

The Narragansett Electric Co. d/b/a National Grid—Application for Approval of a Change in Electric and Gas Base Distribution Rates (filed on November 27, 2017)

Docket 4770

Request for Information

Requesting Party: New Energy Rhode Island (NERI)
To: National Grid
Request No.: NERI 22-1 through 22-9
Date of Request: 3.16.2018
Response Due Date: Rolling
Subject/Panel: Book 15—Pricing Panel—Leary, McCabe

22-1. Reference pp. 16-18. Please explain the reasoning behind the Company’s proposal to begin imposing the full residential customer charge on income-eligible customers.

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

22-2. Reference pp. 20-21.

- a. Please identify the bill impacts of the Company’s proposal to eliminate the LIHEAP matching grant program on the average income-eligible customer.
- b. Please explain the impact on Rate 13 customers of the Company’s proposal to eliminate the Low Income Weatherization program.

Response can be found on Bates page(s) 2-3.

22-3. Reference p. 21.

- a. Electric Customers
 - i. Please identify and explain the bill impact of a 15 percent fixed total bill discount compared to the current income-eligible rate for the following electric customer classes:
 1. Average energy user, income-eligible customer
 2. Low energy user, income-eligible customer
 3. High energy user, income-eligible customer
 - ii. Please identify and explain the combined bill impact on income-eligible electric customers in the classes referenced in 3a of imposing the full residential customer charge and the 15 percent fixed total bill discount compared to the current low income program.
- b. Gas Customers
 - i. Please identify and explain the bill impact of a 15 percent fixed total bill discount compared to the current income-eligible rates for the following

customer classes:

1. Average energy user, income-eligible customer
2. Low energy user, income-eligible customer
3. High energy user, income-eligible customer

Response can be found on Bates page(s) 4-11.

22-4. Reference p. 21. Please describe why the Company believes the discount level should be the same for both electric and gas low income customers.

Response can be found on Bates page(s) 12.

22-5. Reference pp. 21-22 and p. 22 tables.

a. Electric customers:

- i. Please provide the annual discount for an average income-eligible electric customer under each of the percent discount scenarios provided in the tables on page 22.
- ii. Please provide the average annual electricity bill for income-eligible electric customers for the years 2012, 2013, 2014, 2015, 2016, and 2017.
- iii. Please provide the average annual electricity usage for income-eligible electric customers for the years 2012, 2013, 2014, 2015, 2016, and 2017

b. Gas customers:

- i. Please provide the annual discount for an average income-eligible gas customer under each of the percent discount scenarios provided in the tables on page 22.
- ii. Please provide the average annual gas bill for income-eligible gas customers for the years 2012, 2013, 2014, 2015, 2016, and 2017.
- iii. Please provide the average annual gas usage for income-eligible gas customers on the Rate A-60 for the years 2012, 2013, 2014, 2015, 2016, and 2017.

c. Please explain the reasoning behind the selection of a 15% discount level? In answering this question, please include the following:

- i. All considerations taken into account in setting the discount at 15%, as opposed to a higher or lower fixed discount.
- ii. Whether the impact of imposing the customer charge on income-eligible customers was taken into account in setting the proposed discount level.
- iii. Whether the Company considered the impact of the change from the current program to the fixed 15 percent discount on arrearages, collections, and disconnection rates? If so, what are those considerations and anticipated impacts? If not, why not?

Response can be found on Bates page(s) 13-23.

22-6. Reference p. 22.

- a. How have the number of low-income customers served by Narragansett changed since 2012?
- b. Does the proposed spending level reflect this change?
- c. How has electricity usage changed per low-income customer since 2012?
- d. Does the proposed spending level reflect this change?

Response can be found on Bates page(s) 24-32.

22-7. Reference p. 22 and schedule PP-2. Please provide a bill frequency analysis for low-income customers and for non-low-income customers.

- a. Please provide the data broken down by 50 kWh/month increments, from 0-50 kWh/month up to 1,500 kWh/month
- b. Please include and identify the total bills and separate charges, and also show values for all residential customers as a whole.

Response can be found on Bates page(s) 33-36.

22-8. Reference p. 26.

- a. Please explain the reasoning and methodology for the \$8.50 customer charge on Rate A-60 customers.
- b. Please identify the impact of the \$8.50 customer charge on the following Rate A-60 customers:
 - i. Average energy use customer
 - ii. Low energy use customer
 - iii. High energy use customer
- c. How does the \$8.50 customer charge impact the 15 percent fixed total bill discount for Rate A-60 customers?
- d. Please explain how the \$8.50 customer charge will affect Rate A-60 customer's energy usage.
- e. Please explain how the phasing-in of the fixed charge will effectively mitigate the bill impact on a Rate A-60 customer.

Response can be found on Bates page(s) 37-39.

22-9. Please provide estimates of elasticity of demand for residential customers and low-income customers.

- a. Please further identify how the following two program changes will affect elasticity of demand for low-income customers:
 - i. 15 percent fixed total bill discount
 - ii. Fixed customer charge of \$8.45 for Rate A-60 customers

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

NERI 22-1

Request:

Subject: Book 15—Pricing Panel—Leary, McCabe

Reference pp. 16-18. Please explain the reasoning behind the Company's proposal to begin imposing the full residential customer charge on income-eligible customers.

Response:

Narragansett Electric's proposed fixed monthly charge considers all costs that Narragansett Electric must incur to connect a residential customer, as well as the demand incurred by almost all customers. These costs are incurred regardless of whether the customer is on Rate A-16 or Rate A-60 (i.e., regardless of whether a residential customer is or is not eligible for Rate A-60) and in almost all cases do not vary with demand or load profile.

As discussed in Narragansett Electric's response to NERI 7-12, the customer-related costs are \$9.61 per month and the demand costs associated with 0.50 kW are \$5.78 per month, totaling \$15.39 per month. Narragansett Electric's proposed fixed monthly charge is \$8.50 per month, which is not only less than the total of \$15.39 per month, but also less than the \$9.61 per month of customer-related costs. Narragansett Electric has proposed to phase in charging the full residential customer charge for Rate A-60 over three years.

Imposing the full residential customer charge on Rate A-60 customers is consistent with the practice of Narragansett Gas in which customers receiving service on its low income rate classes are charged the residential fixed monthly charge.

NERI 22-2

Request:

Subject: Book 15—Pricing Panel—Leary, McCabe

Reference pp. 20-21.

- a. Please identify the bill impacts of the Company's proposal to eliminate the LIHEAP matching grant program on the average income-eligible customer.
- b. Please explain the impact on Rate 13 customers of the Company's proposal to eliminate the Low Income Weatherization program.

Response:

- a. The Company is proposing to offer a 15 percent total bill discount to Residential Low Income customers and to eliminate the current 10 percent discount on gas base distribution rates as well as the gas LIHEAP matching grant program. Currently, Rate 13 customers are eligible to participate in the Company's LIHEAP matching grant program. The total annual budget for this program is \$1.585 million, which equates to an average annual grant of approximately \$90 per customer per year. The total current bill for an average Rate 13 customer using 845 therms per year is \$1,171.¹ However, this reflects the total amount billed to the low income customer and does not include the matching LIHEAP grant of \$90, which is equivalent to approximately a 13 percent total bill discount. Therefore, the Rate 13 customer's net payment to the Company would be \$1,081. Currently, the total bill for a non-low income residential heating customer using 845 therms would be \$1,227.² Under the Company's proposed 15 percent total bill discount, the total bill for a low income heating customer would be \$1,043, which is approximately \$38 less than the current low income bill including the LIHEAP matching grant.
- b. Through base distribution rates, Narragansett Gas recovers \$200,000 annually for its Low Income Weatherization program. Narragansett Gas reflects this revenue as part of its Low Income Energy Efficiency (EE) program, thereby reducing the EE Program Charge billed to customers. With the elimination of the recovery of this program in base distribution rates, base distribution rates will be \$200,000 lower than they otherwise would have been, and if Narragansett Gas continues to offer the Low Income Weatherization program, the cost of the program would be recovered through the EE

¹ Please see Schedule PMN-8, Page 1, Line 27, Column (c).

² Please see Schedule PMN-8, Page 1, Line 12, Column (c).

Program Charge. Essentially, one rate (base distribution rates) will decline and another rate (the EE Program Charge) will increase.

NERI 22-3

Request:

Subject: Book 15—Pricing Panel—Leary, McCabe

Reference p. 21.

- a. Electric Customers
 - i. Please identify and explain the bill impact of a 15 percent fixed total bill discount compared to the current income-eligible rate for the following electric customer classes:
 - 1. Average energy user, income-eligible customer
 - 2. Low energy user, income-eligible customer
 - 3. High energy user, income-eligible customer
 - ii. Please identify and explain the combined bill impact on income-eligible electric customers in the classes referenced in 3a of imposing the full residential customer charge and the 15 percent fixed total bill discount compared to the current low income program.
- b. Gas Customers
 - i. Please identify and explain the bill impact of a 15 percent fixed total bill discount compared to the current income-eligible rates for the following customer classes:
 - 1. Average energy user, income-eligible customer
 - 2. Low energy user, income-eligible customer
 - 3. High energy user, income-eligible customer

Response:

- a. Please see Attachment NERI 22-3-1 for Narragansett Electric for a comparison of the total monthly bill under the proposed 15 percent total bill discount (in Years 1, 2, and 3) the total monthly bill under the current low income rate structure for an average energy user (assumed to be 500 kWh), a low energy user (assumed to be 375 kWh, or 75 percent of an average user), and a high energy user (assumed to be 625 kWh, or 125 percent of an average user). For simplicity, the Company has shown the monthly bill for each of the three years as compared to the monthly bill under the current low income discount, with Year 3 reflecting the full residential customer charge.

- b. Please see Attachment NERI 22-3-2 for Narragansett Gas for a comparison of the total annual bill under the proposed 15 percent total bill discount compared to the total annual bill under the current low income rate structure for an average energy user (assumed to be 220 therms annually for Rate 11 customers and 845 therms annually for Rate 13 customers), a low energy user (assumed to be 167 therms annually for Rate 11 customers and 635 therms annually for Rate 13 customers), and a high energy user (assumed to be 277 therms annually for Rate 11 customers and 1,058 therms annually for Rate 13 customers).

