Celia B. O'Brien
Assistant General Counsel and Director

August 4, 2015

VIA HAND DELIVERY & ELECTRONIC MAIL

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

RE: Docket 4568 – The Narragansett Electric Company d/b/a National Grid
Review of Electric Distribution Rate Design Pursuant to R.I. Gen. Laws § 39-26.6-24
Responses to PUC Data Requests – Set 1

Dear Ms. Massaro:

On behalf of National Grid[1], I enclose ten (10) copies of the Company's responses to the first set of data requests issued by the Public Utilities Commission (PUC) on August 14, 2015 in the above-referenced docket.

Please be advised that the Company is seeking protective treatment of its response to data request PUC 1-31, as permitted by PUC Rule 1.2(g) and by R.I. Gen. Laws § 38-2-2(4)(B).

This filing also contains a Motion for Protective Treatment in accordance with PUC Rule 1.2(g) and R.I. Gen. Laws § 38-2-2(4)(B). In compliance with Rule 1.2(g), National Grid is providing one (1) complete unredacted copy of the confidential version of its response to data request PUC 1-31 in a sealed envelope marked, **"Contains Privileged and Confidential Materials – Do Not Release."**

Thank you for your attention to this transmittal. If you have any questions concerning this filing, please contact me at 781-907-2153.

Very truly yours,

Celia B. O'Brien

Enclosures

cc: Docket 4568 Service List
Leo Wold, Esq.
Karen Lyons, Esq.
Steve Scialabba

[1] The Narragansett Electric Company d/b/a National Grid (National Grid or the Company).

40 Sylvan Road, Waltham, MA 02451
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Certificate of Service

I hereby certify that a copy of the cover letter and any materials accompanying this certificate was electronically transmitted to the individuals listed below.

Paper copies of this filing are being hand delivered to the Rhode Island Public Utilities Commission and to the Rhode Island Division of Public Utilities and Carriers.

Joanne M. Scanlon

September 4, 2015
Date

Docket No. 4568 National Grid's Rate Design Pursuant to R.I. Gen. Laws Sec 39-26.6-24
Service List updated 9/2/15

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Thadeus B. Culley, Esq. Keyes, FOX & Weidman LLP 401 Harrison Oaks Blvd., Suite 100 Cary, NC 27517	tculley@kfwlaw.com;	510-314-8205
File an original & 9 copies w/ PUC: Luly E. Massaro, Commission Clerk **Public Utilities Commission** 89 Jefferson Blvd. Warwick, RI 02888	Luly.massaro@puc.ri.gov; Cynthia.wilsonfrias@puc.ri.gov; Alan.nault@puc.ri.gov; Todd.bianco@puc.ri.gov;	401-780-2107
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STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

RHODE ISLAND PUBLIC UTILITIES COMMISSION

In Re: Review of The Narragansett Electric Company d/b/a National Grid's Rate Design Pursuant to R.I. Gen. Laws § 39-26.6-24 **Docket No. 4568**

REQUEST OF THE NARRAGANSETT ELECTRIC COMPANY d/b/a NATIONAL GRID FOR PROTECTIVE TREATMENT OF CONFIDENTIAL INFORMATION

National Grid[1] hereby requests that the Rhode Island Public Utilities Commission (PUC) provide confidential treatment and grant protection from public disclosure of certain confidential, competitively sensitive, and proprietary information submitted in this proceeding, as permitted by PUC Rule 1.2(g) and R.I. Gen. Laws § 38-2-2(4)(B). National Grid also hereby requests that, pending entry of that finding, the PUC preliminarily grant National Grid's request for confidential treatment pursuant to Rule 1.2(g)(2).

I. BACKGROUND

On September 4, 2015, National Grid filed with the PUC the Company's response to data request PUC 1-31 in this docket. Data request PUC 1-31 requests that the Company confirm the Navy's current rate class and describe the effect that the Company's proposal to consolidate the G-32 and G-62 rate classes will have on the Navy's annual electricity costs. The Company's response contains customer-specific and account information relating to the Navy's rate class and the effect on the Navy of the Company's proposed G-32/G-62 rate class consolidation

[1] The Narragansett Electric Company d/b/a National Grid (National Grid or the Company).

proposal (i.e., whether the customer will experience an increase or decrease in annual electricity costs as compared to its actual calendar year 2014 total annual bill) if the Company's proposal is approved by the PUC. Customer-specific and account information is proprietary to the customer, and only that customer has the right to indicate whether the customer's information should be available to anyone else (i.e., a competitive supplier or marketer) or to the public in general. Therefore, the Company seeks protection for this customer-specific and account information. The Company has provided public versions of the Company's response to data request PUC 1-31.

II. LEGAL STANDARD

The PUC's Rule 1.2(g) provides that access to public records shall be granted in accordance with the Access to Public Records Act (APRA), R.I. Gen. Laws § 38-2-1, *et seq.* Under APRA, all documents and materials submitted in connection with the transaction of official business by an agency is deemed to be a "public record," unless the information contained in such documents and materials falls within one of the exceptions specifically identified in R.I. Gen. Laws § 38-2-2(4). Therefore, to the extent that information provided to the PUC falls within one of the designated exceptions to the public records law, the PUC has the authority under the terms of APRA to deem such information to be confidential and to protect that information from public disclosure.

In that regard, R.I. Gen. Laws § 38-2-2(4)(B) provides that the following types of records shall not be deemed public:

> Trade secrets and commercial or financial information obtained from a person, firm, or corporation which is of a privileged or confidential nature.

The Rhode Island Supreme Court has held that this confidential information exemption applies where disclosure of information would be likely either (1) to impair the Government's ability to obtain necessary information in the future; or (2) to cause substantial harm to the competitive position of the person from whom the information was obtained. Providence Journal Company v. Convention Center Authority, 774 A.2d 40 (R.I.2001).

The first prong of the test is satisfied when information is voluntarily provided to the governmental agency and that information is of a kind that would customarily not be released to the public by the person from whom it was obtained. Providence Journal, 774 A.2d at 47.

III. BASIS FOR CONFIDENTIALITY

The Company seeks protective treatment of the customer-specific information provided in the Company's response to data request PUC 1-31. This response provides customer-specific and account information regarding the customer's rate class and the effect of the Company's proposal to consolidate the G-32 and G-62 rate classes on the customer (i.e., whether the customer will experience an increase or decrease in annual electricity costs as compared to its actual calendar year 2014 total annual bill) if the Company's proposal is approved by the PUC. This customer-specific and account information contained in the Company's response to PUC 1-31, including the amount of the customer's actual calendar year 2014 total annual bill, is treated as confidential and proprietary within the Company and is not disseminated outside the Company. The Company's customers have come to expect that National Grid will maintain this information on a confidential basis. Moreover, the PUC has recognized each customer's right to control dissemination of the customer's account information, address and other personal or customer-specific information. Such customer-specific information is proprietary to the

customer and only the customer has the right to indicate whether such information should be available in the public domain. In addition, the PUC has historically granted protective treatment over the disclosure of the identifying information of the Company's customers. Public disclosure of this information would substantially harm National Grid's customer who has not otherwise consented to the public disclosure of its information, and would undermine National Grid's integrity with its customers. Accordingly, the Company requests that the PUC grant protective treatment to the Company's response to PUC 1-31.

IV. CONCLUSION

For the reasons set forth above, the Company respectfully requests that the PUC grant its Motion for Protective Treatment as stated herein.

Respectfully submitted,

THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID

By its attorney,

_____

Celia B. O'Brien, Esq. (RI Bar #4484)
National Grid
40 Sylvan Road
Waltham, MA 02451
(781) 907-2153

Dated: September 4, 2015

PUC 1-1

Request:

Please explain the concept of a kw-month. How is it measured?

Response:

The usage of the phrase "per kW-month" in the Company's joint pre-filed direct testimony on page 60 was intended to represent "per kW, per month". Billed kWs are typically measured via a demand meter, with the determination of the monthly kW value as defined in the Company's delivery service tariffs. For stand-alone distributed generation facilities, the kW value will be determined based on the facility's nameplate capacity adjusted by the capacity availability factor applicable to the facility. However, please see the Company's response to PUC 1-21 for a discussion regarding the optimum solution for pricing in this situation.

Prepared by or under the supervision of: Peter T. Zschokke and Jeanne A. Lloyd

PUC 1-2

Request:

There are customers who will only fall within a tier for one month but then use significantly less in the remaining 11 months. Please revise NG-13 to provide for a direct comparison of customers within each tier using 250 kWh per month, 350 kWh per month, 500 kWh per month, 600kWh per month, 750 kWh per month, 1,000 kWh per month, and 1200 kWh per month in all applicable tiers.

Response:

Please see Attachment PUC 1-2.

The Company performed many analyses prior to setting the tiers in this review of electric distribution rate design, which included:

- Frequency analysis based on all kWh;
- Frequency analysis based on maximum kWh by customer;
- Analysis on range of kWh consumption by customer;
- Load data analysis; and
- Average monthly kWh consumption within tier.

The Company fully understands that, with the current proposed rate design, there will be customers who save less than they otherwise would under the current rate structure when reducing consumption in a month. However, there are other instances where the customer will save more under the proposed rates than they would under current rates. The intent of the design—and specifically the Company's intention to limit customers' annual bill impacts to +/- 5%—was to mitigate the occurrence of bill volatility (large swings in billing and large changes in savings).

As an example, Attachment PUC 1-2 shows that a residential customer placed in Tier 4 (maximum usage greater than 1,200 kWh per month) using only 250 kWh in a month would see a bill increase of $10.83, or 20.6%. Schedule NG-13 beginning on page 147 of the Company's July 31, 2015 filing shows that, within the Company's 2014 data, only 3.8% of residential customers have both a maximum monthly usage greater than 1,200 kWh and an average monthly usage less than 770 kWh. Although it is theoretically possible for a customer to have a maximum monthly usage greater than 1,200 kWh and a monthly usage of 250 kWh, the Company's analyses of the 2014 data did not indicate that there were any customers with this usage pattern.

Prepared by or under the supervision of: Peter T. Zschokke and Jeanne A. Lloyd

Calculation of Monthly Typical Bill
Total Bill Impact of Proposed
Rates Applicable to A-16 Rate Customers

Average Monthly kWh	Maximum Monthly kWh	Present Rates Total	Present Rates Standard Offer	Present Rates Delivery	Proposed Rates Total	Proposed Rates Standard Offer	Proposed Rates Delivery	Increase/(Decrease) Amount	Increase/(Decrease) % of Total	Percentage of Customers in Tier
0	0 - 250	$6.15	$0.00	$6.15	$6.41	$0.00	$6.41	$0.26	4.2%	
250		$52.59	$27.10	$25.49	$50.14	$27.10	$23.04	($2.45)	-4.7%	13.9%
250	251 - 750	$52.59	$27.10	$25.49	$53.53	$27.10	$26.43	$0.94	1.8%	
350		$71.15	$37.93	$33.22	$71.01	$37.93	$33.08	($0.14)	-0.2%	
500		$99.02	$54.19	$44.83	$97.25	$54.19	$43.06	($1.77)	-1.8%	
600		$117.59	$65.03	$52.56	$114.75	$65.03	$49.72	($2.84)	-2.4%	
750		$145.46	$81.29	$64.17	$140.99	$81.29	$59.70	($4.47)	-3.1%	39.6%
250	751 - 1200	$52.59	$27.10	$25.49	$58.21	$27.10	$31.11	$5.62	10.7%	
350		$71.15	$37.93	$33.22	$75.70	$37.93	$37.77	$4.55	6.4%	
500		$99.02	$54.19	$44.83	$101.94	$54.19	$47.75	$2.92	2.9%	
600		$117.59	$65.03	$52.56	$119.43	$65.03	$54.40	$1.84	1.6%	
750		$145.46	$81.29	$64.17	$145.68	$81.29	$64.39	$0.22	0.2%	
1,000		$191.90	$108.39	$83.51	$189.41	$108.39	$81.02	($2.49)	-1.3%	
1,200		$229.04	$130.06	$98.98	$224.39	$130.06	$94.33	($4.65)	-2.0%	23.5%
250	GT 1200	$52.59	$27.10	$25.49	$63.42	$27.10	$36.32	$10.83	20.6%	
350		$71.15	$37.93	$33.22	$80.91	$37.93	$42.98	$9.76	13.7%	
500		$99.02	$54.19	$44.83	$107.15	$54.19	$52.96	$8.13	8.2%	
600		$117.59	$65.03	$52.56	$124.64	$65.03	$59.61	$7.05	6.0%	
750		$145.46	$81.29	$64.17	$150.88	$81.29	$69.59	$5.42	3.7%	
1,000		$191.90	$108.39	$83.51	$194.62	$108.39	$86.23	$2.72	1.4%	
1,200		$229.04	$130.06	$98.98	$229.60	$130.06	$99.54	$0.56	0.2%	23.0%

Present Rates			Proposed Rates		
Customer Charge (1)		$5.00	Customer Charge - Tier 1 (0-250 kWh) (2)		$5.25
			Customer Charge - Tier 2 (251-750kWh) (2)		$8.50
			Customer Charge - Tier 3 (751-1200kWh) (2)		$13.00
			Customer Charge - Tier 4 (Greater than 1200 kWh) (2)		$18.00
RE Growth Factor		$0.17	RE Growth Factor		$0.17
LIHEAP Charge		$0.73	LIHEAP Charge		$0.73
Transmission Energy Charge	kWh x	$0.02348	Transmission Energy Charge	kWh x	$0.02348
Distribution Energy Charge (3)	kWh x	$0.04065	Distribution Energy Charge (4)	kWh x	$0.03026
Transition Energy Charge	kWh x	($0.00201)	Proposed Transition Energy Charge	kWh x	($0.00201)
Energy Efficiency Program Charge	kWh x	$0.00983	Energy Efficiency Program Charge	kWh x	$0.00983
Renewable Energy Distribution Charge	kWh x	$0.00232	Renewable Energy Distribution Charge	kWh x	$0.00232
Gross Earnings Tax		4.00%	Gross Earnings Tax		4.00%
Standard Offer Charge	kWh x	$0.10405	Standard Offer Charge	kWh x	

Note (1): Current Customer Charge

Note (2): Proposed Tiered Customer Charge

Note (3): includes the current Base Distribution Charge of 3.664¢/kWh, the current CapEx factor of 0.153¢/kWh, the current O&M factor of 0.183¢/kWh, the current CapEx Reconciliation Factor of (0.021)¢/kWh, the current O&M Reconciliation Factor of (0.005)¢/kWh, and the current RDM Reconciliation Factor of 0.091¢

Note (4): includes the proposed Base Distribution Charge of 2.625¢/kWh, the current CapEx factor of 0.153¢/kWh, the current O&M factor of 0.183¢/kWh, the current CapEx Reconciliation Factor of (0.021)¢/kWh, the current O&M Reconciliation Factor of (0.005)¢/kWh, and the current RDM Reconciliation Factor of 0.091¢

Calculation of Monthly Typical Bill
Total Bill Impact of Proposed
Rates Applicable to C-06 Rate Customers

Average Monthly kWh	Maximum Monthly kWh	Present Rates Total	Present Rates Standard Offer	Present Rates Delivery	Proposed Rates Total	Proposed Rates Standard Offer	Proposed Rates Delivery	Increase/(Decrease) Amount	Increase/(Decrease) % of Total	Percentage of Customers in Tier
0	0 - 100	$11.45	$0.00	$11.45	$11.97	$0.00	$11.97	$0.52	4.5%	
100		$27.84	$9.36	$18.48	$27.71	$9.36	$18.35	($0.13)	-0.5%	15.6%
250	101-700	$52.44	$23.40	$29.04	$52.62	$23.40	$29.22	$0.18	0.3%	
350		$68.83	$32.76	$36.07	$68.36	$32.76	$35.60	($0.47)	-0.7%	
500		$93.43	$46.80	$46.63	$91.97	$46.80	$45.17	($1.46)	-1.6%	
600		$109.82	$56.16	$53.66	$107.71	$56.16	$51.55	($2.11)	-1.9%	34.9%
250	701-2000	$52.44	$23.40	$29.04	$58.35	$23.40	$34.95	$5.91	11.3%	
350		$68.83	$32.76	$36.07	$74.09	$32.76	$41.33	$5.26	7.6%	
500		$93.43	$46.80	$46.63	$97.70	$46.80	$50.90	$4.27	4.6%	
600		$109.82	$56.16	$53.66	$113.44	$56.16	$57.28	$3.62	3.3%	
750		$134.41	$70.20	$64.21	$137.05	$70.20	$66.85	$2.64	2.0%	
1,000		$175.39	$93.59	$81.80	$176.39	$93.59	$82.80	$1.00	0.6%	
1,200		$208.18	$112.31	$95.87	$207.87	$112.31	$95.56	($0.31)	-0.1%	26.6%
250	GT 2000	$52.44	$23.40	$29.04	$67.47	$23.40	$44.07	$15.03	28.7%	
350		$68.83	$32.76	$36.07	$83.21	$32.76	$50.45	$14.38	20.9%	
500		$93.43	$46.80	$46.63	$106.82	$46.80	$60.02	$13.39	14.3%	
600		$109.82	$56.16	$53.66	$122.56	$56.16	$66.40	$12.74	11.6%	
750		$134.41	$70.20	$64.21	$146.17	$70.20	$75.97	$11.76	8.7%	
1,000		$175.39	$93.59	$81.80	$185.51	$93.59	$91.92	$10.12	5.8%	
1,200		$208.18	$112.31	$95.87	$216.99	$112.31	$104.68	$8.81	4.2%	22.9%

Present Rates		
Customer Charge (1)		$10.00
RE Growth Factor		$0.26
LIHEAP Charge		$0.73
Transmission Energy Charge	kWh x	$0.02072
Distribution Energy Charge (3)	kWh x	$0.03668
Transition Energy Charge	kWh x	($0.00201)
Energy Efficiency Program Charge	kWh x	$0.00983
Renewable Energy Distribution Charge	kWh x	$0.00232
Gross Earnings Tax		4.00%
Standard Offer Charge	kWh x	$0.08985

Proposed Rates		
Customer Charge - Tier 1 (0-100 kWh) (2)		$10.50
Customer Charge - Tier 2 (101-700 kWh) (2)		$11.75
Customer Charge - Tier 3 (701-2000 kWh) (2)		$17.25
Customer Charge - Tier 4 (Greater than 2000 kWh) (2)		$26.00
RE Growth Factor		$0.26
LIHEAP Charge		$0.73
Transmission Energy Charge	kWh x	$0.02072
Distribution Energy Charge (4)	kWh x	$0.03039
Proposed Transition Energy Charge	kWh x	($0.00201)
Energy Efficiency Program Charge	kWh x	$0.00983
Renewable Energy Distribution Charge	kWh x	$0.00232
Gross Earnings Tax		4.00%
Standard Offer Charge	kWh x	$0.08985

Note (1): Current Customer Charge

Note (2): Proposed Tiered Customer Charge

Note (3): includes the current Base Distribution Charge of 3.253¢/kWh, the current CapEx factor of 0.150¢/kWh, the current O&M factor of 0.200¢/kWh, the current CapEx Reconciliation Factor of (0.021)¢/kWh, the current O&M Reconciliation Factor of (0.005)¢/kWh, and the current RDM Reconciliation Factor of 0.091¢

Note (4): includes the proposed Base Distribution Charge of 2.624¢/kWh, the current CapEx factor of 0.150¢/kWh, the current O&M factor of 0.200¢/kWh, the current CapEx Reconciliation Factor of (0.021)¢/kWh, the current O&M Reconciliation Factor of (0.005)¢/kWh, and the current RDM Reconciliation Factor of 0.091¢

PUC 1-3

Request:

Please provide the number and kW of all current DG and Net Metering customers as of the end of the most recent 12-month period (please identify the date used).

Response:

Please see the table below which provides all customers of record who are either in the RI DG program or are Net Metering customers.

Interconnected as of 12/31/2014		
Program	Number of Interconnected Customers	kW
RI DG Program	20	17,092
Net Meter	420	12,393

Prepared by or under the supervision of: Timothy R. Roughan

PUC 1-4

Request:

Please provide the annual lost kWh sales from DG and net metering customers for the most recent 12-month period (please identify the date used).

Response:

Please refer to the Company's response to PUC 1-5.

Prepared by or under the supervision of: Peter T. Zschokke and Jeanne A. Lloyd

PUC 1-5

Request:

Please identify the annual lost revenues from DG and net metering customers for the most recent 12-month period (please identify the date used).

Response:

The Company does not meter either the generation of the DG unit or the onsite consumption of net metered customers, and therefore, cannot provide an accurate calculation of annual lost revenue from net metering. The Company does report estimated annual generation associated with net metered customer's generation in the annual Net Metering Report submitted each year in February as part of the Retail Rate filing. The information contained in the most recent annual Net Metering Report for calendar year 2014, which was provided as Schedule JAL-16 in Docket No. 4554, is also included in Attachment PUC 1-5. Assuming that the estimated annual generation of each unit can be used as a proxy for on-site consumption, the Company has calculated the estimated annual lost delivery service revenue in Attachment PUC 1-5. The calculation reflects an annual estimate for each DG customer, even if that DG customer became a net metered customer during 2014. The calculation is based on currently effective rates, and includes delivery service revenue (Transition, Distribution, Transmission, Energy Efficiency, and Renewable Energy Distribution), but does not include commodity revenue. The total estimated annual lost delivery service revenue is approximately $760,932.

