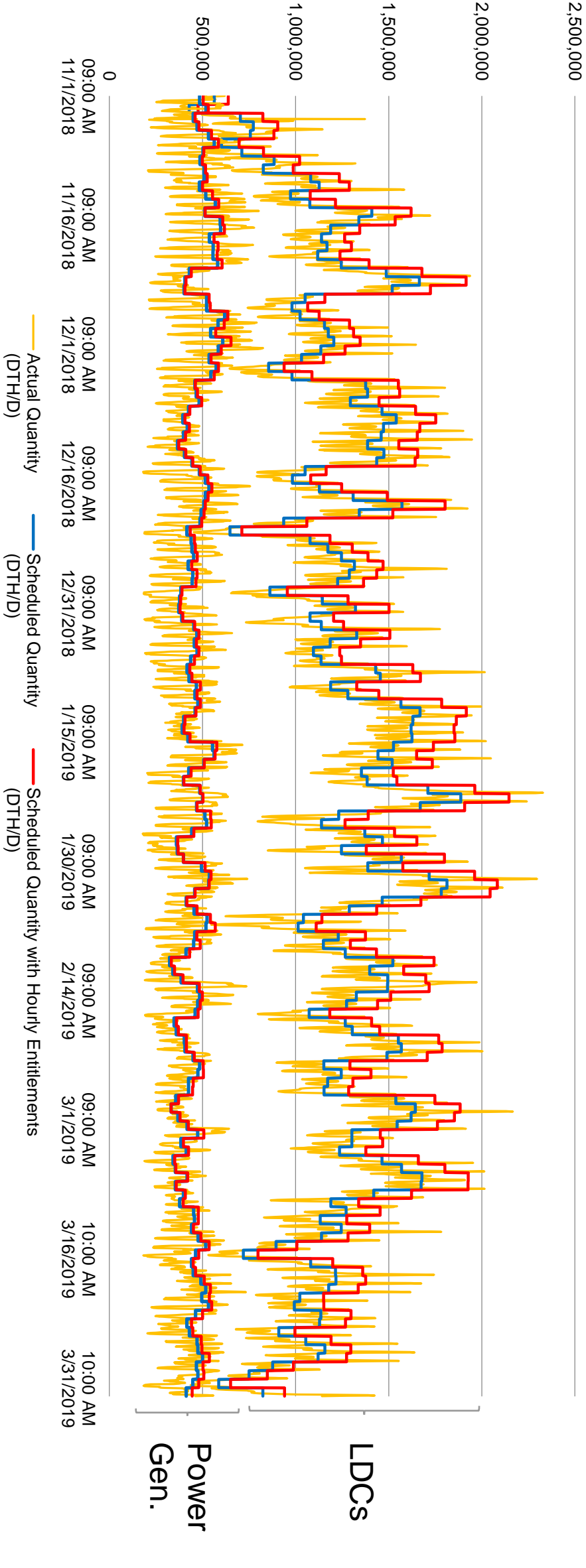
AGT Hourly Rate - Winter LDC Load Duration Top 25



- **Power plant peak hours**
 - When we applied the same criteria – top hours of power plant load for the last two winters, the power plant peak hours occurred in Nov and two in Dec – and almost all in the afternoon.
 - Power plant peak hours did not correspond with LDC peak hours
 - When evaluating power plant load on the LDC peak hour days (ie Jan 2019), they made up 18-24% of the load



LDC and Power Gen. Historical Volumes – Winter 18/19



**LDC Actual Takes on an hourly basis exceeded hourly entitlements by 2.9 Bcf this winter
and power generators exceeded by 3.3 Bcf this winter**

Draft – For Discussion Purposes Only – used “G Lateral” as illustrative example

In order to maintain the operational integrity of the system, Algonquin Gas Transmission, LLC (AGT) is issuing an Operational Flow Order (OFO) pursuant to Section 26 of the General Terms and Conditions of AGT's FERC Gas Tariff effective 9:00 AM CCT, XXXXX XX, 2019 to all parties on the G Lateral, with the exception of those Operational Balancing Agreements required by FERC regulations, on the G Lateral.

This OFO does not affect the ability of AGT to receive or deliver quantities of gas for scheduled nominations to any customer or pipeline except for those customers on the G Lateral.

During the effectiveness of this OFO, all parties must be balanced such that actual deliveries of gas out of the system must be equal to or less than scheduled deliveries. The penalty shall apply to each dekatherm of actual delivery quantities that exceeds the greater of 2,000 Dth or 102% of scheduled delivery quantities. The penalty will be equal to three times the arithmetic average of daily Platts Gas Daily "Daily Price Survey" posting for the High Common price for "Algonquin, city-gates" for the day on which such violation occurred as indicated in AGT's General Terms and Conditions Section 26.8. Additionally, OBA parties with meters located other than on the G lateral will not be allowed to utilize undertakes at those meters to offset overtakes at meters located on the G lateral.

AGT requests that customers/point operators on the G lateral be aware of the impact non-ratable hourly takes from the system may have in causing delivery pressures reaching lower than desired levels. As a reminder, AGT's G lateral is not designed to sustain delivery pressures above contract levels while making non-ratable/accelerated deliveries above scheduled quantities for more than 6 consecutive hours, to be followed by flows below scheduled quantity for the balance of any 24 hour period.

Furthermore, if customers/point operators don't manage hourly takes from the system, 1) delivery pressures will be impacted and /or 2) AGT may be required to impose further restrictions or courses of action in order to maintain the operational integrity of the system including the issuance of an hourly OFO pursuant to General Terms and Conditions Section 26.7(d).

In addition, AGT will not permit retroactive nominations from upstream interconnects governed by a FERC gas tariff to avoid an OFO penalty.

AGT will inform customers via EBB when this OFO will be lifted.

Please contact your operations account representative should you have any questions.

Draft – For Discussion Purposes Only – used “G Lateral” as illustrative example

With the impending colder weather beginning Wednesday January 30, 2019 and in order to maintain the operational integrity of the G system, Algonquin Gas Transmission, LLC (AGT) is requesting all customers/point operators on the G system to fully nominate their 6% “G” system contracts to the appropriate “G” system meter station. In the event customers do not nominate in such a manner, point operators will be limited in their ability to take non-ratable/accelerated deliveries above scheduled volumes to these meters for 6 consecutive hours.

Furthermore, AGT requires that customers/point operators on the G lateral be aware of the impact non-ratable hourly takes from the system and the impact it could have on system operations. Delivery pressures could reach lower than desire levels to the extent point operators’ hourly takes exceed their maximum hourly transportation quantity (MHTQ) based on their scheduled quantities. AGT's G lateral is not designed to sustain delivery pressures above contractual pressure obligations if:

- 1) Point operators’ hourly rates are exceeding their MHTQ levels based on nominated quantities or
- 2) Point operators’ hourly rates are exceeding 1/24th of the daily nominated quantity for more than 6 consecutive hours (or greater than 6 hours on any gas day)

Furthermore, if customers/point operators do not manage hourly takes from the system within their scheduled MHTQ limits AGT may be required to impose further restrictions or courses of action in order to maintain the operational integrity of the system including the issuance of an hourly OFO pursuant to General Terms and Conditions Section 26.7(d).

Please contact your operations account representative should you have any questions.

Draft – For Discussion Purposes Only – used “G Lateral” as illustrative example

In order to maintain the operational integrity of the system, Algonquin Gas Transmission, LLC (AGT) is issuing an Hourly Operational Flow Order (OFO) pursuant to Section 26 of the General Terms and Conditions of AGT’s FERC Gas Tariff effective 9:00 AM CCT, XXX X, XXXX to all parties with meters on the “G” System.

This OFO does not affect the ability of AGT to receive or deliver quantities of gas for scheduled nominations to any customer or pipeline except for those customers with meters on the “G” System.

During the effectiveness of this Hourly OFO, all point operators on the “G” system must be balanced such that actual deliveries of gas out of the system each hour must be equal to or less than the hourly contractual rights of the scheduled deliveries to their meters on the “G” System. Additionally, OBA parties with meters located on other mainline or lateral systems will not be allowed to utilize undertakes at those meters located on other mainline or lateral systems to offset overtakes at meters located on the “G” system.

The penalty shall apply to each dekatherm for any hour in which the actual delivery quantity exceeds 102% or 100 Dth of the hourly contractual rights of the scheduled quantities to the point operator’s meters located on the “G” system. The penalty will be equal to three times the daily Platts Gas Daily “Daily Price Survey” posting for the High Common price for "Algonquin, city-gates" for the day on which such violation occurred as indicated in AGT’s General Terms and Conditions Section 26.8. AGT will utilize the end of day scheduled quantities to calculate the hourly contractual rights for such gas day. In addition, AGT will not permit retroactive nominations to avoid an OFO penalty (except for primary firm no-notice nominations).

AGT requires that customers/point operators on AGT be aware of the impact non-ratable hourly takes from the system may have in causing delivery pressures reaching lower than desired levels. As a reminder, AGT's system is not designed to sustain delivery pressures above contract levels while making non-ratable/accelerated deliveries above scheduled quantities for more than 6 consecutive hours, to be followed by flows below scheduled quantity for the balance of any 24 hour period.

Furthermore, if customers/point operators don't manage hourly takes from the system, 1) delivery pressures will be impacted and /or 2) AGT may enforce the above mentioned 6 consecutive hour limit at accelerated deliveries for those with 6% contracts. 3) AGT may be required to impose further restrictions or courses of action in order to maintain the operational integrity of the system.

This Hourly OFO will remain in effect until further notice.

Please contact your Operations Account Representative should you have any questions.

Division 1-10

Request:

For the peak day during the 2018/19 winter season to date, please identify:

- a. The date, average temperature, wind speed, average temperature on the prior day, and HDDs;
- b. Total sendout;
- c. Firm throughput;
- d. FT-1 capacity exempt transport throughput;
- e. FT-1 capacity assigned transport throughput;
- f. FT-2 transport throughput;
- g. Deliveries to the Company on behalf of FT-1 capacity exempt transportation customers;
- h. Deliveries to the Company on behalf of FT-1 and FT-2 capacity assigned customers (separately);
- i. Capacity resource quantity by type assigned to FT-1 and FT-2 capacity assigned customers/suppliers (separately);
- j. Deliveries to the Company by capacity resource;
- k. Gas supply deliveries to the Company by source and price; and
- l. Delivery and consumption of non-firm load.