Narragansett Electric
Transition to Full Customer Charge with 15% Low Income Discount, Average Usage

	Rate A-60 Units	Rate A-60 Rates				Rate A-60 Charges			
		Proposed			Illustrative	Proposed			Illustrative
		Year 1	Year 2	Year 3 & After	Existing Structure	Year 1	Year 2	Year 3 & After	Existing Structure
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	
(1) Customer Charge	1	\$2.75	\$5.50	\$8.50	\$0.00	\$2.75	\$5.50	\$8.50	\$0.00
(2) RE Growth Factor	1	\$0.78	\$0.78	\$0.78	\$0.78	\$0.78	\$0.78	\$0.78	\$0.78
(3) LIHEAP Enhancement Surcharge	1	\$0.81	\$0.81	\$0.81	\$0.81	\$0.81	\$0.81	\$0.81	\$0.81
(4) Distribution kWh Charge	500	\$0.04438	\$0.04438	\$0.04438	\$0.03119	\$22.19	\$22.19	\$22.19	\$15.60
(5) ISR CapEx Factor	500	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00	\$0.00	\$0.00	\$0.00
(6) ISR CapEx Reconciliation Factor	500	(\$0.00135)	(\$0.00135)	(\$0.00135)	(\$0.00135)	(\$0.68)	(\$0.68)	(\$0.68)	(\$0.68)
(7) ISR O&M Factor	500	\$0.00163	\$0.00163	\$0.00163	\$0.00163	\$0.82	\$0.82	\$0.82	\$0.82
(8) ISR O&M Reconciliation Factor	500	(\$0.00001)	(\$0.00001)	(\$0.00001)	(\$0.00001)	(\$0.01)	(\$0.01)	(\$0.01)	(\$0.01)
(9) Pension/PBOP Factor	500	(\$0.00085)	(\$0.00085)	(\$0.00085)	(\$0.00085)	(\$0.43)	(\$0.43)	(\$0.43)	(\$0.43)
(10) Revenue Decoupling Mechanism Adjustment Factor	500	\$0.00118	\$0.00118	\$0.00118	\$0.00118	\$0.59	\$0.59	\$0.59	\$0.59
(11) Storm Fund Replenishment Factor	500	\$0.00288	\$0.00288	\$0.00288	\$0.00288	\$1.44	\$1.44	\$1.44	\$1.44
(12) Low Income Discount Recovery Factor	500	\$0.00000	\$0.00000	\$0.00000	n/a	\$0.00	\$0.00	\$0.00	n/a
(13) Subtotal Distribution Energy Charge						\$23.92	\$23.92	\$23.92	\$17.33
(14) Transmission Charge	500	\$0.03180	\$0.03180	\$0.03180	\$0.03180	\$15.90	\$15.90	\$15.90	\$15.90
(15) Transition Charge	500	\$0.00057	\$0.00057	\$0.00057	\$0.00057	\$0.29	\$0.29	\$0.29	\$0.29
(16) Energy Efficiency Program Charge	500	\$0.01154	\$0.01154	\$0.01154	\$0.01154	\$5.77	\$5.77	\$5.77	\$5.77
(17) Renewable Energy Distribution Charge	500	\$0.00688	\$0.00688	\$0.00688	\$0.00688	\$3.44	\$3.44	\$3.44	\$3.44
(18) Total Delivery Service Charges						\$53.66	\$56.41	\$59.41	\$44.32
(19) "Winter" SOS Charge (October 2017 - March 2018)	500	\$0.09518	\$0.09518	\$0.09518	\$0.09518	\$47.59	\$47.59	\$47.59	\$47.59
(20) Total						\$101.25	\$104.00	\$107.00	\$91.91
(21) Low Income Discount		15.0%	15.0%	15.0%		(\$15.19)	(\$15.60)	(\$16.05)	n/a
(22) Illustrative Bill Charges After Discount						\$86.06	\$88.40	\$90.95	\$91.91
(23) Illustrative Bill Charges After Discount-Proposal vs. Existing Structure						(\$5.85)	(\$3.51)	(\$0.96)	

- (a) 1 Customer at average usage
- (1)(b) - (1)(d) Schedule HSG-4-I, Column (b), Lines 4, 5, 6
- (4)(b) - (4)(d) Schedule HSG-4-I, Column (b), Lines 9, 10, 11
- (b) - (d) Workpaper HSG-5, Page 2, Column (c)
- (e) Illustrative design of Rate A-60 Customer and Distribution kWh Charges assuming old rate structure
- (f) - (i) Column (a) x Columns (b) thru (e)

- (12) Proposing A-60 exempt from Low Income Discount Recovery Factor
- (13) Sum of Lines (4) thru (12)
- (18) Sum of Lines (1) thru (3) + Line (13) + Sum of Lines (14) thru (17)
- (20) Line (18) + Line (19)
- (21) Columns (b) thru (d), Line (21) x Columns (f) thru (h), Line (20)
- (22) Line (20) + Line (21)
- (23) Line (22), current Column - Line (22), Column (i)

Narragansett Electric
Transition to Full Customer Charge with 15% Low Income Discount, Low Usage

Rate A-60		Rate A-60 Rates				Rate A-60 Charges				
		Units	Proposed			Illustrative Existing Structure	Proposed			Illustrative Existing Structure
			Year 1	Year 2	Year 3 & After		Year 1	Year 2	Year 3 & After	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)		
(1)	Customer Charge	1	\$2.75	\$5.50	\$8.50	\$0.00	\$2.75	\$5.50	\$8.50	\$0.00
(2)	RE Growth Factor	1	\$0.78	\$0.78	\$0.78	\$0.78	\$0.78	\$0.78	\$0.78	\$0.78
(3)	LIHEAP Enhancement Surcharge	1	\$0.81	\$0.81	\$0.81	\$0.81	\$0.81	\$0.81	\$0.81	\$0.81
(4)	Distribution kWh Charge	375	\$0.04438	\$0.04438	\$0.04438	\$0.03119	\$16.64	\$16.64	\$16.64	\$11.70
(5)	ISR CapEx Factor	375	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00	\$0.00	\$0.00	\$0.00
(6)	ISR CapEx Reconciliation Factor	375	(\$0.00135)	(\$0.00135)	(\$0.00135)	(\$0.00135)	(\$0.51)	(\$0.51)	(\$0.51)	(\$0.51)
(7)	ISR O&M Factor	375	\$0.00163	\$0.00163	\$0.00163	\$0.00163	\$0.61	\$0.61	\$0.61	\$0.61
(8)	ISR O&M Reconciliation Factor	375	(\$0.00001)	(\$0.00001)	(\$0.00001)	(\$0.00001)	\$0.00	\$0.00	\$0.00	\$0.00
(9)	Pension/PBOP Factor	375	(\$0.00085)	(\$0.00085)	(\$0.00085)	(\$0.00085)	(\$0.32)	(\$0.32)	(\$0.32)	(\$0.32)
(10)	Revenue Decoupling Mechanism Adjustment Factor	375	\$0.00118	\$0.00118	\$0.00118	\$0.00118	\$0.44	\$0.44	\$0.44	\$0.44
(11)	Storm Fund Replenishment Factor	375	\$0.00288	\$0.00288	\$0.00288	\$0.00288	\$1.08	\$1.08	\$1.08	\$1.08
(12)	Low Income Discount Recovery Factor	375	\$0.00000	\$0.00000	\$0.00000	n/a	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>n/a</u>
(13)	Subtotal Distribution Energy Charge						\$17.94	\$17.94	\$17.94	\$13.00
(14)	Transmission Charge	375	\$0.03180	\$0.03180	\$0.03180	\$0.03180	\$11.93	\$11.93	\$11.93	\$11.93
(15)	Transition Charge	375	\$0.00057	\$0.00057	\$0.00057	\$0.00057	\$0.21	\$0.21	\$0.21	\$0.21
(16)	Energy Efficiency Program Charge	375	\$0.01154	\$0.01154	\$0.01154	\$0.01154	\$4.33	\$4.33	\$4.33	\$4.33
(17)	Renewable Energy Distribution Charge	375	\$0.00688	\$0.00688	\$0.00688	\$0.00688	<u>\$2.58</u>	<u>\$2.58</u>	<u>\$2.58</u>	<u>\$2.58</u>
(18)	Total Delivery Service Charges						\$41.33	\$44.08	\$47.08	\$33.64
(19)	"Winter" SOS Charge (October 2017 - March 2018)	500	\$0.09518	\$0.09518	\$0.09518	\$0.09518	\$47.59	\$47.59	\$47.59	\$47.59
(20)	Total						\$88.92	\$91.67	\$94.67	\$81.23
(21)	Low Income Discount		15.0%	15.0%	15.0%		<u>(\$13.34)</u>	<u>(\$13.75)</u>	<u>(\$14.20)</u>	<u>n/a</u>
(22)	Illustrative Bill Charges After Discount						\$75.58	\$77.92	\$80.47	\$81.23
(23)	Illustrative Bill Charges After Discount-Proposal vs. Existing Structure						(\$5.65)	(\$3.31)	(\$0.76)	

(a) 1 Customer at average usage
(1)(b) - (1)(d) Schedule HSG-4-I, Column (b), Lines 4, 5, 6
(4)(b) - (4)(d) Schedule HSG-4-I, Column (b), Lines 9, 10, 11
(b) - (d) Workpaper HSG-5, Page 2, Column (c)
(e) Illustrative design of Rate A-60 Customer and Distribution kWh Charges assuming old rate structure
(f) - (i) Column (a) x Columns (b) thru (e)

(12) Proposing A-60 exempt from Low Income Discount Recovery Factor
(13) Sum of Lines (4) thru (12)
(18) Sum of Lines (1) thru (3) + Line (13) + Sum of Lines (14) thru (17)
(20) Line (18) + Line (19)
(21) Columns (b) thru (d), Line (21) x Columns (f) thru (h), Line (20)
(22) Line (20) + Line (21)
(23) Line (22), current Column - Line (22), Column (i)

Narragansett Electric
Transition to Full Customer Charge with 15% Low Income Discount, High Usage