Prepared by or under the supervision of: Peter T. Zschokke and Jeanne A. Lloyd

The Narragansett Electric Company
Net Metering Lost Delivery Revenue Estimation

Facility ID	Town	Capacity (kW)	Fuel Type	DG type	Date Authority to Interconnect Sent	Rate Class	Estimated Annual Generation - kWh	Estimated Annual Lost Revenue - Transition (Current Rates)	Estimated Annual Lost Revenue - Distribution (Current Rates)	Estimated Annual Lost Revenue - Transmission (Current Rates)	Estimated Annual Lost Revenue - Energy Efficiency (Current Rates)	Estimated Annual Lost Revenue - Renewable Energy Dist. (Current Rates)	Total Estimated Annual Lost Delivery Revenue
RI-000090	Pawtucket	0.5	Solar	Inverter	7/31/1998	A16	550	($1.11)	$22.36	$12.91	$5.41	$1.28	$40.85
RI-000083	East Greenwich	1	Solar	Inverter	9/3/1998	A16	1,100	($2.21)	$44.72	$25.83	$10.81	$2.55	$81.70
NECO-000026	Charlestown	2.1	Solar	Inverter	7/22/1999	A16	2,310	($4.64)	$93.90	$54.24	$22.71	$5.36	$171.56
RI-000116	Middletown	58	Solar	Inverter	9/9/1999	G32	63,800	($128.24)	$458.08	$593.34	$627.15	$148.02	$1,698.36
RI-000084	Foster	4	Solar	Inverter	12/31/1999	A16	4,400	($8.84)	$178.86	$103.31	$43.25	$10.21	$326.79
RI-000085	WARWICK	1.4	Solar	Inverter	6/15/2000	A16	1,540	($3.10)	$62.60	$36.16	$15.14	$3.57	$114.38
RI-000086	Cranston	0.3	Solar	Inverter	7/1/2000	A16	330	($0.66)	$13.41	$7.75	$3.24	$0.77	$24.51
RI-000088	Portsmouth	5	Solar	Inverter	10/1/2000	A16	5,500	($11.06)	$223.58	$129.14	$54.07	$12.76	$408.49
NECO-000035	Providence	1.14	Solar	Inverter	6/21/2001	A16	1,254	($2.52)	$50.98	$29.44	$12.33	$2.91	$93.13
NECO-000036	Middletown	1.8	Solar	Inverter	11/1/2001	A16	1,980	($3.98)	$80.49	$46.49	$19.46	$4.59	$147.05
NECO-000037	Burrillville	2	Solar	Inverter	1/1/2002	G32	2,200	($4.42)	$15.80	$20.46	$21.63	$5.10	$58.56
NECO-000034	West Kingston	5.76	Solar	Inverter	3/12/2002	G2	6,336	($12.74)	$43.53	$56.64	$62.28	$14.70	$164.42
NECO-000033	Providence	2	Solar	Inverter	5/1/2002	G32	2,200	($4.42)	$15.80	$20.46	$21.63	$5.10	$58.56
NECO-000031	Cranston	2	Solar	Inverter	8/15/2002	G32	2,200	($4.42)	$15.80	$20.46	$21.63	$5.10	$58.56
NECO-000032	North Kingstown	2	Solar	Inverter	8/15/2002	G2	2,200	($4.42)	$15.11	$19.67	$21.63	$5.10	$57.09
NECO-000030	West Kingston	2.5	Solar	Inverter	2/3/2003	A16	2,750	($5.53)	$111.79	$64.57	$27.03	$6.38	$204.24
NECO-000003	Charlestown	3.6	Solar	Inverter	8/1/2003	A16	3,960	($7.96)	$160.97	$92.98	$38.93	$9.19	$294.11
NECO-000002	Wakefield	10	Wind	(blank)	8/4/2003	A16	24,000	($48.24)	$975.60	$563.52	$235.92	$55.68	$1,782.48
NECO-000004	Cranston	3	Solar	Inverter	10/6/2003	A16	3,300	($6.63)	$134.15	$77.48	$32.44	$7.66	$245.09
NECO-000006	Westerly	3	Solar	Inverter	1/15/2004	A16	3,300	($6.63)	$134.15	$77.48	$32.44	$7.66	$245.09
NECO-000007	Bristol	8	Solar	Inverter	5/14/2004	G2	8,800	($17.69)	$60.46	$78.67	$86.50	$20.42	$228.36
NECO-000014	Cumberland	8.4	Solar	Inverter	9/10/2004	A16	9,240	($18.57)	$375.61	$216.96	$90.83	$21.44	$686.25
NECO-000024	Bristol	3.6	Solar	Inverter	9/17/2004	G32	3,960	($7.96)	$28.43	$36.83	$38.93	$9.19	$105.42
NECO-000025	Bristol	9	Solar	Inverter	9/17/2004	G32	9,900	($19.90)	$71.08	$92.07	$97.32	$22.97	$263.54
NECO-000001	Little Compton	10.53	Solar	Inverter	10/27/2004	A16	11,583	($23.28)	$470.85	$271.97	$113.86	$26.87	$860.27
NECO-000008	Westerly	5	Solar	Inverter	10/28/2004	A16	5,500	($11.06)	$223.58	$129.14	$54.07	$12.76	$408.49
NECO-000023	Narragansett	5.3	Solar	Inverter	11/9/2004	A16	5,830	($11.72)	$236.99	$136.89	$57.31	$13.53	$432.99
RI-000004	Charlestown	2.7	Solar	Inverter	1/7/2005	A16	2,970	($5.97)	$120.73	$69.74	$29.20	$6.89	$220.58
NECO-000009	West Greenwich	1.8	Solar	Inverter	3/9/2005	G2	1,980	($3.98)	$13.60	$17.70	$19.46	$4.59	$51.38
NECO-000018	SCITUATE	1.8	Solar	Inverter	5/5/2005	G32	1,980	($3.98)	$14.22	$18.41	$19.46	$4.59	$52.71
NECO-000010	Providence	20.04	Solar	Inverter	5/10/2005	G2	22,044	($44.31)	$151.44	$197.07	$216.69	$51.14	$572.04
RI-000001	Little Compton	10.03	Solar	Inverter	5/25/2005	A16	11,033	($22.18)	$448.49	$259.05	$108.45	$25.60	$819.42
NECO-000027	Providence	3.96	Solar	Inverter	5/27/2005	A16	4,356	($8.76)	$177.07	$102.28	$42.82	$10.11	$323.52
RI-000087	North Kingstown	3	Solar	Inverter	6/1/2005	A16	3,300	($6.63)	$134.15	$77.48	$32.44	$7.66	$245.09
NECO-000022	Wood River Jct	15	Solar	Inverter	6/2/2005	C06	16,500	($33.17)	$605.22	$341.88	$162.20	$38.28	$1,114.41
NECO-000011	WARWICK	8.95	Solar	Inverter	6/21/2005	A16	9,845	($19.79)	$400.20	$231.16	$96.78	$22.84	$731.19
NECO-000015	Barrington	4.488	Solar	Inverter	8/10/2005	A16	4,937	($9.92)	$200.68	$115.92	$48.53	$11.45	$366.66
NECO-000021	Barrington	2.9	Solar	Inverter	8/12/2005	A16	3,190	($6.41)	$129.67	$74.90	$31.36	$7.40	$236.92
NECO-000020	WARWICK	7.3	Solar	Inverter	8/12/2005	A16	8,030	($16.14)	$326.42	$188.54	$78.93	$18.63	$596.39
NECO-000016	Tiverton	5.1	Solar	Inverter	8/24/2005	A16	5,610	($11.28)	$228.05	$131.72	$55.15	$13.02	$416.65
NECO-000017	Lincoln	5.1	Solar	Inverter	8/24/2005	A16	5,610	($11.28)	$228.05	$131.72	$55.15	$13.02	$416.65
RI-000007	Providence	1	Solar	Inverter	10/25/2005	G62	1,100	($2.21)	$0.85	$13.72	$10.81	$2.55	$25.72
RI-000045	Narragansett	4	Solar	Inverter	10/27/2005	A16	4,400	($8.84)	$178.86	$103.31	$43.25	$10.21	$326.79
RI-000010	Tiverton	5	Solar	Inverter	10/27/2005	G02	5,500	($11.06)	$37.79	$49.17	$54.07	$12.76	$142.73
RI-000006	Cumberland	3.05	Solar	Inverter	12/12/2005	A16	3,355	($6.74)	$136.38	$78.78	$32.98	$7.78	$249.18
NECO-000028	Providence	24.9	Solar	Inverter	12/29/2005	G32	27,390	($55.05)	$196.66	$254.73	$269.24	$63.54	$729.12
RI-000069	West Kingston	5.55	Solar	Inverter	12/31/2005	A16	6,105	($12.27)	$248.17	$143.35	$60.01	$14.16	$453.42
RI-000044	Middletown	3	Solar	Inverter	1/1/2006	C06	3,300	($6.63)	$121.04	$68.38	$32.44	$7.66	$222.88
RI-000089	Charlestown	5.2	Solar	Inverter	1/1/2006	A16	5,720	($11.50)	$232.52	$134.31	$56.23	$13.27	$424.82
RI-000041	Providence	1.1	Solar	Inverter	1/26/2006	C06	1,210	($2.43)	$44.38	$25.07	$11.89	$2.81	$81.72
RI-000027	Providence	6	Solar	Inverter	1/27/2006	A16	6,600	($13.27)	$268.29	$154.97	$64.88	$15.31	$490.18
RI-000033	Ashaway	6.84	Solar	Inverter	1/27/2006	A16	7,524	($15.12)	$305.85	$176.66	$73.96	$17.46	$558.81
RI-000038	Providence	3.42	Solar	Inverter	2/7/2006	A16	3,762	($7.56)	$152.93	$88.33	$36.98	$8.73	$279.40
RI-000031	Providence	5.13	Solar	Inverter	2/20/2006	A16	5,643	($11.34)	$229.39	$132.50	$55.47	$13.09	$419.11
RI-000005	Narragansett	4	Solar	Inverter	3/2/2006	A16	4,400	($8.84)	$178.86	$103.31	$43.25	$10.21	$326.79
NECO-000013	Wakefield	5.32	Solar	Inverter	3/17/2006	A16	5,852	($11.76)	$237.88	$137.40	$57.53	$13.58	$434.63
RI-000012	Kingstown	5.86	Solar	Inverter	3/31/2006	C06	6,446	($12.96)	$236.44	$133.56	$63.36	$14.95	$435.36
NECO-000019	Portsmouth	660	Wind	Induction	4/1/2006	G32	1,584,000	($3,183.84)	$11,373.12	$14,731.20	$15,570.72	$3,674.88	$42,166.08
RI-000011	Charlestown	4	Solar	Inverter	4/7/2006	A16	4,400	($8.84)	$178.86	$103.31	$43.25	$10.21	$326.79
RI-000032	GLOUCESTER	4.56	Solar	Inverter	4/14/2006	A16	5,016	($10.08)	$203.90	$117.78	$49.31	$11.64	$372.54
RI-000008	Smithfield	10.54	Solar	Inverter	4/14/2006	A16	11,594	($23.30)	$471.30	$272.23	$113.97	$26.90	$861.09
RI-000014	Tiverton	4.008	Solar	Inverter	4/17/2006	A16	4,409	($8.86)	$179.22	$103.52	$43.34	$10.23	$327.44
RI-000026	West Kingston	4	Solar	Inverter	4/27/2006	A16	4,400	($8.84)	$178.86	$103.31	$43.25	$10.21	$326.79
RI-000030	Charlestown	4.18	Solar	Inverter	4/27/2006	A16	4,598	($9.24)	$186.91	$107.96	$45.20	$10.67	$341.49
NECO-000029	Cranston	50	Solar	Inverter	5/1/2006	C06	55,000	($110.55)	$2,017.40	$1,139.60	$540.65	$127.60	$3,714.70
RI-000039	Warren	4.56	Solar	Inverter	5/9/2006	A16	5,016	($10.08)	$203.90	$117.78	$49.31	$11.64	$372.54
RI-000016	Wakefield	5.7	Solar	Inverter	5/9/2006	A16	6,270	($12.60)	$254.88	$147.22	$61.63	$14.55	$465.67
RI-000022	Westerly	3.99	Solar	Inverter	5/18/2006	A16	4,389	($8.82)	$178.41	$103.05	$43.14	$10.18	$325.97
RI-000003	Peacedale	5.1	Solar	Inverter	6/2/2006	A16	5,610	($11.28)	$228.05	$131.72	$55.15	$13.02	$416.65
RI-000025	Portsmouth	3.4	Solar	Inverter	7/5/2006	A16	3,740	($7.52)	$152.03	$87.82	$36.76	$8.68	$277.77
RI-000019	Narragansett	3.3	Solar	Inverter	7/26/2006	A16	3,630	($7.30)	$147.56	$85.23	$35.68	$8.42	$269.60
RI-000021	South Kingstown	3.8	Solar	Inverter	7/26/2006	A16	4,180	($8.40)	$169.92	$98.15	$41.09	$9.70	$310.45
RI-000020	Charlestown	5.32	Solar	Inverter	7/26/2006	A16	5,852	($11.76)	$237.88	$137.40	$57.53	$13.58	$434.63
RI-000017	Wakefield	5.94	Solar	Inverter	7/26/2006	A16	6,534	($13.13)	$265.61	$153.42	$64.23	$15.16	$485.28
RI-000024	West Kingston	3.8	Solar	Inverter	8/17/2006	A16	4,180	($8.40)	$169.92	$98.15	$41.09	$9.70	$310.45
RI-000054	Portsmouth	1.8	Solar	Inverter	8/31/2006	G02	1,980	($3.98)	$13.60	$17.70	$19.46	$4.59	$51.38
RI-000040	Narragansett	5.7	Solar	Inverter	9/16/2006	A16	6,270	($12.60)	$254.88	$147.22	$61.63	$14.55	$465.67
RI-000028	Providence	3.06	Solar	Inverter	10/10/2006	A16	3,366	($6.77)	$136.83	$79.03	$33.09	$7.81	$249.99
RI-000002	Charlestown	5.25	Solar	Inverter	10/30/2006	A60	5,775	($11.61)	$156.96	$135.60	$56.77	$13.40	$351.12
RI-000013	Hope Valley	6.88	Solar	Inverter	10/30/2006	A16	7,568	($15.21)	$307.64	$177.70	$74.39	$17.56	$562.08
RI-000036	Jamestown	1.4	Solar	Inverter	11/2/2006	A16	1,540	($3.10)	$62.60	$36.16	$15.14	$3.57	$114.38
RI-000051	Bristol	4.2	Solar	Inverter	12/1/2006	A16	4,620	($9.29)	$187.80	$108.48	$45.41	$10.72	$343.13
RI-000035	South Kingstown	6.27	Solar	Inverter	12/11/2006	A16	6,897	($13.86)	$280.36	$161.94	$67.80	$16.00	$512.24
RI-000018	Barrington	3.25	Solar	Inverter	12/19/2006	A16	3,575	($7.19)	$145.32	$83.94	$35.14	$8.29	$265.52
RI-000009	Bristol	4	Solar	Inverter	12/19/2006	A16	4,400	($8.84)	$178.86	$103.31	$43.25	$10.21	$326.79
RI-000042a	Westerly	5.9	Solar	Inverter	1/11/2007	A16	6,490	($13.04)	$263.82	$152.39	$63.80	$15.06	$482.01
RI-000042b	Westerly	5.9	Solar	Inverter	1/11/2007	A16	6,490	($13.04)	$263.82	$152.39	$63.80	$15.06	$482.01
RI-000046	Westerly	6.4	Solar	Inverter	1/11/2007	A16	7,040	($14.15)	$286.18	$165.30	$69.20	$16.33	$522.86
RI-000023	Providence	1.7	Solar	Inverter	1/12/2007	A16	1,870	($3.76)	$76.02	$43.91	$18.38	$4.34	$138.88
RI-000049	Bristol	2	Solar	Inverter	1/31/2007	G02	2,200	($4.42)	$15.11	$19.67	$21.63	$5.10	$57.09
RI-000050	Middletown	2	Solar	Inverter	2/1/2007	G02	2,200	($4.42)	$15.11	$19.67	$21.63	$5.10	$57.09
RI-000043	Pawtucket	3.4	Solar	Inverter	2/2/2007	A16	3,740	($7.52)	$152.03	$87.82	$36.76	$8.68	$277.77
RI-000052	Wakefield	5.9	Solar	Inverter	2/6/2007	A16	6,490	($13.04)	$263.82	$152.39	$63.80	$15.06	$482.01
RI-000037	Cranston	5.7	Solar	Inverter	2/16/2007	A16	6,270	($12.60)	$254.88	$147.22	$61.63	$14.55	$465.67
RI-000053	SCITUATE	15.45	Solar	Inverter	6/11/2007	C06	16,995	($34.16)	$623.38	$352.14	$167.06	$39.43	$1,147.84
RI-000059	North Smithfield	2	Solar	Inverter	7/6/2007	G32	2,200	($4.42)	$15.80	$20.46	$21.63	$5.10	$58.56
RI-000060	Covertry	2	Solar	Inverter	7/6/2007	G32	2,200	($4.42)	$15.80	$20.46	$21.63	$5.10	$58.56
RI-000062	Hope Valley	3.12	Solar	Inverter	7/19/2007	C06	3,432	($6.90)	$125.89	$71.11	$33.74	$7.96	$231.80
RI-000073	Little Compton	3.04	Solar	Inverter	8/28/2007	A16	3,344	($6.72)	$135.93	$78.52	$32.87	$7.76	$248.36
RI-000071	Portsmouth	3.15	Solar	Inverter	9/25/2007	A16	3,465	($6.96)	$140.85	$81.36	$34.06	$8.04	$257.35
RI-000056	Greenville	19.4	Solar	Inverter	9/26/2007	G02	21,340	($42.89)	$146.61	$190.78	$209.77	$49.51	$553.77
RI-000061	Peace Dale	2	Solar	Inverter	9/27/2007	G32	2,200	($4.42)	$15.80	$20.46	$21.63	$5.10	$58.56
RI-000074	WARWICK	1.75	Solar	Inverter	10/1/2007	A16	1,925	($3.87)	$78.25	$45.20	$18.92	$4.47	$142.97
RI-000072	Middletown	2.45	Solar	Inverter	10/12/2007	A16	2,695	($5.42)	$109.55	$63.28	$26.49	$6.25	$200.16
RI-000077	Jamestown	3.675	Solar	Inverter	10/22/2007	A16	4,043	($8.13)	$164.33	$94.92	$39.74	$9.38	$300.24
RI-000080	Wakefield	2.4	Wind	Inverter	10/23/2007	A16	5,760	($11.58)	$234.14	$135.24	$56.62	$13.36	$427.80
RI-000078	SCITUATE	7.56	Solar	Inverter	10/29/2007	A16	8,316	($16.72)	$338.05	$195.26	$81.75	$19.29	$617.63
RI-000082	Little Compton	2.8	Solar	Inverter	11/7/2007	A16	3,080	($6.19)	$125.20	$72.32	$30.28	$7.15	$228.75