Response:

The gas day with the highest total throughput for the winter of 2018-2019 occurred on January 21, 2019.

| | |
|-------------------------------------------|------------------|
| a. Gas Day Date | January 21, 2019 |
| a. Average Temperature | 6 oF |
| a. Average Wind Speed | 15 mph |
| a. Average Temperature (prior gas day) | 16 oF |
| a. HDD | 59 |
| b. Total throughput | 386,340 Dth |
| c. Firm throughput | 386,315 Dth |

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4963
2019 Annual Gas Cost Recovery Filing
Responses to the Division's First Set of Data Requests
Issued August 16, 2019

| | | | |
|--------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------|
| d. FT-1 capacity exempt transport throughput | 27,335 Dth | | |
| e. FT-1 capacity assigned transport throughput | 21,695 Dth | | |
| f. FT-2 transport throughput | (not metered daily) | | |
| g. Deliveries to the Company on behalf of FT-1 capacity exempt transportation customers | The Company does not have a breakdown of FT-1 deliveries by capacity-assigned and capacity-exempt; the marketer only nominates in total. | | |
| h. Deliveries to the Company on behalf of FT-1 and FT-2 capacity assigned customers (separately) | Total FT-1 deliveries 52,149 Dth (see (g) above) Total FT-2 deliveries 16,247 Dth | | |
| i. Capacity resource quantity by type assigned to FT-1 and FT-2 capacity assigned customers/suppliers (separately) | For January 2019: FT-1: 14,166 Dth pipeline FT-2: 20,225 Dth pipeline, 4,641 Dth storage, 19,835 Dth peaking. | | |
| j. Deliveries to the Company by capacity resource | <u>Capacity Resource</u> | <u>Deliveries</u> | |
| | Pipeline | 172,330 | |
| | Storage | 39,044 | |
| | Peaking/LNG | <u>105,957</u> | |
| | Total | 317,331 | |
| k. Gas supply deliveries to the Company by source and price | <u>Source</u> | <u>Deliveries</u> | <u>Delivered Price</u> |
| | Transco, Leidy-Line | 72 | \$3.4894 |
| | TETCO, Zone M-2 | 26,595 | \$3.5349 |
| | Dominion South Point | 527 | \$3.5311 |
| | TETCO, Leidy (M2) | 3,770 | \$3.4377 |
| | Maumee - TCO, Appalachia | 19,036 | \$3.5542 |
| | Maumee - TCO, Appalachia | 8,271 | \$3.3244 |

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4963
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| | | | |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Broad Run - TCO, Appalachia Transco, Leidy-Line TETCO, Zone M-3 Millennium, East receipts Eagle - TETCO, Zone M-3 Pennsburg - TETCO, Zone M-3 AIM - RAMAPO, Zone M-3 TETCO, Zone M-2 (SCT) TETCO, Zone M-3 (SCT) Algonquin Citygate Zone 4 ConneXion Zone 4 Zone 4 Niagara Dawn, Ontario Dawn, Ontario Dracut Everett AGT Storage TGP Storage TGP Swing-on-Storage LNG Algonquin Citygate Tennessee Citygate 317,331 | 9,936 1,158 2,193 8,625 3,577 3,331 9,375 2,086 1,357 14,100 11,600 13,514 4,435 1,067 10,584 1,000 17,682 24,925 28,208 10,836 5,035 49,250 15,186 10,000 | \$3.3244 \$3.6397 \$8.5760 \$3.6756 \$8.7220 \$8.7220 \$8.9242 \$3.8863 \$8.7921 \$4.1883 \$3.5267 \$3.6292 \$3.3963 \$6.1018 \$3.4554 \$3.9745 \$3.6809 \$4.2362 \$2.6242 \$3.0003 \$3.0198 \$5.2582 \$18.0000 \$17.0000 |
| 1. Delivery and consumption of non-firm load | 25 Dth | | |

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4963
2019 Annual Gas Cost Recovery Filing
Responses to the Division's First Set of Data Requests
Issued August 16, 2019

Division 1-12

Request:

Please provide monthly supply plans for each month of the winter of 2018/19.

Response:

Please see Attachment DIV 1-12.

| <u>RHODE ISLAND MONTHLY PLAN</u> | | | |
|--------------------------------------------------------------|----------------|----------------|----------------|
| November 2018 | | | |
| | <u>MIN DAY</u> | <u>AVG DAY</u> | <u>MAX DAY</u> |
| *4-Year Historical Sendout HDD | 57,734 0 | 133,098 9 | 226,784 28 |
| *All Sales and Transportation customers. No power plants. | | | |
| **Forecasted Sendout HDD | 50,029 9 | 112,774 19 | 219,493 37 |
| **Firm Sales and Transportation customers w/ NGRID Capacity. | | | |
| Forecasted Firm Transportation | 13,304 | 23,158 | 38,520 |
| Forecasted Sales Demand | 36,725 | 89,616 | 180,973 |

| Baseload Election - November 2018 | | |
|------------------------------------------|---------------|---------------------|
| Volume per Day (MMBtu) | | |
| Dawn (est.) | 0 | AMA - Direct Energy |
| Longhaul | <u>14,000</u> | |
| TGP Total | 14,000 | |
| Longhaul | <u>22,000</u> | |
| AGT Total | 22,000 | |
| Grand Total | 36,000 | |

RI Page 2

Estimated Rhode Island Capacity Breakout for November 2018

ALGONQUIN

| Path | Receipt Point | Receipt Volumes | M2 | M3 | Seasonal CG Loss | City Gate Capacity | City Gate Refill Loss | Net CG Deliveries | Baseload | Available Swing |
|------------------------|---------------|-----------------|-----------|--------|------------------|--------------------|-----------------------|-------------------|----------|-----------------|
| Transco Leidy->AGT | Transco | 72 | | 72 | 0 | 72 | | 72 | 72 | 0 |
| Millen->Ramapo->AGT | Millennium | 9,054 | | 9,000 | 0 | 8,826 | | 8,826 | 8,826 | 0 |
| TETCO->AGT | M2 | 27,259 | 27,259 | 26,763 | 0 | 26,581 | (6,250) | 20,331 | 13,102 | 7,229 |
| AGT | M3 | 6,802 | | 6,802 | 0 | 6,756 | | 6,756 | 0 | 6,756 |
| RAMAPO->AGT | RAMAPO | 9,355 | | 9,355 | 0 | 9,174 | | 9,174 | 0 | 9,174 |
| TCO->AGT | Eagle | 3,653 | | 3,600 | 0 | 3,576 | | 3,576 | 0 | 3,576 |
| TCO->AGT | Pennsburg | 3,515 | | 3,464 | 0 | 3,440 | | 3,440 | 0 | 3,440 |
| Transco Leidy->AGT SCT | Transco | 1,172 | | 1,167 | 0 | 1,158 | | 1,158 | 0 | 1,158 |
| TCO->AGT | Maumee | 28,460 | | 28,046 | (13,706) | 14,149 | (478) | 13,671 | 0 | 13,671 |
| TCO->AGT | Broad Run | 10,148 | | 10,000 | (9,932) | 0 | | 0 | 0 | 0 |
| Remaining AGT (SCT) | M3 (SCT) | 3,189 | | 3,189 | (276) | 3,167 | | 3,167 | 0 | 3,167 |
| | | 102,679 | Transport | | (23,914) | 76,899 | (6,728) | 70,171 | 22,000 | 48,171 |

AGT Storage

| Path | Receipt Point | In-Hole WDs | MDWQ | M3 | Seasonal CG Loss | Storage Capacity | | | | |
|---------------|---------------|-------------|--------|--------|------------------|------------------|---------------------|--|--|--|
| GSS-TE 600045 | DTI GSS-TE | 5,636 | 5,636 | 5,549 | (1,158) | 4,353 | | | | |
| GSS 300169 | DTI GSS | 2,061 | 2,061 | 2,021 | (2,007) | 0 | | | | |
| GSS 300171 | DTI GSS | 2,617 | 2,617 | 2,583 | (2,565) | 0 | | | | |
| FSS 9630 | TCO FSS | 2,545 | 2,545 | 2,508 | (2,491) | 0 | | | | |
| FSS-1 400515 | TETCO FSS1 | 948 | 944 | 929 | (923) | 0 | | | | |
| SS-1 400185 | TETCO SS1 | 676 | 665 | 665 | (660) | 0 | | | | |
| SS-1 400221 | TETCO SS1 | 14,370 | 14,137 | 14,137 | 0 | 14,041 | | | | |
| Storage | | | | | (9,804) | 18,394 | | | | |
| Total | | | | | (33,718) | 95,293 | Available AGT Swing | | | |

TENNESSEE

| Path | Receipt Point | Receipt Volumes | TGP | TGP Zone4 | | City Gate Capacity | City Gate Refill Loss | Net CG Deliveries | Baseload | Available Swing |
|-----------------------|---------------|-----------------|-----------|-----------|--|--------------------|-----------------------|-------------------|----------|-----------------|
| TGP ConnXion 4 -> 6 | Z4 CXN | 11,746 | | 11,746 | | 11,600 | 0 | 11,600 | 11,600 | 0 |
| TGP 4 -> 6 | Z4 | 19,883 | | 19,883 | | 19,636 | | 19,636 | 2,400 | 17,236 |
| TGP 1 -> 6 | 800 Leg | 208 | | | | 200 | 0 | 200 | 0 | 200 |
| TGP 1 -> 6 | 500 Leg | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| TGP 0 -> 6 | Z0 | 0 | | | | 0 | | 0 | 0 | 0 |
| TGP 5 -> 6 | Niagara | 1,077 | | | | 1,067 | | 1,067 | 0 | 1,067 |
| Union>TrCan>IGT->TGP | Dawn | 1,004 | | | | 1,000 | | 1,000 | 0 | 1,000 |
| Union>TrCan>Port->TGP | Dawn | 10,757 | | | | 10,746 | | 10,746 | 0 | 10,746 |
| TGP 6 -> 6 | Everett | 25,075 | | | | 25,000 | | 25,000 | 0 | 25,000 |
| TGP 6 -> 6 | Dracut | 18,051 | | | | 18,033 | | 18,033 | 0 | 18,033 |
| | | 87,801 | Transport | | | 87,282 | 0 | 87,282 | 14,000 | 73,282 |

TGP Storage

| Path | Receipt Point | In-Hole WDs | MDWQ | | Storage Capacity | | | | | |
|------------|---------------|-------------|--------|--|------------------|---------------------|--|--|--|--|
| GSS 300168 | DTI GSS | 1,401 | 1,401 | | 1,384 | | | | | |
| GSS 300170 | DTI GSS | 5,324 | 5,324 | | 5,155 | | | | | |
| FSMA 62918 | TGP FSMA | 10,249 | 10,249 | | 10,122 | | | | | |
| FSMA 501 | TGP FSMA | 10,920 | 10,920 | | 10,785 | | | | | |
| Storage | | | | | 10,836 | | | | | |
| Total | | | | | 98,118 | Available TGP Swing | | | | |

RI Page 3

November 2018

| Company | Field | Contract Number | Storage Capacity Quantity (Dth/Yr) | Current MDWQ (Dth/Day) | Current MDIQ (Dth/Day) | Estimated Opening Balance as of November 01 2018 | % Full | W/D via |
|--------------|---------------------|-----------------|------------------------------------|------------------------|------------------------|--------------------------------------------------|--------|---------------|
| Narragansett | Dominion GSS-TE | 600045 | 1,376,324 | 14,337 | 6,431 | 1,331,288 | 97% | Tetco/AGT |
| Narragansett | Dominion GSS | 300168 | 154,050 | 1,401 | 720 | 148,852 | 97% | TGP |
| Narragansett | Dominion GSS | 300169 | 206,100 | 2,061 | 963 | 199,055 | 97% | DTI/Tetco/AGT |
| Narragansett | Dominion GSS | 300170 | 490,340 | 5,324 | 2,291 | 474,102 | 97% | DTI/TGP |
| Narragansett | Dominion GSS | 300171 | 188,814 | 2,617 | 882 | 181,830 | 96% | Tetco/AGT |
| Narragansett | Columbia FSS | 9630 | 203,957 | 2,545 | 340 | 197,917 | 97% | TCO/AGT |
| Narragansett | Texas Eastern FSS-1 | 400515 | 56,640 | 944 | 291 | 54,352 | 96% | Tetco/AGT |
| Narragansett | Texas Eastern SS-1 | 400185 | 51,990 | 665 | 267 | 50,089 | 96% | AGT |
| Narragansett | Texas Eastern SS-1 | 400221 | 1,188,033 | 14,137 | 6,107 | 1,139,406 | 96% | AGT |
| Narragansett | Tennessee FS-MA | 62918 | 210,000 | 10,249 | 1,400 | 192,521 | 92% | TGP |
| Narragansett | Tennessee FS-MA | 501 | 605,343 | 10,920 | 4,036 | 535,987 | 89% | TGP |

Storage Totals **4,731,591** **65,200** **23,728** **4,505,399** **95%**

| <u>RHODE ISLAND MONTHLY PLAN</u> | | | |
|------------------------------------------------------------------------------------------------|------------------|-------------------|-------------------|
| December 2018 | | | |
| | <u>MIN DAY</u> | <u>AVG DAY</u> | <u>MAX DAY</u> |
| *4-Year Historical Sendout HDD *All Sales and Transportation customers. No power plants. | 65,460 6 | 184,547 28 | 361,735 58 |
| **Forecasted Sendout HDD **Firm Sales and Transportation customers w/ NGRID Capacity. | 111,294 18 | 180,050 30 | 267,957 45 |
| Forecasted Firm Transportation Forecasted Sales Demand | 22,139 89,155 | 31,774 148,276 | 42,676 225,281 |

| Baseload Election - December 2018 | | |
|-----------------------------------|---------------|---------------------|
| Volume per Day (MMBtu) | | |
| Dawn | 1,000 | AMA - Direct Energy |
| Longhaul | <u>24,000</u> | |
| TGP Total | 25,000 | |
| Longhaul/Ramapo | <u>43,000</u> | |
| AGT Total | 43,000 | |
| Grand Total | 68,000 | |