Rate A-60		Rate A-60 Rates				Rate A-60 Charges				
		Units	Proposed			Illustrative Existing Structure	Proposed			Illustrative Existing Structure
			Year 1	Year 2	Year 3 & After		Year 1	Year 2	Year 3 & After	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)		
(1)	Customer Charge	1	\$2.75	\$5.50	\$8.50	\$0.00	\$2.75	\$5.50	\$8.50	\$0.00
(2)	RE Growth Factor	1	\$0.78	\$0.78	\$0.78	\$0.78	\$0.78	\$0.78	\$0.78	\$0.78
(3)	LIHEAP Enhancement Surcharge	1	\$0.81	\$0.81	\$0.81	\$0.81	\$0.81	\$0.81	\$0.81	\$0.81
(4)	Distribution kWh Charge	625	\$0.04438	\$0.04438	\$0.04438	\$0.03119	\$27.74	\$27.74	\$27.74	\$19.49
(5)	ISR CapEx Factor	625	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00	\$0.00	\$0.00	\$0.00
(6)	ISR CapEx Reconciliation Factor	625	(\$0.00135)	(\$0.00135)	(\$0.00135)	(\$0.00135)	(\$0.84)	(\$0.84)	(\$0.84)	(\$0.84)
(7)	ISR O&M Factor	625	\$0.00163	\$0.00163	\$0.00163	\$0.00163	\$1.02	\$1.02	\$1.02	\$1.02
(8)	ISR O&M Reconciliation Factor	625	(\$0.00001)	(\$0.00001)	(\$0.00001)	(\$0.00001)	(\$0.01)	(\$0.01)	(\$0.01)	(\$0.01)
(9)	Pension/PBOP Factor	625	(\$0.00085)	(\$0.00085)	(\$0.00085)	(\$0.00085)	(\$0.53)	(\$0.53)	(\$0.53)	(\$0.53)
(10)	Revenue Decoupling Mechanism Adjustment Factor	625	\$0.00118	\$0.00118	\$0.00118	\$0.00118	\$0.74	\$0.74	\$0.74	\$0.74
(11)	Storm Fund Replenishment Factor	625	\$0.00288	\$0.00288	\$0.00288	\$0.00288	\$1.80	\$1.80	\$1.80	\$1.80
(12)	Low Income Discount Recovery Factor	625	\$0.00000	\$0.00000	\$0.00000	n/a	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>n/a</u>
(13)	Subtotal Distribution Energy Charge						\$29.92	\$29.92	\$29.92	\$21.67
(14)	Transmission Charge	625	\$0.03180	\$0.03180	\$0.03180	\$0.03180	\$19.88	\$19.88	\$19.88	\$19.88
(15)	Transition Charge	625	\$0.00057	\$0.00057	\$0.00057	\$0.00057	\$0.36	\$0.36	\$0.36	\$0.36
(16)	Energy Efficiency Program Charge	625	\$0.01154	\$0.01154	\$0.01154	\$0.01154	\$7.21	\$7.21	\$7.21	\$7.21
(17)	Renewable Energy Distribution Charge	625	\$0.00688	\$0.00688	\$0.00688	\$0.00688	<u>\$4.30</u>	<u>\$4.30</u>	<u>\$4.30</u>	<u>\$4.30</u>
(18)	Total Delivery Service Charges						\$66.01	\$68.76	\$71.76	\$55.01
(19)	"Winter" SOS Charge (October 2017 - March 2018)	500	\$0.09518	\$0.09518	\$0.09518	\$0.09518	\$47.59	\$47.59	\$47.59	\$47.59
(20)	Total						\$113.60	\$116.35	\$119.35	\$102.60
(21)	Low Income Discount		15.0%	15.0%	15.0%		<u>(\$17.04)</u>	<u>(\$17.45)</u>	<u>(\$17.90)</u>	<u>n/a</u>
(22)	Illustrative Bill Charges After Discount						\$96.56	\$98.90	\$101.45	\$102.60
(23)	Illustrative Bill Charges After Discount-Proposal vs. Existing Structure						(\$6.04)	(\$3.70)	(\$1.15)	

- (a) 1 Customer at average usage
- (1)(b) - (1)(d) Schedule HSG-4-I, Column (b), Lines 4, 5, 6
- (4)(b) - (4)(d) Schedule HSG-4-I, Column (b), Lines 9, 10, 11
- (b) - (d) Workpaper HSG-5, Page 2, Column (c)
- (e) Illustrative design of Rate A-60 Customer and Distribution kWh Charges assuming old rate structure
- (f) - (i) Column (a) x Columns (b) thru (e)

- (12) Proposing A-60 exempt from Low Income Discount Recovery Factor
- (13) Sum of Lines (4) thru (12)
- (18) Sum of Lines (1) thru (3) + Line (13) + Sum of Lines (14) thru (17)
- (20) Line (18) + Line (19)
- (21) Columns (b) thru (d), Line (21) x Columns (f) thru (h), Line (20)
- (22) Line (20) + Line (21)
- (23) Line (22), current Column - Line (22), Column (i)

Narragansett Gas
Transition to 15% Low Income Discount on Total Annual Bill, Low Usage

	Rate 11 Usage (Therms)	Rate 13 Usage (Therms)	Rate 11 Rates		Rate 13 Rates		Rate 11 Charges		Rate 13 Charges	
			Existing Rates	Proposed Rates	Existing Rates	Proposed Rates	Existing Charges	Proposed Charges	Existing Charges	Proposed Charges
			(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
(1) Customer Charge	167		\$11.70	\$16.00	\$11.70	\$16.00	\$140.40	\$192.00	\$140.40	\$192.00
(2) LIHEAP Enhancement Surcharge Distribution Charge	167		\$0.81	\$0.81	\$0.81	\$0.81	\$9.72	\$9.72	\$9.72	\$9.72
(3) Head Block	167	627	\$0.3947	\$0.6027	\$0.4205	\$0.6034	\$65.91	\$100.65	\$263.65	\$378.33
(4) Tail Block	167	8	-	\$0.6027	\$0.2709	\$0.6034			\$2.17	\$4.83
(5) DAC	167	635	\$0.2389	\$0.0475	\$0.1430	\$0.0207	\$39.90	\$7.93	\$90.81	\$13.14
(6) Energy Efficiency Program Charge	167	635	\$0.0888	\$0.0878	\$0.0888	\$0.0878	\$14.83	\$14.66	\$56.39	\$55.75
(7) Total Delivery Service Charges							\$270.76	\$324.97	\$563.13	\$653.78
(8) Commodity Charge	167	635	\$0.4859	\$0.4827	\$0.5291	\$0.5258	<u>\$81.15</u>	<u>\$80.61</u>	<u>\$335.98</u>	<u>\$333.88</u>
(9) Total							\$351.91	\$405.58	\$899.11	\$987.66
(10) Low Income Discount			0%	15%	0%	15%	\$0.00	\$60.84	\$0.00	\$148.15
(11) LIHEAP Match							\$0.00		\$90.00	
(12) Illustrative Bill Charge							\$351.91	\$344.74	\$809.11	\$839.51
(13) Illustrative Bill Charge - Proposal vs. Existing Structure								<u>(\$7.17)</u>		<u>\$30.40</u>

(a)	Rate 11 customer at high usage = 75% of Average Use	(4)(i)	(4)(b) X (4)(e)	(8)(h)	(8)(a) X (8)(d)
(b)	Rate 13 customer at high usage = 75% of Average Use	(4)(j)	(4)(b) X (4)(f)	(8)(i)	(8)(b) X (8)(e)
(c) & (e)	Illustrative design of rates assuming old rate structure	(5)(g)	(5)(a) X (5)(c)	(8)(j)	(8)(b) X (8)(f)
(d) & (f)	Proposed delivery rates	(5)(h)	(5)(a) X (5)(d)	(9)	Line (7) + Line (8)
(1)(g) - (1)(j)	Customer charge*12	(5)(i)	(5)(b) X (5)(e)	(10)(h)	(10)(d) X (9)(h)
(2)(g) - (2)(j)	LIHEAP charge*12	(5)(j)	(5)(b) X (5)(f)	(10)(i)	(10)(f) X (9)(j)
(3)(g)	(3)(a) X (3)(c)	(6)(g)	(6)(a) X (6)(c)	(11)(i)	LIHEAP Matching Grant Program
(3)(h)	(3)(a) X (3)(d)	(6)(h)	(6)(a) X (6)(d)	(12)	Line (9) - Line (10) - Line (11)
(3)(i)	(3)(b) X (3)(e)	(6)(i)	(6)(b) X (6)(e)	(13)(h)	(12)(g) - (12)(h)
(3)(j)	(3)(b) X (3)(f)	(6)(j)	(6)(b) X (6)(f)	(13)(j)	(12)(i) - (12)(j)
(4)(g)	(4)(a) X (4)(c)	(7)	Sum of Lines (1) thru (6)		
(4)(h)	(4)(a) X (4)(d)	(8)(g)	(8)(a) X (8)(c)		

Narragansett Gas
Transition to 15% Low Income Discount on Total Annual Bill, Average Usage

	Rate 11 Usage (Therms) (a)	Rate 13 Usage (Therms) (b)	Rate 11 Rates		Rate 13 Rates		Rate 11 Charges		Rate 13 Charges	
			Illustrative Existing Rates (c)	Proposed Rates (d)	Illustrative Existing Rates (e)	Proposed Rates (f)	Illustrative Existing Charges (g)	Proposed Charges (h)	Illustrative Existing Charges (i)	Proposed Charges (j)
(1) Customer Charge	220		\$11.70	\$16.00	\$11.70	\$16.00	\$140.40	\$192.00	\$140.40	\$192.00
(2) LIHEAP Enhancement Surcharge Distribution Charge	220		\$0.81	\$0.81	\$0.81	\$0.81	\$9.72	\$9.72	\$9.72	\$9.72
(3) Head Block	220	763	\$0.3947	\$0.6027	\$0.4205	\$0.6034	\$87.00	\$132.59	\$320.84	\$460.39
(4) Tail Block	220	82	-	\$0.6027	\$0.2709	\$0.6034			\$22.21	\$49.48
(5) DAC	220	845	\$0.2389	\$0.0475	\$0.1430	\$0.0207	\$53.00	\$10.45	\$120.84	\$17.49
(6) Energy Efficiency Program Charge	220	845	\$0.0888	\$0.0878	\$0.0888	\$0.0878	\$20.00	\$19.32	\$75.04	\$74.19
(7) Total Delivery Service Charges							\$310.12	\$364.08	\$689.05	\$803.28
(8) Commodity Charge	220	845	\$0.4859	\$0.4827	\$0.5291	\$0.5258	<u>\$106.90</u>	<u>\$106.19</u>	<u>\$447.09</u>	<u>\$444.30</u>
(9) Total							\$417.02	\$470.27	\$1,136.14	\$1,247.58
(10) Low Income Discount			0%	15%	0%	15%	\$0.00	\$70.54	\$0.00	\$187.14
(11) LIHEAP Match							\$0.00		\$90.00	
(12) Illustrative Bill Charge							\$417.02	\$399.73	\$1,046.14	\$1,060.44
(13) Illustrative Bill Charge - Proposal vs. Existing Structure								<u>(\$17.29)</u>		<u>\$14.30</u>