The Narragansett Electric Company
Net Metering Lost Delivery Revenue Estimation

Facility ID	Town	Capacity (kW)	Fuel Type	DG type	Date Authority to Interconnect Sent	Rate Class	Estimated Annual Generation - kWh	Estimated Annual Lost Revenue - Transition (Current Rates)	Estimated Annual Lost Revenue - Distribution (Current Rates)	Estimated Annual Lost Revenue - Transmission (Current Rates)	Estimated Annual Lost Revenue - Energy Efficiency (Current Rates)	Estimated Annual Lost Revenue - Renewable Energy Dist. (Current Rates)	Total Estimated Annual Lost Delivery Revenue
RI-000079	Newport	24.5	Solar	Inverter	11/16/2007	G02	26,950	($54.17)	$185.15	$240.93	$264.92	$62.52	$699.35
RI-000081	South Kingstown	4.2	Solar	Inverter	12/7/2007	A16	4,620	($9.29)	$187.80	$108.48	$45.41	$10.72	$343.13
RI-000058	West Greenwich	1.575	Solar	Inverter	12/13/2007	C06	1,733	($3.48)	$63.55	$35.90	$17.03	$4.02	$117.01
RI-000057	Jamestown	3.15	Solar	Inverter	12/31/2007	A16	3,465	($6.96)	$140.85	$81.36	$34.06	$8.04	$257.35
RI-000055	Wakefield	7	Solar	Inverter	12/31/2007	A16	7,700	($15.48)	$313.01	$180.80	$75.69	$17.86	$571.88
RI-000096	Narragansett	5.32	Solar	Inverter	6/9/2008	A16	5,852	($11.76)	$237.88	$137.40	$57.53	$13.58	$434.63
RI-000102	West Warwick	2	Solar	Inverter	6/13/2008	G02	2,200	($4.42)	$15.11	$19.67	$21.63	$5.10	$57.09
RI-000075	Little Compton	5.4	Solar	Inverter	6/18/2008	A16	5,940	($11.94)	$241.46	$139.47	$58.39	$13.78	$441.16
RI-000097	Jamestown	5.05	Solar	Inverter	6/25/2008	A16	5,555	($11.17)	$225.81	$130.43	$54.61	$12.89	$412.57
RI-000098	Portsmouth	5.6	Solar	Inverter	6/26/2008	A16	6,160	($12.38)	$250.40	$144.64	$60.55	$14.29	$457.50
RI-000100	Middletown	4.8	Wind	(blank)	7/3/2008	A16	11,520	($23.16)	$468.29	$270.49	$113.24	$26.73	$855.59
RI-000104	Westerly	7.2	Solar	Inverter	8/26/2008	A16	7,920	($15.92)	$321.95	$185.96	$77.85	$18.37	$588.22
RI-000103	Saunderstown	3	Solar	Inverter	9/17/2008	A16	3,300	($6.63)	$134.15	$77.48	$32.44	$7.66	$245.09
RI-000112	Portsmouth	3	Solar	Inverter	9/26/2008	A16	3,300	($6.63)	$134.15	$77.48	$32.44	$7.66	$245.09
RI-000110	Little Compton	4.2	Solar	Inverter	9/29/2008	A16	4,620	($9.29)	$187.80	$108.48	$45.41	$10.72	$343.13
RI-000107	Wakefield	3.24	Solar	Inverter	9/30/2008	A16	3,564	($7.16)	$144.88	$83.68	$35.03	$8.27	$264.70
RI-000111	Providence	3.28	Solar	Inverter	10/8/2008	C06	3,608	($7.25)	$132.34	$74.76	$35.47	$8.37	$243.68
RI-000113	Newport	3.07	Solar	Inverter	10/14/2008	A16	3,377	($6.79)	$137.28	$79.29	$33.20	$7.83	$250.81
RI-000109	Providence	2.87	Solar	Inverter	10/30/2008	A16	3,157	($6.35)	$128.33	$74.13	$31.03	$7.32	$234.47
RI-000120	Middletown	1.2	Wind	Inverter	11/20/2008	A16	2,880	($5.79)	$117.07	$67.62	$28.31	$6.68	$213.90
RI-000119	Middletown	1.98	Solar	Inverter	11/20/2008	A16	2,178	($4.38)	$88.54	$51.14	$21.41	$5.05	$161.76
RI-000117	Newport	2	Solar	Inverter	11/20/2008	A16	2,200	($4.42)	$89.43	$51.66	$21.63	$5.10	$163.39
RI-000121	Johnston	2.88	Solar	Inverter	12/8/2008	A16	3,168	($6.37)	$128.78	$74.38	$31.14	$7.35	$235.29
RI-000126	Cumberland	1.8	Solar	Inverter	1/14/2009	A16	1,980	($3.98)	$80.49	$46.49	$19.46	$4.59	$147.05
RI-000122	Tiverton	2	Solar	Inverter	1/14/2009	A16	2,200	($4.42)	$89.43	$51.66	$21.63	$5.10	$163.39
RI-000128	North Providence	3.15	Solar	Inverter	1/15/2009	A16	3,465	($6.96)	$140.85	$81.36	$34.06	$8.04	$257.35
RI-000124	W. Greenwich	5.04	Solar	Inverter	1/15/2009	A16	5,544	($11.14)	$225.36	$130.17	$54.50	$12.86	$411.75
RI-000123	Middletown	27.6	Solar	Inverter	2/17/2009	C06	30,360	($61.02)	$1,113.60	$629.06	$298.44	$70.44	$2,050.51
RI-000129	Hope (Fiskeville)	6	Solar	Inverter	2/26/2009	A16	6,600	($13.27)	$268.29	$154.97	$64.88	$15.31	$490.18
RI-000101	Portsmouth	1500	Wind	Induction	3/18/2009	G32	3,600,000	($7,236.00)	$25,848.00	$33,480.00	$35,388.00	$8,352.00	$95,832.00
RI-000135	Wyoming	7	Solar	Inverter	4/1/2009	A16	7,700	($15.48)	$313.01	$180.80	$75.69	$17.86	$571.88
RI-000133	Westerly	3.78	Solar	Inverter	4/7/2009	A16	4,158	($8.36)	$169.02	$97.63	$40.87	$9.65	$308.81
RI-000137	Johnston	5.46	Solar	Inverter	4/22/2009	A16	6,006	($12.07)	$244.14	$141.02	$59.04	$13.93	$446.07
RI-000108	WARWICK	23.625	Solar	Inverter	5/18/2009	G02	25,988	($52.23)	$178.53	$232.33	$255.46	$60.29	$674.38
RI-000136	Hopkinton	1.8	Solar	Inverter	6/19/2009	A16	1,980	($3.98)	$80.49	$46.49	$19.46	$4.59	$147.05
RI-000144	Foster	1.3	Wind	Inverter	7/6/2009	A16	3,120	($6.27)	$126.83	$73.26	$30.67	$7.24	$231.72
RI-000142	Charleston	4.2	Solar	Inverter	7/7/2009	A16	4,620	($9.29)	$187.80	$108.48	$45.41	$10.72	$343.13
RI-000132	WARWICK	100	Wind	Inverter	8/18/2009	G32	240,000	($482.40)	$1,723.20	$2,232.00	$2,359.20	$556.80	$6,388.80
RI-000147	Cranston	3.85	Solar	Inverter	8/20/2009	A16	4,235	($8.51)	$172.15	$99.44	$41.63	$9.83	$314.53
RI-000151	Jamestown	1.8	Solar	Inverter	11/18/2009	A16	1,980	($3.98)	$80.49	$46.49	$19.46	$4.59	$147.05
RI-000148	Prudence Island	2.1	Solar	Inverter	11/19/2009	A16	2,310	($4.64)	$93.90	$54.24	$22.71	$5.36	$171.56
RI-000157	Hope Valley	3.6	Solar	Inverter	12/4/2009	A16	3,960	($7.96)	$160.97	$92.98	$38.93	$9.19	$294.11
RI-000146	Middletown	100	Wind	Inverter	12/10/2009	G02	240,000	($482.40)	$1,648.80	$2,145.60	$2,359.20	$556.80	$6,228.00
RI-000160	Providence	50	Solar	Inverter	12/29/2009	G02	55,000	($110.55)	$377.85	$491.70	$540.65	$127.60	$1,427.25
RI-000154	Providence	75	Solar	Inverter	12/29/2009	G02	82,500	($165.83)	$566.78	$737.55	$810.98	$191.40	$2,140.88
RI-000159	Cumberland	5	Solar	Inverter	1/11/2010	A16	5,500	($11.06)	$223.58	$129.14	$54.07	$12.76	$408.49
RI-000163	Woonsocket	3	Solar	Inverter	1/12/2010	A16	3,300	($6.63)	$134.15	$77.48	$32.44	$7.66	$245.09
RI-000162	Jamestown	4.5	Solar	Inverter	1/15/2010	A16	4,950	($9.95)	$201.22	$116.23	$48.66	$11.48	$367.64
RI-000152	Tiverton	4.8	Solar	Inverter	2/22/2010	A16	5,280	($10.61)	$214.63	$123.97	$51.90	$12.25	$392.15
RI-000176	N Smithfield	1.5	Wind	Inverter	6/10/2010	A16	3,600	($7.24)	$146.34	$84.53	$35.39	$8.35	$267.37
RI-000177	Barrington	6	Solar	Inverter	6/22/2010	A16	6,600	($13.27)	$268.29	$154.97	$64.88	$15.31	$490.18
RI-000174	Rumford	3	Solar	Inverter	7/19/2010	A16	3,300	($6.63)	$134.15	$77.48	$32.44	$7.66	$245.09
RI-000183	Little Compton	3	Solar	Inverter	7/19/2010	A16	3,300	($6.63)	$134.15	$77.48	$32.44	$7.66	$245.09
RI-000184	Bristol	4	Solar	Inverter	7/23/2010	A16	4,400	($8.84)	$178.86	$103.31	$43.25	$10.21	$326.79
RI-000172	SCITUATE	4	Solar	Inverter	7/26/2010	A16	4,400	($8.84)	$178.86	$103.31	$43.25	$10.21	$326.79
RI-000175	Providence	1.5	Wind	Inverter	8/2/2010	C06	3,600	($7.24)	$132.05	$74.59	$35.39	$8.35	$243.14
RI-000156	South Kingston(Wakefield)	3.15	Solar	Inverter	8/17/2010	A16	3,465	($6.96)	$140.85	$81.36	$34.06	$8.04	$257.35
RI-000171	Narragansett	4	Solar	Inverter	10/5/2010	A16	4,400	($8.84)	$178.86	$103.31	$43.25	$10.21	$326.79
RI-000127	Narragansett	10	Wind	Inverter	10/8/2010	C06	24,000	($48.24)	$880.32	$497.28	$235.92	$55.68	$1,620.96
RI-000178	Little Compton	14	Solar	Inverter	10/19/2010	A16	15,400	($30.95)	$626.01	$361.59	$151.38	$35.73	$1,143.76
RI-000194	Exeter	3.61	Solar	Inverter	11/10/2010	A16	3,971	($7.98)	$161.42	$93.24	$39.03	$9.21	$294.93
RI-000190	Jamestown	4	Solar	Inverter	11/16/2010	C02	4,400	($8.84)	$161.39	$91.17	$43.25	$10.21	$297.18
RI-000170	Barrington	3	Solar	Inverter	11/19/2010	A16	3,300	($6.63)	$134.15	$77.48	$32.44	$7.66	$245.09
RI-000181	SCITUATE	3	Solar	Inverter	11/19/2010	A16	3,300	($6.63)	$134.15	$77.48	$32.44	$7.66	$245.09
RI-000209	North Kingstown	1.5	Wind	Inverter	1/7/2011	A16	3,600	($7.24)	$146.34	$84.53	$35.39	$8.35	$267.37
RI-000207	West Kingston	4	Solar	Inverter	1/13/2011	A16	4,400	($8.84)	$178.86	$103.31	$43.25	$10.21	$326.79
RI-000193	Narragansett	5	Solar	Inverter	1/18/2011	A16	5,500	($11.06)	$223.58	$129.14	$54.07	$12.76	$408.49
RI-000208	Charlestown	5	Solar	Inverter	2/1/2011	A16	5,500	($11.06)	$223.58	$129.14	$54.07	$12.76	$408.49
RI-000216	West Kingston	5.25	Solar	Inverter	3/2/2011	A16	5,775	($11.61)	$234.75	$135.60	$56.77	$13.40	$428.91
RI-000188	Pawtucket	164	Solar	Inverter	3/2/2011	G32	180,400	($362.60)	$1,295.27	$1,677.72	$1,773.33	$418.53	$4,802.25
RI-000192a	Johnston	19	Solar	Inverter	3/9/2011	G02	20,900	($42.01)	$143.58	$186.85	$205.45	$48.49	$542.36
RI-000212	South Kingston	2.6	Solar	Inverter	3/18/2011	A16	2,860	($5.75)	$116.26	$67.15	$28.11	$6.64	$212.41
RI-000201	Charlestown	30	Solar	Inverter	3/22/2011	G02	33,000	($66.33)	$226.71	$295.02	$324.39	$76.56	$856.35
RI-000200	North Kingston	2.9	Solar	Inverter	3/23/2011	A16	3,190	($6.41)	$129.67	$74.90	$31.36	$7.40	$236.92
RI-000191	Providence	50	Solar	Inverter	3/23/2011	C02	55,000	($110.55)	$2,017.40	$1,139.60	$540.65	$127.60	$3,714.70
RI-000192c	Providence	20.3	Solar	Inverter	3/30/2011	G02	22,330	($44.88)	$153.41	$199.63	$219.50	$51.81	$579.46
RI-000192b	Barrington	21	Solar	Inverter	4/5/2011	G02	23,100	($46.43)	$158.70	$206.51	$227.07	$53.59	$599.45
RI-000218	Compton	4.8	Solar	Inverter	4/8/2011	A16	5,280	($10.61)	$214.63	$123.97	$51.90	$12.25	$392.15
RI-000210	Newport	1.14	Solar	Inverter	7/13/2011	A16	1,254	($2.52)	$50.98	$29.44	$12.33	$2.91	$93.13
RI-000224	Cumberland	2.27	Solar	Inverter	8/2/2011	A16	2,497	($5.02)	$101.50	$58.63	$24.55	$5.79	$185.45
RI-000228	North Smithfield	13	Solar	Inverter	8/11/2011	G32	14,300	($28.74)	$581.30	$132.99	$140.57	$33.18	$859.29
RI-000229	Charlestown	3	Solar	Inverter	10/7/2011	A16	3,300	($6.63)	$134.15	$77.48	$32.44	$7.66	$245.09
RI-000235	Providence	4	Solar	Inverter	10/10/2011	A16	4,400	($8.84)	$178.86	$103.31	$43.25	$10.21	$326.79
RI-000227	Lincoln	60	Solar	Inverter	10/10/2011	G02	66,000	($132.66)	$453.42	$590.04	$648.78	$153.12	$1,712.70
RI-000230	Littlecompton	4	Solar	Inverter	10/17/2011	A16	4,400	($8.84)	$178.86	$103.31	$43.25	$10.21	$326.79
RI-000213	Narragansett	100	Wind	Inverter	10/19/2011	G02	240,000	($482.40)	$1,648.80	$2,145.60	$2,359.20	$556.80	$6,228.00
RI-000217	Providence	35	Solar	Inverter	11/10/2011	C06	38,500	($77.39)	$1,412.18	$1,040.27	$378.46	$89.32	$2,842.84
RI-000232	Providence	10	Solar	Inverter	11/18/2011	C06	11,000	($22.11)	$403.48	$227.92	$108.13	$25.52	$742.94
RI-000234	Hope Valley	6	Solar	Inverter	12/20/2011	A16	6,600	($13.27)	$268.29	$154.97	$64.88	$15.31	$490.18
13433708	L COMPTON	4	Solar	Inverter	1/20/2012	A-16	4,400	($8.84)	$178.86	$103.31	$43.25	$10.21	$326.79
13163366	CRANSTON	3	Solar	Inverter	1/27/2012	A-16	3,300	($6.63)	$134.15	$77.48	$32.44	$7.66	$245.09
13163630	KENYON	4	Solar	Inverter	1/27/2012	A-16	4,400	($8.84)	$178.86	$103.31	$43.25	$10.21	$326.79
13287157	WEST WARWICK	150	Solar	Inverter	1/27/2012	G-2	165,000	($331.65)	$1,133.55	$1,475.10	$1,621.95	$382.80	$4,281.75
13168640	TIVERTON	5	Solar	Inverter	1/30/2012	A-16	5,500	($11.06)	$37.79	$129.14	$54.07	$12.76	$222.70
13337931	WEST WARWICK	225	Hydro	Synchronous	2/1/2012	B-32	450,000	($904.50)	$3,231.00	$5,611.50	$4,423.50	$1,044.00	$13,405.50
13286055	CUMBERLAND	260	Solar	Inverter	2/10/2012	G-32	286,000	($574.86)	$1,964.82	$2,659.80	$2,811.38	$663.52	$7,524.66
12240150	BRISTOL	4	Solar	Inverter	2/13/2012	A-16	4,400	($8.84)	$30.23	$103.31	$43.25	$10.21	$178.16
13163682	ESMOND	7	Solar	Inverter	2/13/2012	A-16	7,700	($15.48)	$52.90	$180.80	$75.69	$17.86	$311.77
13169212	PROVIDENCE	0.57	Solar	Inverter	2/13/2012	A-16	627	($1.26)	$4.31	$14.72	$6.16	$1.45	$25.39
12148883	NEWPORT	8	Solar	Inverter	2/28/2012	A-16	8,800	($17.69)	$60.46	$206.62	$86.50	$20.42	$356.31
13168408	RUMFORD	4	Solar	Inverter	2/29/2012	A-16	4,400	($8.84)	$30.23	$103.31	$43.25	$10.21	$178.16
12442025	BRISTOL	5	Solar	Inverter	3/9/2012	A-16	5,500	($11.06)	$37.79	$129.14	$54.07	$12.76	$222.70
13168551	LINCOLN	5	Solar	Inverter	3/9/2012	A-16	5,500	($11.06)	$37.79	$129.14	$54.07	$12.76	$222.70
13551480	LINCOLN	6	Solar	Inverter	3/12/2012	G-2	6,600	($13.27)	$45.34	$59.00	$64.88	$15.31	$171.27
13170555	PEACE DALE	7.2	Solar	Inverter	3/14/2012	A-16	7,920	($15.92)	$321.95	$185.96	$77.85	$18.37	$588.22
12381648	L COMPTON	7.5	Solar	Inverter	3/16/2012	C-06	8,250	($16.58)	$302.61	$170.94	$81.10	$19.14	$557.21
13168708	PRUDENCE ISL	3	Solar	Inverter	3/16/2012	C-02	3,300	($6.63)	$121.04	$68.38	$32.44	$7.66	$222.88
13169065	NARRAGANSETT	10	Solar	Inverter	3/30/2012	G-2	11,000	($22.11)	$75.57	$98.34	$108.13	$25.52	$285.45