RI Page 2

| Estimated Rhode Island Capacity Breakout for December 2018 | | | | | | | | |
|------------------------------------------------------------|---------------|-----------------|-----------|-------------|----------------------------------------|---------------------|----------|-----------------|
| | | | | | | | | |
| ALGONQUIN | | | | | | | | |
| Path | Receipt Point | Receipt Volumes | M2 | M3 | City Gate Capacity | Net CG Deliveries | Baseload | Available Swing |
| Transco Leidy->AGT | Transco | 72 | | 72 | 72 | 72 | 72 | 0 |
| TETCO->AGT | M2 | 27,258 | 27,258 | 26,762 | 26,580 | 26,580 | 26,580 | 0 |
| AGT | M3 | 2,849 | | 2,849 | 2,830 | 2,830 | 2,830 | 0 |
| RAMAPO->AGT | RAMAPO | 18,354 | | 18,354 | 18,000 | 18,000 | 13,000 | 5,000 |
| TCO->AGT | Maumee | 27,967 | | 27,560 | 27,373 | 27,373 | 518 | 26,855 |
| TCO->AGT | Broad Run | 10,148 | | 10,000 | 9,932 | 9,932 | 0 | 9,932 |
| TCO->AGT | Eagle | 3,653 | | 3,600 | 3,576 | 3,576 | 0 | 3,576 |
| TCO->AGT | Pennsburg | 3,416 | | 3,366 | 3,343 | 3,343 | 0 | 3,343 |
| Transco Leidy->AGT SCT | Transco | 1,172 | | 1,166 | 1,158 | 1,158 | 0 | 1,158 |
| Remaining AGT (SCT) | M3 (SCT) | 3,467 | | 3,467 | 3,443 | 3,443 | 0 | 3,443 |
| AGT Citygate | AGT CG | 14,100 | | | 14,100 | 14,100 | 0 | 14,100 |
| | | 112,456 | Transport | | 110,407 | 110,407 | 43,000 | 67,407 |
| AGT Storage | | | | | | | | |
| Path | Receipt Point | In-Hole WDs | MDWQ | M3 | Storage Capacity | | | |
| GSS-TE 600045 | DTI GSS-TE | 9,480 | 9,480 | 9,343 | 9,279 | | | |
| GSS 300169 | DTI GSS | 2,061 | 2,061 | 2,021 | 2,007 | | | |
| GSS 300171 | DTI GSS | 2,617 | 2,617 | 2,583 | 2,565 | | | |
| FSS 9630 | TCO FSS | 2,545 | 2,545 | 2,508 | 2,491 | | | |
| FSS-1 400515 | TETCO FSS1 | 948 | 944 | 929 | 923 | | | |
| SS-1 400185 | TETCO SS1 | 676 | 665 | 665 | 660 | | | |
| SS-1 400221 | TETCO SS1 | 14,370 | 14,137 | 14,137 | 14,041 | | | |
| Storage | | | | | 31,966 | | | |
| Total | | | | | 142,373 | Available AGT Swing | | 67,407 |
| | | | | | | | | |
| TENNESSEE | | | | | | | | |
| Path | Receipt Point | Receipt Volumes | | At TGP Inct | City Gate Capacity | Net CG Deliveries | Baseload | Available Swing |
| TGP ConnXion 4 --> 6 | Z4 CXN | 11,746 | | | 11,600 | 11,600 | 11,600 | 0 |
| TGP 4 --> 6 | Z4 | 20,084 | | | 19,835 | 19,835 | 12,400 | 7,435 |
| TGP 5 --> 6 | Niagara | 1,077 | | | 1,067 | 1,067 | 0 | 1,067 |
| Union>TrCan>Port->TGP | Dawn | 10,854 | 10,757 | 10,604 | 10,593 | 10,593 | 0 | 10,593 |
| Union>TrCan>IGT->TGP | Dawn | 1,023 | 1,014 | 1,009 | 1,000 | 1,000 | 1,000 | 0 |
| TGP 6 --> 6 | Dracut | 17,700 | | 17,700 | 17,682 | 17,682 | 0 | 17,682 |
| TGP 6 --> 6 | Everett | 25,000 | | 25,000 | 24,925 | 24,925 | 0 | 24,925 |
| TGP 6 --> 6 | Dracut | 515 | | | 514 | 514 | 0 | 514 |
| | | 87,999 | Transport | | 87,216 | 87,216 | 25,000 | 62,216 |
| TGP Storage | | | | | | | | |
| Path | Receipt Point | In-Hole WDs | MDWQ | | Storage Capacity <td colspan="3"></td> | | | |
| GSS 300168 | DTI GSS | 1,401 | 1,401 | | 1,384 | | | |
| GSS 300170 | DTI GSS | 5,324 | 5,324 | | 5,155 | | | |
| FSMA 62918 | TGP FSMA | 10,249 | 10,249 | | 10,122 | | | |
| FSMA 501 | TGP FSMA | 10,920 | 10,920 | | 10,785 | | | |
| Storage | | | | | 10,836 | | | |
| Total | | | | | 98,052 | Available TGP Swing | | 62,216 |

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| ENGIE Supply |
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| Freepoint AMA |
| Direct AMA |
| REPSOL Supply |
| ENGIE Supply |

ENGIE Supply

Freepoint AMA

Direct AMA

REPSOL Supply

ENGIE Supply

| Company | Field | Contract Number | Storage Capacity Quantity (Dth/Yr) | Current MIDWQ (Dth/Day) | Current MDIQ (Dth/Day) | Balance as of November 17 2018 | % Full | W/D via |
|--------------|---------------------|-----------------|------------------------------------|-------------------------|------------------------|--------------------------------|--------|---------------|
| Narragansett | Dominion GSS-TE | 600045 | 1,376,324 | 14,337 | 6,431 | 1,291,478 | 94% | Tetco/AGT |
| Narragansett | Dominion GSS | 300168 | 154,050 | 1,401 | 720 | 139,959 | 91% | TGP |
| Narragansett | Dominion GSS | 300169 | 206,100 | 2,061 | 963 | 193,060 | 94% | DTI/Tetco/AGT |
| Narragansett | Dominion GSS | 300170 | 490,340 | 5,324 | 2,291 | 451,628 | 92% | DTI/TGP |
| Narragansett | Dominion GSS | 300171 | 188,814 | 2,617 | 882 | 174,513 | 92% | Tetco/AGT |
| Narragansett | Columbia FSS | 9630 | 203,957 | 2,545 | 680 | 197,917 | 97% | TCO/AGT |
| Narragansett | Texas Eastern FSS-1 | 400515 | 56,640 | 944 | 291 | 54,281 | 96% | Tetco/AGT |
| Narragansett | Texas Eastern SS-1 | 400185 | 51,990 | 665 | 267 | 50,134 | 96% | AGT |
| Narragansett | Texas Eastern SS-1 | 400221 | 1,188,033 | 14,137 | 6,107 | 1,102,636 | 93% | AGT |
| Narragansett | Tennessee FS-MA | 62918 | 210,000 | 10,249 | 1,400 | 184,018 | 88% | TGP |
| Narragansett | Tennessee FS-MA | 501 | 605,343 | 10,920 | 4,036 | 521,154 | 86% | TGP |

| | | | | | |
|----------------|-----------|--------|--------|-----------|-----|
| Storage Totals | 4,731,591 | 65,200 | 24,068 | 4,360,778 | 92% |
|----------------|-----------|--------|--------|-----------|-----|

| <u>RHODE ISLAND MONTHLY PLAN</u> | | | |
|------------------------------------------------------------------------------------------------|------------------|-------------------|-------------------|
| January 2019 | | | |
| | <u>MIN DAY</u> | <u>AVG DAY</u> | <u>MAX DAY</u> |
| *4-Year Historical Sendout HDD *All Sales and Transportation customers. No power plants. | 104,122 6 | 228,807 34 | 388,576 60 |
| **Forecasted Sendout HDD **Firm Sales and Transportation customers w/ NGRID Capacity. | 118,249 19 | 212,496 35 | 344,348 60 |
| Forecasted Firm Transportation Forecasted Sales Demand | 22,865 95,384 | 33,891 178,605 | 48,767 295,581 |

| Baseload Election - January 2019 | | |
|----------------------------------|---------------|---------------------|
| Volume per Day (MMBtu) | | |
| Dawn | 1,000 | AMA - Direct Energy |
| Longhaul | <u>27,000</u> | |
| TGP Total | 28,000 | |
| Longhaul/Ramapo | <u>50,000</u> | |
| AGT Total | 50,000 | |
| Grand Total | 78,000 | |

RI Page 2

| Estimated Rhode Island Capacity Breakout for January 2019 | | | | | | | | |
|-----------------------------------------------------------|---------------|-----------------|-----------|-------------|--------------------|----------------------------|----------|-----------------|
| | | | | | | | | |
| ALGONQUIN | | | | | | | | |
| Path | Receipt Point | Receipt Volumes | M2 | M3 | City Gate Capacity | Net CG Deliveries | Baseload | Available Swing |
| Transco Leidy->AGT | Transco | 72 | | 72 | 72 | 72 | 72 | 0 |
| TETCO->AGT | M2 | 27,386 | 27,386 | 26,770 | 26,599 | 26,599 | 26,599 | 0 |
| DTI->TETCO FTS->AGT | Dom SP | 548 | | 530 | 527 | 527 | 527 | 0 |
| TCO->AGT | Maumee | 27,890 | | 27,484 | 27,308 | 27,308 | 22,802 | 4,506 |
| TCO->AGT | Broad Run | 10,148 | | 10,000 | 9,936 | 9,936 | 0 | 9,936 |
| TETCO Leidy-Dominion | Leidy-Dom | 3,844 | | 3,794 | 3,770 | 3,770 | 0 | 3,770 |
| Transco Leidy->AGT SCT | Transco | 1,171 | | 1,165 | 1,158 | 1,158 | 0 | 1,158 |
| AGT | M3 | 2,188 | | 2,188 | 2,174 | 2,174 | 0 | 2,174 |
| TCO->AGT | Eagle | 3,653 | | 3,600 | 3,577 | 3,577 | 0 | 3,577 |
| TCO->AGT | Pennsburg | 3,401 | | 3,352 | 3,331 | 3,331 | 0 | 3,331 |
| RAMAPO->AGT | RAMAPO | 18,783 | | 18,783 | 18,000 | 18,000 | 0 | 18,000 |
| Remaining AGT (SCT) | M3 (SCT) | 3,465 | | 3,465 | 3,443 | 3,443 | 0 | 3,443 |
| AGT Citygate | AGT CG | 14,100 | | | 14,100 | 14,100 | 0 | 14,100 |
| | | 116,649 | Transport | | 113,995 | 113,995 | 50,000 | 63,995 |
| AGT Storage | | | | | | | | |
| Path | Receipt Point | In-Hole WDs | MDWQ | M3 | Storage Capacity | | | |
| GSS-TE 600045 | DTI GSS-TE | 5,636 | 5,636 | 5,549 | 5,513 | | | |
| GSS 300169 | DTI GSS | 2,061 | 2,061 | 2,021 | 2,008 | | | |
| GSS 300171 | DTI GSS | 2,617 | 2,617 | 2,583 | 2,566 | | | |
| FSS 9630 | TCO FSS | 2,545 | 2,545 | 2,508 | 2,492 | | | |
| FSS-1 400515 | TETCO FSS1 | 950 | 944 | 927 | 921 | | | |
| SS-1 400185 | TETCO SS1 | 677 | 665 | 665 | 661 | | | |
| SS-1 400221 | TETCO SS1 | 14,386 | 14,137 | 14,137 | 14,047 | | | |
| Storage | | | | | 28,208 | | | |
| Total | | | | | 142,203 | Available AGT Swing 63,995 | | |
| | | | | | | | | |
| TENNESSEE | | | | | | | | |
| Path | Receipt Point | Receipt Volumes | | At TGP Inct | City Gate Capacity | Net CG Deliveries | Baseload | Available Swing |
| TGP ConnXion 4 --> 6 | Z4 CXN | 11,746 | | | 11,600 | 11,600 | 11,600 | 0 |
| TGP 4 --> 6 | Z4 | 20,084 | | | 19,835 | 19,835 | 15,400 | 4,435 |
| TGP 5 --> 6 | Niagara | 1,077 | | | 1,067 | 1,067 | 0 | 1,067 |
| Union>TrCan>Port->TGP | Dawn | 10,867 | 10,757 | 10,582 | 10,571 | 10,571 | 0 | 10,571 |
| Union>TrCan>IGT->TGP | Dawn | 1,030 | 1,020 | 1,009 | 1,000 | 1,000 | 1,000 | 0 |
| TGP 6 --> 6 | Dracut | 17,700 | | 17,700 | 17,682 | 17,682 | 0 | 17,682 |
| TGP 6 --> 6 | Everett | 25,000 | | 25,000 | 24,925 | 24,925 | 0 | 24,925 |
| TGP 6 --> 6 | Dracut | 358 | | | 358 | 358 | 0 | 358 |
| | | 87,862 | Transport | | 87,038 | 87,038 | 28,000 | 59,038 |
| TGP Storage | | | | | | | | |
| Path | Receipt Point | In-Hole WDs | MDWQ | | Storage Capacity | | | |
| GSS 300168 | DTI GSS | 1,401 | 1,401 | | 1,384 | | | |
| GSS 300170 | DTI GSS | 5,324 | 5,324 | | 5,155 | | | |
| FSMA 62918 | TGP FSMA | 10,249 | 10,249 | | 10,122 | | | |
| FSMA 501 | TGP FSMA | 10,920 | 10,920 | | 10,785 | | | |
| Storage | | | | | 10,836 | | | |
| Total | | | | | 97,874 | Available TGP Swing | | 59,038 |