(a) Rate 11 customer at average usage	(4)(i)	(4)(b) X (4)(e)	(8)(h)	(8)(a) X (8)(d)
(b) Rate 13 customer at average usage	(4)(j)	(4)(b) X (4)(f)	(8)(i)	(8)(b) X (8)(e)
(c) & (e) Illustrative design of rates assuming old rate structure	(5)(g)	(5)(a) X (5)(c)	(8)(j)	(8)(b) X (8)(f)
(d) & (f) Proposed delivery rates	(5)(h)	(5)(a) X (5)(d)	(9)	Line (7) + Line (8)
(1)(g) - (1)(j) Customer charge*12	(5)(i)	(5)(b) X (5)(e)	(10)(h)	(10)(d) X (9)(h)
(2)(g) - (2)(j) LIHEAP charge*12	(5)(j)	(5)(b) X (5)(f)	(10)(i)	(10)(f) X (9)(j)
(3)(g) (3)(a) X (3)(c)	(6)(g)	(6)(a) X (6)(c)	(11)(i)	LIHEAP Matching Grant Program
(3)(h) (3)(a) X (3)(d)	(6)(h)	(6)(a) X (6)(d)	(12)	Line (9) - Line (10) - Line (11)
(3)(i) (3)(b) X (3)(e)	(6)(i)	(6)(b) X (6)(e)	(13)(h)	(12)(g) - (12)(h)
(3)(j) (3)(b) X (3)(f)	(6)(j)	(6)(b) X (6)(f)	(13)(j)	(12)(i) - (12)(j)
(4)(g) (4)(a) X (4)(c)	(7)	Sum of Lines (1) thru (6)		
(4)(h) (4)(a) X (4)(d)	(8)(g)	(8)(a) X (8)(c)		

Narragansett Gas
Transition to 15% Low Income Discount on Total Annual Bill, High Usage

	Rate 11 Usage (Therms)	Rate 13 Usage (Therms)	Rate 11 Rates		Rate 13 Rates		Rate 11 Charges		Rate 13 Charges	
			Existing Rates	Proposed Rates	Existing Rates	Proposed Rates	Existing Charges	Proposed Charges	Existing Charges	Proposed Charges
			(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
(1) Customer Charge	277		\$11.70	\$16.00	\$11.70	\$16.00	\$140.40	\$192.00	\$140.40	\$192.00
(2) LIHEAP Enhancement Surcharge Distribution Charge	277		\$0.81	\$0.81	\$0.81	\$0.81	\$9.72	\$9.72	\$9.72	\$9.72
(3) Head Block	277	846	\$0.3947	\$0.6027	\$0.4205	\$0.6034	\$109.00	\$166.95	\$355.74	\$510.48
(4) Tail Block	277	212	-	\$0.6027	\$0.2709	\$0.6034			\$57.43	\$127.92
(5) DAC	277	1,058	\$0.2389	\$0.0475	\$0.1430	\$0.0207	\$66.00	\$13.16	\$151.29	\$21.90
(6) Energy Efficiency Program Charge	277	1,058	\$0.0888	\$0.0878	\$0.0888	\$0.0878	\$25.00	\$24.32	\$93.95	\$92.89
(7) Total Delivery Service Charges							\$350.12	\$406.15	\$808.54	\$954.91
(8) Commodity Charge	277	1,058	\$0.4859	\$0.4827	\$0.5291	\$0.5258	<u>\$134.59</u>	<u>\$133.71</u>	<u>\$559.79</u>	<u>\$556.30</u>
(9) Total							\$484.71	\$539.85	\$1,368.33	\$1,511.21
(10) Low Income Discount			0%	15%	0%	15%	\$0.00	\$80.98	\$0.00	\$226.68
(11) LIHEAP Match							\$0.00		\$90.00	
(12) Illustrative Bill Charge							\$484.71	\$458.88	\$1,278.33	\$1,284.53
(13) Illustrative Bill Charge - Proposal vs. Existing Structure								<u>(\$25.84)</u>		<u>\$6.20</u>

(a)	Rate 11 customer at high usage = 125% of Average Use	(4)(i)	(4)(b) X (4)(e)	(8)(h)	(8)(a) X (8)(d)
(b)	Rate 13 customer at high usage = 125% of Average Use	(4)(j)	(4)(b) X (4)(f)	(8)(i)	(8)(b) X (8)(e)
(c) & (e)	Illustrative design of rates assuming old rate structure	(5)(g)	(5)(a) X (5)(c)	(8)(j)	(8)(b) X (8)(f)
(d) & (f)	Proposed delivery rates	(5)(h)	(5)(a) X (5)(d)	(9)	Line (7) + Line (8)
(1)(g) - (1)(j)	Customer charge*12	(5)(i)	(5)(b) X (5)(e)	(10)(h)	(10)(d) X (9)(h)
(2)(g) - (2)(j)	LIHEAP charge*12	(5)(j)	(5)(b) X (5)(f)	(10)(i)	(10)(f) X (9)(j)
(3)(g)	(3)(a) X (3)(c)	(6)(g)	(6)(a) X (6)(c)	(11)(i)	LIHEAP Matching Grant Program
(3)(h)	(3)(a) X (3)(d)	(6)(h)	(6)(a) X (6)(d)	(12)	Line (9) - Line (10) - Line (11)
(3)(i)	(3)(b) X (3)(e)	(6)(i)	(6)(b) X (6)(e)	(13)(h)	(12)(g) - (12)(h)
(3)(j)	(3)(b) X (3)(f)	(6)(j)	(6)(b) X (6)(f)	(13)(j)	(12)(i) - (12)(j)
(4)(g)	(4)(a) X (4)(c)	(7)	Sum of Lines (1) thru (6)		
(4)(h)	(4)(a) X (4)(d)	(8)(g)	(8)(a) X (8)(c)		

NERI 22-4

Request:

Subject: Book 15—Pricing Panel—Leary, McCabe

Reference p. 21. Please describe why the Company believes the discount level should be the same for both electric and gas low income customers.

Response:

As discussed in the Company's response to Division 7-27, the Company's goal in its low income discount proposal is to treat its gas and electric customers the same with regard to the percentage discount they receive on their utility bills. Because a customer is no more or no less in need of assistance when viewed as a gas customer or an electric customer, the Company has proposed to set the percent discount at the same value for gas and electric customers.

In addition, the Company is proposing to set the discount level at the same level for both electric and gas low income customers to prevent customer confusion that may be created with different discount percentages on two different bills issued by the Company.

NERI 22-5

Request:

Subject: Book 15—Pricing Panel—Leary, McCabe

Reference pp. 21-22 and p. 22 tables.

- a. Electric customers:
 - i. Please provide the annual discount for an average income-eligible electric customer under each of the percent discount scenarios provided in the tables on page 22.
 - ii. Please provide the average annual electricity bill for income-eligible electric customers for the years 2012, 2013, 2014, 2015, 2016, and 2017.
 - iii. Please provide the average annual electricity usage for income-eligible electric customers for the years 2012, 2013, 2014, 2015, 2016, and 2017.
- b. Gas customers:
 - i. Please provide the annual discount for an average income-eligible gas customer under each of the percent discount scenarios provided in the tables on page 22.
 - ii. Please provide the average annual gas bill for income-eligible gas customers for the years 2012, 2013, 2014, 2015, 2016, and 2017.
 - iii. Please provide the average annual gas usage for income-eligible gas customers on the Rate A-60 for the years 2012, 2013, 2014, 2015, 2016, and 2017.
- c. Please explain the reasoning behind the selection of a 15% discount level? In answering this question, please include the following:
 - i. All considerations taken into account in setting the discount at 15%, as opposed to a higher or lower fixed discount.
 - ii. Whether the impact of imposing the customer charge on income-eligible customers was taken into account in setting the proposed discount level.
 - iii. Whether the Company considered the impact of the change from the current program to the fixed 15 percent discount on arrearages, collections, and disconnection rates? If so, what are those considerations and anticipated impacts? If not, why not?

Response:

- a. Electric customers:
 - i. Please see Attachment NERI 22-5-1, Page 1, for the calculated annual discount for an average use customer on Narragansett Electric's low income rate under each of the percent discount scenarios provided in the tables on Page 22 of the

- Joint Pre-Filed Direct Testimony of Ann E. Leary and Scott M. McCabe (Bates Page 26 of Book 15).
- ii. Please see Attachment NERI 22-5-1, Page 2, for the annual electricity bill for an average customer on Narragansett Electric's low income rate for the years 2012, 2013, 2014, 2015, 2016, and 2017.
 - iii. Please see Attachment NERI 22-5-1, Page 3, for the average annual electricity usage for income-eligible electric customers for the years 2012, 2013, 2014, 2015, 2016, and 2017, calculated as each year's total Rate A-60 kWh divided by the average monthly number of Rate A-60 bills.
- b. Gas customers:
- i. Please see Attachment NERI 22-5-2, Pages 1 and 2, for the calculated annual discount for an average use customer on Narragansett Gas's low income rates under each of the percent discount scenarios provided in the tables on Page 22 of the Joint Pre-Filed Direct Testimony of Ms. Leary and Mr. McCabe (Bates Page 26 of Book 15).
 - ii. Please see Attachment NERI 22-5-2, Pages 3 and 4, for the average annual electricity bill for income-eligible Narragansett Gas customers for the years 2012, 2013, 2014, 2015, 2016, and 2017.
 - iii. Please see attachment NERI 22-5-1, Pages 5 and 6, for the average annual gas usage for an average customer on Narragansett Gas's low income rates for the years 2012, 2013, 2014, 2015, 2016, and 2017, calculated as each year's total Rate 11 and Rate 13 therms divided by the average monthly number of Rate 11 and Rate 13 bills.
- c.
- i. When choosing the 15 percent discount as opposed to a higher or lower fixed discount percentage, the Company selected a value that resulted in a discount as close as possible to the existing discount.
 - ii. The impact of the full customer charge was taken into account when selecting the 15 percent discount level, especially with regard to the total discount provided to Narragansett Electric customers under the proposal when compared to the amount of the low-income discount from the Company's 2012 rate case (Docket No. 4323), with the discount amounts being within approximately \$232,000 of each other.
 - iii. The Company believes that there will be no impact on arrearages, collection rates, or disconnection rates based on the proposed change from a discount on base distribution rates to the proposed total bill discount of 15 percent. Again, the Company designed the proposed 15 percent total bill discount to be as close as possible to the existing level of discount given to electric customers on Narragansett Electric's low income rate. Therefore, the Company has no reason to believe this change in discount methodology will change any of the activities listed.