The Narragansett Electric Company
Net Metering Lost Delivery Revenue Estimation

Facility ID	Town	Capacity (kW)	Fuel Type	DG type	Date Authority to Interconnect Sent	Rate Class	Estimated Annual Generation - kWh	Estimated Annual Lost Revenue - Transition (Current Rates)	Estimated Annual Lost Revenue - Distribution (Current Rates)	Estimated Annual Lost Revenue - Transmission (Current Rates)	Estimated Annual Lost Revenue - Energy Efficiency (Current Rates)	Estimated Annual Lost Revenue - Renewable Energy Dist. (Current Rates)	Total Estimated Annual Lost Delivery Revenue
13168803	NORTH KINGSTOWN	20	Solar	Inverter	4/2/2012	G-2	22,000	($44.22)	$151.14	$196.68	$216.26	$51.04	$570.90
12729266	WOOD RIVER JT	6	solar	Inverter	5/1/2012	A-16	6,600	($13.27)	$268.29	$154.97	$64.88	$15.31	$490.18
12808914	PAWTUCKET	23	Solar	Inverter	5/10/2012	G-2	25,300	($50.85)	$173.81	$226.18	$248.70	$58.70	$656.54
13433977	BRISTOL	50	Wind	(blank)	5/14/2012	C-02	120,000	($241.20)	$4,401.60	$2,486.40	$1,179.60	$278.40	$8,104.80
13177748	JOHNSTON	6	Solar	Inverter	5/22/2012	C-06	6,600	($13.27)	$242.09	$136.75	$64.88	$15.31	$445.76
12778215	PROVIDENCE	4.73	solar	Inverter	5/30/2012	a-16	5,203	($10.46)	$211.50	$122.17	$51.15	$12.07	$386.43
12723949	PROVIDENCE	3	solar	Inverter	5/31/2012	A-16	3,300	($6.63)	$134.15	$77.48	$32.44	$7.66	$245.09
12726566	PROVIDENCE	5.3	solar	Inverter	5/31/2012	A-16	5,830	($11.72)	$236.99	$136.89	$57.31	$13.53	$432.99
12797813	PROVIDENCE	4.73	solar	Inverter	5/31/2012	c-06	5,203	($10.46)	$190.85	$107.81	$51.15	$12.07	$351.41
13168581	JAMESTOWN	4	Solar	Inverter	6/25/2012	C-06	4,400	($8.84)	$161.39	$91.17	$43.25	$10.21	$297.18
13168917	WESTERLY	10	Solar	Inverter	6/25/2012	C-02	11,000	($22.11)	$403.48	$227.92	$108.13	$25.52	$742.94
12790101	PROVIDENCE	5.16	solar	Inverter	7/2/2012	a-16	5,676	($11.41)	$230.73	$133.27	$55.80	$13.17	$421.56
12981846	PROVIDENCE	3.44	Solar	Inverter	7/2/2012	A-16	3,784	($7.61)	$153.82	$88.85	$37.20	$8.78	$281.04
12930973	NORTH KINGSTOWN	2	solar	Inverter	7/16/2012	A-16	2,200	($4.42)	$89.43	$51.66	$21.63	$5.10	$163.39
12741538	PROVIDENCE	3.2	solar	Inverter	7/18/2012	a-16	3,520	($7.08)	$143.09	$82.65	$34.60	$8.17	$261.43
12700487	PROVIDENCE	1.29	solar	Inverter	7/19/2012	C-06	1,419	($2.85)	$52.05	$29.40	$13.95	$3.29	$95.84
13262387	NARRAGANSETT	3.66	Solar	Inverter	7/20/2012	A-16	4,026	($8.09)	$163.66	$94.53	$39.58	$9.34	$299.01
13086985	PROVIDENCE	4.73	Solar	Inverter	7/30/2012	C-06	5,203	($10.46)	$190.85	$107.81	$51.15	$12.07	$351.41
12733869	PROVIDENCE	4.73	solar	Inverter	8/3/2012	A-60	5,203	($10.46)	$141.42	$122.17	$51.15	$12.07	$316.34
13063715	PROVIDENCE	3.87	Solar	Inverter	8/3/2012	C-06	4,257	($8.56)	$156.15	$88.21	$41.85	$9.88	$287.52
12815821	PROVIDENCE	3.23	Solar	Inverter	8/8/2012	A-16	3,553	($7.14)	$144.43	$83.42	$34.93	$8.24	$263.88
13263785	PROVIDENCE	2.37	Solar	Inverter	8/15/2012	A-16	2,607	($5.24)	$105.97	$61.21	$25.63	$6.05	$193.62
12700157	PROVIDENCE	6.45	solar	Inverter	8/29/2012	C-06	7,095	($14.26)	$260.24	$147.01	$69.74	$16.46	$479.20
13356318	SAUNDERSTOWN	2.37	Solar	Inverter	9/4/2012	A-16	2,607	($5.24)	$105.97	$61.21	$25.63	$6.05	$193.62
13432975	PROVIDENCE	4.3	Solar	Inverter	9/5/2012	A-16	4,730	($9.51)	$192.27	$111.06	$46.50	$10.97	$351.30
13407239	PROVIDENCE	3.87	Solar	Inverter	9/7/2012	A-16	4,257	($8.56)	$173.05	$99.95	$41.85	$9.88	$316.17
12613705	PROVIDENCE	50	solar	Inverter	9/18/2012	G-62	55,000	($110.55)	$42.35	$685.85	$540.65	$127.60	$1,285.90
13256165	WAKEFIELD	4.95	Solar	Inverter	9/28/2012	A-16	5,445	($10.94)	$221.34	$127.85	$53.52	$12.63	$404.40
13609645	L COMPTON	1.72	Solar	Inverter	9/28/2012	A-16	1,892	($3.80)	$76.91	$44.42	$18.60	$4.39	$140.52
13227471	PROVIDENCE	2	Solar	Inverter	10/5/2012	C-06	2,200	($4.42)	$80.70	$45.58	$21.63	$5.10	$148.59
13188008	CRANSTON	21	Solar	Inverter	10/10/2012	A-16	23,100	($46.43)	$939.02	$542.39	$227.07	$53.59	$1,715.64
13755485	CHARLESTOWN	7	Solar	Inverter	11/16/2012	A-16	7,700	($15.48)	$313.01	$180.80	$75.69	$17.86	$571.88
13679422	JAMESTOWN	1.29	Solar	Inverter	11/20/2012	A-16	1,419	($2.85)	$57.68	$33.32	$13.95	$3.29	$105.39
13868654	BARRINGTON	3.87	Solar	Inverter	11/26/2012	A-16	4,257	($8.56)	$173.05	$99.95	$41.85	$9.88	$316.17
13301833	NORTH SMITHFIELD	5.3	Solar	Inverter	11/30/2012	A-16	5,830	($11.72)	$236.99	$136.89	$57.31	$13.53	$432.99
13854152	WESTERLY	5	Solar	Inverter	12/5/2012	A-17	5,500	($11.06)	$223.58	$129.14	$54.07	$12.76	$408.49
12762756	CRANSTON	3.65	Solar	Inverter	12/20/2012	A-18	4,015	($8.07)	$163.21	$94.27	$39.47	$9.31	$298.19
12282568	BRADFORD	10.3	Solar	Inverter	12/21/2012	G-32	11,330	($22.77)	$81.35	$105.37	$111.37	$26.29	$301.60
13605369	CUMBERLAND	0.43	Solar	Inverter	2/6/2013	C-06	473	($0.95)	$17.35	$9.80	$4.65	$1.10	$31.95
13605566	PROVIDENCE	0.43	Solar	Inverter	2/6/2013	C-06	473	($0.95)	$17.35	$9.80	$4.65	$1.10	$31.95
13911749	PROVIDENCE	1.44	Solar	Inverter	2/6/2013	A-16	1,584	($3.18)	$64.39	$37.19	$15.57	$3.67	$117.64
13933429	JAMESTOWN	4	Solar	Inverter	2/22/2013	A-16	4,400	($8.84)	$178.86	$103.31	$43.25	$10.21	$326.79
14588725	EAST GREENWICH	1.51	Solar	Inverter	3/26/2013	A-16	1,661	($3.34)	$67.52	$39.00	$16.33	$3.85	$123.36
14469194	SAUNDERSTOWN	3.01	Solar	Inverter	3/27/2013	A-15	3,311	($6.66)	$134.59	$77.74	$32.55	$7.68	$245.91
14726048	EAST GREENWICH	4	Solar	Inverter	5/3/2013	A-16	4,400	($8.84)	$178.86	$103.31	$43.25	$10.21	$326.79
14276764	NARRAGANSETT	2.8	Solar	Inverter	6/14/2013	A-16	3,080	($6.19)	$125.20	$72.32	$30.28	$7.15	$228.75
14847417	NARRAGANSETT	4	Solar	Inverter	6/14/2013	A-16	4,400	($8.84)	$178.86	$103.31	$43.25	$10.21	$326.79
14278306	PROVIDENCE	0.86	Solar	Inverter	6/26/2013	A-16	946	($1.90)	$38.45	$22.21	$9.30	$2.19	$70.26
14276819	L COMPTON	3.01	Solar	Inverter	7/10/2013	A-16	3,311	($6.66)	$134.59	$77.74	$32.55	$7.68	$245.91
14726475	NEWPORT	2.15	Solar	Inverter	7/10/2013	A-16	2,365	($4.75)	$96.14	$55.53	$23.25	$5.49	$175.65
14601977	CRANSTON	4.95	Solar	Inverter	7/17/2013	A-16	5,445	($10.94)	$221.34	$127.85	$53.52	$12.63	$404.40
14601995	NORTH SCITUATE	5.16	Solar	Inverter	7/19/2013	A-16	5,676	($11.41)	$230.73	$133.27	$55.80	$13.17	$421.56
14589949	BRISTOL	28	Solar	Inverter	7/31/2013	g-02	30,800	($61.91)	$211.60	$275.35	$302.76	$71.46	$799.26
14790269	NORTH KINGSTOWN	23	Solar	Inverter	8/2/2013	g-02	25,300	($50.85)	$173.81	$226.18	$248.70	$58.70	$656.54
14601876	FOSTER	2.15	Solar	Inverter	8/8/2013	A-16	2,365	($4.75)	$96.14	$55.53	$23.25	$5.49	$175.65
14276693	MIDDLETOWN	0.86	Solar	Inverter	8/9/2013	A-16	946	($1.90)	$38.45	$22.21	$9.30	$2.19	$70.26
14780864	NEWPORT	2	Solar	Inverter	8/9/2013	A-16	2,200	($4.42)	$89.43	$51.66	$21.63	$5.10	$163.39
14761875	MIDDLETOWN	3.66	Solar	Inverter	8/9/2013	A-16	4,026	($8.09)	$163.66	$94.53	$39.58	$9.34	$299.01
14855860	PAWTUCKET	14	Solar	Inverter	8/9/2013	G-32	15,400	($30.95)	$7.85	$143.22	$151.38	$35.73	$307.23
13220170	PROVIDENCE	300	Solar	Inverter	8/14/2013	G-32	330,000	($663.30)	$2,369.40	$3,069.00	$3,243.90	$765.60	$8,784.60
13425175	MIDDLETOWN	20	Solar	Inverter	8/16/2013	a-16	22,000	($44.22)	$894.30	$516.56	$216.26	$51.04	$1,633.94
14767040	PROVIDENCE	4	Solar	Inverter	8/16/2013	A-16	4,400	($8.84)	$178.86	$103.31	$43.25	$10.21	$326.79
15481450	JOHNSTON	10	Solar	Inverter	8/20/2013	c-06	11,000	($22.11)	$403.48	$227.92	$108.13	$25.52	$742.94
14735613	PROVIDENCE	5	Solar	Inverter	8/22/2013	A-16	5,500	($11.06)	$223.58	$129.14	$54.07	$12.76	$408.49
15476331	PORTSMOUTH	2.5	Solar	Inverter	8/22/2013	A-16	2,750	($5.53)	$111.79	$64.57	$27.03	$6.38	$204.24
15212872	JAMESTOWN	4.3	Solar	Inverter	8/27/2013	A-16	4,730	($9.51)	$192.27	$111.06	$46.50	$10.97	$351.30
15280721	CHEPACHET	6.02	Solar	Inverter	9/4/2013	a-16	6,622	($13.31)	$269.18	$155.48	$65.09	$15.36	$491.82
15378490	NEWPORT	2.15	Solar	Inverter	9/4/2013	A-16	2,365	($4.75)	$96.14	$55.53	$23.25	$5.49	$175.65
15358807	CHARLESTOWN	5.16	Solar	Inverter	9/4/2013	A-16	5,676	($11.41)	$230.73	$133.27	$55.80	$13.17	$421.56
14726436	PEACE DALE	2.8	Solar	Inverter	9/6/2013	A-16	3,080	($6.19)	$125.20	$72.32	$30.28	$7.15	$228.75
14753836	EXETER	5.16	Solar	Inverter	9/19/2013	A-16	5,676	($11.41)	$230.73	$133.27	$55.80	$13.17	$421.56
15187880	SAUNDERSTOWN	5.16	Solar	Inverter	9/19/2013	A-16	5,676	($11.41)	$230.73	$133.27	$55.80	$13.17	$421.56
15289861	TIVERTON	4.3	Solar	Inverter	9/19/2013	A-16	4,730	($9.51)	$192.27	$111.06	$46.50	$10.97	$351.30
14874919	JAMESTOWN	3.01	Solar	Inverter	9/26/2013	A-16	3,311	($6.66)	$134.59	$77.74	$32.55	$7.68	$245.91
15075211	CRANSTON	5.16	Solar	Inverter	10/3/2013	A-16	5,676	($11.41)	$230.73	$133.27	$55.80	$13.17	$421.56
15128281	WESTERLY	7.96	Solar	Inverter	10/3/2013	a-16	8,756	($17.60)	$355.93	$205.59	$86.07	$20.31	$650.31
15211271	NORTH SCITUATE	5.1	Solar	Inverter	10/3/2013	A-16	5,610	($11.28)	$228.05	$131.72	$55.15	$13.02	$416.65
15660811	SAUNDERSTOWN	2.58	Solar	Inverter	10/3/2013	A-16	2,838	($5.70)	$115.36	$66.64	$27.90	$6.58	$210.78
15140057	WARREN	3.66	Solar	Inverter	10/16/2013	a-16	4,026	($8.09)	$163.66	$94.53	$39.58	$9.34	$299.01
15441523	CHARLESTOWN	6.45	Solar	Inverter	10/16/2013	a-16	7,095	($14.26)	$288.41	$166.59	$69.74	$16.46	$526.95
15551310	JOHNSTON	4.09	Solar	Inverter	10/16/2013	A-16	4,499	($9.04)	$182.88	$105.64	$44.23	$10.44	$334.14
15135359	TIVERTON	7.74	Solar	Inverter	10/17/2013	a-16	8,514	($17.11)	$346.09	$199.91	$83.69	$19.75	$632.33
15150360	PORTSMOUTH	2.15	Solar	Inverter	10/18/2013	A-16	2,365	($4.75)	$96.14	$55.53	$23.25	$5.49	$175.65
14800225	CRANSTON	12.96	Solar	Inverter	10/21/2013	a-16	14,256	($28.65)	$579.51	$334.73	$140.14	$33.07	$1,058.79
15886590	JAMESTOWN	1.29	Solar	Inverter	10/23/2013	A-16	1,419	($2.85)	$57.68	$33.32	$13.95	$3.29	$105.39
15877444	PORTSMOUTH	3.66	Solar	Inverter	10/23/2013	A-16	4,026	($8.09)	$163.66	$94.53	$39.58	$9.34	$299.01
15960523	HOPE	3.87	Solar	Inverter	10/29/2013	C-06	4,257	($8.56)	$156.15	$88.21	$41.85	$9.88	$287.52
15613973	WARWICK	3.6	Solar	Inverter	11/6/2013	A-16	3,960	($7.96)	$160.97	$92.98	$38.93	$9.19	$294.11
15912539	SAUNDERSTOWN	5.81	Solar	Inverter	11/15/2013	A-16	6,391	($12.85)	$259.79	$150.06	$62.82	$14.83	$474.66
16020398	PAWTUCKET	5.16	Solar	Inverter	11/18/2013	A-16	5,676	($11.41)	$230.73	$133.27	$55.80	$13.17	$421.56
14913107	MIDDLETOWN	2.8	Solar	Inverter	11/26/2013	A-16	3,080	($6.19)	$125.20	$72.32	$30.28	$7.15	$228.75
15600663	PROVIDENCE	3.01	Solar	Inverter	11/26/2013	A-16	3,311	($6.66)	$134.59	$77.74	$32.55	$7.68	$245.91
15950635	NEWPORT	5.16	Solar	Inverter	11/26/2013	C-06	5,676	($11.41)	$208.20	$117.61	$55.80	$13.17	$383.36
15960570	WARWICK	3.23	Solar	Inverter	11/26/2013	A-16	3,553	($7.14)	$144.43	$83.42	$34.93	$8.24	$263.88
16032506	TIVERTON	7.96	Solar	Inverter	11/26/2013	A-16	8,756	($17.60)	$355.93	$205.59	$86.07	$20.31	$650.31
14761967	NORTH SMITHFIELD	7.74	Solar	Inverter	12/18/2013	A-16	8,514	($17.11)	$346.09	$199.91	$83.69	$19.75	$632.33
15960546	EAST GREENWICH	5.81	Solar	Inverter	12/19/2013	A-16	6,391	($12.85)	$259.79	$150.06	$62.82	$14.83	$474.66
16004074	EXETER	7.96	Solar	Inverter	12/19/2013	A-16	8,756	($17.60)	$355.93	$205.59	$86.07	$20.31	$650.31
16020662	MIDDLETOWN	4.3	Solar	Inverter	12/19/2013	A-16	4,730	($9.51)	$192.27	$111.06	$46.50	$10.97	$351.30
13105351	RUMFORD	45.6	Solar	Inverter	12/20/2013	c-06	50,160	($100.82)	$1,839.87	$1,039.32	$493.07	$116.37	$3,387.81
13252180	PAWTUCKET	1.64	solar	Inverter	8/9/2009	A-16	1,804	($3.63)	$73.33	$42.36	$17.73	$4.19	$133.98
12440329	WARWICK	19.5	solar	Inverter	6/13/2011	C-06	21,450	($43.11)	$786.79	$444.44	$210.85	$49.76	$1,448.73
RI-000199	North Kingstown	405	Solar	Inverter	9/9/2011	B-62	445,500	($895.46)	$343.04	$5,555.39	$4,379.27	$1,033.56	$10,415.79
13339553	PORTSMOUTH	225	Wind	Inverter	3/20/2012	G-2	540,000	($1,085.40)	$3,709.80	$4,827.60	$5,308.20	$1,252.80	$14,013.00
13511760	TIVERTON	275	Wind	Inverter	6/5/2012	C-06	660,000	($1,326.60)	$24,208.80	$13,675.20	$6,487.80	$1,531.20	$44,576.40
12364353	EXETER	15.3	solar	Inverter	6/19/2012	C-06	16,830	($33.83)	$617.32	$348.72	$165.44	$39.05	$1,136.70
13115934	PROVIDENCE	4500	Wind	Inverter	10/16/2012	G-32	10,800,000	($21,708.00)	$77,544.00	$100,440.00	$106,164.00	$25,056.00	$287,496.00
12252717	NARRAGANSETT	10	Wind	Inverter	12/4/2012	G-2	24,000	($48.24)	$164.88	$214.56	$235.92	$55.68	$622.80

The Narragansett Electric Company
Net Metering Lost Delivery Revenue Estimation

Facility ID	Town	Capacity (kW)	Fuel Type	DG type	Date Authority to Interconnect Sent	Rate Class	Estimated Annual Generation - kWh	Estimated Annual Lost Revenue - Transition (Current Rates)	Estimated Annual Lost Revenue - Distribution (Current Rates)	Estimated Annual Lost Revenue - Transmission (Current Rates)	Estimated Annual Lost Revenue - Energy Efficiency (Current Rates)	Estimated Annual Lost Revenue - Renewable Energy Dist. (Current Rates)	Total Estimated Annual Lost Delivery Revenue
15779010	NORTH SCITUATE	10.75	Solar	Inverter	1/10/2014	A-16	11,825	($23.77)	$480.69	$277.65	$116.24	$27.43	$878.24
15660814	JAMESTOWN	7.65	Solar	Inverter	1/14/2014	A-16	8,415	($16.91)	$342.07	$197.58	$82.72	$19.52	$624.98
16119917	JAMESTOWN	5	Solar	Inverter	1/14/2014	A-16	5,500	($11.06)	$223.58	$129.14	$54.07	$12.76	$408.49
16281029	BARRINGTON	3.44	Solar	Inverter	1/14/2014	A-16	3,784	($7.61)	$153.82	$88.85	$37.20	$8.78	$281.04
15680716	JAMESTOWN	6.45	Solar	Inverter	1/17/2014	A-16	7,095	($14.26)	$288.41	$166.59	$69.74	$16.46	$526.95
15987219	PROVIDENCE	3.44	Solar	Inverter	1/28/2014	A-16	3,784	($7.61)	$153.82	$88.85	$37.20	$8.78	$281.04
15551662	PROVIDENCE	3.44	Solar	Inverter	1/28/2014	A-16	3,784	($7.61)	$153.82	$88.85	$37.20	$8.78	$281.04
15650232	PROVIDENCE	3.87	Solar	Inverter	1/28/2014	A-16	4,257	($8.56)	$173.05	$99.95	$41.85	$9.88	$316.17
16049358	PROVIDENCE	4.3	Solar	Inverter	1/28/2014	A-16	4,730	($9.51)	$192.27	$111.06	$46.50	$10.97	$351.30
16052781	PROVIDENCE	3.01	Solar	Inverter	1/28/2014	A-16	3,311	($6.66)	$134.59	$77.74	$32.55	$7.68	$245.91
16240969	PROVIDENCE	3.87	Solar	Inverter	1/28/2014	A-16	4,257	($8.56)	$173.05	$99.95	$41.85	$9.88	$316.17
14797804	FOSTER	8	Solar	Inverter	1/29/2014	A-16	8,800	($17.69)	$357.72	$206.62	$86.50	$20.42	$653.58
16020824	WARREN	1.29	Solar	Inverter	2/3/2014	A-16	1,419	($2.85)	$57.68	$33.32	$13.95	$3.29	$105.39
15862797	L COMPTON	4	Solar	Inverter	2/11/2014	A-16	4,400	($8.84)	$178.86	$103.31	$43.25	$10.21	$326.79
16315480	WAKEFIELD	6	Solar	Inverter	2/11/2014	A-16	6,600	($13.27)	$268.29	$154.97	$64.88	$15.31	$490.18
15700681	JAMESTOWN	2.58	Solar	Inverter	3/5/2014	A-16	2,838	($5.70)	$115.36	$66.64	$27.90	$6.58	$210.78
16538805	WESTERLY	5	Solar	Inverter	4/11/2014	A-16	5,500	($11.06)	$223.58	$129.14	$54.07	$12.76	$408.49
16714328	CHEPACHET	2.58	Solar	Inverter	4/17/2014	A-16	2,838	($5.70)	$115.36	$66.64	$27.90	$6.58	$210.78
16863933	WEST WARWICK	0.43	Solar	Inverter	5/1/2014	A-16	473	($0.95)	$19.23	$11.11	$4.65	$1.10	$35.13
14882524	JAMESTOWN	3.44	Solar	Inverter	5/8/2014	A-16	3,784	($7.61)	$153.82	$88.85	$37.20	$8.78	$281.04
16659042	JAMESTOWN	5	Solar	Inverter	5/14/2014	A-16	5,500	($11.06)	$223.58	$129.14	$54.07	$12.76	$408.49
15672019	PAWTUCKET	24	Solar	Inverter	5/22/2014	g-02	26,400	($53.06)	$181.37	$236.02	$259.51	$61.25	$685.08
13177831	WARREN	0.57	Solar	Inverter	5/23/2014	A-16	627	($1.26)	$25.49	$14.72	$6.16	$1.45	$46.57
16849037	WAKEFIELD	7.75	Solar	Inverter	6/2/2014	A-16	8,525	($17.14)	$346.54	$200.17	$83.80	$19.78	$633.15
15672618	PAWTUCKET	24	Solar	Inverter	6/5/2014	g-62	26,400	($53.06)	$20.33	$329.21	$259.51	$61.25	$617.23
17071966	TIVERTON	6	Solar	Inverter	6/16/2014	A-16	6,600	($13.27)	$268.29	$154.97	$64.88	$15.31	$490.18
16658943	JOHNSTON	7.5	Solar	Inverter	6/17/2014	A-16	8,250	($16.58)	$335.36	$193.71	$81.10	$19.14	$612.73
16714678	L COMPTON	11	Solar	Inverter	6/17/2014	a-16	12,100	($24.32)	$491.87	$284.11	$118.94	$28.07	$898.67
16811848	EAST GREENWICH	7.5	Solar	Inverter	6/28/2014	A-16	8,250	($16.58)	$335.36	$193.71	$81.10	$19.14	$612.73
16837237	WARWICK	5.16	Solar	Inverter	7/1/2014	A-16	5,676	($11.41)	$230.73	$133.27	$55.80	$13.17	$421.56
16922760	WESTERLY	6.45	Solar	Inverter	7/1/2014	A-16	7,095	($14.26)	$288.41	$166.59	$69.74	$16.46	$526.95
16789421	PORTSMOUTH	5	Solar	Inverter	7/2/2014	A-16	5,500	($11.06)	$223.58	$129.14	$54.07	$12.76	$408.49
16923859	EXETER	14.19	Solar	Inverter	7/7/2014	a-16	15,609	($31.37)	$634.51	$366.50	$153.44	$36.21	$1,159.28
17192714	CHARLESTOWN	3.22	Solar	Inverter	7/14/2014	A-16	3,542	($7.12)	$143.98	$83.17	$34.82	$8.22	$263.06
15430757	WAKEFIELD	3	Solar	Inverter	7/16/2014	A-16	3,300	($6.63)	$134.15	$77.48	$32.44	$7.66	$245.09
16796924	PORTSMOUTH	4	Solar	Inverter	7/23/2014	A-16	4,400	($8.84)	$178.86	$103.31	$43.25	$10.21	$326.79
16841395	WESTERLY	6.25	Solar	Inverter	7/23/2014	A-16	6,875	($13.82)	$279.47	$161.43	$67.58	$15.95	$510.61
17099078	PAWTUCKET	3	Solar	Inverter	8/4/2014	A-16	3,300	($6.63)	$134.15	$77.48	$32.44	$7.66	$245.09
16617414	MIDDLETOWN	60	Solar	Inverter	8/18/2014	c-06	66,000	($132.66)	$2,420.88	$1,367.52	$648.78	$153.12	$4,457.64
16837718	PROVIDENCE	3.87	Solar	Inverter	8/21/2014	A-16	4,257	($8.56)	$173.05	$99.95	$41.85	$9.88	$316.17
16841481	RUMFORD	5.25	Solar	Inverter	8/21/2014	A-16	5,775	($11.61)	$234.75	$135.60	$56.77	$13.40	$428.91
16922768	PAWTUCKET	2.5	Solar	Inverter	8/21/2014	A-16	2,750	($5.53)	$111.79	$64.57	$27.03	$6.38	$204.24
16847839	PROVIDENCE	2.75	Solar	Inverter	8/27/2014	A-16	3,025	($6.08)	$122.97	$71.03	$29.74	$7.02	$224.67
17470091	PROVIDENCE	3.75	Solar	Inverter	8/27/2014	A-16	4,125	($8.29)	$167.68	$96.86	$40.55	$9.57	$306.36
17584869	WEST KINGSTON	4	Solar	Inverter	8/27/2014	A-16	4,400	($8.84)	$178.86	$103.31	$43.25	$10.21	$326.79
16611202	EAST PROVIDENCE	75	Solar	Inverter	9/3/2014	C-06	82,500	($165.83)	$3,026.10	$1,709.40	$810.98	$191.40	$5,572.05
16979864	WAKEFIELD	7.09	Solar	Inverter	9/5/2014	A-16	7,799	($15.68)	$317.03	$183.12	$76.66	$18.09	$579.23
16999144	PROVIDENCE	3.5	Solar	Inverter	9/5/2014	A-16	3,850	($7.74)	$156.50	$90.40	$37.85	$8.93	$285.94
17490946	BARRINGTON	3.25	Solar	Inverter	9/5/2014	A-16	3,575	($7.19)	$145.32	$83.94	$35.14	$8.29	$265.52
17584887	WEST KINGSTON	9	Solar	Inverter	9/5/2014	A-16	9,900	($19.90)	$402.44	$232.45	$97.32	$22.97	$735.27
16631931	WARWICK	30	Solar	Inverter	9/9/2014	g-02	33,000	($66.33)	$226.71	$295.02	$324.39	$76.56	$856.35
17447224	LINCOLN	3.44	Solar	Inverter	9/26/2014	A-16	3,784	($7.61)	$153.82	$88.85	$37.20	$8.78	$281.04
17769192	PROVIDENCE	2.5	Solar	Inverter	9/26/2014	A-16	2,750	($5.53)	$111.79	$64.57	$27.03	$6.38	$204.24
17449362	HOPE	7.6	Solar	Inverter	9/29/2014	A-16	8,360	($16.80)	$339.83	$196.29	$82.18	$19.40	$620.90
16788456	PROVIDENCE	5.5	Solar	Inverter	9/30/2014	A-16	6,050	($12.16)	$245.93	$142.05	$59.47	$14.04	$449.33
17665432	NORTH KINGSTOWN	2.5	Solar	Inverter	10/1/2014	A-16	2,750	($5.53)	$111.79	$64.57	$27.03	$6.38	$204.24
17665342	MIDDLETOWN	4	Solar	Inverter	10/2/2014	A-16	4,400	($8.84)	$178.86	$103.31	$43.25	$10.21	$326.79
17665302	CRANSTON	3	Solar	Inverter	10/7/2014	A-16	3,300	($6.63)	$134.15	$77.48	$32.44	$7.66	$245.09
17732018	NEWPORT	3	Solar	Inverter	10/7/2014	A-16	3,300	($6.63)	$134.15	$77.48	$32.44	$7.66	$245.09
17723937	PORTSMOUTH	7.6	Solar	Inverter	10/10/2014	A-16	8,360	($16.80)	$339.83	$196.29	$82.18	$19.40	$620.90
17471891	GREENVILLE	3.87	Solar	Inverter	10/14/2014	A-16	4,257	($8.56)	$173.05	$99.95	$41.85	$9.88	$316.17
17711343	NARRAGANSETT	5	Solar	Inverter	10/17/2014	A-16	5,500	($11.06)	$223.58	$129.14	$54.07	$12.76	$408.49
17457905	JAMESTOWN	7	Solar	Inverter	10/23/2014	A-16	7,700	($15.48)	$313.01	$180.80	$75.69	$17.86	$571.88
17891429	EXETER	2	Solar	Inverter	10/23/2014	A-16	2,200	($4.42)	$89.43	$51.66	$21.63	$5.10	$163.39
17472411	L COMPTON	7.5	Solar	Inverter	10/28/2014	A-16	8,250	($16.58)	$335.36	$193.71	$81.10	$19.14	$612.73
15862938	JAMESTOWN	8.16	Solar	Inverter	10/29/2014	A-16	8,976	($18.04)	$364.87	$210.76	$88.23	$20.82	$666.65
17413565	RIVERSIDE	3.5	Solar	Inverter	10/29/2014	A-16	3,850	($7.74)	$156.50	$90.40	$37.85	$8.93	$285.94
17732094	JAMESTOWN	2.75	Solar	Inverter	10/29/2014	A-16	3,025	($6.08)	$122.97	$71.03	$29.74	$7.02	$224.67
17678400	JAMESTOWN	11	Solar	Inverter	10/30/2014	a-16	12,100	($24.32)	$491.87	$284.11	$118.94	$28.07	$898.67
17743200	NARRAGANSETT	3	Solar	Inverter	10/30/2014	A-16	3,300	($6.63)	$134.15	$77.48	$32.44	$7.66	$245.09
17473331	FOSTER	4.5	Solar	Inverter	11/4/2014	A-16	4,950	($9.95)	$201.22	$116.23	$48.66	$11.48	$367.64
17775953	PORTSMOUTH	9.25	Solar	Inverter	11/6/2014	A-16	10,175	($20.45)	$413.61	$238.91	$100.02	$23.61	$755.70
17722478	EAST GREENWICH	2.75	Solar	Inverter	11/7/2014	A-16	3,025	($6.08)	$122.97	$71.03	$29.74	$7.02	$224.67
18154533	WOOD RIVER JT	3.5	Solar	Inverter	11/10/2014	A-16	3,850	($7.74)	$156.50	$90.40	$37.85	$8.93	$285.94
17281317	NORTH KINGSTOWN	9	Solar	Inverter	11/13/2014	C-06	9,900	($19.90)	$363.13	$205.13	$97.32	$22.97	$668.65
17513659	CUMBERLAND	4.5	Solar	Inverter	11/14/2014	A-16	4,950	($9.95)	$201.22	$116.23	$48.66	$11.48	$367.64
17472940	LINCOLN	5.5	Solar	Inverter	11/17/2014	A-16	6,050	($12.16)	$245.93	$142.05	$59.47	$14.04	$449.33
17372548	WEST KINGSTON	10	Solar	Inverter	11/19/2014	A-16	11,000	($22.11)	$447.15	$258.28	$108.13	$25.52	$816.97
17743158	JAMESTOWN	4	Solar	Inverter	11/19/2014	A-16	4,400	($8.84)	$178.86	$103.31	$43.25	$10.21	$326.79
17732079	WESTERLY	7.25	Solar	Inverter	11/21/2014	A-16	7,975	($16.03)	$324.18	$187.25	$78.39	$18.50	$592.30
17832890	JOHNSTON	5	Solar	Inverter	11/24/2014	A-16	5,500	($11.06)	$223.58	$129.14	$54.07	$12.76	$408.49
17354436	CUMBERLAND	4.5	Solar	Inverter	11/25/2014	A-16	4,950	($9.95)	$201.22	$116.23	$48.66	$11.48	$367.64
17833152	LINCOLN	5	Solar	Inverter	11/26/2014	A-16	5,500	($11.06)	$223.58	$129.14	$54.07	$12.76	$408.49
17504085	L COMPTON	5	Solar	Inverter	12/1/2014	A-16	5,500	($11.06)	$223.58	$129.14	$54.07	$12.76	$408.49
17473280	BRISTOL	6.5	Solar	Inverter	12/10/2014	A-16	7,150	($14.37)	$290.65	$167.88	$70.28	$16.59	$531.03
15049726	WAKEFIELD	4.3	Solar	Inverter	12/12/2014	A-16	4,730	($9.51)	$192.27	$111.06	$46.50	$10.97	$351.30
18469711	WAKEFIELD	5	Solar	Inverter	12/16/2014	A-16	5,500	($11.06)	$223.58	$129.14	$54.07	$12.76	$408.49
17824272	WESTERLY	10.5	Solar	Inverter	12/19/2014	A-16	11,550	($23.22)	$469.51	$271.19	$113.54	$26.80	$857.82
17766993	WEST KINGSTON	14.25	Solar	Inverter	12/22/2014	a-16	15,675	($31.51)	$637.19	$368.05	$154.09	$36.37	$1,164.18
17473990	BARRINGTON	5.5	Solar	Inverter	12/23/2014	A-60	6,050	($12.16)	$164.44	$142.05	$59.47	$14.04	$367.84
18560388	MIDDLETOWN	2.75	Solar	Inverter	12/29/2014	A-16	3,025	($6.08)	$122.97	$71.03	$29.74	$7.02	$224.67
16960369	NEWPORT	3	Solar	Inverter	12/30/2014	A-16	3,300	($6.63)	$134.15	$77.48	$32.44	$7.66	$245.09
18416675	PEACE DALE	6	Solar	Inverter	12/30/2014	A-16	6,600	($13.27)	$268.29	$154.97	$64.88	$15.31	$490.18
13276481	WAKEFIELD	3	Solar	Inverter	3/24/2010	A-16	3,300	($6.63)	$134.15	$77.48	$32.44	$7.66	$245.09
13169627	COVENTRY	100	Solar	Inverter	2/27/2012	G-2	110,000	($221.10)	$755.70	$983.40	$1,081.30	$255.20	$2,854.50
13213633	CRANSTON	500	Solar	Inverter	12/27/2013	G-2	550,000	($1,105.50)	$3,778.50	$4,917.00	$5,406.50	$1,276.00	$14,272.50
Totals	**420**	**12,393.18**					**23,655,459**	**($47,547.47)**	**$259,701.18**	**$261,365.16**	**$232,533.16**	**$54,880.67**	**$760,932.70**