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| ENGIE Supply |
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| Freepoint AMA |
| Direct AMA |
| REPSOL Supply |
| ENGIE Supply |

ENGIE Supply

Freepoint AMA

Direct AMA

REPSOL Supply

ENGIE Supply

| Company | Field | Contract Number | Storage Capacity Quantity (Dth/Yr) | Current MDWQ (Dth/Day) | Current MDIQ (Dth/Day) | Balance as of December 16 2018 | % Full | W/D via |
|--------------|---------------------|-----------------|------------------------------------|------------------------|------------------------|--------------------------------|--------|---------------|
| Narragansett | Dominion GSS-TE | 600045 | 1,376,324 | 14,337 | 6,431 | 1,190,335 | 86% | Tetco/AGT |
| Narragansett | Dominion GSS | 300168 | 154,050 | 1,401 | 720 | 124,004 | 80% | TGP |
| Narragansett | Dominion GSS | 300169 | 206,100 | 2,061 | 963 | 169,722 | 82% | DTI/Tetco/AGT |
| Narragansett | Dominion GSS | 300170 | 490,340 | 5,324 | 2,291 | 398,314 | 81% | DTI/TGP |
| Narragansett | Dominion GSS | 300171 | 188,814 | 2,617 | 882 | 144,569 | 77% | Tetco/AGT |
| Narragansett | Columbia FSS | 9630 | 203,957 | 2,545 | 680 | 171,945 | 84% | TCO/AGT |
| Narragansett | Texas Eastern FSS-1 | 400515 | 56,640 | 944 | 291 | 52,207 | 92% | Tetco/AGT |
| Narragansett | Texas Eastern SS-1 | 400185 | 51,990 | 665 | 267 | 49,181 | 95% | AGT |
| Narragansett | Texas Eastern SS-1 | 400221 | 1,188,033 | 14,137 | 6,107 | 1,081,547 | 91% | AGT |
| Narragansett | Tennessee FS-MA | 62918 | 210,000 | 10,249 | 1,400 | 176,390 | 84% | TGP |
| Narragansett | Tennessee FS-MA | 501 | 605,343 | 10,920 | 4,036 | 536,470 | 89% | TGP |

| | | | | | |
|----------------|-----------|--------|--------|-----------|-----|
| Storage Totals | 4,731,591 | 65,200 | 24,068 | 4,094,684 | 87% |
|----------------|-----------|--------|--------|-----------|-----|

| <u>RHODE ISLAND MONTHLY PLAN</u> | | | |
|------------------------------------------------------------------------------------------------|------------------|-------------------|-------------------|
| February 2019 | | | |
| | <u>MIN DAY</u> | <u>AVG DAY</u> | <u>MAX DAY</u> |
| *4-Year Historical Sendout HDD *All Sales and Transportation customers. No power plants. | 77,478 8 | 215,210 33 | 368,125 62 |
| **Forecasted Sendout HDD **Firm Sales and Transportation customers w/ NGRID Capacity. | 115,528 16 | 201,169 33 | 284,754 49 |
| Forecasted Firm Transportation Forecasted Sales Demand | 21,739 93,789 | 31,201 169,968 | 40,056 244,698 |

| Baseload Election - February 2019 | | |
|-----------------------------------|---------------|---------------------|
| Volume per Day (MMBtu) | | |
| Dawn | 1,000 | AMA - Direct Energy |
| Longhaul | <u>25,000</u> | |
| TGP Total | 26,000 | |
| Longhaul/Ramapo | <u>44,000</u> | |
| AGT Total | 44,000 | |
| Grand Total | 70,000 | |

RI Page 2

| Estimated Rhode Island Capacity Breakout for February 2019 | | | | | | | | |
|------------------------------------------------------------|---------------|-----------------|-----------|-------------|--------------------|---------------------|----------|-----------------|
| | | | | | | | | |
| ALGONQUIN | | | | | | | | |
| Path | Receipt Point | Receipt Volumes | M2 | M3 | City Gate Capacity | Net CG Deliveries | Baseload | Available Swing |
| Transco Leidy->AGT | Transco | 72 | | 72 | 72 | 72 | 72 | 0 |
| TETCO->AGT | M2 | 27,382 | 27,382 | 26,766 | 26,595 | 26,595 | 26,595 | 0 |
| DTI->TETCO FTS->AGT | Dom SP | 548 | | 530 | 527 | 527 | 527 | 0 |
| TETCO Leidy-Dominion | TET-Leidy | 3,844 | | 3,794 | 3,770 | 3,770 | 3,770 | 0 |
| TCO->AGT | Maumee | 27,888 | | 27,483 | 27,307 | 27,307 | 13,036 | 14,271 |
| TCO->AGT | Broad Run | 10,148 | | 10,000 | 9,936 | 9,936 | 0 | 9,936 |
| Transco Leidy->AGT SCT | Transco | 1,171 | | 1,165 | 1,158 | 1,158 | 0 | 1,158 |
| AGT | M3 | 2,207 | | 2,207 | 2,193 | 2,193 | 0 | 2,193 |
| Millen->Ramapo->AGT | Millennium | 9,072 | | 9,000 | 8,625 | 8,625 | 0 | 8,625 |
| TCO->AGT | Eagle | 3,653 | | 3,600 | 3,577 | 3,577 | 0 | 3,577 |
| TCO->AGT | Pennsburg | 3,401 | | 3,352 | 3,331 | 3,331 | 0 | 3,331 |
| RAMAPO->AGT | RAMAPO | 9,783 | | 9,783 | 9,375 | 9,375 | 0 | 9,375 |
| Remaining AGT (SCT) | M3 (SCT) | 3,465 | | 3,465 | 3,443 | 3,443 | 0 | 3,443 |
| AGT Citygate | AGT CG | 14,100 | | | 14,100 | 14,100 | 0 | 14,100 |
| | | 116,734 | Transport | | 114,009 | 114,009 | 44,000 | 70,009 |
| AGT Storage | | | | | | | | |
| Path | Receipt Point | In-Hole WDs | MDWQ | M3 | Storage Capacity | | | |
| GSS-TE 600045 | DTI GSS-TE | 5,636 | 5,636 | 5,549 | 5,513 | | | |
| GSS 300169 | DTI GSS | 2,061 | 2,061 | 2,021 | 2,008 | | | |
| GSS 300171 | DTI GSS | 2,617 | 2,617 | 2,583 | 2,566 | | | |
| FSS 9630 | TCO FSS | 2,545 | 2,545 | 2,508 | 2,492 | | | |
| FSS-1 400515 | TETCO FSS1 | 950 | 944 | 927 | 921 | | | |
| SS-1 400185 | TETCO SS1 | 677 | 665 | 665 | 661 | | | |
| SS-1 400221 | TETCO SS1 | 14,386 | 14,137 | 14,137 | 14,047 | | | |
| Storage | | | | | 28,208 | | | |
| Total | | | | | 142,217 | Available AGT Swing | | 70,009 |
| | | | | | | | | |
| TENNESSEE | | | | | | | | |
| Path | Receipt Point | Receipt Volumes | | At TGP Inct | City Gate Capacity | Net CG Deliveries | Baseload | Available Swing |
| TGP ConnXion 4 --> 6 | Z4 CXN | 11,746 | | | 11,600 | 11,600 | 11,600 | 0 |
| TGP 4 --> 6 | Z4 | 20,084 | | | 19,835 | 19,835 | 13,400 | 6,435 |
| TGP 5 --> 6 | Niagara | 1,077 | | | 1,067 | 1,067 | 0 | 1,067 |
| Union>TrCan>Port->TGP | Dawn | 10,884 | 10,757 | 10,595 | 10,584 | 10,584 | 0 | 10,584 |
| Union>TrCan>IGT->TGP | Dawn | 1,032 | 1,020 | 1,009 | 1,000 | 1,000 | 1,000 | 0 |
| TGP 6 --> 6 | Dracut | 17,700 | | 17,700 | 17,682 | 17,682 | 0 | 17,682 |
| TGP 6 --> 6 | Everett | 25,000 | | 25,000 | 24,925 | 24,925 | 0 | 24,925 |
| TGP 6 --> 6 | Dracut | 431 | | | 431 | 431 | 0 | 431 |
| | | 87,954 | Transport | | 87,124 | 87,124 | 26,000 | 61,124 |
| TGP Storage | | | | | | | | |
| Path | Receipt Point | In-Hole WDs | MDWQ | | Storage Capacity | | | |
| GSS 300168 | DTI GSS | 1,401 | 1,401 | | 1,384 | | | |
| GSS 300170 | DTI GSS | 5,324 | 5,324 | | 5,155 | | | |
| FSMA 62918 | TGP FSMA | 10,249 | 10,249 | | 10,122 | | | |
| FSMA 501 | TGP FSMA | 10,920 | 10,920 | | 10,785 | | | |
| Storage | | | | | 10,836 | | | |
| Total | | | | | 97,960 | Available TGP Swing | | 61,124 |

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| ENGIE Supply |
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| Freepoint AMA |
| Direct AMA |
| REPSOL Supply |
| ENGIE Supply |