Narragansett Electric
Year 1 Different Discount Percentages

	Rate A-60 Units	Rate A-60 Rates		Rate A-60 Charges			
		Proposed		Proposed			
		Year 1	Year 1	Year 1	Year 1	Year 1	Year 1
(a)	(b)	5% (c)	10% (d)	15% (e)	20% (f)	25% (g)	
(1) Customer Charge	12	\$2.75	\$33.00	\$33.00	\$33.00	\$33.00	\$33.00
(2) RE Growth Factor	12	\$0.78	\$9.36	\$9.36	\$9.36	\$9.36	\$9.36
(3) LIHEAP Enhancement Surcharge	12	\$0.81	\$9.72	\$9.72	\$9.72	\$9.72	\$9.72
	6,000						
(4) Distribution kWh Charge	6,000	\$0.04438	\$266.28	\$266.28	\$266.28	\$266.28	\$266.28
(5) ISR CapEx Factor	6,000	\$0.00000	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
(6) ISR CapEx Reconciliation Factor	6,000	(\$0.00135)	(\$8.10)	(\$8.10)	(\$8.10)	(\$8.10)	(\$8.10)
(7) ISR O&M Factor	6,000	\$0.00163	\$9.78	\$9.78	\$9.78	\$9.78	\$9.78
(8) ISR O&M Reconciliation Factor	6,000	(\$0.00001)	(\$0.06)	(\$0.06)	(\$0.06)	(\$0.06)	(\$0.06)
(9) Pension/PBOP Factor	6,000	(\$0.00085)	(\$5.10)	(\$5.10)	(\$5.10)	(\$5.10)	(\$5.10)
(10) Revenue Decoupling Mechanism Adjustment Factor	6,000	\$0.00118	\$7.08	\$7.08	\$7.08	\$7.08	\$7.08
(11) Storm Fund Replenishment Factor	6,000	\$0.00288	\$17.28	\$17.28	\$17.28	\$17.28	\$17.28
(12) Low Income Discount Recovery Factor	6,000	\$0.00000	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
(13) Subtotal Distribution Energy Charge			\$287.16	\$287.16	\$287.16	\$287.16	\$287.16
(14) Transmission Charge	6,000	\$0.03180	\$190.80	\$190.80	\$190.80	\$190.80	\$190.80
(15) Transition Charge	6,000	\$0.00057	\$3.42	\$3.42	\$3.42	\$3.42	\$3.42
(16) Energy Efficiency Program Charge	6,000	\$0.01154	\$69.24	\$69.24	\$69.24	\$69.24	\$69.24
(17) Renewable Energy Distribution Charge	6,000	\$0.00688	\$41.28	\$41.28	\$41.28	\$41.28	\$41.28
(18) Total Delivery Service Charges			\$643.98	\$643.98	\$643.98	\$643.98	\$643.98
(19) "Winter" SOS Charge (October 2017 - March 2018)	3,000	\$0.09518	\$285.54	\$285.54	\$285.54	\$285.54	\$285.54
(20) "Summer" SOS Charge (April 2017-September 2017)	3,000	\$0.06231	\$186.93	\$186.93	\$186.93	\$186.93	\$186.93
(21) Total SOS Charges	6,000		\$472.47	\$472.47	\$472.47	\$472.47	\$472.47
(22) Total			\$1,116.45	\$1,116.45	\$1,116.45	\$1,116.45	\$1,116.45
(23) Low Income Discount			(\$55.82)	(\$111.65)	(\$167.47)	(\$223.29)	(\$279.11)
(24) Illustrative Bill Charges After Discount			\$1,060.63	\$1,004.80	\$948.98	\$893.16	\$837.34

- (a) 1 Customer at average usage for 12 months
- (1)(b) Schedule HSG-4-I, Column (b), Lines 4, 5, 6
- (4)(b) Schedule HSG-4-I, Column (b), Lines 9, 10, 11
- (b) Workpaper HSG-5, Page 2, Column (c)
- (c) Illustrative design of Rate A-60 Customer and Distribution kWh Charges assuming old rate structure
- (d) - (h) Column (a) x Column (b)
- (i) Column (a) x Column (c)

- (12) Proposing A-60 exempt from Low Income Discount Recovery Factor
- (13) Sum of Lines (4) thru (12)
- (18) Sum of Lines (1) thru (3) + Line (13) + Sum of Lines (14) thru (17)
- (21) Line (19) + Line (20)
- (22) Line (18) + Line (21)
- (23) Line (22) x discount applicable to column (c) through (g)
- (24) Line (22) + Line (23)

Narragansett Electric
A-60 Average Annual Bill

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
	(a)	(b)	(c)	(d)	(e)	(f)
(1) Annual Usage	6,864	7,048	6,840	6,882	6,569	6,446
(2) Annual Customer Charge	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
(3) Annual LIHEAP Charge	\$9.96	\$9.96	\$8.76	\$8.76	\$8.76	\$9.72
(4) Annual Distribution Charge	\$150.15	\$172.42	\$168.54	\$182.55	\$190.92	\$194.15
(5) Annual Renewable Energy Charge	\$0.39	\$0.69	\$1.23	\$8.58	\$19.08	\$43.93
(6) Annual Transmission Charge	\$127.83	\$141.83	\$148.77	\$159.41	\$171.83	\$197.28
(7) Annual Transition Charge	\$2.70	\$9.66	\$7.71	(\$8.70)	(\$6.18)	\$1.86
(8) Annual Energy Efficiency Programs	\$42.68	\$63.81	\$64.32	\$67.62	\$72.77	\$74.42
(9) Annual RE Growth Program	\$0.00	\$0.00	\$0.00	\$1.02	\$4.02	\$4.32
(10) Annual Energy Charge	<u>\$502.68</u>	<u>\$504.91</u>	<u>\$594.48</u>	<u>\$721.78</u>	<u>\$565.55</u>	<u>\$485.86</u>
(11) Annual Subtotal	\$836.39	\$903.28	\$993.81	\$1,141.02	\$1,026.75	\$1,011.54
(12) Annual GET	<u>\$34.87</u>	<u>\$37.63</u>	<u>\$41.40</u>	<u>\$47.53</u>	<u>\$42.80</u>	<u>\$42.14</u>
(13) Annual Total	\$871.26	\$940.91	\$1,035.21	\$1,188.55	\$1,069.55	\$1,053.68

- (1) Per page 3, Line (3)
- (2) Customer Charge X 12 (months)
- (3) LIHEAP Charge X 12 (months)
- (4) Monthly Distribution Charges per RIPUC Tariff No. 2095 X (Line (1) ÷ 12)
- (5) Monthly Renewable Energy Charges per RIPUC Tariff No. 2095 X (Line (1) ÷ 12)
- (6) Monthly Transmission Charges per RIPUC Tariff No. 2095 X (Line (1) ÷ 12)
- (7) Monthly Transition Charges per RIPUC Tariff No. 2095 X (Line (1) ÷ 12)
- (8) Monthly Energy Efficiency Charges per RIPUC Tariff No. 2095 X (Line (1) ÷ 12)
- (9) RE Growth Charge X 12 (months)
- (10) Monthly Supply Charges per RIPUC Tariff No. 2096 X (Line (1) ÷ 12)
- (11) Sum of Lines (2) through (10)
- (12) Line (11) X 4.166667%
- (13) Line (11) + Line (12)

Narragansett Electric
A-60 Average Annual Electric Use

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
	(a)	(b)	(c)	(d)	(e)	(f)
(1) Annual kWh Usage	294,207,042	296,166,153	294,402,953	314,542,793	238,873,632	208,435,066
(2) Average Customers	42,861	42,021	43,042	45,705	36,362	32,333
(3) Average Annual Use	6,864	7,048	6,840	6,882	6,569	6,446

- (1) Company billing system
- (2) Company billing system
- (3) Line (1) ÷ Line (2)

Narragansett Gas
Rate 11 Different Discount Percentages

		Rate 11 Usage (Therms)	Proposed Rates	5%	10%	15%	20%	25%
		(a)	(b)	(c)	(d)	(e)	(f)	(g)
(1)	Customer Charge		\$16.00	\$192.00	\$192.00	\$192.00	\$192.00	\$192.00
(2)	LIHEAP Enhancement Surcharge Distribution Charge		\$0.81	\$9.72	\$9.72	\$9.72	\$9.72	\$9.72
(3)	Head Block	220	\$0.6027	\$132.59	\$132.59	\$132.59	\$132.59	\$132.59
(4)	Tail Block	220	\$0.6027					
(5)	DAC	220	\$0.1982	\$43.60	\$43.60	\$43.60	\$43.60	\$43.60
(6)	Energy Efficiency Program Charge	220	\$0.0869	<u>\$19.12</u>	<u>\$19.12</u>	<u>\$19.12</u>	<u>\$19.12</u>	<u>\$19.12</u>
(7)	Total Delivery Service Charges			\$397.04	\$397.04	\$397.04	\$397.04	\$397.04
(8)	Commodity Charge	220	\$0.7183	<u>\$158.03</u>	<u>\$158.03</u>	<u>\$158.03</u>	<u>\$158.03</u>	<u>\$158.03</u>
(9)	Total			\$555.06	\$555.06	\$555.06	\$555.06	\$555.06
(10)	Low Income Discount			<u>(\$27.75)</u>	<u>(\$55.51)</u>	<u>(\$83.26)</u>	<u>(\$111.01)</u>	<u>(\$138.77)</u>
(11)	Illustrative Bill Charge after discount			\$527.31	\$499.56	\$471.80	\$444.05	\$416.30
(a)	Rate 11 customer at average usage			(8)(c) - (8)(g)	(8)(a) X (8)(b)			
(b)	Proposed Delivery Rates			(9)	Line (7) + Line (8)			
(1)(c) - (1)(g)	Proposed Rate 11 Customer Charge X 12			(10)(c)	(9)(c) X 5%			
(2)(c) - (2)(g)	Proposed LIHEAP Charge X 12			(10)(d)	(9)(d) X 10%			
(3)(c) - (3)(g)	(3)(a) X (3)(b)			(10)(e)	(9)(e) X 15%			
(5)(c)-(5)(g)	(5)(a) X (5)(b)			(10)(f)	(9)(f) X 20%			
(6)(c)-(6)(g)	(6)(a) X (6)(b)			(10)(g)	(9)(g) X 25%			
(7)	Sum of Lines (1) thru (6)			(11)	Line (9) + Line (10)			