PUC 1-6

Request:

Please provide all the analysis used by National Grid to support the shift from 18% fixed costs to 40% fixed costs in the residential rate design, 24% to 40% in the C-06 rate design and 84% to 90% in the G-02 rate design.

Response:

As described in the Company's pre-filed direct testimony on page 20, beginning on line 4, the ideal rate design for all customers would include a monthly fixed charge designed to collect (1) the customer-related distribution system costs and (2) a demand charge based upon the customer's monthly peak demand, which would recover the remaining costs. The metering currently installed for customers in rate classes A-16 and C-06 does not support the billing of a demand charge; therefore, the Company is proposing that, for these two rate classes, demand-related distribution system costs be recovered through tiered customer charges, using maximum monthly kWh as a proxy for maximum, or peak, monthly demand (kW). The rate structure for Rate G-02 currently includes a demand charge. However, the demand charge does not recover 100% of the demand-related revenue requirement; a portion of the demand-related revenue requirement (i.e., approximately 16%) is recovered through a per kWh charge.

Because changes in rate design will ultimately impact customers differently based upon each customer's usage patterns, the Company is not proposing rates in this proceeding that are designed to collect 100% of the distribution system revenue requirement through customer and demand charges, but is proposing to move toward that goal by shifting a portion of the demand-related revenue requirement into the customer and/or demand charges for each rate class. The amount of revenue requirement shifted from the per kWh charges to the customer and/or demand charge for each class is limited by the resulting customer bill impacts for each class.

The Company did not target a specific percentage for each rate class that would be recovered through the proposed customer charges and demand charge for Rate G-02, but rather focused on moving the rate design towards recovering more demand-related revenue requirement through these fixed charges. Additionally, the Company focused on bill impacts and keeping these impacts within the +/-5% threshold.

Prepared by or under the supervision of: Peter T. Zschokke and Jeanne A. Lloyd

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Rate A-16

Based upon Docket No. 4323 rate year number of bills of 4,669,275 and the current customer charge of $5.00, $23,346,375 (4,669,275 x $5.00), or 17.4% of the Rate A-16 total revenue requirement of $133,808,673 was designed to be recovered through the customer charge. For the proposed rate design, the Company determined through performing a frequency analysis of all residential A-16 bills that 13.9% of the bills will fall into the first tier, 39.6% of bills will fall into the second tier, 23.4% of bills will fall into the third tier, with the remaining 23.1% of bills falling into the fourth tier. Based upon the proposed customer charges and the estimated annual bills in each tier, the portion of the revenue requirement recovered through the customer charge will increase to $52,742,963:

Total Bills		Percent of Bills in Tier		Bills in Tier		Proposed Customer Charge		Proposed Revenue	Percent of Total Revenue Requirement
4,669,275	*	13.9%	=	649,029	*	$5.25	=	$3,407,403	2.5%
4,669,275	*	39.6%	=	1,849,033	*	$8.50	=	$15,716,780	11.7%
4,669,275	*	23.4%	=	1,092,610	*	$13.00	=	$14,203,935	10.6%
4,669,275	*	23.1%	=	1,078,603	*	$18.00	=	$19,414,845	14.5%
Total		**100.0%**		**4,669,275**				**$52,742,963**	**39.4%**
Total Revenue Requirement								$133,808,673	

This calculation is also shown on page 143 of the Company's July 31, 2015 filing on Schedule NG-12, page 1 of 4, line 11.

Rate C-06

Based upon Docket No. 4323 rate year number of bills of 599,503 and the current customer charge of $10.00, $5,995,033 (599,503 x $10.00) is designed to be recovered from metered C-06 customers through the customer charge. Additionally, 7,152 bills per year are issued to unmetered customers. At the current location charge of $6.00, this equates to $42,912 (7,152 x $6.00) per year. The total current customer charge revenue is $6,037,945 ($5,995,033 + $42,912), or 23.7% of the total revenue requirement of $25,523,701. For the proposed rate design, the Company determined through performing a frequency analysis of all Rate C-06 metered customer bills that 15.6% of the bills will fall into the first tier, 34.9% of bills will fall

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into the second tier, 26.6% of bills will fall into the third tier, with the remaining 22.9% of bills falling into the fourth tier. Based upon the proposed customer charges and the estimated annual bills in each tier, the portion of the revenue requirement recovered through the customer charge will increase to $9,801,928:

Total Bills		Percent of Bills in Tier		Bills in Tier		Proposed Customer Charge		Proposed Revenue	Percent of Total Revenue Requirement
599,503 (metered)	*	15.6%	=	93,463	*	$10.50	=	$981,362	3.8%
599,503 (metered)	*	34.9%	=	209,407	*	$11.75	=	$2,460,532	9.6%
599,503 (metered)	*	26.6%	=	159,468	*	$17.25	=	$2,750,823	10.8%
599,503 (metered)	*	22.9%	=	137,165	*	$26.00	=	$3,566,299	14.0%
Sub-total		100.0%		599,503				$9,759,016	38.2%
7,152 (non-metered)				7,152	*	$6.00	=	$42,912	0.2%
Total				**606,655**				**$9,801,926**	**38.4%**
Total Revenue Requirement								$25,523,701	

This calculation is also shown on page 144 of the Company's July 31, 2015 filing on Schedule NG-12, page 2 of 4, line 13.

Rate G-02

Currently, rates for the G-02 class include a fixed customer of $135.00 and a demand charge of $4.85 for all kW in excess of 10kW. Based upon the Docket No. 4323 billing units, the following calculation shows the percentage of total revenue requirement designed to be recovered through the current customer and demand charges:

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Determinant	Value	Current Charge	Calculated Revenue	Percent of Total Revenue Requirement
Bills	100,425	$135.00	$13,557,375	36.3%
Demand Billing units in excess of 10kW	3,656,947.7	$4.85	$17,736,196	47.5%
Total			**$31,293,571**	**83.8%**
Total Revenue Requirement			$37,328,115	

Under the proposed rate structure, the customer charge will decrease to $75.00 from its current level of $135.00. All kW of demand will then be billed at a rate of $5.60 per kW. The revenue designed to be recovered through the proposed customer and demand charges is as follows:

Determinant	Value	Proposed Charge	Proposed Revenue	Percent of Total Revenue Requirement
Bills	100,425	$75.00	$7,531,875	20.2%
Demand Billing Units (all)	4,661,194.5	$5.60	$26,102,689	69.9%
Total			**$33,634,564**	**90.1%**
Total Revenue Requirement			$37,328,115	

This calculation is also shown on page 145 of the Company's July 31, 2015 filing on Schedule NG-12, page 3 of 4, line 21 (customer charge) and line 30 (demand charge).

Prepared by or under the supervision of: Peter T. Zschokke and Jeanne A. Lloyd

PUC 1-7

Request:

Please provide the percentage of (a) A-16 customers who will be placed in a higher tier because of one month's usage; and (b) C-06 customers who will be placed in a higher tier because of one month's usage.

Response:

The percentage of A-16 customers that will be placed in a higher tier due to one month's usage is 18.6%, as shown below:

Residential	Tier 2	Tier 3	Tier 4
Percent of Customers in Tier due to one month's usage	4.5%	7.7%	6.4%

The percentage of C-06 customers that will be placed in a higher tier due to one month's usage is 9.5% as shown below:

Small Commercial	Tier 2	Tier 3	Tier 4
Percent of Customers in Tier due to one month's usage	2.6%	3.9%	3.0%

Prepared by or under the supervision of: Peter T. Zschokke and Jeanne A. Lloyd

PUC 1-8

Request:

Using ten residential customers who fall within Tier 2 for all months but one (where the one month places them into Tier 4), please provide the difference in their annual charges if they were to reduce that one month of usage to be charged under Tier 2. Please do the same for those who fall within Tier 3 for all months but one. Please ensure that no more than one of the ten customers are in the top usage level of the bottom tier and the bottom usage level of the top tier (i.e., a customer with 700 kWh per month for 11 months and 800 kWh in month 12).

Response:

Please see Attachment PUC 1-8.

Prepared by or under the supervision of: Peter T. Zschokke and Jeanne A. Lloyd

Example Set 1: One Month in tier 4, 11 months in Tier 2 vs. all months in Tier 2

Residential Customer Example 1

		Distribution				Distribution			
		Customer	Energy			Customer	Energy		
Month	kWh	Charge	Charge	Total Bill	kWh	Charge	Charge	Total Bill	Change
1	1250	$18.00	$37.83	$238.35	750	$8.50	$22.70	$140.99	($97.36)
2	558	$18.00	$16.89	$117.30	558	$8.50	$16.89	$107.41	($9.90)
3	371	$18.00	$11.23	$84.58	371	$8.50	$11.23	$74.69	($9.90)
4	610	$18.00	$18.46	$126.40	610	$8.50	$18.46	$116.50	($9.90)
5	331	$18.00	$10.02	$77.58	331	$8.50	$10.02	$67.69	($9.90)
6	549	$18.00	$16.61	$115.72	549	$8.50	$16.61	$105.82	($9.90)
7	538	$18.00	$16.28	$113.80	538	$8.50	$16.28	$103.91	($9.90)
8	296	$18.00	$8.96	$71.48	296	$8.50	$8.96	$61.58	($9.90)
9	409	$18.00	$12.38	$91.24	409	$8.50	$12.38	$81.34	($9.90)
10	305	$18.00	$9.23	$73.05	305	$8.50	$9.23	$63.16	($9.90)
11	392	$18.00	$11.86	$88.25	392	$8.50	$11.86	$78.35	($9.90)
12	553	$18.00	$16.73	$116.42	553	$8.50	$16.73	$106.52	($9.90)
				$1,314.18				**$1,107.96**	**($206.22)**

Residential Customer Example 2

		Distribution				Distribution			
		Customer	Energy			Customer	Energy		
Month	kWh	Charge	Charge	Total Bill	kWh	Charge	Charge	Total Bill	Change
1	1500	$18.00	$45.39	$282.08	750	$8.50	$22.70	$140.99	($141.09)
2	671	$18.00	$20.30	$137.07	671	$8.50	$20.30	$127.18	($9.90)
3	411	$18.00	$12.44	$91.57	411	$8.50	$12.44	$81.68	($9.90)
4	527	$18.00	$15.95	$111.86	527	$8.50	$15.95	$101.97	($9.90)
5	400	$18.00	$12.10	$89.66	400	$8.50	$12.10	$79.76	($9.90)
6	361	$18.00	$10.92	$82.83	361	$8.50	$10.92	$72.94	($9.90)
7	460	$18.00	$13.92	$100.16	460	$8.50	$13.92	$90.26	($9.90)
8	271	$18.00	$8.20	$67.09	271	$8.50	$8.20	$57.20	($9.90)
9	386	$18.00	$11.68	$87.20	386	$8.50	$11.68	$77.30	($9.90)
10	745	$18.00	$22.54	$150.00	745	$8.50	$22.54	$140.10	($9.90)
11	300	$18.00	$9.08	$72.18	300	$8.50	$9.08	$62.28	($9.90)
12	476	$18.00	$14.40	$102.95	476	$8.50	$14.40	$93.05	($9.90)
				$1,374.66				**$1,124.71**	**($249.95)**

Example Set 1: One Month in tier 4, 11 months in Tier 2 vs. all months in Tier 2

Residential Customer Example 3

		Distribution				Distribution			
		Customer	Energy			Customer	Energy		
Month	kWh	Charge	Charge	Total Bill	kWh	Charge	Charge	Total Bill	Change
1	1750	$18.00	$52.96	$325.81	750	$8.50	$22.70	$140.99	($184.82)
2	356	$18.00	$10.77	$81.96	356	$8.50	$10.77	$72.06	($9.90)
3	405	$18.00	$12.26	$90.54	405	$8.50	$12.26	$80.65	($9.90)
4	626	$18.00	$18.94	$129.19	626	$8.50	$18.94	$119.29	($9.90)
5	560	$18.00	$16.95	$117.65	560	$8.50	$16.95	$107.75	($9.90)
6	390	$18.00	$11.80	$87.91	390	$8.50	$11.80	$78.01	($9.90)
7	641	$18.00	$19.40	$131.82	641	$8.50	$19.40	$121.93	($9.90)
8	515	$18.00	$15.58	$109.76	515	$8.50	$15.58	$99.86	($9.90)
9	594	$18.00	$17.97	$123.60	594	$8.50	$17.97	$113.71	($9.90)
10	662	$18.00	$20.03	$135.49	662	$8.50	$20.03	$125.59	($9.90)
11	654	$18.00	$19.79	$134.10	654	$8.50	$19.79	$124.21	($9.90)
12	653	$18.00	$19.76	$133.91	653	$8.50	$19.76	$124.01	($9.90)
				$1,601.74				**$1,308.06**	**($293.68)**

Residential Customer Example 4

		Distribution				Distribution			
		Customer	Energy			Customer	Energy		
Month	kWh	Charge	Charge	Total Bill	kWh	Charge	Charge	Total Bill	Change
1	1800	$18.00	$54.47	$334.55	750	$8.50	$22.70	$140.99	($193.56)
2	316	$18.00	$9.56	$74.96	316	$8.50	$9.56	$65.06	($9.90)
3	288	$18.00	$8.71	$70.06	288	$8.50	$8.71	$60.17	($9.90)
4	568	$18.00	$17.19	$119.05	568	$8.50	$17.19	$109.16	($9.90)
5	286	$18.00	$8.65	$69.72	286	$8.50	$8.65	$59.82	($9.90)
6	311	$18.00	$9.41	$74.08	311	$8.50	$9.41	$64.19	($9.90)
7	586	$18.00	$17.73	$122.19	586	$8.50	$17.73	$112.29	($9.90)
8	407	$18.00	$12.32	$90.89	407	$8.50	$12.32	$80.99	($9.90)
9	253	$18.00	$7.66	$63.95	253	$8.50	$7.66	$54.05	($9.90)
10	387	$18.00	$11.71	$87.39	387	$8.50	$11.71	$77.49	($9.90)
11	561	$18.00	$16.98	$117.81	561	$8.50	$16.98	$107.92	($9.90)
12	285	$18.00	$8.62	$69.53	285	$8.50	$8.62	$59.64	($9.90)
				$1,294.18				**$991.76**	**($302.42)**

Example Set 1: One Month in tier 4, 11 months in Tier 2 vs. all months in Tier 2

Residential Customer Example 5

		Distribution				Distribution			
		Customer	Energy			Customer	Energy		
Month	kWh	Charge	Charge	Total Bill	kWh	Charge	Charge	Total Bill	Change
1	2000	$18.00	$60.52	$369.54	750	$8.50	$22.70	$140.99	($228.55)
2	741	$18.00	$22.42	$149.30	741	$8.50	$22.42	$139.41	($9.90)
3	332	$18.00	$10.05	$77.76	332	$8.50	$10.05	$67.86	($9.90)
4	413	$18.00	$12.50	$91.94	413	$8.50	$12.50	$82.04	($9.90)
5	619	$18.00	$18.73	$127.97	619	$8.50	$18.73	$118.07	($9.90)
6	434	$18.00	$13.13	$95.61	434	$8.50	$13.13	$85.72	($9.90)
7	373	$18.00	$11.29	$84.95	373	$8.50	$11.29	$75.05	($9.90)
8	297	$18.00	$8.99	$71.64	297	$8.50	$8.99	$61.74	($9.90)
9	392	$18.00	$11.86	$88.25	392	$8.50	$11.86	$78.35	($9.90)
10	325	$18.00	$9.83	$76.53	325	$8.50	$9.83	$66.64	($9.90)
11	530	$18.00	$16.04	$112.40	530	$8.50	$16.04	$102.50	($9.90)
12	474	$18.00	$14.34	$102.60	474	$8.50	$14.34	$92.71	($9.90)
				$1,448.49				**$1,111.08**	**($337.41)**