ENGIE Supply

Freepoint AMA
Direct AMA
REPSOL Supply
ENGIE Supply

| Company | Field | Contract Number | Storage Capacity Quantity (Dth/Yr) | Current MDWQ (Dth/Day) | Current MDIQ (Dth/Day) | Balance as of January 21 2019 | % Full | W/D via |
|--------------|---------------------|-----------------|------------------------------------|------------------------|------------------------|-------------------------------|--------|---------------|
| Narragansett | Dominion GSS-TE | 600045 | 1,376,324 | 14,337 | 6,431 | 938,166 | 68% | Tetco/AGT |
| Narragansett | Dominion GSS | 300168 | 154,050 | 1,401 | 720 | 97,133 | 63% | TGP |
| Narragansett | Dominion GSS | 300169 | 206,100 | 2,061 | 963 | 125,397 | 61% | DTI/Tetco/AGT |
| Narragansett | Dominion GSS | 300170 | 490,340 | 5,324 | 2,291 | 294,830 | 60% | DTI/TGP |
| Narragansett | Dominion GSS | 300171 | 188,814 | 2,617 | 1,049 | 89,852 | 48% | Tetco/AGT |
| Narragansett | Columbia FSS | 9630 | 203,957 | 2,545 | 816 | 121,046 | 59% | TCO/AGT |
| Narragansett | Texas Eastern FSS-1 | 400515 | 56,640 | 944 | 291 | 40,376 | 71% | Tetco/AGT |
| Narragansett | Texas Eastern SS-1 | 400185 | 51,990 | 665 | 267 | 40,833 | 79% | AGT |
| Narragansett | Texas Eastern SS-1 | 400221 | 1,188,033 | 14,137 | 6,107 | 903,280 | 76% | AGT |
| Narragansett | Tennessee FS-MA | 62918 | 210,000 | 10,249 | 1,400 | 114,749 | 55% | TGP |
| Narragansett | Tennessee FS-MA | 501 | 605,343 | 10,920 | 4,036 | 516,599 | 85% | TGP |

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|----------------|-----------|--------|--------|-----------|-----|
| Storage Totals | 4,731,591 | 65,200 | 24,371 | 3,282,261 | 69% |
|----------------|-----------|--------|--------|-----------|-----|

| <u>RHODE ISLAND MONTHLY PLAN</u> | | | |
|--------------------------------------------------------------|----------------|----------------|----------------|
| March 2019 | | | |
| | <u>MIN DAY</u> | <u>AVG DAY</u> | <u>MAX DAY</u> |
| *4-Year Historical Sendout HDD | 72,422 2 | 185,675 27 | 304,852 48 |
| *All Sales and Transportation customers. No power plants. | | | |
| **Forecasted Sendout HDD | 94,643 14 | 154,458 26 | 232,643 39 |
| **Firm Sales and Transportation customers w/ NGRID Capacity. | | | |
| Forecasted Firm Transportation | 18,569 | 26,878 | 35,967 |
| Forecasted Sales Demand | 76,074 | 127,580 | 196,676 |

| Baseload Election - March 2019 | | |
|--------------------------------|--------|---------------------|
| Volume per Day (MMBtu) | | |
| Dawn | 0 | AMA - Direct Energy |
| Longhaul | 21,000 | |
| TGP Total | 21,000 | |
| Longhaul/Ramapo | 34,000 | |
| AGT Total | 34,000 | |
| Grand Total | 55,000 | |

RI Page 2

| Estimated Rhode Island Capacity Breakout for March 2019 | | | | | | | | |
|---------------------------------------------------------|---------------|-----------------|-----------|-------------|--------------------|---------------------|----------|-----------------|
| ALGONQUIN | | | | | | | | |
| Path | Receipt Point | Receipt Volumes | M2 | M3 | City Gate Capacity | Net CG Deliveries | Baseload | Available Swing |
| Transco Leidy->AGT | Transco | 72 | | 72 | 72 | 72 | 72 | 0 |
| TETCO->AGT | M2 | 27,382 | 27,382 | 26,766 | 26,595 | 26,595 | 26,595 | 0 |
| DTI->TETCO FTS->AGT | Dom SP | 548 | | 530 | 527 | 527 | 527 | 0 |
| TETCO Leidy-Dominion | TET-Leidy | 4,052 | | 4,000 | 3,974 | 3,974 | 3,974 | 0 |
| TCO->AGT | Maumee | 27,888 | | 27,483 | 27,307 | 27,307 | 2,832 | 24,475 |
| TCO->AGT | Broad Run | 10,148 | | 10,000 | 9,936 | 9,936 | 0 | 9,936 |
| Transco Leidy->AGT SCT | Transco | 1,171 | | 1,165 | 1,158 | 1,158 | 0 | 1,158 |
| AGT | M3 | 2,201 | | 2,201 | 2,187 | 2,187 | 0 | 2,187 |
| Millen->Ramapo->AGT | Millennium | 9,072 | | 9,000 | 8,625 | 8,625 | 0 | 8,625 |
| TCO->AGT | Eagle | 3,653 | | 3,600 | 3,577 | 3,577 | 0 | 3,577 |
| TCO->AGT | Pennsburg | 3,401 | | 3,352 | 3,331 | 3,331 | 0 | 3,331 |
| RAMAPO->AGT | RAMAPO | 9,783 | | 9,783 | 9,375 | 9,375 | 0 | 9,375 |
| Remaining AGT (SCT) | M3 (SCT) | 3,465 | | 3,465 | 3,443 | 3,443 | 0 | 3,443 |
| AGT Citygate | AGT CG | 14,100 | | | 14,100 | 14,100 | 0 | 14,100 |
| | | 116,936 | Transport | | 114,207 | 114,207 | 34,000 | 80,207 |
| AGT Storage | | | | | | | | |
| Path | Receipt Point | In-Hole WDs | MDWQ | M3 | Storage Capacity | | | |
| GSS-TE 600045 | DTI GSS-TE | 5,636 | 5,636 | 5,549 | 5,513 | | | |
| GSS 300169 | DTI GSS | 2,061 | 2,061 | 2,021 | 2,008 | | | |
| GSS 300171 | DTI GSS | 2,408 | 2,408 | 2,377 | 2,362 | | | |
| FSS 9630 | TCO FSS | 2,545 | 2,545 | 2,508 | 2,492 | | | |
| FSS-1 400515 | TETCO FSS1 | 950 | 944 | 927 | 921 | | | |
| SS-1 400185 | TETCO SS1 | 677 | 665 | 665 | 661 | | | |
| SS-1 400221 | TETCO SS1 | 14,386 | 14,137 | 14,137 | 14,047 | | | |
| Storage | | | | | 28,004 | | | |
| Total | | | | | 142,211 | Available AGT Swing | | 80,207 |
| TENNESSEE | | | | | | | | |
| Path | Receipt Point | Receipt Volumes | | At TGP Inct | City Gate Capacity | Net CG Deliveries | Baseload | Available Swing |
| TGP ConnXion 4 --> 6 | Z4 CXN | 11,746 | | | 11,600 | 11,600 | 11,600 | 0 |
| TGP 4 --> 6 | Z4 | 20,084 | | | 19,835 | 19,835 | 9,400 | 10,435 |
| TGP 5 --> 6 | Niagara | 1,077 | | | 1,067 | 1,067 | 0 | 1,067 |
| Union>TrCan>Port->TGP | Dawn | 10,877 | 10,757 | 10,589 | 10,578 | 10,578 | 0 | 10,578 |
| Union>TrCan>IGT->TGP | Dawn | 1,031 | 1,020 | 1,009 | 1,000 | 1,000 | 0 | 1,000 |
| TGP 6 --> 6 | Dracut | 17,700 | | 17,700 | 17,682 | 17,682 | 0 | 17,682 |
| TGP 6 --> 6 | Everett | 25,000 | | 25,000 | 24,925 | 24,925 | 0 | 24,925 |
| TGP 6 --> 6 | Dracut | 415 | | | 415 | 415 | 0 | 415 |
| | | 87,930 | Transport | | 87,102 | 87,102 | 21,000 | 66,102 |
| TGP Storage | | | | | | | | |
| Path | Receipt Point | In-Hole WDs | MDWQ | | Storage Capacity | | | |
| GSS 300168 | DTI GSS | 1,401 | 1,401 | | 1,384 | | | |
| GSS 300170 | DTI GSS | 5,324 | 5,324 | | 5,155 | | | |
| FSMA 62918 | TGP FSMA | 10,249 | 10,249 | | 10,122 | | | |
| FSMA 501 | TGP FSMA | 10,920 | 10,920 | | 10,785 | | | |
| Storage | | | | | 10,836 | | | |
| Total | | | | | 97,938 | Available TGP Swing | | 66,102 |
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ENGIE Supply

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| Company | Field | Contract Number | Storage Capacity Quantity (Dth/Yr) | Current MIDWQ (Dth/Day) | Current MDIQ (Dth/Day) | Balance as of February 19 2019 | % Full | W/D via |
|--------------|---------------------|-----------------|------------------------------------|-------------------------|------------------------|--------------------------------|--------|---------------|
| Narragansett | Dominion GSS-TE | 600045 | 1,376,324 | 14,337 | 6,431 | 707,622 | 51% | Tetco/AGT |
| Narragansett | Dominion GSS | 300168 | 154,050 | 1,401 | 856 | 69,698 | 45% | TGP |
| Narragansett | Dominion GSS | 300169 | 206,100 | 2,061 | 1,145 | 82,305 | 40% | DTI/Tetco/AGT |
| Narragansett | Dominion GSS | 300170 | 490,340 | 5,324 | 2,724 | 193,182 | 39% | DTI/TGP |
| Narragansett | Dominion GSS | 300171 | 188,814 | 2,408 | 1,049 | 49,355 | 26% | Tetco/AGT |
| Narragansett | Columbia FSS | 9630 | 203,957 | 2,545 | 816 | 73,521 | 36% | TCO/AGT |
| Narragansett | Texas Eastern FSS-1 | 400515 | 56,640 | 944 | 291 | 29,823 | 53% | Tetco/AGT |
| Narragansett | Texas Eastern SS-1 | 400185 | 51,990 | 665 | 267 | 32,783 | 63% | AGT |
| Narragansett | Texas Eastern SS-1 | 400221 | 1,188,033 | 14,137 | 6,107 | 761,669 | 64% | AGT |
| Narragansett | Tennessee FS-MA | 62918 | 210,000 | 10,249 | 1,400 | 190,398 | 91% | TGP |
| Narragansett | Tennessee FS-MA | 501 | 605,343 | 10,920 | 4,036 | 443,310 | 73% | TGP |

| | | | | | |
|----------------|-----------|--------|--------|-----------|-----|
| Storage Totals | 4,731,591 | 64,991 | 25,122 | 2,633,666 | 56% |
|----------------|-----------|--------|--------|-----------|-----|

Division 1-13

Request:

Please identify the current Company fuel allowance percentage assessed to transportation customers for company-use and lost-and-unaccounted-for gas and explain how the charge is determined and when it is updated. Please explain whether any transportation customers receive a discount to the generally applicable Company fuel allowance.

Response:

The Company's current fuel allowance percentage is 3.01%, as posted on its external website¹. This percentage is updated annually on November 1 by comparing the Company's aggregated wholesale throughput at its city gates to the aggregated retail throughput at its customers' meters for twelve months September through August. The Company then averages the most recent five years of fuel allowance percentages to calculate the fuel allowance to be applied in the upcoming GCR year (November – October).

The Company does not assess the Company fuel allowance to transportation customers directly but instead assesses the fuel allowance percentage on marketer nominations at the Company's citygate, with the 'net' volume delivered to transportation customers' facilities. There are no discounts to the generally applicable Company fuel allowance provided to marketers, and the Company is not aware of how marketers pass on the cost of the allowance to their customers.

¹ https://www.nationalgridus.com/media/pdfs/billing-payments/rigas_firm_rates.pdf

Division 1-14

Request:

Please identify the projected increase in planning load annual and design day demands due to capacity exempt customers switching to sales service or becoming capacity eligible for each year of the forecast period included in the 2019 Gas Long-Range Supply Plan.

Response:

The Company's forecast does not include the conversion of capacity-exempt customers converting to sales service. Capacity-exempt customers are prohibited from purchasing gas from National Grid except if their marketer drops them. During that period, they are provided Default Service until they arrange service with a replacement marketer.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4963
2019 Annual Gas Cost Recovery Filing
Responses to the Division's First Set of Data Requests
Issued August 16, 2019

Division 1-16

Request:

Please provide a first-of-the month index price for the period April 2018 through March 2019 for each pipeline point location the Company purchased gas at any time during the period April 2018 through March 2019.