Narragansett Gas
Rate 13 Different Discount Percentages

		Rate 13 Usage (Therms)	Proposed Rates	5%	10%	15%	20%	25%
		(a)	(b)	(c)	(d)	(e)	(f)	(g)
(1)	Customer Charge		\$16.00	\$192.00	\$192.00	\$192.00	\$192.00	\$192.00
(2)	LIHEAP Enhancement Surcharge		\$0.81	\$9.72	\$9.72	\$9.72	\$9.72	\$9.72
	Distribution Charge							
(3)	Head Block	763	\$0.6034	\$460.39	\$460.39	\$460.39	\$460.39	\$460.39
(4)	Tail Block	82	\$0.6034	\$49.48	\$49.48	\$49.48	\$49.48	\$49.48
(5)	DAC	845	\$0.1710	\$144.50	\$144.50	\$144.50	\$144.50	\$144.50
(6)	Energy Efficiency Program Charge	845	\$0.0869	<u>\$73.43</u>	<u>\$73.43</u>	<u>\$73.43</u>	<u>\$73.43</u>	<u>\$73.43</u>
(7)	Total Delivery Service Charges			\$929.52	\$929.52	\$929.52	\$929.52	\$929.52
(8)	Commodity Charge	845	\$0.7614	<u>\$643.38</u>	<u>\$643.38</u>	<u>\$643.38</u>	<u>\$643.38</u>	<u>\$643.38</u>
(9)	Total			\$1,572.90	\$1,572.90	\$1,572.90	\$1,572.90	\$1,572.90
(10)	Low Income Discount			(\$78.65)	(\$157.29)	(\$235.94)	(\$314.58)	(\$393.23)
(11)	Illustrative Bill Charge after discount			\$1,494.26	\$1,415.61	\$1,336.97	\$1,258.32	\$1,179.68
(a)	Rate 13 customer at average usage		(8)(c) - (8)(g)	(8)(a) X (8)(b)				
(b)	Proposed Delivery Rates		(9)	Line (7) + Line (8)				
(1)(c) - (1)(g)	Proposed Rate 13 Customer Charge X 12		(10)(c)	(9)(c) X 5%				
(2)(c) - (2)(g)	Proposed LIHEAP Charge X 12		(10)(d)	(9)(d) X 10%				
(3)(c) - (3)(g)	(3)(a) X (3)(b)		(10)(e)	(9)(e) X 15%				
(4)(c) - (4)(g)	(4)(a) X (4)(b)		(10)(f)	(9)(f) X 20%				
(5)(c)-(5)(g)	(5)(a) X (5)(b)		(10)(g)	(9)(g) X 25%				
(6)(c)-(6)(g)	(6)(a) X (6)(b)		(11)	Line (9) + Line (10)				
(7)	Sum of Lines (1) thru (6)							

Narragansett Gas
Rate 11 Average Annual Bill

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
	(a)	(b)	(c)	(d)	(e)	(f)
(1) Average Annual Usage	559	686	701	612	575	423
(2) Annual Customer Charge	\$120.00	\$153.00	\$156.00	\$156.00	\$156.00	\$156.00
(3) Annual Delivery Charge	\$210.33	\$265.00	\$289.30	\$232.99	\$197.35	\$156.56
(4) Annual Supply Charge	\$404.27	\$429.17	\$494.88	\$398.72	\$297.14	\$193.22
(5) Annual Distribution Charge	\$30.03	\$43.77	\$14.89	\$13.11	\$57.77	\$92.04
(6) Annual Energy Efficiency Charge	\$21.72	\$28.56	\$40.74	\$46.92	\$43.16	\$37.06
(7) Annual LIHEAP Charge	<u>\$9.96</u>	<u>\$9.96</u>	<u>\$8.81</u>	<u>\$8.76</u>	<u>\$8.76</u>	<u>\$9.68</u>
(8) Annual Subtotal	\$796.31	\$929.46	\$1,004.62	\$856.50	\$760.18	\$644.56
(9) Annual GET	<u>\$25.00</u>	<u>\$28.00</u>	<u>\$30.00</u>	<u>\$26.00</u>	<u>\$24.00</u>	<u>\$20.00</u>
(10) Annual Total	\$821.31	\$957.46	\$1,034.62	\$882.50	\$784.18	\$664.56

- (1) Per Page 3, Line (3)
- (2) Customer Charge X 12 (months)
- (3) Monthly Delivery Charge X Line (1)
- (4) Monthly Commodity Charge X Line (1)
- (5) Monthly Distribution Charge X Line (1)
- (6) Monthly Energy Efficiency Charge X Line (1)
- (7) Monthly LIHEAP Charge X Line (1)
- (8) Sum of Lines (2) through (7)
- (9) Line (8) X 3.092784%
- (10) Line (8) + Line (9)

Narragansett Gas
Rate 13 Average Annual Bill

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
	(a)	(b)	(c)	(d)	(e)	(f)
(1) Average Annual Usage	740	846	886	883	780	805
(2) Annual Customer Charge	\$144.00	\$155.00	\$156.00	\$156.00	\$156.00	\$156.00
(3) Annual Delivery Charge	\$242.56	\$307.16	\$337.77	\$335.44	\$304.78	\$313.56
(4) Annual Supply Charge	\$568.79	\$566.48	\$651.02	\$591.89	\$421.72	\$390.40
(5) Annual Distribution Charge	\$22.00	\$46.87	\$32.69	-\$1.46	\$35.01	\$101.16
(6) Annual Energy Efficiency Charge	\$28.58	\$35.24	\$51.67	\$67.65	\$58.54	\$70.50
(7) Annual LIHEAP Charge	<u>\$614.20</u>	<u>\$702.18</u>	<u>\$646.78</u>	<u>\$644.59</u>	<u>\$569.40</u>	<u>\$652.05</u>
(8) Annual Subtotal	\$1,620.13	\$1,812.93	\$1,875.93	\$1,794.11	\$1,545.45	\$1,683.67
(9) Annual GET	<u>\$51.00</u>	<u>\$57.00</u>	<u>\$59.00</u>	<u>\$55.00</u>	<u>\$47.00</u>	<u>\$53.00</u>
(10) Annual Total	\$1,671.13	\$1,869.93	\$1,934.93	\$1,849.11	\$1,592.45	\$1,736.67

- (1) Per Page 3, Line (3)
- (2) Customer Charge X 12 (months)
- (3) Monthly Delivery Charge X Line (1)
- (4) Monthly Commodity Charge X Line (1)
- (5) Monthly Distribution Charge X Line (1)
- (6) Monthly Energy Efficiency Charge X Line (1)
- (7) Monthly LIHEAP Charge X Line (1)
- (8) Sum of Lines (2) through (7)
- (9) Line (8) X 3.092784%
- (10) Line (8) + Line (9)

Narragansett Gas
Rate 11 Average Annual Gas Use

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
	(a)	(b)	(c)	(d)	(e)	(f)
(1) Total Therms	198,058	296,277	395,787	273,406	183,466	110,039
(2) Average Number of Customers	354	432	565	447	319	260
(3) Average Annual Usage	559	686	701	612	575	423

- (1) Company billing system
- (2) Company billing system
- (3) Line (1) / Line (2)

Narragansett Gas
Rate 13 Average Annual Gas Use

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
	(a)	(b)	(c)	(d)	(e)	(f)
(1) Total Therms	14,139,476	15,876,665	17,583,464	18,245,932	14,128,211	14,833,233
(2) Average Number of Customers	19,108	18,764	19,850	20,662	18,109	18,436
(3) Average Annual Usage	740	846	886	883	780	805

- (1) Company billing system
- (2) Company billing system
- (3) Line (1) / Line (2)

NERI 22-6

Request:

Subject: Book 15—Pricing Panel—Leary, McCabe

Reference p. 22.

- a. How have the number of low-income customers served by Narragansett changed since 2012?
- b. Does the proposed spending level reflect this change?
- c. How has electricity usage changed per low-income customer since 2012?
- d. Does the proposed spending level reflect this change?

Response:

- a. Please see the Company's response to Division 5-16, a copy of which is provided as Attachment NERI 22-6 for ease of reference, for the number of gas and electric customers on each rate class, including the Company's three low income rate classes, for the years 2013 through 2017.
- b. As described in Lines 5-11 on Page 24 of the Joint Pre-Filed Direct Testimony of Company Witnesses Ann E. Leary and Scott M. McCabe (Bates Page 28 of Book 15), the Low Income Discount Recovery Factor will be calculated in accordance with the provisions of the proposed electric Residential Assistance Provision, RIPUC No. 2195, and the proposed gas tariff, RIPUC No. 101, Section 7, Schedule C, Item 9.0. As provided in these tariffs, the discount provided to low income customers will be recovered concurrently based on the estimated annual low income discount. The estimated discount will be 15 percent of the forecasted electric Rate A-60 and gas Rates 11 and 13 monthly billing units multiplied by the applicable customer charge and the sum of the delivery and commodity rates in effect during the period. This estimate of the discount shall be used to determine the amount to be reflected in delivery rates on a prospective basis. Thus, the proposed spending levels in the tables presented on Page 22 (Bates Page 26 of Book 15) are based on the forecasted units for the rate year. Each year, the Company files proposed Low Income Discount Recovery Factors, the Company will use the latest available for forecast of the number of low income customers and the associated volumetric deliveries to estimate the applicable low income discount.
- c. The average annual use for an electric low income customer for calendar years 2012 and 2017 is 6,736 kWh and 6,283 kWh, respectively. These values are derived from Company Witness Joseph Gredder's Schedule JFG-20 (Bates Page 79 of Book 3, weather-normalized gigawatt-hour deliveries for Rate A-60 for 2012 and 2017) and

Schedule JFG-21 (Bates Page 81 of Book 3, annual customer counts for Rate A-60 for 2012 and 2017).

- d. See the Company's response to part b. above.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4770
Responses to Division's Fifth Set of Data Requests
Issued January 3, 2018

Division 5-16

Request:

Please provide the number of residential and commercial customers by service rate over the last five calendar years.

Response:

Please see Attachment DIV 5-16-1 for the number of Narragansett Gas residential and commercial customers by rate class, and Attachment DIV 5-16-2 for the number of Narragansett Electric residential and commercial customers by rate class over the last five calendar years.

(This response is identical to the Company's response to Division 1-16 in Docket No. 4780.)