Residential Customer Example 6

		Distribution				Distribution			
		Customer	Energy			Customer	Energy		
Month	kWh	Charge	Charge	Total Bill	kWh	Charge	Charge	Total Bill	Change
1	1201	$18.00	$36.34	$229.78	750	$8.50	$22.70	$140.99	($88.79)
2	670	$18.00	$20.27	$136.88	670	$8.50	$20.27	$126.98	($9.90)
3	355	$18.00	$10.74	$81.79	355	$8.50	$10.74	$71.90	($9.90)
4	675	$18.00	$20.43	$137.77	675	$8.50	$20.43	$127.88	($9.90)
5	668	$18.00	$20.21	$136.54	668	$8.50	$20.21	$126.65	($9.90)
6	392	$18.00	$11.86	$88.25	392	$8.50	$11.86	$78.35	($9.90)
7	691	$18.00	$20.91	$140.55	691	$8.50	$20.91	$130.66	($9.90)
8	645	$18.00	$19.52	$132.51	645	$8.50	$19.52	$122.61	($9.90)
9	598	$18.00	$18.10	$124.30	598	$8.50	$18.10	$114.41	($9.90)
10	490	$18.00	$14.83	$105.42	490	$8.50	$14.83	$95.52	($9.90)
11	291	$18.00	$8.81	$70.60	291	$8.50	$8.81	$60.71	($9.90)
12	623	$18.00	$18.85	$128.67	623	$8.50	$18.85	$118.77	($9.90)
				$1,513.06				**$1,315.42**	**($197.65)**

Example Set 1: One Month in tier 4, 11 months in Tier 2 vs. all months in Tier 2

Residential Customer Example 7

		Distribution				Distribution			
		Customer	Energy			Customer	Energy		
Month	kWh	Charge	Charge	Total Bill	kWh	Charge	Charge	Total Bill	Change
1	1350	$18.00	$40.85	$255.84	750	$8.50	$22.70	$140.99	($114.85)
2	327	$18.00	$9.90	$76.89	327	$8.50	$9.90	$66.99	($9.90)
3	319	$18.00	$9.65	$75.49	319	$8.50	$9.65	$65.59	($9.90)
4	252	$18.00	$7.63	$63.77	252	$8.50	$7.63	$53.88	($9.90)
5	530	$18.00	$16.04	$112.40	530	$8.50	$16.04	$102.50	($9.90)
6	672	$18.00	$20.33	$137.24	672	$8.50	$20.33	$127.34	($9.90)
7	474	$18.00	$14.34	$102.60	474	$8.50	$14.34	$92.71	($9.90)
8	440	$18.00	$13.31	$96.66	440	$8.50	$13.31	$86.76	($9.90)
9	493	$18.00	$14.92	$105.94	493	$8.50	$14.92	$96.04	($9.90)
10	709	$18.00	$21.45	$143.70	709	$8.50	$21.45	$133.80	($9.90)
11	432	$18.00	$13.07	$95.25	432	$8.50	$13.07	$85.35	($9.90)
12	632	$18.00	$19.12	$130.24	632	$8.50	$19.12	$120.34	($9.90)
				$1,396.01				**$1,172.30**	**($223.71)**

Residential Customer Example 8

		Distribution				Distribution			
		Customer	Energy			Customer	Energy		
Month	kWh	Charge	Charge	Total Bill	kWh	Charge	Charge	Total Bill	Change
1	1400	$18.00	$42.36	$264.58	750	$8.50	$22.70	$140.99	($123.59)
2	569	$18.00	$17.22	$119.22	569	$8.50	$17.22	$109.32	($9.90)
3	372	$18.00	$11.26	$84.76	372	$8.50	$11.26	$74.86	($9.90)
4	313	$18.00	$9.47	$74.45	313	$8.50	$9.47	$64.55	($9.90)
5	653	$18.00	$19.76	$133.91	653	$8.50	$19.76	$124.01	($9.90)
6	490	$18.00	$14.83	$105.42	490	$8.50	$14.83	$95.52	($9.90)
7	476	$18.00	$14.40	$102.95	476	$8.50	$14.40	$93.05	($9.90)
8	303	$18.00	$9.17	$72.69	303	$8.50	$9.17	$62.79	($9.90)
9	648	$18.00	$19.61	$133.04	648	$8.50	$19.61	$123.15	($9.90)
10	602	$18.00	$18.22	$125.00	602	$8.50	$18.22	$115.10	($9.90)
11	287	$18.00	$8.68	$69.89	287	$8.50	$8.68	$59.99	($9.90)
12	500	$18.00	$15.13	$107.16	500	$8.50	$15.13	$97.26	($9.90)
				$1,393.05				**$1,160.60**	**($232.45)**

Example Set 1: One Month in tier 4, 11 months in Tier 2 vs. all months in Tier 2

Residential Customer Example 9

		Distribution				Distribution			
		Customer	Energy			Customer	Energy		
Month	kWh	Charge	Charge	Total Bill	kWh	Charge	Charge	Total Bill	Change
1	1600	$18.00	$48.42	$299.57	750	$8.50	$22.70	$140.99	($158.58)
2	678	$18.00	$20.52	$138.29	678	$8.50	$20.52	$128.40	($9.90)
3	703	$18.00	$21.27	$142.67	703	$8.50	$21.27	$132.77	($9.90)
4	620	$18.00	$18.76	$128.14	620	$8.50	$18.76	$118.24	($9.90)
5	618	$18.00	$18.70	$127.78	618	$8.50	$18.70	$117.89	($9.90)
6	386	$18.00	$11.68	$87.20	386	$8.50	$11.68	$77.30	($9.90)
7	546	$18.00	$16.52	$115.20	546	$8.50	$16.52	$105.30	($9.90)
8	470	$18.00	$14.22	$101.91	470	$8.50	$14.22	$92.01	($9.90)
9	399	$18.00	$12.07	$89.49	399	$8.50	$12.07	$79.59	($9.90)
10	614	$18.00	$18.58	$127.10	614	$8.50	$18.58	$117.21	($9.90)
11	388	$18.00	$11.74	$87.55	388	$8.50	$11.74	$77.66	($9.90)
12	569	$18.00	$17.22	$119.22	569	$8.50	$17.22	$109.32	($9.90)
				$1,564.11				**$1,296.68**	**($267.44)**

Residential Customer Example 10

		Distribution				Distribution			
		Customer	Energy			Customer	Energy		
Month	kWh	Charge	Charge	Total Bill	kWh	Charge	Charge	Total Bill	Change
1	1750	$18.00	$52.96	$325.81	750	$8.50	$22.70	$140.99	($184.82)
2	616	$18.00	$18.64	$127.44	616	$8.50	$18.64	$117.54	($9.90)
3	740	$18.00	$22.39	$149.14	740	$8.50	$22.39	$139.24	($9.90)
4	489	$18.00	$14.80	$105.23	489	$8.50	$14.80	$95.33	($9.90)
5	713	$18.00	$21.58	$144.42	713	$8.50	$21.58	$134.52	($9.90)
6	667	$18.00	$20.18	$136.36	667	$8.50	$20.18	$126.47	($9.90)
7	487	$18.00	$14.74	$104.88	487	$8.50	$14.74	$94.98	($9.90)
8	441	$18.00	$13.34	$96.82	441	$8.50	$13.34	$86.93	($9.90)
9	668	$18.00	$20.21	$136.54	668	$8.50	$20.21	$126.65	($9.90)
10	290	$18.00	$8.78	$70.42	290	$8.50	$8.78	$60.52	($9.90)
11	497	$18.00	$15.04	$106.63	497	$8.50	$15.04	$96.73	($9.90)
12	264	$18.00	$7.99	$65.88	264	$8.50	$7.99	$55.98	($9.90)
				$1,569.55				**$1,275.88**	**($293.68)**

Example Set 2: One Month in tier 4, 11 months in Tier 3 vs. all months in Tier 3

Residential Customer Example 1

		Distribution				Distribution			
		Customer	Energy			Customer	Energy		
Month	kWh	Charge	Charge	Total Bill	kWh	Charge	Charge	Total Bill	Change
1	1250	$18.00	$37.83	$238.35	1200	$13.00	$36.31	$224.40	($13.96)
2	957	$18.00	$28.96	$187.10	957	$13.00	$28.96	$181.90	($5.21)
3	1163	$18.00	$35.19	$223.13	1163	$13.00	$35.19	$217.92	($5.21)
4	993	$18.00	$30.05	$193.39	993	$13.00	$30.05	$188.18	($5.21)
5	1108	$18.00	$33.53	$213.51	1108	$13.00	$33.53	$208.30	($5.21)
6	1181	$18.00	$35.74	$226.28	1181	$13.00	$35.74	$221.07	($5.21)
7	946	$18.00	$28.63	$185.17	946	$13.00	$28.63	$179.96	($5.21)
8	1178	$18.00	$35.65	$225.75	1178	$13.00	$35.65	$220.54	($5.21)
9	878	$18.00	$26.57	$173.29	878	$13.00	$26.57	$168.08	($5.21)
10	1151	$18.00	$34.83	$221.03	1151	$13.00	$34.83	$215.82	($5.21)
11	1119	$18.00	$33.86	$215.43	1119	$13.00	$33.86	$210.22	($5.21)
12	1035	$18.00	$31.32	$200.73	1035	$13.00	$31.32	$195.52	($5.21)
				$2,503.16				**$2,431.91**	**($71.25)**

Residential Customer Example 2

		Distribution				Distribution			
		Customer	Energy			Customer	Energy		
Month	kWh	Charge	Charge	Total Bill	kWh	Charge	Charge	Total Bill	Change
1	1500	$18.00	$45.39	$282.08	1200	$13.00	$36.31	$224.40	($57.69)
2	932	$18.00	$28.20	$182.71	932	$13.00	$28.20	$177.50	($5.21)
3	1034	$18.00	$31.29	$200.56	1034	$13.00	$31.29	$195.35	($5.21)
4	1174	$18.00	$35.53	$225.05	1174	$13.00	$35.53	$219.84	($5.21)
5	1176	$18.00	$35.59	$225.41	1176	$13.00	$35.59	$220.20	($5.21)
6	785	$18.00	$23.75	$157.00	785	$13.00	$23.75	$151.79	($5.21)
7	1064	$18.00	$32.20	$205.81	1064	$13.00	$32.20	$200.60	($5.21)
8	1197	$18.00	$36.22	$229.08	1197	$13.00	$36.22	$223.88	($5.21)
9	1164	$18.00	$35.22	$223.29	1164	$13.00	$35.22	$218.08	($5.21)
10	788	$18.00	$23.84	$157.53	788	$13.00	$23.84	$152.32	($5.21)
11	950	$18.00	$28.75	$185.88	950	$13.00	$28.75	$180.67	($5.21)
12	801	$18.00	$24.24	$159.80	801	$13.00	$24.24	$154.59	($5.21)
				$2,434.21				**$2,319.23**	**($114.98)**

Example Set 2: One Month in tier 4, 11 months in Tier 3 vs. all months in Tier 3

Residential Customer Example 3

		Distribution				Distribution			
		Customer	Energy			Customer	Energy		
Month	kWh	Charge	Charge	Total Bill	kWh	Charge	Charge	Total Bill	Change
1	1750	$18.00	$52.96	$325.81	1200	$13.00	$36.31	$224.40	($101.42)
2	1182	$18.00	$35.77	$226.45	1182	$13.00	$35.77	$221.24	($5.21)
3	1085	$18.00	$32.83	$209.49	1085	$13.00	$32.83	$204.28	($5.21)
4	770	$18.00	$23.30	$154.39	770	$13.00	$23.30	$149.18	($5.21)
5	1153	$18.00	$34.89	$221.36	1153	$13.00	$34.89	$216.16	($5.21)
6	953	$18.00	$28.84	$186.40	953	$13.00	$28.84	$181.19	($5.21)
7	861	$18.00	$26.05	$170.30	861	$13.00	$26.05	$165.09	($5.21)
8	1084	$18.00	$32.80	$209.30	1084	$13.00	$32.80	$204.09	($5.21)
9	820	$18.00	$24.81	$163.11	820	$13.00	$24.81	$157.91	($5.21)
10	1120	$18.00	$33.89	$215.61	1120	$13.00	$33.89	$210.41	($5.21)
11	875	$18.00	$26.48	$172.75	875	$13.00	$26.48	$167.54	($5.21)
12	1140	$18.00	$34.50	$219.11	1140	$13.00	$34.50	$213.91	($5.21)
				$2,474.09				**$2,315.39**	**($158.71)**

Residential Customer Example 4

		Distribution				Distribution			
		Customer	Energy			Customer	Energy		
Month	kWh	Charge	Charge	Total Bill	kWh	Charge	Charge	Total Bill	Change
1	1800	$18.00	$54.47	$334.55	1200	$13.00	$36.31	$224.40	($110.16)
2	828	$18.00	$25.06	$164.53	828	$13.00	$25.06	$159.32	($5.21)
3	839	$18.00	$25.39	$166.46	839	$13.00	$25.39	$161.25	($5.21)
4	875	$18.00	$26.48	$172.75	875	$13.00	$26.48	$167.54	($5.21)
5	1073	$18.00	$32.47	$207.39	1073	$13.00	$32.47	$202.18	($5.21)
6	897	$18.00	$27.14	$176.59	897	$13.00	$27.14	$171.39	($5.21)
7	941	$18.00	$28.47	$184.28	941	$13.00	$28.47	$179.07	($5.21)
8	937	$18.00	$28.35	$183.58	937	$13.00	$28.35	$178.38	($5.21)
9	800	$18.00	$24.21	$159.63	800	$13.00	$24.21	$154.42	($5.21)
10	990	$18.00	$29.96	$192.88	990	$13.00	$29.96	$187.67	($5.21)
11	787	$18.00	$23.81	$157.36	787	$13.00	$23.81	$152.16	($5.21)
12	763	$18.00	$23.09	$153.17	763	$13.00	$23.09	$147.96	($5.21)
				$2,253.17				**$2,085.72**	**($167.45)**

Example Set 2: One Month in tier 4, 11 months in Tier 3 vs. all months in Tier 3

Residential Customer Example 5

		Distribution				Distribution			
		Customer	Energy			Customer	Energy		
Month	kWh	Charge	Charge	Total Bill	kWh	Charge	Charge	Total Bill	Change
1	2000	$18.00	$60.52	$369.54	1200	$13.00	$36.31	$224.40	($145.15)
2	1003	$18.00	$30.35	$195.14	1003	$13.00	$30.35	$189.93	($5.21)
3	893	$18.00	$27.02	$175.91	893	$13.00	$27.02	$170.70	($5.21)
4	1027	$18.00	$31.08	$199.34	1027	$13.00	$31.08	$194.14	($5.21)
5	854	$18.00	$25.84	$169.06	854	$13.00	$25.84	$163.85	($5.21)
6	864	$18.00	$26.14	$170.81	864	$13.00	$26.14	$165.60	($5.21)
7	859	$18.00	$25.99	$169.94	859	$13.00	$25.99	$164.73	($5.21)
8	1086	$18.00	$32.86	$209.67	1086	$13.00	$32.86	$204.46	($5.21)
9	1110	$18.00	$33.59	$213.86	1110	$13.00	$33.59	$208.66	($5.21)
10	945	$18.00	$28.60	$185.00	945	$13.00	$28.60	$179.79	($5.21)
11	1120	$18.00	$33.89	$215.61	1120	$13.00	$33.89	$210.41	($5.21)
12	1018	$18.00	$30.80	$197.75	1018	$13.00	$30.80	$192.54	($5.21)
				$2,471.64				**$2,269.20**	**($202.44)**

Residential Customer Example 6

		Distribution				Distribution			
		Customer	Energy			Customer	Energy		
Month	kWh	Charge	Charge	Total Bill	kWh	Charge	Charge	Total Bill	Change
1	1201	$18.00	$36.34	$229.78	1200	$13.00	$36.31	$224.40	($5.39)
2	933	$18.00	$28.23	$182.89	933	$13.00	$28.23	$177.68	($5.21)
3	1154	$18.00	$34.92	$221.55	1154	$13.00	$34.92	$216.34	($5.21)
4	921	$18.00	$27.87	$180.80	921	$13.00	$27.87	$175.59	($5.21)
5	1083	$18.00	$32.77	$209.14	1083	$13.00	$32.77	$203.93	($5.21)
6	1079	$18.00	$32.65	$208.43	1079	$13.00	$32.65	$203.22	($5.21)
7	877	$18.00	$26.54	$173.09	877	$13.00	$26.54	$167.89	($5.21)
8	937	$18.00	$28.35	$183.58	937	$13.00	$28.35	$178.38	($5.21)
9	1072	$18.00	$32.44	$207.22	1072	$13.00	$32.44	$202.01	($5.21)
10	871	$18.00	$26.36	$172.05	871	$13.00	$26.36	$166.84	($5.21)
11	1176	$18.00	$35.59	$225.41	1176	$13.00	$35.59	$220.20	($5.21)
12	1035	$18.00	$31.32	$200.73	1035	$13.00	$31.32	$195.52	($5.21)
				$2,394.67				**$2,331.99**	**($62.68)**

Example Set 2: One Month in tier 4, 11 months in Tier 3 vs. all months in Tier 3

Residential Customer Example 7

		Distribution				Distribution			
		Customer	Energy			Customer	Energy		
Month	kWh	Charge	Charge	Total Bill	kWh	Charge	Charge	Total Bill	Change
1	1350	$18.00	$40.85	$255.84	1200	$13.00	$36.31	$224.40	($31.45)
2	904	$18.00	$27.36	$177.83	904	$13.00	$27.36	$172.63	($5.21)
3	938	$18.00	$28.38	$183.76	938	$13.00	$28.38	$178.55	($5.21)
4	958	$18.00	$28.99	$187.26	958	$13.00	$28.99	$182.05	($5.21)
5	952	$18.00	$28.81	$186.23	952	$13.00	$28.81	$181.02	($5.21)
6	994	$18.00	$30.08	$193.57	994	$13.00	$30.08	$188.36	($5.21)
7	1071	$18.00	$32.41	$207.04	1071	$13.00	$32.41	$201.83	($5.21)
8	928	$18.00	$28.08	$182.01	928	$13.00	$28.08	$176.80	($5.21)
9	995	$18.00	$30.11	$193.74	995	$13.00	$30.11	$188.53	($5.21)
10	989	$18.00	$29.93	$192.69	989	$13.00	$29.93	$187.48	($5.21)
11	1149	$18.00	$34.77	$220.68	1149	$13.00	$34.77	$215.47	($5.21)
12	1058	$18.00	$32.02	$204.75	1058	$13.00	$32.02	$199.54	($5.21)
				$2,385.41				**$2,296.67**	**($88.74)**

Residential Customer Example 8

		Distribution				Distribution			
		Customer	Energy			Customer	Energy		
Month	kWh	Charge	Charge	Total Bill	kWh	Charge	Charge	Total Bill	Change
1	1400	$18.00	$42.36	$264.58	1200	$13.00	$36.31	$224.40	($40.19)
2	799	$18.00	$24.18	$159.45	799	$13.00	$24.18	$154.24	($5.21)
3	1097	$18.00	$33.20	$211.59	1097	$13.00	$33.20	$206.39	($5.21)
4	789	$18.00	$23.88	$157.72	789	$13.00	$23.88	$152.51	($5.21)
5	1192	$18.00	$36.07	$228.21	1192	$13.00	$36.07	$223.00	($5.21)
6	1145	$18.00	$34.65	$219.99	1145	$13.00	$34.65	$214.78	($5.21)
7	768	$18.00	$23.24	$154.03	768	$13.00	$23.24	$148.82	($5.21)
8	981	$18.00	$29.69	$191.29	981	$13.00	$29.69	$186.08	($5.21)
9	771	$18.00	$23.33	$154.55	771	$13.00	$23.33	$149.34	($5.21)
10	1179	$18.00	$35.68	$225.93	1179	$13.00	$35.68	$220.72	($5.21)
11	1079	$18.00	$32.65	$208.43	1079	$13.00	$32.65	$203.22	($5.21)
12	1092	$18.00	$33.04	$210.70	1092	$13.00	$33.04	$205.49	($5.21)
				$2,386.47				**$2,288.99**	**($97.48)**

Example Set 2: One Month in tier 4, 11 months in Tier 3 vs. all months in Tier 3

Residential Customer Example 9

		Distribution				Distribution			
		Customer	Energy			Customer	Energy		
Month	kWh	Charge	Charge	Total Bill	kWh	Charge	Charge	Total Bill	Change
1	1600	$18.00	$48.42	$299.57	1200	$13.00	$36.31	$224.40	($75.18)
2	1156	$18.00	$34.98	$221.90	1156	$13.00	$34.98	$216.69	($5.21)
3	807	$18.00	$24.42	$160.85	807	$13.00	$24.42	$155.65	($5.21)
4	1144	$18.00	$34.62	$219.80	1144	$13.00	$34.62	$214.59	($5.21)
5	916	$18.00	$27.72	$179.93	916	$13.00	$27.72	$174.72	($5.21)
6	941	$18.00	$28.47	$184.28	941	$13.00	$28.47	$179.07	($5.21)
7	1157	$18.00	$35.01	$222.07	1157	$13.00	$35.01	$216.86	($5.21)
8	811	$18.00	$24.54	$161.54	811	$13.00	$24.54	$156.33	($5.21)
9	1132	$18.00	$34.25	$217.70	1132	$13.00	$34.25	$212.49	($5.21)
10	796	$18.00	$24.09	$158.93	796	$13.00	$24.09	$153.72	($5.21)
11	891	$18.00	$26.96	$175.55	891	$13.00	$26.96	$170.34	($5.21)
12	1059	$18.00	$32.05	$204.95	1059	$13.00	$32.05	$199.74	($5.21)
				$2,407.07				**$2,274.60**	**($132.47)**

Residential Customer Example 10

		Distribution				Distribution			
		Customer	Energy			Customer	Energy		
Month	kWh	Charge	Charge	Total Bill	kWh	Charge	Charge	Total Bill	Change
1	1750	$18.00	$52.96	$325.81	1200	$13.00	$36.31	$224.40	($101.42)
2	983	$18.00	$29.75	$191.64	983	$13.00	$29.75	$186.43	($5.21)
3	751	$18.00	$22.73	$151.05	751	$13.00	$22.73	$145.84	($5.21)
4	1025	$18.00	$31.02	$199.00	1025	$13.00	$31.02	$193.79	($5.21)
5	761	$18.00	$23.03	$152.81	761	$13.00	$23.03	$147.60	($5.21)
6	1009	$18.00	$30.53	$196.19	1009	$13.00	$30.53	$190.98	($5.21)
7	827	$18.00	$25.03	$164.36	827	$13.00	$25.03	$159.16	($5.21)
8	865	$18.00	$26.17	$170.99	865	$13.00	$26.17	$165.78	($5.21)
9	1170	$18.00	$35.40	$224.34	1170	$13.00	$35.40	$219.14	($5.21)
10	940	$18.00	$28.44	$184.11	940	$13.00	$28.44	$178.91	($5.21)
11	795	$18.00	$24.06	$158.75	795	$13.00	$24.06	$153.54	($5.21)
12	1091	$18.00	$33.01	$210.53	1091	$13.00	$33.01	$205.32	($5.21)
				$2,329.59				**$2,170.89**	**($158.71)**

PUC 1-9

Request:

Please provide some of the types of activities of the residential customers within the response to PUC-1-7 that may be addressed in order to place those customers into the lower tier. Using the current energy efficiency programs, what types of programs and/or incentives may be provided to those customers, what is the cost and payback period to those customers under (a) the current pricing structure and (b) the proposed pricing structure?