Response:

Please see Attachment DIV 1-16.

| FOM Index | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 | Sep-18 | Oct-18 | Nov-18 | Dec-18 | Jan-19 | Feb-19 | Mar-19 |
|-------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Texas Eastern - M2, receipts | 2.22 | 2.27 | 2.19 | 2.32 | 2.4 | 2.46 | 2.38 | 2.78 | 4.29 | 3.31 | 2.68 | 2.6 |
| Texas Eastern - M3 | 2.32 | 2.37 | 2.29 | 2.44 | 2.51 | 2.56 | 2.54 | 3.02 | 5.66 | 6.88 | 4.5 | 2.96 |
| Algonquin, City-gates | 4.14 | 2.65 | 2.49 | 2.79 | 2.89 | 2.96 | 3.46 | 3.68 | 10.53 | 9.35 | 7.56 | 4.52 |
| Columbia Gas, Appalachia | 2.5 | 2.61 | 2.65 | 2.81 | 2.62 | 2.67 | 2.73 | 2.95 | 4.53 | 3.4 | 2.74 | 2.65 |
| Dominion, Appalachia | 2.24 | 2.32 | 2.22 | 2.34 | 2.4 | 2.48 | 2.43 | 2.78 | 4.32 | 3.32 | 2.71 | 2.62 |
| Iroquois, receipts | 2.73 | 2.69 | 2.6 | 2.86 | 2.9 | 2.91 | 3.09 | 3.6 | 5.82 | 5.29 | 3.68 | 3.25 |
| Millennium, East Pool | 2.15 | 2 | 1.52 | 2.16 | 2.22 | 2.42 | 2.35 | 2.85 | 4.35 | 3.41 | 2.77 | 2.61 |
| Tennessee, zone 4 - 200 Leg | 2.42 | 2.51 | 2.43 | 2.64 | 2.59 | 2.69 | 2.81 | 3.04 | 4.56 | 3.47 | 2.79 | 2.7 |
| Tennessee, zone 4 - 313 Pool | 2.35 | 2.42 | 2.37 | 2.55 | 2.53 | 2.64 | 2.75 | 2.99 | 4.43 | 3.37 | 2.71 | 2.71 |
| Dracut, Mass. | No Index | No Index | No Index | No Index | No Index | No Index | No Index | No Index | No Index | No Index | No Index | No Index |
| Tennessee, Zone 0 | 2.57 | 2.7 | 2.76 | 2.83 | 2.66 | 2.77 | 2.9 | 3.1 | 4.62 | 3.53 | 2.83 | 2.76 |
| Tennessee, Louisiana, 500 Leg | 2.62 | 2.76 | 2.81 | 2.92 | 2.75 | 2.83 | 2.96 | 3.15 | 4.71 | 3.59 | 2.88 | 2.79 |
| Tennessee, Louisiana, 800 Leg | 2.6 | 2.75 | 2.79 | 2.9 | 2.74 | 2.82 | 2.92 | 3.12 | 4.67 | 3.54 | 2.85 | 2.76 |
| Jan 2019) | 4.21 | 2.7 | 2.58 | 2.83 | 2.84 | 2.92 | 3.43 | 4.32 | 11.4 | 9.55 | No Index | 4.58 |
| Transco, Leidy Line receipt | 2.17 | 1.99 | 1.5 | 2.17 | 2.23 | 2.47 | 2.5 | 2.88 | 4.38 | 3.38 | 2.78 | 2.63 |
| Niagara | 2.6 | 2.59 | 2.49 | 2.7 | No Index | No Index | 2.87 | 3.32 | 5.04 | 3.83 | 3.33 | 2.96 |

Division 1-22

Request:

Please provide the same information requested in the prior question for all exchange or park and loan activities wherein, for a fee, the Company accepts the delivery of gas from a counter-party at one pipeline location and delivers it to another location, accepts the delivery of gas from a counter-party and agrees to return it at a later date, or delivers gas to a counter-party at a point in time and accepts the return of that gas at a later point in time.

Response:

The Company has not engaged in any exchange or park and loan activities.

Division 1-23

Request:

Please provide, on an aggregate basis (as opposed to an individual supplier basis), a monthly tabulation of FT-1 and FT-2 transportation customer imbalances for the period April 2018 through March 2019. That is, provide receipts of customer-owned gas adjusted for distribution system fuel retention and on-system storage activity versus consumption. Show how the imbalances were resolved, including those cashed-out, cashed-in, those carried forward, or resolved through other means. Include quantities and rates applicable to resolving imbalances (e.g., cash-out) as appropriate.

Response:

Please see Attachment DIV 1-23 for FT-1 and FT-2 imbalances for the period April 2018 through March 2019 and the cash out index rate by month. The imbalances are cashed out as described below.

FT-1 and FT-2 transportation customer imbalances are resolved as described in the Company's gas tariff, RIPUC NG-GAS No. 101, Section 6, Transportation Terms and Conditions, Schedule C (Gas Tariff). The Company has provided the relevant excerpts from the Gas Tariff below:

2.0 FT-1 Transportation service:

2.03.2 Monthly Imbalances:

For each Aggregation Pool, the Marketer must maintain total Actual Transportation Quantities within a reasonable tolerance of total monthly Gas Usage. Any differences between total Monthly Transportation Quantities for an Aggregation Pool and the aggregated Gas Usage of Customers in the Aggregation Pool, expressed as a percentage of total Monthly Transportation Quantities will be cashed out according to the following schedule:

| Imbalance Tier | Over-deliveries | Under-deliveries |
|----------------|---------------------------------------------------------|-------------------------------------------------------------------------------|
| 0% - 5% | The average of the Daily Indices for the relevant Month | The highest average of seven consecutive Daily Indices for the Relevant Month |

| | | |
|-------------|-------------------------------------|-------------------------------------|
| > 5% - 10% | 0.85 times the above stated rate | 1.15 times the above stated rate |
| > 10% - 15% | 0.60 times the above stated rate | 1.4 times the above stated rate |
| > 15% | 0.25 times the above stated rate | 1.75 times the above stated rate |

1.04.3 Marketer Responsibility

For Critical Days or Operational Flow Orders (OFO) aggravated by under-delivery, the Marketer will be charged a penalty of 5 times the Daily Index for the aggregated Gas Usage of Customers in the Aggregation Pool that exceed 102% of the Marketer's aggregate actual receipts on the Transporting Pipeline at the Point of Receipt. The Marketer will be charged a penalty of 0.1 times the Daily Index for the differences between said receipts and said usage that exceed 20% of said receipts $[(\text{Receipts} - \text{Usage}) > (20\% \times \text{Receipts})]$.

For Critical Days or OFO's aggravated by over-delivery, the Marketer will be charged a penalty of 0.1 times the Daily Index for the aggregated Gas Usage of Customers in the Aggregation Pool that exceed 120% of the Marketer's aggregate actual receipts on the Transporting Pipeline at the Point of Receipt. The Marketer will be charged a penalty of 5 times the Daily Index for the differences between said receipts and said usage that exceed 2% of said receipts $[(\text{Receipts} - \text{Usage}) > (2\% \times \text{Receipts})]$.

The forecasted daily use (FDU) will be calculated each day. Imbalances between customer Gas Usage and the Forecasted Daily Usage (FDU), adjusted for actual weather, will be cashed out at the average of the Algonquin and Tennessee city gate delivered monthly indexes. The Company will prorate the imbalance amount between the months billed based on the customer's base load and heating use factors and apply the average monthly index to the corresponding month's imbalance quantity. Customer imbalances get split into individual months using degree days. That imbalance is then multiplied by that month's daily index.

The imbalance amount will be a credit if deliveries exceed the customer's use and a debit if deliveries are less than the customer's use. The billed imbalance amount for any billing will be the sum of the imbalance charges or credits attributable to each individual month.

3.03.1 Critical Days:

To satisfy the FDU (Forecasted Daily Use) nomination requirement on Critical Days, the Marketer is required to fully utilize upstream capacity that it received from Company through Capacity Release so as to help avoid restricting the Company's ability to provide efficient and reliable firm transportation and sales service. Notice of Critical Days will be posted on the EBB no later than concurrent with the posting of the FDU nomination requirement.

3.03.2 Over- and Under-deliveries:

Under-deliveries at times when an OFO or critical day have not been declared will be cashed out at 120% of daily index. If the Company declares an OFO or critical day condition reducing the tolerance for over-deliveries, any over-deliveries of the aggregation pool's gas requirements, above the FDU, will be cashed out at 40% of the daily index. In addition, the Company reserves the right to reject such a nomination. Over-deliveries at other times will be cashed out at 80% of Daily Index.

1.06.0 Shipper And Transporting Pipeline Requirements:

Marketers must deliver a minimum of forty percent (40%) of total daily pipeline receipts (including all of the Marketer's Aggregation Pools serving both FT-1 and FT-2 customers) on each of the upstream pipelines: Algonquin Gas Transmission ("Algonquin") and Tennessee Gas Pipeline ("Tennessee"). The remaining twenty percent (20%) of total daily pipeline receipts (including all of the Marketer's Aggregation Pools serving both FT-1 and FT-2 customers) may be delivered on either or both Algonquin or Tennessee.

If the Marketer does not deliver gas on the transporting pipelines as required above, the Company may charge the Marketer a penalty of 0.5 times the Daily Index for all differences less than the forty (40) percent minimum requirement on each transporting pipeline.

| Month | Imbalances in Dekatherms. | | Total Imbalance Dekatherms. | Average of the Daily Indices for the relevant Month |
|--------------|---------------------------|--------------------|-----------------------------|-----------------------------------------------------|
| | FT-1* | FT-2** | | |
| Apr-2018 | 59,321.70 | 23,123.39 | 82,445.09 | \$4.99 |
| May-2018 | -13,503.60 | 5,655.63 | -7,847.97 | \$2.37 |
| Jun-2018 | -14,951.10 | -12,868.57 | -27,819.67 | \$2.68 |
| Jul-2018 | 16,032.40 | -9,003.31 | 7,029.09 | \$2.81 |
| Aug-2018 | 25,385.50 | -17,795.49 | 7,590.01 | \$3.14 |
| Sep-2018 | 30,447.40 | -2929.016 | 27,518.38 | \$2.93 |
| Oct-2018 | -2,650.30 | -40,509.58 | -43,159.88 | \$3.45 |
| Nov-2018 | 51,868.70 | -26399.9 | 25,468.80 | \$6.12 |
| Dec-2018 | 98,709.40 | -31,201.15 | 67,508.26 | \$5.78 |
| Jan-2019 | 98,033.30 | -32,987.17 | 65,046.13 | \$6.99 |
| Feb-2019 | 71,595.30 | -16,479.53 | 55,115.77 | \$4.24 |
| Mar-2019 | 84,746.50 | -6,720.15 | 78,026.36 | \$4.05 |
| Total | 505035.2 | -168,114.84 | 336,920.36 | |

*The FT-1 imbalances are cashed out using the tier rates as listed in question Division 1-23.

**The FT-2 imbalance are separated into appropriate months using degree days, then multiplied by the average of the daily indices for the relevant month.

Division 1-24

Request:

Please identify the daily and monthly balancing requirements imposed on FT-1 and FT-2 transportation customers and explain how the balancing requirements of transportation customers affects the amount and type of capacity reserved by the Company. Identify any currently applicable balancing charges assessed to transportation customers.

Response:

Please see the Company's response to Division 1-23 for the daily and monthly balancing requirements imposed on FT-1 and FT-2 transportation customers and the applicable balancing charges assessed to transportation customers.

As the delivery point operator, the Company must balance total load, including transportation customer load as well as sales customer load, with both Algonquin and Tennessee. The Company requires assets in its gas supply portfolio to balance total load on the level imposed by the respective pipeline (i.e. daily, hourly, etc.).

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Division 1-25

Request:

Please identify the extent to which the Company is able to use its long-haul Tennessee capacity with Gulf Coast production area primary receipt points to purchase Tennessee Zone 4 gas supplies.

Response:

The Company has the ability to purchase Tennessee Zone 4 gas supplies using long haul capacity with Gulf Coast production area primary receipt points under three out of nine Tennessee transportation contracts to which it is a party. The following table illustrates the Company's capability under each of those contracts:

| Contract | MDQ | Production Area Entitlements | | Zone 4 Capabilities |
|----------|--------|------------------------------|--------|---------------------|
| 1597 | 29,335 | Zone 0 | 9,522 | 29,335 |
| | | Zone 1 | 19,813 | |
| 64025 | 5,220 | Zone 0 | 5,220 | 5,220 |
| 64026 | 6,380 | Zone 0 | 6,380 | 6,380 |

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Division 1-26

Request:

Please identify the extent to which the Company is able to use its long-haul Texas Eastern capacity with Gulf Coast production area primary receipt points to purchase Texas Eastern M-2 gas supplies.