Narragansett Electric - Monthly Gas Customer Count Per Rate Class

Rate Class Description	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
Rate Class	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13
2013												
(1) Residential - Non-Heating	10	25,865	25,856	25,885	25,836	25,744	25,516	25,456	25,479	25,503	25,593	25,648
(2) Residential Low Income - Non-Heating	11	379	378	370	361	396	407	508	490	477	465	459
(3) Residential - Heating - Rate	12	187,768	188,346	188,723	188,583	187,023	186,352	184,049	184,505	185,940	188,130	189,559
(4) Residential Low Income	13	18,347	18,178	18,011	17,943	18,537	18,501	20,169	19,948	19,413	18,989	18,477
(5) Small C&I	21	18,747	18,800	18,800	18,697	18,524	18,381	18,270	18,221	18,243	18,367	18,856
(6) Medium C&I	22	4,681	4,696	4,705	4,702	4,691	4,694	4,684	4,665	4,678	4,700	4,758
(7) Large Low Load	33	450	454	452	453	450	448	448	450	452	457	460
(8) Large High Load	23	185	185	184	185	185	185	186	180	177	177	177
(9) Extra Large Low Load	34	37	37	38	37	37	37	37	38	37	37	37
(10) Extra Large High Load	24	76	76	75	77	77	76	76	75	74	74	74
(11) Non-Firm	60&61	20	19	19	19	18	18	17	18	17	17	17
(12) Other	80	26	26	26	26	26	26	26	26	26	26	26
(13) Total		256,581	257,051	257,288	256,919	255,708	254,803	253,977	253,355	254,758	257,039	258,548
2014												
(14) Residential - Non-Heating	10	25,669	25,669	25,619	25,534	25,323	25,206	25,139	25,164	25,189	25,267	22,917
(15) Residential Low Income - Non-Heating	11	456	454	505	546	635	649	661	625	616	595	396
(16) Residential - Heating - Rate	12	190,600	191,238	190,140	189,436	186,752	185,530	184,685	184,971	185,559	187,029	193,252
(17) Residential Low Income	13	18,264	18,119	19,422	19,820	20,986	21,040	21,171	20,661	19,713	19,450	19,392
(18) Small C&I	21	18,995	19,020	19,027	18,879	18,642	18,453	18,350	18,358	18,280	18,636	18,812
(19) Medium C&I	22	4,773	4,780	4,784	4,782	4,769	4,755	4,754	4,687	4,793	4,824	4,835
(20) Large Low Load	33	463	466	467	467	466	464	465	462	459	461	469
(21) Large High Load	23	178	180	180	179	181	182	184	184	172	175	172
(22) Extra Large Low Load	34	35	36	36	36	36	36	35	36	36	36	36
(23) Extra Large High Load	24	77	81	79	81	79	79	79	78	80	81	83
(24) Non-Firm	60&61	15	14	16	16	16	15	14	14	14	12	11
(25) Other	80	26	26	26	26	26	26	26	26	26	26	26
(26) Total		259,551	260,083	260,301	259,802	257,911	256,435	255,563	255,265	256,529	258,986	260,401

Source: Company billing records

Narragansett Electric - Monthly Gas Customer Count Per Rate Class

Rate Class Description	Rate Class	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
		Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15
(27) Residential - Non-Heating	10	22,933	22,962	22,940	22,713	22,631	21,735	21,706	21,773	21,746	21,806	21,853	21,931
(28) Residential Low Income - Non-Heating	11	403	402	413	545	568	460	457	452	435	421	413	405
(29) Residential - Heating - Rate	12	194,354	195,114	194,912	192,348	190,629	190,917	190,851	191,023	191,368	192,871	194,958	196,482
(30) Residential Low Income	13	19,211	19,060	19,671	21,828	22,454	22,164	21,700	21,198	20,672	20,292	19,980	19,718
(31) Small C&I	21	18,998	19,065	19,041	18,903	18,711	18,534	18,451	18,426	18,393	18,568	18,843	19,055
(32) Medium C&I	22	4,849	4,865	4,857	4,848	4,848	4,834	4,829	4,797	4,809	4,841	4,859	4,880
(33) Large Low Load	33	469	470	470	470	468	467	467	447	447	455	457	461
(34) Large High Load	23	174	172	172	173	173	174	174	163	162	162	161	161
(35) Extra Large Low Load	34	36	36	36	36	36	36	37	37	36	36	36	36
(36) Extra Large High Load	24	84	84	84	84	84	84	83	85	84	84	84	84
(37) Non-Firm	60&61	11	11	11	11	11	11	11	11	11	11	11	12
(38) Other	80	26	26	26	26	26	26	26	25	25	25	25	25
(39) Total		261,548	262,267	262,633	261,985	260,639	259,442	258,792	258,437	258,188	259,572	261,681	263,250
2016													
(40) Residential - Non-Heating	10	22,008	22,007	22,144	21,266	21,218	19,957	19,055	19,051	19,072	19,115	19,191	19,250
(41) Residential Low Income - Non-Heating	11	407	404	263	443	479	373	254	246	247	243	236	235
(42) Residential - Heating - Rate	12	197,596	198,171	205,450	199,739	198,166	198,481	199,328	199,329	199,718	200,965	202,786	204,265
(43) Residential Low Income	13	19,485	19,248	11,951	18,247	19,112	19,239	19,049	18,716	18,483	18,194	17,919	17,660
(44) Small C&I	21	19,232	19,250	19,212	19,134	19,032	18,846	18,738	18,599	18,586	18,742	18,961	19,196
(45) Medium C&I	22	4,899	4,898	4,906	4,903	4,895	4,878	4,878	4,936	4,964	4,996	5,013	5,039
(46) Large Low Load	33	461	462	463	461	459	457	457	451	452	457	460	462
(47) Large High Load	23	164	166	165	165	165	165	164	181	185	185	184	187
(48) Extra Large Low Load	34	36	36	36	36	36	36	36	34	34	34	34	34
(49) Extra Large High Load	24	84	84	84	84	84	84	85	91	91	91	91	91
(50) Non-Firm	60&61	11	11	11	11	11	11	10	10	10	10	10	10
(51) Other	80	25	25	25	25	25	25	25	25	25	25	25	25
(52) Total		264,408	264,762	264,710	264,514	263,682	262,552	262,079	261,669	261,867	263,057	264,910	266,454

Source: Company billing records

Narragansett Electric - Monthly Gas Customer Count Per Rate Class

Rate Class Description	Rate Class	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
		Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
(53) Residential - Non-Heating	10	19,252	19,272	19,308	19,292	19,196	19,125	19,086	19,067	18,725	18,333	18,380	18,400
(54) Residential Low Income - Non-Heating	11	233	232	226	262	306	318	321	320	281	211	206	212
(55) Residential - Heating - Rate	12	205,147	205,721	206,060	203,897	201,692	200,727	200,418	200,583	201,524	204,611	206,954	208,274
(56) Residential Low Income	13	17,419	17,244	17,050	19,038	20,347	20,312	20,163	19,817	19,422	17,282	16,717	16,424
(57) Small C&I	21	19,289	19,315	19,296	19,154	18,983	18,835	18,748	18,668	18,640	18,702	18,774	19,149
(58) Medium C&I	22	5,048	5,057	5,068	5,063	5,051	5,042	5,038	5,056	5,074	5,080	5,321	5,123
(59) Large Low Load	33	462	463	463	462	459	459	458	455	452	457	460	460
(60) Large High Load	23	187	187	187	187	187	187	187	187	184	185	185	187
(61) Extra Large Low Load	34	34	35	35	35	35	35	35	32	31	30	30	31
(62) Extra Large High Load	24	90	90	89	90	88	88	88	84	84	84	85	85
(63) Non-Firm	60&61	10	10	10	10	11	11	11	11	11	11	11	11
(64) Gas Lights	80	25	25	25	25	25	25	25	25	25	25	25	25
(65) Total		267,196	267,651	267,817	267,515	266,380	265,164	264,578	264,305	264,453	265,011	267,148	268,381

Source: Company billing records

Narragansett Electric - Monthly Electric Customer Count Per Rate Class

Rate Class Description	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	
	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	
2013													
(1) Basic Residential	A-16	389,624	390,026	390,967	391,280	391,502	392,012	391,124	390,474	392,086	391,335	391,966	391,673
(2) Low Income	A-60	42,364	42,329	42,238	42,266	42,342	42,287	42,398	42,204	41,921	41,589	41,285	41,032
(3) Large Demand Backup Service	B-32	5	5	5	5	4	4	4	3	4	4	4	4
(4) Optional Large Demand Backup Service	B-62	1	1	1	1	1	1	1	1	1	1	1	1
(5) Small C&I	C-06	49,069	49,100	49,147	49,112	49,207	49,103	49,066	49,136	49,286	49,054	49,241	49,000
(6) General C&I	G-02	7,926	8,380	8,385	8,357	8,373	8,346	8,345	8,288	8,296	8,158	8,273	8,048
(7) 200 kW Demand	G-32	1,009	1,071	1,062	1,059	1,067	1,061	1,064	1,059	1,056	1,050	1,049	1,027
(8) 3000 kW Demand	G-62	12	13	12	12	13	11	12	12	12	13	11	12
(9) Station Power Delivery and Reliability Service	M-1	3	3	3	3	3	3	3	3	3	3	3	3
(10) Private Lighting	S-10	2,616	2,610	2,608	2,594	2,581	2,575	2,571	2,569	2,564	2,568	2,559	2,553
(11) General Street and Area Lighting	S-14	381	381	379	379	379	380	380	380	379	378	378	379
(12) Electric Propulsion	X-01	1	1	1	1	1	1	1	1	1	1	1	1
(13) Total		493,011	493,920	494,808	495,069	495,473	495,784	494,969	494,130	495,610	494,155	494,771	493,733
2014													
(14) Basic Residential	A-16	391,721	391,300	393,727	392,776	392,918	393,027	387,954	387,431	389,134	389,507	388,918	389,777
(15) Low Income	A-60	40,897	40,697	40,867	41,292	41,781	41,482	46,255	45,597	45,128	44,626	44,070	43,806
(16) Large Demand Backup Service	B-32	4	4	4	4	4	4	4	4	4	5	5	5
(17) Optional Large Demand Backup Service	B-62	1	2	1	1	1	1	1	2	1	0	0	0
(18) Small C&I	C-06	49,068	49,378	49,328	49,128	49,233	49,230	49,216	49,031	49,355	49,394	49,043	49,117
(19) General C&I	G-02	8,217	8,311	8,192	8,145	8,297	8,224	8,168	8,087	8,250	8,235	8,045	8,193
(20) 200 kW Demand	G-32	1,039	1,036	1,025	1,037	1,060	1,044	1,053	1,052	1,054	1,051	1,029	1,047
(21) 3000 kW Demand	G-62	13	12	13	11	12	10	11	11	11	12	10	11
(22) Station Power Delivery and Reliability Service	M-1	3	2	2	3	3	3	3	3	3	3	3	3
(23) Private Lighting	S-10	2,550	2,550	2,549	2,561	2,522	2,516	2,518	2,514	2,517	2,516	2,509	2,506
(24) General Street and Area Lighting	S-14	378	381	379	379	379	382	382	382	382	381	381	381
(25) Electric Propulsion	X-01	1	1	1	1	1	1	1	1	1	1	1	1
(26) Total		493,892	493,674	496,088	495,338	496,211	495,924	495,566	494,115	495,840	495,731	494,014	494,847