Response:

Customers may participate in any of the Company's residential energy efficiency offerings to reduce their usage in an attempt to move to a lower tier. Current offerings are described in the Company's 2015 Energy Efficiency Program Plan, approved by the PUC in Docket No. 4527.

A typical non-low income participant in the energy efficiency programs will save between 0.1% and 6.5% of their monthly usage (see 2015 Energy Efficiency program Plan, Docket No. 4527, Attachment 7, page 2 of 4), though individual customers may see more savings depending on the project. Given this amount of savings, it is likely that most participants in energy efficiency programs will not see a change in tier under the current proposal, unless they are close to tier boundaries.

The Company has prepared two illustrations for the impact of the rate design proposal on energy efficiency project payback. One is for a residential customer who consumed 500 kWh/month prior to the retrofit and the second is for a customer who consumed 251 kWh/month. The illustrations assume that both customers purchased LED A lamps. Each lamp is assumed to save 39 kWh annually, consistent with assumptions for the 2015 energy efficiency programs. In these examples, the Company assumed lamp costs are approximately $16 per lamp, and the Company's buydown program reduces the retail cost to customers to $8 per lamp. Payback is calculated as customer cost/annual savings.

Prepared by or under the supervision of: Jeremy Newberger

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Scenario	500 kWh (current), purchase 2 LEDs	500 kWh (proposed), purchase 2 LEDs
Pre-retrofit bill	$99.03	$97.26
Monthly Savings	6 kWh	6 kWh
Post-efficiency use	494 kWh	494 kWh
Post-retrofit bill	$97.92	$96.22
Annual savings	$13.32	$12.48
Project cost	$32.00	$32.00
Incentive	$16.00	$16.00
Customer cost	$16.00	$16.00
Simple payback to customer	1.2 years	1.3 years

Scenario	251 kWh (current), install one bulb	251 kWh (proposed), install one bulb
Pre-retrofit bill	$52.77	$53.71
Monthly Savings	3 kWh	3 kWh
Post-efficiency use	248 kWh	248 kWh
Post-retrofit bill	$52.22	$53.18 (1st 11 months) $49.79 (after 11 months)
Annual savings	$6.60	$6.36 (1st 11 months) $47.04 (after 11 months)
Project cost	$16.00	$16.00
Incentive	$8.00	$8.00
Customer cost	$8.00	$8.00
Simple payback	1.2 years	1.1 years

These illustrations indicate that the proposed rate design structure is likely to have a minimal impact on the payback period for residential customers when a customer is expected to stay within a tier, and a beneficial impact when a customer is able to move to a lower tier. It should be noted that many customers who participate in the EnergyWise program incur no costs for measures installed at the time of the energy assessment. For these customers, their cost is zero, and their payback will be immediate under both existing and proposed rates.

Prepared by or under the supervision of: Jeremy Newberger

PUC 1-10

Request:

How does the Company anticipate the proposed pricing structure will affect the Total Resource Cost test used in evaluating the value of the energy efficiency program?

Response:

The Total Resource Cost test used to assess the cost effectiveness of energy efficiency program uses avoided costs of energy to calculate the value of saved energy, rather than retail rates. Therefore, the Company does not anticipate that the proposed pricing structure will affect Total Resource Cost test results.

Prepared by or under the supervision of: Jeremy Newberger

PUC 1-11

Request:

How does the Company anticipate the proposed pricing structure to affect the design of the energy efficiency program?

Response:

The Company believes the proposed pricing structure will continue to properly promote energy efficiency and does not anticipate it will affect customer's interest in pursuing energy efficiency upgrades. Therefore, the Company sees no need to change the design of its energy efficiency programs as a consequence of the proposed rate structure.

Under current rates, for a typical residential customer consuming 500 kWh per month, variable charges make up approximately 95% of the monthly bill. Under the proposed rate structure, for the same customer, variable charges will remain at 95% of the bill based upon kWh use but split between a little more than 91% of the customer's bill on per kWh variable charges and the other 4% based upon maximum kWh use in the last 12 months. Therefore, there will still be a strong incentive for all customers to save and reduce the variable charge component of their bill, without any program redesign.

For a small number of customers, who are close to the boundaries of the consumption tiers, the proposed rate structure will provide an added incentive to reduce energy consumption, whether to reduce usage to move to a lower tier, or to reduce usage to avoid moving to a higher tier. In either event, current energy efficiency offerings will be effective in achieving those objectives, and no redesign is anticipated.

If the Company's proposed rate structure is approved by the PUC, the Company will consider modifying its marketing and educational material for the energy efficiency programs to highlight the bill impact benefits from program participation.

Prepared by or under the supervision of: Jeremy Newberger

PUC 1-12

Request:

Please provide the costs of the various types of meters that the Company currently uses for customers in each rate class, including cost of installation and other relevant costs (please identify the other relevant costs). See: http://www.ripuc.org/eventsactions/docket/4549-NGrid-RRs(5-15-15).pdf. Please reconcile this with the amount contained on Schedule NG-2 in Docket No. 4542. http://www.ripuc.org/eventsactions/docket/4542-NGrid-REGFactor-Supp(5-22-15).pdf.

Response:

Please see Attachment PUC 1-12 for the most recent costs for the various types of meters that the Company currently uses for customers in each rate class, including installation and other relevant costs. These costs were recently updated as part of a metering review performed in a different National Grid service territory.

The amount provided in Docket No. 4549 included the cost of a residential class meter (A-16 and A-60) as $48.66, and the amount provided in Docket No. 4542 estimated the cost of a residential class meter as $60. As shown in Attachment PUC 1-12, the cost for this class of meters was recently reviewed and determined to be $57.68 before applying the Rhode Island state sales tax of 7%. The discrepancy appears to be simply the timing of when the numbers were provided. With the tax, the meter cost is $60.71. Installation for this type of meter averages $47.44, so the total installed cost for this meter is $108.15.

Prepared by or under the supervision of: Peter T. Zschokke and Jeanne A. Lloyd

	Meters by rate class					
Meter components	A16, CO6	G02 (without ITs)	G02 (with ITs)	G32, G62	G32, G62 (analog modem)	G32, G62 (digital modem)
Meter	$22.00	$33.24	$33.24	$109.00	$109.00	$109.00
Analog modem (landline)	N/A	N/A	N/A	N/A	$352.00	N/A
Digital modem (wireless)	N/A	N/A	N/A	N/A	N/A	$519.00
Testing (TOU & Instrument Transformer rated)	$14.33	16.00	16.00	38.30	$38.30	$38.30
AMR module	$21.35	N/A	N/A	N/A	N/A	N/A
Register (Demand)	N/A	$107.41	$107.41	N/A	N/A	N/A
Instrument Transformers (ITs)	N/A	N/A	$804.60	$804.60	$804.60	$804.60
Meter costs						
AMR	$57.68	N/A	N/A	N/A	N/A	N/A
Average cost for meter (without ITs)	$57.68	$156.65	N/A	N/A	N/A	N/A
Average cost for meter (with ITs)	N/A	N/A	$961.25	$951.90	$951.90	$951.90
Average cost for meter (with analog modem)	N/A	N/A	N/A	N/A	$1,303.90	N/A
Average cost for meter (with digital modem)	N/A	N/A	N/A	N/A	N/A	$1,470.90
RI sales tax (7% on equipment only)	$3.03	$9.85	$66.17	$63.95	$88.59	$100.28
Installation Costs	$47.44	$47.44	$185.30	$185.90	$185.90	$185.90
Total installed cost per meter	$108.15	$213.94	$1,212.72	$1,201.75	$1,578.39	$1,757.08
test of complete metering package (meter, ITs, and modem)	N/A	N/A	$200	$200	$200	$200
Total meter installation and complete metering package	$108.15	$213.94	$1,412.72	$1,401.75	$1,778.39	$1,957.08

1) Instrument transfromers refer to current and potential transformers needed for services over 400 amps
2) Modems are used where daily downloads of meter data are required or requested by the customer

PUC 1-13

Request:

Is there a demand meter on the market smaller than the one listed on RR-3 in Docket No. 4549? http://www.ripuc.org/eventsactions/docket/4549-NGrid-RRs(5-15-15).pdf. If so, what is the cost?

Response:

Yes, but only fractions of an inch smaller. National Grid has not evaluated this meter for use in any of its service territories, and therefore, has no actual cost data for this meter.

Prepared by or under the supervision of: Peter T. Zschokke and Jeanne A. Lloyd

PUC 1-14

Request:

For each month, please indicate the number and percentage of A-16 customers who have their highest usage that month.

Response:

Please see the table below for the requested information. Please note that some customers' maximum usage may occur in more than one month. For instance, a customer may have a maximum usage of 1,008 kWh occurring both in February and December. Each occurrence of maximum usage was used to calculate the percentage splits.

Month	Number of Customers with maximum usage during month	Percent of Customers with maximum usage during month
January	115,245	23.5%
February	31,997	6.5%
March	25,466	5.2%
April	8,319	1.7%
May	8,798	1.8%
June	6,725	1.4%
July	76,972	15.7%
August	103,630	21.2%
September	40,346	8.2%
October	9,781	2.0%
November	10,457	2.1%
December	52,120	10.7%
Total	489,856	100.0%

Prepared by or under the supervision of: Peter T. Zschokke and Jeanne A. Lloyd

PUC 1-15

Request:

For each month, please indicate the number and percentage of C-06 customers who have their highest usage that month.

Response:

Please see the table below for the requested information. Please note that some customers' maximum usage may occur in more than one month. For instance, a customer may have a maximum usage of 10,000 kWh occurring both in February and December. Each occurrence of maximum usage was used to calculate the percentage splits.

Month	Number of Customers with maximum usage during month	Percent of Customers with maximum usage during month
January	12,750	23.4%
February	4,793	8.8%
March	4,521	8.3%
April	1,592	2.9%
May	2,699	5.0%
June	1,555	2.9%
July	5,401	9.9%
August	8,191	15.1%
September	3,720	6.8%
October	1,409	2.6%
November	1,702	3.1%
December	6,073	11.2%
Total	54,406	100.0%

Prepared by or under the supervision of: Peter T. Zschokke and Jeanne A. Lloyd

PUC 1-16

Request:

Please provide the month of the system peak, the month of the system peak for each customer class.

Response:

The month of the Company's system peak for the year 2014 and the month of the system peak for each customer class for the year 2014, are as follows:

Company System Peak	September
A-16	September
C-06	September
G-02	September
G-32	September
G-62	November

Prepared by or under the supervision of: Peter T. Zschokke and Jeanne A. Lloyd

PUC 1-17

Request:

Will the move to revenue recovery through a higher percentage of fixed costs be expected to reduce adjustment through the revenue decoupling mechanism? How will this be impacted by the new Access Fee?

Response:

Yes, in general, recovery of a higher percentage of the Company's Annual Target Revenue, which is the annual level of distribution revenue the Company is allowed to realize under its Revenue Decoupling Mechanism (RDM) through customer and/or demand charges, as opposed to per kWh charges, should result in less volatility in the annual RDM reconciliation balance. Typically, kWh deliveries, especially for residential and small commercial customers, are subject to more fluctuation year-on-year than number of bills and demand (kW), since kWh deliveries can be significantly affected by such factors as weather, the economy, and the cumulative effect of energy conservation measures.

Revenue billed to customers through the proposed Access Fee will be included with other billed distribution revenue in the calculation of the annual RDM adjustment factor, and will either increase any over-recovery of Annual Target Revenue or decrease any under-recovery of Annual Target Revenue during the RDM year.

Prepared by or under the supervision of: Peter T. Zschokke and Jeanne A. Lloyd

PUC 1-18

Request:

Please explain how the proposed Access Fee will affect current standalone DG projects. What additional costs will each face. How many are operational? How many will be operational in the next twelve months? Please provide without any identifying customer information.

Response:

The proposed Access Fee will assure standalone DG projects pay their fair share for the use of the distribution system. Currently, these projects export all their electric production out onto the distribution system resulting in on-going operation and maintenance costs that are currently paid for by all other customers.

The table below provides the initial estimates for existing stand-alone DG projects. The availability factors have been assumed to be 40% for all technologies in this estimate. The Company has not finished the review needed to determine non-solar availability factors.

Please see the Company's response to PUC 1-21 for a discussion regarding the optimum solution for pricing in this situation.

Prepared by or under the supervision of:
Peter T. Zschokke, Jeanne A. Lloyd, and Timothy R. Roughan

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Unit Identifier	Type	Nameplate kW	Primary (P) or Secondary (S) access fee	Availability Factor	Proposed DG access fee annual costs
1	Hydro	1,200	P	40%	$28,800
2	Hydro	1,800	P	40%	$43,200
3	Hydro	1,200	P	40%	$28,800
4	Wind	275	S	40%	$6,600
5	Wind	1,500	P	40%	$36,000
6	Solar	2,000	P	40%	$48,000
7	Solar	500	P	40%	$12,000
8	solar	500	P	40%	$12,000
9	Solar	500	P	40%	$12,000
10	Solar	2,000	P	40%	$48,000
11	Solar	3,000	P	40%	$72,000
12	Solar	135	S	40%	$3,240
13	Solar	1,833	P	40%	$43,992
14	Solar	320	S	40%	$7,680
15	Solar	500	P	40%	$12,000
16	Solar	500	P	40%	$12,000
17	Solar	300	P	40%	$7,200
18	Solar	300	S	40%	$7,200
19	Solar	850	P	40%	$20,400
20	Solar	128	S	40%	$3,072
21	Solar	50	S	40%	$1,200
22	Solar	56	S	40%	$1,344
23	Solar	72	S	40%	$1,728
24	Solar	499	P	40%	$11,976
25	Solar	1,375	P	40%	$33,000

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Peter T. Zschokke, Jeanne A. Lloyd, and Timothy R. Roughan

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The table below provides the estimates for projects expected to come on-line between now and September 2017:

Name	Type	Nameplate kW	Primary (P) or Secondary (S) access fee	Availability Factor	Proposed DG access fee annual costs
26	Solar	500	P	40%	$12,000
27	Solar	1,298	P	40%	$31,152
28	Solar	498	P	40%	$11,952
29	Solar	110	S	40%	$3,828
30	Solar	1,246	P	40%	$29,904
31	Solar	895	P	40%	$21,480
32	Anaerobic Dig	500	P	40%	$12,000
33	Solar	1,250	P	40%	$30,000
34	Solar	1,250	P	40%	$30,000
35	Solar	1,246	P	40%	$29,904
36	Solar	1,242	P	40%	$29,808
37	Solar	1,043	P	40%	$25,032
38	Solar	500	P	40%	$11,990
39	Solar	500	P	40%	$11,990
40	Solar	499	P	40%	$11,976
41	Solar	270	S	40%	$9,386
42	Solar	173	S	40%	$6,034
43	Wind	1,500	P	40%	$36,000
44	Wind	1,500	P	40%	$36,000

PUC 1-19

Request:

Please provide an analysis of the A-16 residential customers to justify the use of 500 kWh as a typical residential customer.

Response:

For many years, the Company has used 500 kWh per month as a representative monthly usage level for a typical residential customer. The typical use is not necessarily intended to represent the average monthly use of all customers in the class, but rather a level that generally represents the monthly usage of the majority of the customers in the class. By using a level of kWh use that is relevant for the majority of the Company' customers, the Company can better communicate to customers accurate and comparable information from period to period regarding changes in rates and the resulting effect on monthly bills for electric service. In addition to conveying information to customers regarding rate changes, typical bill calculations are commonly used as a way to compare rates of one utility to another, and it is important that the bill calculations for each utility are based upon the same kWh use in order to make a valid comparison. Edison Electric Institute publishes typical bill calculations twice per year for most electric utilities nationwide. The typical bill calculations are based upon three levels of monthly usage: 500 kWh, 750 kWh, and 1,000 kWh.

In the Northeast, it is common for electric utilities to use 500 kWh as representative of a residential customer's monthly use. Based on the Company's actual Basic Residential Rate A-16 customer bills for the twelve months ending December 2014, the table below shows that 54% of all monthly bills during the year were less than 500 kWh, 41% were between 500 and 1,500 kWh, and 5% were more than 1,500. Although not presented below, an analysis based on average monthly use for each customer produces results that are very similar to this table.

The average monthly use for the all Rate A-16 customers for this period was 600 kWh. However, Rate A-16 is available to customers for purposes other than domestic household use. For example, farms, churches, and certain multi-unit buildings are allowed to receive service on Rate A-16. These customers tend to have monthly use that is significantly higher than a typical residential customer, thereby raising the calculation of the class average monthly use. Two percent of the customer bills issued during the twelve months ending December 2014 was based upon usage levels between 2,000 kWh and 133,700 kWh per month. If these bills are eliminated from the calculation of the class average, the average monthly usage drops to approximately 545 kWh per month. Therefore, 500 kWh is a representative usage level for most residential customers and is relatively close to the class average usage as well.

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kWh Range		Percent of Bills in Range	Cumulative Bills
0	100	7.0%	7.0%
100	200	10.0%	17.0%
200	300	13.0%	30.0%
300	400	12.9%	42.9%
400	500	11.1%	54.0%
500	600	10.0%	64.0%
600	700	8.0%	71.9%
700	800	6.0%	78.0%
800	900	5.0%	83.0%
900	1,000	3.0%	86.0%
1,000	1,100	3.0%	89.0%
1,100	1,200	2.0%	91.0%
1,200	1,300	2.0%	93.0%
1,300	1,400	1.0%	94.0%
1,400	1,500	1.0%	95.0%
In excess of 1,500		5.0%	100.0%

Prepared by or under the supervision of: Peter T. Zschokke and Jeanne A. Lloyd

PUC 1-20

Request:

Please provide all documents and plans to educate customers, explaining how each customer class will be targeted.

Response:

The Company has not yet fully developed its customer communication plan designed to educate customers about the proposed rate changes affecting each of the rate classes. However, the Company intends to evaluate the most effective way to communicate with and educate customers, utilizing various forms of communication tools and techniques, such as bill messages, bill inserts, energy efficiency program marketing and educational materials, website tutorials and social media. The Company will update the PUC periodically regarding customer communications as the Company formulates its communications strategy during the upcoming months.

Prepared by or under the supervision of: Peter T. Zschokke and Jeanne A. Lloyd

PUC 1-21

Request:

National Grid has proposed an Access Charge for standalone DG projects. On page 64 of the Company's initial filing, National Grid stated: "While an optimum solution would be to measure the DG facility's maximum use of the system, as measured by the energy generated and exported onto the distribution system, none of the Company's tariffs provides for such an application and measurement and billing of demand based on electricity exported onto the distribution system." Why wouldn't National Grid use this opportunity to propose the optimal solution at this time when project developers rely on current rates as part of their analysis of the investment value of a project? If the current proposal is not the optimal solution, please justify how it is reasonable.

Response:

The optimum solution (i.e., measure and bill each customer based on the energy generated and exported onto the distribution system) is appropriate as a long-term solution when and where the appropriate metering capability is available. This optimum solution can be implemented in the short-term for those customers having this type of metering installed on the DG facilities. However, the optimum solution would require modifications to the Company's metering and billing processes and systems as well as tariff revisions. Although the Company expects many of the existing DG facilities to have demand, or interval, meters installed for settlement purposes at ISO-NE, and the Company would install separate meters on generation on new DG facilities, this approach would necessitate installation of meters on all stand-alone DG facilities if the proper metering was not already in place. The Company is not aware of any stand-alone DG facilities that do not have the proper metering already in place.

Prepared by or under the supervision of: Peter T. Zschokke and Jeanne A. Lloyd

PUC 1-22

Request:

Please calculate lost revenues if all A-16 customers were to reduce consumption down one tier in July. Please calculate the resulting decoupling charge. Please also calculate the increased energy efficiency charge to maintain the current budget. Please explain all assumptions.

Response:

Please see Attachment PUC 1-22. The Company used the following assumptions to calculate lost revenues if all Rate A-16 customers were to reduce their July consumption in order to move down one tier and to calculate the resulting Revenue Decoupling Mechanism (RDM) Adjustment Factor and Energy Efficiency Program Charge (EEPC):

- Only customers with the highest usage in the month of July were used;
- If a customer moved from Tier 4 to Tier 3, the current July usage was reduced from actual to 1,200 kWh;
- If a customer moved from Tier 3 to Tier 2, the current July usage was reduced from actual to 750 kWh;
- If a customer moved from Tier 2 to Tier 1, the current July usage was reduced from actual to 250 kWh; and
- All rates used for the calculations were July 2015 (i.e., current) rates.

Using the calendar year 2014 data for all Rate A-16 customers, the Company first isolated customers whose highest monthly usage occurred in July. The Company next replaced each customer's July usage with the top usage for the next lowest tier. Each customer's maximum monthly usage and their corresponding tier were then re-determined. Customers were grouped by their original tier (if their tier did not change after the July usage was adjusted) or by their new tier as a result of moving down from one tier to the next. The total kWh reduction for each group of customers is shown in column (c), lines 9-14. The Company then calculated (1) the total reduction in customer charge revenue for each group of customers moving down from one tier to the next and (2) the total revenue reduction for the base distribution energy charge and EEPC based on the reduced consumption (kWh) for each group of customers. The resulting decrease in distribution revenue is $1,251,712. This would result in an increase to the RDM Adjustment Factor of $0.00016 per kWh. The decrease in EEPC revenue is $201,294 and would result in an increase of $0.00002 per kWh to the EEPC.