Response:

The Company has the ability to purchase Texas Eastern M-2 gas supplies using long haul capacity with Gulf Coast production area primary receipt points under two out of twelve transportation contracts to which it is a party. The following table illustrates the Company's capability under each of those contracts:

| Contract | MDQ | Production Area Entitlements | | M-2 Capabilities |
|----------|--------|------------------------------|--------|------------------|
| 800156 | 2,099 | STX | 585 | 2,099 |
| | | ETX | 392 | |
| | | WLA | 900 | |
| | | ELA | 1,504 | |
| 800303 | 45,934 | STX | 14,193 | 45,934 |
| | | ETX | 9,523 | |
| | | WLA | 21,846 | |
| | | ELA | 31,460 | |

Division 1-31

Request:

Please explain the basis for calculating the fixed cost gas cost recovery rate for high and low load factor sales customers based on the percentage of design winter sales.

Response:

The Rhode Island Public Utilities Commission (PUC) approved the Company's proposal to establish fixed cost gas cost recovery rates for high load factor (HLF) and low load factor (LLF) customers in the Company's 2008 Rate Filing RIPUC Docket No. 3943. The HLF factor rate classes use proportionately less of their gas for heating, thereby placing less demand on the supply portfolio under peak conditions. Since the Company's gas supply resources are planned so that there is sufficient capacity to meet the needs of firm sales customers under design winter conditions, allocating fixed costs to HLF and LLF rate classes based on their proportion of design winter usage is appropriate.

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Division 1-32

Request:

Please provide the projected design day, design winter, and design annual volumes of high and low load factor sales customers for the period November 2019 through October 2020.

Response:

While the Company does not have daily metered retail data to precisely forecast a retail design day, it has estimated these values (in Dth) as:

| | Design Day | Design Winter | Design Year |
|------------------------|------------|---------------|-------------|
| Low Load Factor Sales | 303,664 | 21,347,602 | 29,690,745 |
| High Load Factor Sales | 5,750 | 491,863 | 860,638 |

Division 1-33

Request:

For the periods November 2018 through October 2019 and November 2019 through October 2020, please provide the following projected design day demand quantities:

- a. Total for which the Company performs capacity planning;
- b. FT-2 customer demands met by pipeline FT capacity;
- c. FT-2 customer demands met by pipeline and LNG storage (separately);
- d. FT-1 capacity exempt customer demands met by pipeline FT capacity;
- e. FT-1 capacity exempt customer demands met by pipeline and LNG storage (separately);
- f. FT-1 capacity assigned customer demands met by pipeline FT capacity;
- g. FT-1 capacity assigned customer demands met by pipeline and LNG storage (separately);
- h. Sales customer demands met by pipeline FT capacity; and
- i. Sales customer demands meet by pipeline and LNG storage (separately).

Response:

Data for 2018-19 forecasted design day are based on capacity releases for January 2019. Data for 2019-20 forecasted design day are based on capacity releases for September 2019.

| | <u>Nov 2018 – Oct 2019</u> | <u>Nov 2019 – Oct 2020</u> |
|------------------------------------------------------------------------|-------------------------------------------------|-------------------------------------------|
| a. Total for which the Company performs capacity planning; | 390,227 Dth (Dkt. 4872, Att. AEL-1, page 13) | 388,746 Dth (Att. MJPAEL-1, page 13) |
| b. FT-2 customer demands met by pipeline FT capacity; | Pipeline: 20,225 Dth | Pipeline: 20,564 Dth |
| c. FT-2 customer demands met by pipeline and LNG storage (separately); | Storage: 4,641 Dth Peaking: 19,835 Dth | Storage: 4,686 Dth Peaking: 20,027 Dth |

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| | | |
|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| d. FT-1 capacity exempt customer demands met by pipeline FT capacity; | 30,530 Dth (Note: the Company does not perform capacity planning for the capacity-exempt customers) | 30,603 Dth (Note: the Company does not perform capacity planning for the capacity-exempt customers) |
| e. FT-1 capacity exempt customer demands met by pipeline and LNG storage (separately); | The Company is unaware of the supplies delivered to FT-1 capacity-exempt customers. Their total forecasted sendout is presented in (d) above. | The Company is unaware of the supplies delivered to FT-1 capacity-exempt customers. Their total forecasted sendout is presented in (d) above. |
| f. FT-1 capacity assigned customer demands met by pipeline FT capacity; | Pipeline: 14,166 Dth | Pipeline: 14,115 Dth |
| g. FT-1 capacity assigned customer demands met by pipeline and LNG storage (separately); | Storage and peaking: 8,827 Dth (based on the Company's forecast of their total peak less (f)) | Storage and peaking: 12,159 Dth (based on the Company's forecast of their total peak less (f)) |
| h. Sales customer demands met by pipeline FT capacity; and | Pipeline: 141,331 Dth | Pipeline: 155,755 Dth |
| i. Sales customer demands meet by pipeline and LNG storage (separately). | Storage: 38,030 Dth Peaking: 151,999 Dth | Storage: 38,128 Dth Peaking: 135,471 Dth |

Division 1-34

Request:

Reference Attachment AEL-6 in Docket No. 4872, Book 1 (2018 GCR filing). Please explain how the capacity assignment table percentages are determined and how they are used in the allocation of capacity quantities and costs.

Response:

The capacity assignment table percentages, which are an estimated allocation of the Company's capacity during a peak day, are reset annually via a multi-step analysis. As part of each Annual GCR filing, the Company provides the excel file which details the actual calculations and derivation of the capacity allocators. First, the Company allocates its peak day volumes between base load and heat load for each rate class. The base load for each rate class is based on average actual volumes for the billing months July through September, when customers are not using natural gas for space heating. The design heating load is calculated by dividing the remaining volumes (heating load) by the actual Heating Degree Days (HDD) to derive a heat factor (therms per HDD) for each rate class and multiplying the heat factors for a winter month (typically January or February) by the design HDD as determined by the load forecasting department. The resulting base load and heating load, excluding volumes associated with capacity exempt customers, represents the Company's design day throughput by rate class.

Next, the Company allocates its peak day capacity between pipeline, storage and peaking capacity. First, it assumes base load is served by pipeline supply, and directly assigns base load to each rate class based upon the analysis described above. Next, it determines how much incremental heating load can be served by remaining contracted pipeline capacity and allocates the remaining pipeline capacity to each rate class based on the design heating load by rate class. Finally, the Company also uses the design heating load by rate class to allocate its total storage and peaking capacity to each rate class, resulting in a complete allocation of pipeline, storage, and peaking capacity by rate class. The Company subtotals the allocated capacity for all high load factor (HLF) rate classes and all low load factor (LLF) rate classes to determine two sets of capacity allocators, one for the HLF customers, and one for the LLF customers.

The capacity allocators are then used to determine how much pipeline, storage and peaking capacity is "released" (either physically or virtually) to a marketer when a sales customer elects to transition to a marketer for gas supply. These allocations ensure that customers transitioning to a marketer are assigned a representative slice of the Company's capacity costs to avoid placing an unfair burden upon the Company's remaining sales customers. For example, in the Company's 2018-2019 GCR filing in RIPUC Docket No. 4872, the Company credited the

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capacity costs that were assigned to the Marketers in Exhibit NGC/EDA-1, thereby reducing the fixed capacity costs billed to its firm sales customers via the GCR factor.

Division 1-40

Request:

Please provide an explanation for each of the following line items included in the June 28, 2019 Annual Gas Recovery Reconciliation filing:

- a. Schedule 2, page 3, lines 74 and 75. Storage Fixed Costs-Facilities and Storage Fixed Costs-Deliveries;
- b. Schedule 3, page 1, lines 10 and 11. Manchester Street Volumes and Fixed Cost Factor;
- c. Schedule 3, page 1, lines 18-20. Please explain why revenues are not realized in each month there are sales volumes;
- d. Schedule 3, page 1, lines 21-23. Please explain why the variable supply costs fluctuates significantly from month to month; and
- e. Schedule 3, page 1, line 25. Referred Responsibility.

Response:

- a. Storage Fixed Costs-Facilities represents fixed costs incurred by the Company to reserve space in various storage facilities to store gas for use during winter months. Conversely, Storage Fixed Cost-Deliveries represents fixed costs incurred by the Company to reserve capacity on various pipeline segments used to deliver natural gas from underground storage facilities to the city gate when called upon.
- b. Lines (10)-(11) and (27)-(28) reflect revenues generated by the Company's special contract to provide firm gas supply service to Dominion Power (Dominion) at the Manchester Street Gate Station in Providence, Rhode Island. In accordance with the terms of the contract, the Company charges Dominion a flat annual fee, which includes the commodity cost of gas necessary to operate the boilers located at the gate station. Therefore, to ensure that the Company does not recover the cost of commodity it purchases to serve Dominion from tariff sales customers, the Company reflects an estimate of commodity revenue received under this contract in the GCR reconciliation. This estimate is derived by multiplying Dominion's monthly throughput volumes by the GCR Fixed Cost Factor (lines (10)-(11)) and the Variable Cost Factor (lines (27)-(28)), grossed up by the uncollectible percentage approved in the most recent base distribution rate case. Therefore, commodity cost incurred by the Company to serve Dominion is offset by this revenue reflected in the GCR reconciliation.

However, in preparing this response, the Company discovered that it inadvertently credited this commodity revenue to customers twice beginning in September 2018 with the implementation of new base distribution rates approved in Docket No. 4770. In

designing the new base distribution rates, the Company credited the entire annual fee associated with the Dominion contract, which includes both distribution and commodity revenue, to firm tariff customers. See Docket No. 4770 Compliance Attachment 14, Schedule 2, Page 5, Line 10. Therefore, customers are already receiving the necessary credit through lower base distribution rates to offset Dominion-related commodity costs. Consequently, to avoid crediting customers for the commodity portion of the Dominion revenue twice, once through base distribution rates and again through the GCR, the Company will cease crediting the Dominion commodity costs in future GCR reconciliations beginning in November 2019. The Company will not revise its November 2018 through October 2019 GCR reconciliation to exclude the Dominion credits.

- c. The Transition Sales Service (TSS) is a surcharge billed to those customers who migrate from transportation service back to sales service. The TSS surcharge is calculated¹ each month in accordance with the Company's Tariff² and posted to the Company's website. There is no revenue reflected in Schedule 3, page 1, lines (18)-(20) for the months of April 2018 through November 2018 and January 2019 through March 2019 because the TSS surcharge was zero during those periods. Please see Attachment DIV 1-40 for the historical summary of TSS rates posted on the Company's external website.
- d. Schedule 3, page 1, lines (21)-(23) show the calculation of revenues attributable to Default Transportation Service as described in the Company's Tariff, Section 6, Transportation Terms and Conditions, Schedule C, Section 2.04.0. This service is available for customers who do not have pipeline capacity assignment from the Company and whose marketers are no longer delivering gas on their behalf. This service is intended as a temporary backstop for customers to receive gas service while securing a new marketer. The Default Service Rate is calculated³ each month and will vary monthly depending upon the daily index as well as seasonal multipliers. Please see Attachment DIV 1-40 for the historical summary of the Default Service Rates posted on the Company's external website.
- e. Schedule 3, page 1, line (25) shows the revenue associated with Deferred Responsibility charge, which ensures that customers migrating from sales service to transportation service are charged or credited their fair share of the deferred gas cost balance. As described in detail in the Company's Tariff, Section 2, Schedule A, Section 9.0, the Deferred Gas Cost Responsibility seeks to assess to migrating customers their fair share of (1) the prior period deferred gas cost reconciliation amount reflected in the Company's current Gas Charge; and (2) any incremental under-recovery or over-recovery of actual costs versus projected costs that accrue while the current Gas Charge is in effect. These

¹ Each month the Company provides the detail calculation of the TSS Rate to the Division and PUC via email.