Prepared by or under the supervision of: Peter T. Zschokke and Jeanne A. Lloyd

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
				Distribution Proposed	Base Distribution Proposed			Base Egy Efficiency Current
				Customer Charge	per kWh Charge			per kWh Charge
1	Tier 1 - 0 to 250 kWh			$5.25	$0.02625			$0.00935
2	Tier 2 - 251 to 750 kWh			$8.50	$0.02625			$0.00935
3	Tier 3 - 751 to 1,200 kWh			$13.00	$0.02625			$0.00935
4	Tier 4 - Greater than 1,200 kWh			$18.00	$0.02625			$0.00935
5								
6		No. Of		Distribution	Distribution	**Total**		Egy Efficiency
7		Bills	kWh	Customer Charge	per kWh Charge	**Distribution**		per kWh Base Charge
8		Changing Tiers	Change	Revenue Change	Revenue Change	**Revenue Change**		Revenue Change
9	Tier 2		(6,050,781)	$0	($158,833)	**($158,833)**		($56,575)
10	Tier 3		(3,247,771)	$0	($85,254)	**($85,254)**		($30,367)
11	Tier 4		(10,703,082)	$0	($280,956)	**($280,956)**		($100,074)
12	Tier 2 dropping to Tier 1	16,951	(73,866)	($55,091)	($1,939)	**($57,030)**		($691)
13	Tier 3 dropping to Tier 2	70,890	(616,762)	($319,005)	($16,190)	**($335,195)**		($5,767)
14	Tier 4 dropping to Tier 3	62,497	(836,543)	($312,485)	($21,959)	**($334,444)**		($7,822)
15								
16	Total	150,338	(21,528,805)	($686,581)	($565,131)	**($1,251,712)**		($201,294)
17								
18								
19	Distribution lost revenue (RDM Under recovery)				($1,251,712)			
20								
21	Forecasted July 1, 2016 - June 30, 2017 kWh Deliveries adjusted for displaced kWh				7,655,902,940			
22								
23	RDM Adjustment Factor Change				$0.00016			
24								
25								
26	Lost Revenue due to displaced kWh				($201,294)			
27								
28	Forecasted July 1, 2016 - June 30, 2017 kWh Deliveries adjusted for displaced kWh				7,655,902,940			
29								
30	EE Factor Change				$0.00002			

Line Notes:

Line (9), Column (f):	Line (9), Column (c) x Line (2), Column (f)	Line (13), Column (f):	Sum of Line (13), Columns (d) and (e)
Line (9), Column (h):	Line (9), Column (c) x Line (2), Column (h)	Line (13), Column (h):	Line (13), column (c) x Line (2), Column (h)
Line (10), Column (f):	Line (10), Column (c) x Line (3), Column (f)	Line (14), Column (d):	[Line (14), column (b) x Line (3), Column (d)] - [Line (14), column (b) x Line (4), Column (d)]
Line (10), Column (h):	Line (10), Column (c) x Line (3), Column (h)		
Line (11), Column (f):	Line (11), Column (c) x Line (4), Column (f)	Line (14), Column (e):	Line (14), column (c) x Line (3), Column (e)
Line (11), Column (h):	Line (11), Column (c) x Line (4), Column (h)	Line (14), Column (f):	Sum of Line (14), Columns (d) and (e)
Line (12), Column (d):	[Line (12), column (b) x Line (1), Column (d)] - [Line (12), column (b) x Line (2), Column (d)]	Line (14), Column (h):	Line (14), column (c) x Line (3), Column (h)
		Line (16):	Sum of Line (9) through Line (14)
Line (12), Column (e):	Line (12), column (c) x Line (1), Column (e)	Line (19):	Line (16), Column (f)
Line (12), Column (f):	Sum of Line (12), Columns (d) and (e)	Line (21):	Company Forecast - Line (16), Column (c)
Line (12), Column (h):	Line (12), column (c) x Line (1), Column (h)	Line (23):	Line (19) ÷ Line (21), truncated to 5 decimal places
Line (13), Column (d):	[Line (13), column (b) x Line (2), Column (d)] - [Line (13), column (b) x Line (3), Column (d)]	Line (26):	Line (16), Column (h)
		Line (28):	Company Forecast - Line (16), Column (c)
Line (13), Column (e):	Line (13), column (c) x Line (2), Column (e)	Line (30):	Line (26) ÷ Line (28), truncated to 5 decimal places

PUC 1-23

Request:

Given the proposed change in Rate A-16, is the subsidy afforded to the A-60 customers still expected to result in a 50% discount off of the A-16 distribution charges?

Response:

Yes, given the proposed change in Rate A-16, the subsidy afforded to the A-60 customers will still result in a discount off the A-16 distribution charge of approximately 50%. Please see the analysis below for calculations of the Rate A-60 percentage discount based on both the current rates and the proposed rates.

Rate A-60 Class's Percentage Discount Based on Current Rates	
Current Rate A-16 Customer Charge	$5.00
Rate A-60 Number of Bills	502,672
Rate A-60 Customer Charge Revenue at Rate A-16 Customer Charge	$2,513,360
Current Rate A-16 Energy Charge	$0.03664
Rate A-60 kWh	291,989,246
Rate A-60- Energy Charge Revenue at Rate A-16 Energy Charge	$10,698,486
Total Rate A-60 Revenue at Rate A-16 Charges	$13,211,846
Rate A-60 Revenue at Current Rates	
Rate A-60 Energy Charge Rate	$0.02317
Rate A-60 kWh	291,989,246
Rate A-60 Total Revenue at Rate A-60 Energy Charge	$6,765,391
Rate A-60 Class's Discount from Rate A-16 Charges	48.8%

Prepared by or under the supervision of: Peter T. Zschokke and Jeanne A. Lloyd

PUC 1-23, page 2

Rate A-60 Class's Percentage Discount Based on Proposed Rates				
	Rate A-16	Rate A-60		
	Customer Charges	No. of Bills		Revenue
Tier 1	$5.25	69,871		$366,823
Tier 2	$8.50	199,058		$1,691,993
Tier 3	$13.00	117,625		$1,529,125
Tier 4	$18.00	116,117		$2,090,106
Rate A-60 Customer Charge Revenue at Rate A-16 Customer Charges				$5,678,047
Proposed Rate A-16 Energy Charge				$0.02625
Rate A-60 kWh				291,989,246
Rate A-60 Energy Charge Revenue at Rate A-16 Energy Charge				$7,664,718
Total Rate A-60 Revenue at Proposed Rate A-16 Charges				$13,342,765
Rate A-60 Revenue at Proposed Rates				
Rate A-60 Energy Charge				$0.02317
Rate A-60 kWh				291,989,246
Rate A-60 Total Revenue at Rate A-60 Energy Charge				$6,765,391
Rate A-60 Class's Discount from Rate A-16 Charges				49.3%

Prepared by or under the supervision of: Peter T. Zschokke and Jeanne A. Lloyd

PUC 1-24

Request:

Have any other public utility regulatory agencies approved a rate structure for residential and/or small commercial customers using kWh charges to approximate a demand charge as is proposed by National Grid where the customers pay a tiered rate based on their highest month of usage? If so, has the utility installed advanced metering systems? Please identify the utilities and links to any regulatory orders approving such rates.

Response:

Arizona Public Service Company recovers some portion of their fixed costs through two factors: a set of charges per day plus a Lost Fixed Cost Recovery of 1.4592% applied to the customer's total bill. Arizona Public Service Company recently implemented an "unbundling" option for Basic Service and Customer Accounts charges for their E-12 Residential Service rate class that allows a customer to "opt-out" of the "Lost Fixed Cost Recovery (LFCR)" Adjustment Factor. This "unbundling" includes progressive per day charges based on the following tiers:

0 – 400 kWh
401 – 800 kWh
801 – 2,000 kWh
2,001 kWh and greater

However, these tiers are determined based on "Total Monthly Metered kWh," and not based on a customer's historical peak consumption level. This approach could potentially lead to a greater degree of bill volatility as customers move from tier to tier as monthly kWh use changes.

A copy of Arizona Public Service Company's Schedule E-12 Residential Service Standard Rate Tariff is included as Attachment PUC 1-24. The tariff does not specify the type of metering installed for Rate E-12 customers.

Arizona Corporation Commission Decision No. 73183, which approved Arizona Public Service Company's Lost Fixed Cost Recovery Adjustment Factor, can be found at the following link: http://images.edocket.azcc.gov/docketpdf/0000137042.pdf.

Prepared by or under the supervision of: Peter T. Zschokke and Jeanne A. Lloyd

RATE SCHEDULE E-12
RESIDENTIAL SERVICE
STANDARD RATE

AVAILABILITY

This rate schedule is available in all territory served by the Company at all points where facilities of adequate capacity and the required phase and suitable voltage are adjacent to the sites served.

APPLICATION

This rate schedule is applicable to all Standard Offer and Direct Access electric service, except as stated below, required for residential purposes in individual private dwellings and in individually metered apartments when such service is supplied at one site through one point of delivery and measured through one meter. For those dwellings and apartments where electric service has historically been measured through two meters, when one of the meters was installed pursuant to a water heating or space heating rate schedule no longer in effect, the electric service measured by such meters shall be combined for billing purposes. Rate selection is subject to paragraphs 3.2 through 3.5 of the Company's Schedule 1, Terms and Conditions for Standard Offer and Direct Access Services.

This schedule is not applicable to breakdown, standby, supplemental or resale service.

TYPE OF SERVICE

The type of service provided under this schedule will be single phase, 60 Hertz, at a single standard voltage (120/240 or 120/208 as may be selected by customer subject to availability at the customer's site). Three phase service may be furnished under the Company's Schedule 3 (Conditions Governing Extensions of Electric Distribution Lines and Services), and is required for motors of an individual rated capacity of 7-1/2 HP or more.

RATES

The customer's bill shall be computed at the following rates plus any adjustments incorporated in this schedule:

Bundled Standard Offer Service

Basic Service Charge: $ 0.285 per day

Optional Basic Service Charge for Opting Out of Adjustment Schedule LFCR:

Total Monthly Metered kWh	Basic Service Charge
0 to 400 kWh	$0.305 per day
401 to 800 kWh	$0.325 per day
801 to 2000 kWh	$0.377 per day
2001 kWh and greater	$0.502 per day

This charge will not be available until the first reset of Adjustment Schedule LFCR, which will be on or about March 1, 2013.

aps

RATE SCHEDULE E-12
RESIDENTIAL SERVICE
STANDARD RATE

RATES (cont)

Energy Charge:

May – October Billing Cycles (Summer)	November – April Billing Cycles (Winter)
$0.09687 per kWh for the first 400 kWh, plus $0.13817 per kWh for the next 400 kWh, plus $0.16167 per kWh for the next 2200 kWh, plus $0.17257 per kWh for all additional kWh	$0.09417 per kWh

Bundled Standard Offer Service consists of the following Unbundled Components:

Unbundled Components

Customer Accounts Charge: $ 0.063 per day

Optional Customer Accounts Charge for Opting Out of Adjustment Schedule LFCR:

Total Monthly Metered kWh	Customer Accounts Charge
0 to 400 kWh	$0.083 per day
401 to 800 kWh	$0.103 per day
801 to 2000 kWh	$0.155 per day
2001 kWh and greater	$0.280 per day

Revenue Cycle Service Charges:

Metering	$ 0.090	per day
Meter Reading	$ 0.062	per day
Billing	$ 0.070	per day
System Benefits Charge:	$ 0.00297	per kWh
Transmission Charge:	$ 0.00520	per kWh
Delivery Charge:	$ 0.02700	per kWh

Generation Charges:

May – October Billing Cycles (Summer)	November – April Billing Cycles (Winter)
$0.06170 per kWh for the first 400 kWh, plus $0.10300 per kWh for the next 400 kWh, plus $0.12650 per kWh for the next 2200 kWh, plus $0.13740 per kWh for all additional kWh	$0.05900 per kWh

RATE SCHEDULE E-12
RESIDENTIAL SERVICE
STANDARD RATE

DIRECT ACCESS

The bill for Direct Access customers will consist of the Unbundled Components Customer Accounts Charge, the System Benefits Charge, and the Delivery Charge, plus any applicable adjustments incorporated in this schedule. Direct Access customers must acquire and pay for generation, transmission, and revenue cycle services from a competitive third party supplier. If any revenue cycle services are not available from a third party supplier and must be obtained from the Company, the Unbundled Components Revenue Cycle Service Charges will be applied to the customer's bill.

ADJUSTMENTS

1. The bill is subject to the Renewable Energy Standard as set forth in the Company's Adjustment Schedule REAC-1 pursuant to Arizona Corporation Commission Decision No. 70313.

2. The bill is subject to the Power Supply Adjustment factor as set forth in the Company's Adjustment Schedule PSA-1 pursuant to Arizona Corporation Commission Decision No. 67744, Arizona Corporation Commission Decision No. 69663, Arizona Corporation Commission Decision No. 71448, and 73183.

3. The bill is subject to the Transmission Cost Adjustment factor as set forth in the Company's Adjustment Schedule TCA-1 pursuant to Arizona Corporation Commission Decision No. 67744.

4. The bill is subject to the Environmental Improvement Surcharge as set forth in the Company's Adjustment Schedule EIS pursuant to Arizona Corporation Commission Decision No. 69663 and Arizona Corporation Commission Decision No. 73183.

5. Direct Access customers returning to Standard Offer service may be subject to a Returning Customer Direct Access Charge as set forth in the Company's Adjustment Schedule RCDAC-1 pursuant to Arizona Corporation Commission Decision No. 67744.

6. The bill is subject to the Demand Side Management Adjustment charge as set forth in the Company's Adjustment Schedule DSMAC-1 pursuant to Arizona Corporation Commission Decision No. 67744 and Arizona Corporation Commission Decision No. 71448.

7. The bill is subject to the Lost Fixed Cost Recovery mechanism as set forth in the Company's Adjustment Schedule LFCR pursuant to Arizona Corporation Commission Decision No. 73183, unless the customer opts out from this adjustment and is subject to the Optional Basic Service Charge.

8. The bill is subject to the applicable proportionate part of any taxes or governmental impositions which are or may in the future be assessed on the basis of gross revenues of APS and/or the price or revenue from the electric energy or service sold and/or the volume of energy generated or purchased for sale and/or sold hereunder.

CONTRACT PERIOD

Any applicable contract period will be set forth in APS' standard agreement for service.

RATE SCHEDULE E-12
RESIDENTIAL SERVICE
STANDARD RATE

TERMS AND CONDITIONS

Service under this rate schedule is subject to the Company's Schedule 1, Terms and Conditions for Standard Offer and Direct Access Services and the Company's Schedule 10, Terms and Conditions for Direct Access. These schedules have provisions that may affect the customer's bill. In addition, service may be subject to special terms and conditions as provided for in a customer contract or service agreement.

PUC 1-25

Request:

Please explain how the Massachusetts Electric Company distribution rates are designed for residential customers.

Response:

Rate R-1 is the regular residential rate class. Rate R-2 is available to low-income residential customers who meet the criteria specified in the tariff. The current distribution rate structure for both Residential Rate R-1 and Residential Low Income Rate R-2 includes a monthly customer charge of $4.00 and inclining block per kWh charges. The initial block per kWh charge is applicable to the first 600 kWh of use per month, and the tail block per kWh charge applies to all kWh in excess of 600 kWh per month. Rate R-2 customers are charged the same rates as Rate R-1 customers but also receive a 25% discount on all amounts billed.

Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid (the MA Companies) have made a revenue-neutral distribution rate design proposal in Docket DPU 15-120, Petition of National Grid for Approval of Grid Modernization Plan, very similar to the proposal in this proceeding. In Massachusetts, the MA Companies are also proposing tiered customer charges for their residential and small commercial customers that are designed to reflect the cost to serve all customers, both customers with and without distributed generation, and to move towards fair and equitable charges to all customers.

Prepared by or under the supervision of: Peter T. Zschokke and Jeanne A. Lloyd

PUC 1-26

Request:

Please explain how the National Grid New York distribution rates are designed for residential customers.

Response:

Niagara Mohawk Power Corporation (Niagara Mohawk), the Company's New York affiliate that provides electric service to approximately 1.6 million customers in upstate New York, bills distribution rates that are based on the most recent embedded cost of service study (ECOSS) as filed in Case No. 12-E-0201. The ECOSS allocates Niagara Mohawk's overall revenue requirement among the various rate classes based on causal relationships. These relationships are determined by analyzing Niagara Mohawk's system design and operations, its accounting records, and its system and customer load data. Based on those analyses, each asset and cost is either directly assigned to a rate class or an appropriate cost allocator is chosen. The final revenue requirement allocation reflects the results of the ECOSS as closely as possible, while mitigating extreme rate impacts on any individual rate class and on individual customer subgroups.

The residential fixed monthly customer charge is intended to recover customer-related costs that do not vary with a customer's usage. The residential customer charge for Niagara Mohawk customers was increased from $16.21 per month to $17.00 per month in Case No. 12-E-0201, which was consistent with the results of the Marginal Cost of Service Study (MCOSS). Customer-related costs in the MCOSS are the costs associated with connecting an additional customer and comprise the cost of a service drop and a meter, and ongoing customer-related operating costs (metering, billing, and collections). The MCOSS indicated that the monthly customer charge for residential customers was $19.69. Niagara Mohawk increased the charge from $16.21 per month to $17.00 per month to gradually move the fixed monthly customer charge closer to the MCOSS results. As a result, Niagara Mohawk's residential customer charge is designed to recover 35% of the rate class's total revenue requirement in the third year of the rate plan settlement reached in Case No. 12-E-0201, which is April 2015 through March 2016.

Niagara Mohawk residential customers are billed a fixed monthly customer charge, a merchant function charge that is designed to recover costs associated with the procurement of commodity, and a distribution delivery charge based on monthly kWh usage. To develop residential distribution delivery per-kWh rates, Niagara Mohawk started with the overall residential revenue requirement agreed to in a settlement reached in Case No. 12-E-0201. The total revenue requirement, less the amount collected through the fixed monthly customer charge, and the

PUC 1-26, page 2

merchant function charge is the revenue requirement that formed the basis for the distribution delivery per kWh charge. That remaining amount divided by the forecast kWh sales for the residential class resulted in the final distribution delivery per kWh rates filed in Case No. 12-E-0201.

PUC 1-27

Request:

Are there any residential or small commercial customers in the Massachusetts Electric Company or National Grid New York service territories with demand meters (outside of the Worcester pilot)?

Response:

In Massachusetts Electric Company service territory, there is currently a sample of demand meters used for load research purposes for both residential (R-1 and R-2) and small commercial (G-1) customers. In addition, Massachusetts Electric Company has installed demand meters to accomplish tasks such as load control for storage heating or cooling and currently has approximately 3,400 residential and 27,300 small commercial demand meters in Massachusetts outside of the Worcester pilot.

In Niagara Mohawk Power Corporation's service territory in upstate New York, there is currently a sample of approximately 380 demand meters used for load research purposes for both residential and small commercial customers. There are also approximately 10,000 demand-capable meters installed for residential customers that are either currently on the residential optional time-of-use rate or were previously on that rate and have migrated back to the standard residential rate. These demand-capable meters capture interval data from which demands can be calculated. Small commercial customers are required to have a demand meter installed once the customer's monthly energy consumption exceeds 2,000 kWh per month for any four consecutive months. Once the demand meter is installed, the customer is then billed a monthly demand charge. Niagara Mohawk Power Corporation currently has approximately 49,000 small commercial customers with a demand meter (about 31% of the total SC-2 Small General Service rate class).

Prepared by or under the supervision of: Peter T. Zschokke and Jeanne A. Lloyd

PUC 1-28

Request:

For each customer currently taking service under Rate G-62, please show their individual bill impact when moved to the proposed Rate G-32. Please number the customers rather than using identifying information.

Response:

Please see the table below for individual bill impacts for customers currently on Rate G-62 that would move to Rate G-32 under the Company's proposal:

Customer	Annual Bill Increase (Decrease)	Percent Increase (Decrease) on Total Bill
1	($123,941.51)	(7.4%)
2	($116,545.56)	(5.6%)
3	($98,890.83)	(5.5%)
4	($50,369.03)	(1.3%)
5	$43,579.70	0.8%
6	$103,112.11	1.5%
7	$190,056.91	2.2%
8	$306,960.53	2.8%

Please note that this analysis includes only customers that received at least 11 bills during the period January 2014 through December 2014.

Prepared by or under the supervision of: Peter T. Zschokke and Jeanne A. Lloyd

PUC 1-29

Request:

Please indicate what analysis the Company has conducted regarding the economic development impact the consolidation of Rates G-62 with G-32 will have.

Response:

The Company has not conducted any specific analysis regarding the economic development impact of the consolidation of Rates G-62 and G-32. A relatively small number of commercial and industrial customers (i.e., eight customers) are affected by the consolidation of the two rate classes. An analysis of the individual customer bill impacts, based on calendar year 2014 billing data, indicates that four of the eight customers will experience bill *decreases*, ranging from 1.3% to 7.4%. The other four customers will experience modest bill *increases*, ranging from 0.8% to 2.8%. Please see the Company's response to PUC 1-28 for Rate G-62 individual customer bill impacts.

Prepared by or under the supervision of: Peter T. Zschokke and Jeanne A. Lloyd

PUC 1-30

Request:

Will combining Rate G-62 with Rate G-32 as proposed provide any disincentive to companies that offer manufacturing jobs locating to Rhode Island?

Response:

The Company has not performed any specific analysis regarding the impact of the consolidation of Rates G-62 and G-32 on manufacturing jobs in Rhode Island. Please also see the Company's response to PUC 1-29.

Prepared by or under the supervision of: Peter T. Zschokke and Jeanne A. Lloyd

Redacted
PUC 1-31

Request:

Is the Navy still on Rate G-62? If so, has the Company considered the effect of moving the Navy from G-62 to G-32? What effect will the proposed consolidation have on the Navy's annual electricity costs?

Response:

The Navy is a Rate [redacted] customer. The annual bill impact [redacted] based on billing determinants for the twelve months ended December 2014 is [redacted] from calendar year 2014's total annual bill of [redacted].

Prepared by or under the supervision of: Peter T. Zschokke and Jeanne A. Lloyd