² See RIPUC NG-GAS No. 101, Section 5, Commercial and Industrial Services, Schedule H

³ Each month the Company provides the detail calculation of the Default Rate to the Division and PUC via email.

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charges or credits are reflected in the GCR reconciliation (Schedule 3, page 1, line (25))
to ensure that the remaining sales customers are unaffected by customer migration.

Gas Supply Costs For Business Customers



Gas Supply Costs are the portion of your service for which you can shop for an alternate energy supplier, energy service company, or gas marketer. National Grid also provides gas supply should you not wish to buy your gas supply from the market or find yourself without a gas supply from the market.

National Grid's tariffs provide for gas supply to its business customers and should be consulted as the official terms of service.

Firm Gas Supply Provided by National Grid

National Grid supplies gas and pipeline capacity that brings the gas into New England through its Gas Cost Recovery (GCR) Clause. The rates for this service are regulated by the Rhode Island Public Utilities Commission and are established annually for the year November through October, but can be adjusted at any point during the year if gas costs change significantly. Most, but not all, of our customers, are eligible for this service, and if you are not eligible, National Grid provides the gas supply services listed below. Generally, all firm sales customers receive this service, which guarantees a source of uninterrupted gas.

The GCR current rates for National Grid's gas supply through October 2018, unless new rates are approved by the Public Utilities Commission before this date, are:

High Load¹ Customers, effective November 1, 2018 \$0.6100 per therm

Low Load² Customers, effective November 1, 2018 \$0.7041 per therm

¹ High Load Customers are customers receiving service on the following rate schedules: Residential Non-Heating, Large High Load C&I, Extra Large High Load C&I.

² Low Load Customers are customers receiving service on the following rate schedules: Residential Heating, Small C&I, Medium C&I, Large Low Load C&I, Extra Large Low Load C&I.

The following services are available to those customers not eligible for Firm Gas Supply.

Transitional Sales Service (TSS)

Business customers who are receiving service on National Grid's Firm Transportation Service and are assigned pipeline capacity by National Grid are eligible for TSS should they be without a supplier. TSS is not available for customers who have elected no capacity assignment from National Grid. Eligible customers are assessed a TSS surcharge in addition to the GCR rate for their gas supply. The TSS surcharge is applicable to usage from the time the customer returns to National Grid gas supply through April 30. If the customer has not returned to a supplier by April 30, the customer will remain on sales service and charged the GCR rate. Recent TSS surcharges are shown below.

Default Transportation Service

Default Transportation Service is required for any large or extra large business customer receiving Firm Transportation Service who: have their gas usage recorded on a daily basis (FT-1 classification), do not have pipeline capacity assigned to them from National Grid, and finds themselves, for whatever reason, without a supplier. For more important information about Default Transportation Service, please refer to National Grid's Transportation Terms and Conditions, Section 2.04. Recent Default Transportation Service rates are shown below.

Default Transportation Service is also required for business customers receiving Non-Firm Transportation Service. Customers on Non-Firm Transportation Service are not assigned capacity by National Grid. Should a customer on Non-Firm Transportation Service find itself, for whatever reason, without a supplier, the customer will be billed on Default Transportation Service for the first month it receives gas supply from National Grid, and will be billed the Unauthorized Use rate for any additional months in accordance with National Grid's Transportation Terms and Condition.

Non-Firm Sales Service

Beginning July 1, 2009, Non-Firm Sales (NFS) service is closed except those receiving NFS service on July 1, 2009. The rates for gas supply to NFS customers are shown on the next page.

Deferred Gas Cost Responsibility

The Deferred Gas Cost Responsibility is applicable to a business customer who has been receiving Firm Sales Service and elects to transfer to Transportation Service to purchase their gas supply from a supplier. The Deferred Gas Cost Responsibility is to ensure that the customer has been assessed their share of deferred gas costs, as approved by the PUC, at the end of the October prior to the customer transferring to a supplier, for the period of time the customer was receiving Firm Sales Service. The calculation can result in either a charge or a credit to the customer's account. For the calculation of the Deferred Gas Cost Responsibility amount, please refer to National Grid's Gas Cost Recovery Clause, Section 2, Schedule A, Item 9.0.

Gas Supply Costs For Business Customers



Summary Of Rates

| Effective Date | TSS Surcharge (\$/therm) | Default Transportation Service (\$/therm) | Non-Firm Sales Service (\$/therm) |
|-------------------|--------------------------|-------------------------------------------|-----------------------------------|
| March 1, 2019 | \$0.0000 | \$0.7041 | \$0.35135 |
| February 1, 2019 | \$0.0000 | \$1.0654 | \$1.04998 |
| January 1, 2019 | \$0.0000 | \$1.3368 | \$1.08423 |
| December 1, 2018 | \$0.0253 | \$1.5261 | \$0.83211 |
| November 1, 2018 | \$0.0000 | \$0.7041 | \$0.38129 |
| October 1, 2018 | \$0.0000 | \$0.7516 | \$0.30115 |
| September 1, 2018 | \$0.0000 | \$0.7516 | \$0.31194 |
| August 1, 2018 | \$0.0000 | \$0.7614 | \$0.31831 |
| July 1, 2018 | \$0.0000 | \$0.7614 | \$0.33057 |
| June 1, 2018 | \$0.0000 | \$0.7614 | \$0.30501 |
| May 1, 2018 | \$0.0000 | \$0.7614 | \$0.29547 |
| April 1, 2018 | \$0.0000 | \$0.7614 | \$0.29661 |
| March 1, 2018 | \$0.0000 | \$0.7614 | \$0.36965 |
| February 1, 2018 | \$0.0317 | \$1.8723 | \$1.29630 |
| January 1, 2018 | \$0.0000 | \$1.7071 | \$0.81690 |
| December 1, 2017 | \$0.0000 | \$0.8510 | \$0.51234 |
| November 1, 2017 | \$0.0000 | \$0.5291 | \$0.34659 |
| October 1, 2017 | \$0.0000 | \$0.4766 | \$0.28239 |
| September 1, 2017 | \$0.0000 | \$0.4766 | \$0.29241 |
| August 1, 2017 | \$0.0000 | \$0.4766 | \$0.29309 |
| July 1, 2017 | \$0.0000 | \$0.4766 | \$0.29355 |
| June 1, 2017 | \$0.0121 | \$0.4766 | \$0.33054 |
| May 1, 2017 | \$0.0087 | \$0.4766 | \$0.33054 |
| April 1, 2017 | \$0.0024 | \$0.4766 | \$0.32155 |
| March 1, 2017 | \$0.0000 | \$0.4766 | \$0.35285 |
| February 1, 2017 | \$0.0000 | \$1.0462 | \$0.76478 |
| January 1, 2017 | \$0.0388 | \$1.7160 | \$1.05230 |
| December 1, 2016 | \$0.0000 | \$0.6536 | \$0.44163 |
| November 1, 2016 | \$0.0000 | \$0.4766 | \$0.28399 |
| October 1, 2016 | \$0.0000 | \$0.5530 | \$0.16634 |
| September 1, 2016 | \$0.0000 | \$0.5530 | \$0.16942 |
| August 1, 2016 | \$0.0000 | \$0.5530 | \$0.24491 |
| July 1, 2016 | \$0.0000 | \$0.5530 | \$0.27166 |
| June 1, 2016 | \$0.0000 | \$0.5530 | \$0.18058 |
| May 1, 2016 | \$0.0000 | \$0.5530 | \$0.16111 |
| April 1, 2016 | \$0.0000 | \$0.5530 | \$0.15746 |
| March 1, 2016 | \$0.0000 | \$0.5530 | \$0.24923 |
| February 1, 2016 | \$0.0000 | \$0.6434 | \$0.56576 |
| January 1, 2016 | \$0.0000 | \$0.9389 | \$0.52227 |
| December 1, 2015 | \$0.0000 | \$0.7175 | \$0.36731 |
| November 1, 2015 | \$0.0000 | \$0.6678 | \$0.30150 |
| October 1, 2015 | \$0.0000 | \$0.6871 | \$0.25402 |
| September 1, 2015 | \$0.0000 | \$0.6871 | \$0.25094 |
| August 1, 2015 | \$0.0000 | \$0.6871 | \$0.23247 |
| July 1, 2015 | \$0.0000 | \$0.6871 | \$0.26690 |

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Gas Supply Costs For Business Customers



| | | | |
|-------------------|----------|----------|-----------|
| June 1, 2015 | \$0.0000 | \$0.6871 | \$0.31342 |
| May 1, 2015 | \$0.0000 | \$0.6871 | \$0.28343 |
| April 1, 2015 | \$0.0000 | \$0.6871 | \$0.29563 |
| March 1, 2015 | \$0.0000 | \$1.3585 | \$0.64577 |
| February 1, 2015 | \$0.0000 | \$1.4502 | \$1.06648 |
| January 1, 2015 | \$0.0000 | \$1.5244 | \$1.36815 |
| December 1, 2014 | \$0.0000 | \$1.9526 | \$0.85053 |
| November 1, 2014 | \$0.0000 | \$0.7898 | \$0.33588 |
| October 1, 2014 | \$0.0000 | \$0.9208 | \$0.30523 |
| September 1, 2014 | \$0.0000 | \$0.9208 | \$0.28443 |
| August 1, 2014 | \$0.0000 | \$0.9208 | \$0.32570 |
| July 1, 2014 | \$0.0000 | \$0.9208 | \$0.43865 |
| June 1, 2014 | \$0.0000 | \$0.9208 | \$0.41087 |
| May 1, 2014 | \$0.0000 | \$0.9208 | \$0.44757 |
| April 1, 2014 | \$0.0000 | \$0.9208 | \$0.53171 |
| March 1, 2014 | \$0.0171 | \$2.0795 | \$0.85112 |
| February 1, 2014 | \$0.0790 | \$4.3220 | \$2.15004 |
| January 1, 2014 | \$0.0000 | \$3.0235 | \$1.00237 |
| December 1, 2013 | \$0.0000 | \$1.9765 | \$0.58338 |
| November 1, 2013 | \$0.0000 | \$0.7145 | \$0.43385 |
| October 1, 2013 | \$0.0000 | \$0.6725 | \$0.43039 |
| September 1, 2013 | \$0.0000 | \$0.6725 | \$0.40042 |
| August 1, 2013 | \$0.0000 | \$0.6725 | \$0.43278 |
| July 1, 2013 | \$0.0000 | \$0.6725 | \$0.45055 |
| June 1, 2013 | \$0.0000 | \$0.7120 | \$0.47584 |
| May 1, 2013 | \$0.0000 | \$0.6725 | \$0.49737 |
| April 1, 2013 | \$0.0000 | \$0.7300 | \$0.46092 |
| March 1, 2013 | \$0.0000 | \$1.2085 | \$0.54590 |
| February 1, 2013 | \$0.0000 | \$1.2730 | \$0.72988 |
| January 1, 2013 | \$0.0000 | \$1.3585 | \$0.72122 |
| December 1, 2012 | \$0.0000 | \$1.4190 | \$0.62621 |
| November 1, 2012 | \$0.0000 | \$0.6675 | \$0.42811 |
| October 1, 2012 | \$0.0000 | \$0.7896 | \$0.34810 |
| September 1, 2012 | \$0.0000 | \$0.7896 | \$0.32123 |
| August 1, 2012 | \$0.0000 | \$0.7896 | \$0.34504 |
| July 1, 2012 | \$0.0000 | \$0.7896 | \$0.35077 |
| June 1, 2012 | \$0.0000 | \$0.7896 | \$0.32566 |
| May 1, 2012 | \$0.0000 | \$0.7896 | \$0.24957 |
| April 1, 2012 | \$0.0000 | \$0.7896 | \$0.28594 |
| March 1, 2012 | \$0.0000 | \$0.7896 | \$0.33691 |
| February 1, 2012 | \$0.0000 | \$0.7896 | \$0.51630 |
| January 1, 2012 | \$0.0000 | \$0.7896 | \$0.67388 |

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