Source: Company billing records

Narragansett Electric - Monthly Electric Customer Count Per Rate Class

Rate Class Description	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
Rate Class Description	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15
(27) Basic Residential	390,035	390,486	389,748	388,917	389,171	389,040	387,419	387,810	389,373	389,524	390,137	391,418
(28) Low Income	43,504	44,499	45,478	46,990	47,534	47,175	46,509	46,084	45,767	45,272	44,937	44,708
(29) Large Demand Backup Service	5	5	5	5	5	5	5	5	5	5	5	5
(30) Optional Large Demand Backup Service	0	0	0	0	0	0	0	0	0	0	0	0
(31) Small C&I	49,071	49,523	49,565	49,477	49,435	49,534	49,344	49,334	49,576	49,516	51,509	49,667
(32) General C&I	8,043	8,145	8,057	8,145	8,174	8,216	8,206	8,274	8,246	8,244	8,640	8,246
(33) 200 kW Demand	1,019	1,029	1,024	1,041	1,041	1,050	1,044	1,054	1,049	1,036	1,079	1,038
(34) 3000 kW Demand	10	11	12	12	12	12	10	12	12	12	12	12
(35) Station Power Delivery and Reliability Service	3	3	3	3	3	3	3	3	3	3	3	3
(36) Customer Owned Lighting	0	0	0	0	0	0	0	0	0	0	0	0
(37) Decorative Lighting	1	1	1	1	1	1	1	1	1	1	1	1
(38) Private Lighting	2,504	2,491	2,487	2,479	2,475	2,464	2,458	2,452	2,446	2,447	2,469	2,443
(39) General Street and Area Lighting	380	380	380	381	389	381	380	379	379	379	380	379
(40) Electric Propulsion	1	1	1	1	1	1	1	1	1	1	1	1
(41) Total	494,576	496,574	496,761	497,451	498,240	497,881	495,379	495,408	496,857	496,439	499,172	497,920
2016												
(42) Basic Residential	390,519	390,177	400,444	401,892	393,030	400,605	398,573	400,122	399,661	401,133	403,297	385,442
(43) Low Income	44,176	45,522	37,256	33,800	34,221	35,127	35,080	34,946	34,517	34,783	34,504	32,416
(44) Large Demand Backup Service	5	5	5	5	5	5	5	5	5	5	5	4
(45) Optional Large Demand Backup Service	0	0	0	0	0	0	0	0	0	0	0	0
(46) Small C&I	49,675	49,635	49,950	49,744	49,187	49,586	49,638	49,752	49,725	49,871	50,077	47,969
(47) General C&I	8,366	8,247	8,289	8,234	8,221	8,179	8,160	8,230	8,296	8,175	8,294	7,965
(48) 200 kW Demand	1,057	1,041	1,040	1,045	1,045	1,041	1,041	1,041	1,047	1,037	1,041	1,014
(49) 3000 kW Demand	12	13	12	11	12	12	12	12	12	12	12	12
(50) Station Power Delivery and Reliability Service	3	3	3	3	3	3	3	3	3	3	3	3
(51) Customer Owned Lighting	0	0	0	0	0	0	0	0	0	0	0	0
(52) Decorative Lighting	0	0	0	0	0	0	0	0	0	0	0	0
(53) Private Lighting	2,446	2,439	2,429	2,428	2,418	2,372	2,368	2,367	2,357	2,362	2,360	2,351
(54) General Street and Area Lighting	379	377	377	378	379	367	366	366	365	365	363	365
(55) Electric Propulsion	1	1	1	1	1	1	1	1	1	1	1	1
(56) Total	496,639	497,460	499,806	497,541	488,522	497,297	495,247	496,845	495,989	497,749	499,959	477,544

Source: Company billing records

Narragansett Electric - Monthly Electric Customer Count Per Rate Class

Rate Class	2017	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
(57) Basic Residential	A-16	399,827	403,861	387,046	394,396	400,555	404,910	404,350	405,044	403,638	388,347	412,276	391,745
(58) Low Income	A-60	33,909	33,542	31,591	32,580	35,339	35,515	35,333	34,615	32,262	29,606	28,123	25,584
(59) Large Demand Backup Service	B-32	4	4	4	5	5	4	4	5	6	4	5	5
(60) Optional Large Demand Backup Service	B-62	0	0	0	0	0	0	0	0	0	0	0	0
(61) Small C&I	C-06	50,072	50,530	48,999	50,024	50,075	50,826	50,751	50,680	50,462	48,684	50,963	48,502
(62) General C&I	G-02	8,308	8,244	8,257	8,296	8,129	8,320	8,298	8,260	8,162	8,157	8,358	7,952
(63) 200 kW Demand	G-32	1,045	1,023	1,033	1,048	1,037	1,036	1,024	1,038	1,000	1,032	1,017	998
(64) 3000 kW Demand	G-62	13	13	13	13	12	13	13	13	13	13	13	12
(65) Station Power Delivery and Reliability Service	M-1	3	3	3	3	3	3	3	3	3	3	3	3
(66) Customer Owned Lighting	S-05	2	2	2	2	22	102	49	80	57	97	100	110
(67) Decorative Lighting	S-06	1	1	1	1	1	1	1	1	1	1	1	1
(68) General Street and Area Lighting	S-10	2,344	2,345	2,335	2,331	2,321	2,314	2,296	2,293	2,272	2,260	2,248	2,243
(69) Private Lighting	S-14	365	363	362	360	354	330	334	330	317	317	309	309
(70) Electric Propulsion	X-01	1	1	1	1	1	1	1	1	1	1	1	1
(71) Total		495,894	499,932	479,647	489,060	497,854	503,375	502,457	502,363	498,194	478,522	503,417	477,465

Source: Company billing records

NERI 22-7

Request:

Subject: Book 15—Pricing Panel—Leary, McCabe

Reference p. 22 and schedule PP-2. Please provide a bill frequency analysis for low-income customers and for non-low-income customers.

- a. Please provide the data broken down by 50 kWh/month increments, from 0-50 kWh/month up to 1,500 kWh/month
- b. Please include and identify the total bills and separate charges, and also show values for all residential customers as a whole.

Response:

- a. Please see Attachment NERI 22-7 for the bill frequency analysis of customers on Rate A-60 (low income, Page 1), customers on Rate A-16 (non-low income, Page 2), and all residential customers (on Page 3).
- b. The total number of bills for all Rate A-60 customers during the test year was 405,479, for all Rate A-16 customers was 4,700,374, and all residential customers was 5,105,863. A bill frequency is simply a count of the bills that meet the requested criteria, charges are not shown in a bill frequency and therefore are not reflected in Attachment NERI 22-7.

**One-Way Frequencies
 Results**

The FREQ Procedure

**Residential A-60 Customers eliminated cancel re-bills, negative usage
 and bills outside of the normal billing days**

TOT KWH QY MIN	TOT KWH QY MAX	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	50	3,201	0.8%	3,201	0.8%
51	100	8,478	2.1%	11,679	2.9%
101	150	20,220	5.0%	31,899	7.9%
151	200	29,573	7.3%	61,472	15.2%
201	250	34,228	8.4%	95,700	23.6%
251	300	34,388	8.5%	130,088	32.1%
301	350	32,583	8.0%	162,671	40.1%
351	400	30,024	7.4%	192,695	47.5%
401	450	26,945	6.6%	219,640	54.2%
451	500	23,626	5.8%	243,266	60.0%
501	550	20,938	5.2%	264,204	65.2%
551	600	17,820	4.4%	282,024	69.6%
601	650	15,752	3.9%	297,776	73.4%
651	700	13,458	3.3%	311,234	76.8%
701	750	11,605	2.9%	322,839	79.6%
751	800	10,084	2.5%	332,923	82.1%
801	850	8,732	2.2%	341,655	84.3%
851	900	7,444	1.8%	349,099	86.1%
901	950	6,564	1.6%	355,663	87.7%
951	1000	5,622	1.4%	361,285	89.1%
1001	1050	5,016	1.2%	366,301	90.3%
1051	1100	4,355	1.1%	370,656	91.4%
1101	1150	3,792	0.9%	374,448	92.3%
1151	1200	3,222	0.8%	377,670	93.1%
1201	1250	2,923	0.7%	380,593	93.9%
1251	1300	2,515	0.6%	383,108	94.5%
1301	1350	2,278	0.6%	385,386	95.0%
1351	1400	1,973	0.5%	387,359	95.5%
1401	1450	1,630	0.4%	388,989	95.9%
1451	1500	1,426	0.4%	390,415	96.3%
1501	14930	15,064	3.7%	405,479	100.0%
Total		405,479		405,479	

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**One-Way Frequencies
 Results
 The FREQ Procedure**

Residential A-16 Customers eliminated cancel re-bills, negative usage and bills outside of the normal billing days

TOT KWH QY MIN	TOT KWH QY MAX	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	50	160,809	3.4%	160,809	3.4%
51	100	149,883	3.2%	310,692	6.6%
101	150	224,647	4.8%	535,339	11.4%
151	200	275,469	5.9%	810,808	17.2%
201	250	298,666	6.4%	1,109,474	23.6%
251	300	307,537	6.5%	1,417,011	30.1%
301	350	306,569	6.5%	1,723,580	36.7%
351	400	298,239	6.3%	2,021,819	43.0%
401	450	281,785	6.0%	2,303,604	49.0%
451	500	261,777	5.6%	2,565,381	54.6%
501	550	238,896	5.1%	2,804,277	59.7%
551	600	213,910	4.6%	3,018,187	64.2%
601	650	191,449	4.1%	3,209,636	68.3%
651	700	169,554	3.6%	3,379,190	71.9%
701	750	148,903	3.2%	3,528,093	75.1%
751	800	130,916	2.8%	3,659,009	77.8%
801	850	115,269	2.5%	3,774,278	80.3%
851	900	100,907	2.1%	3,875,185	82.4%
901	950	89,406	1.9%	3,964,591	84.3%
951	1000	78,113	1.7%	4,042,704	86.0%
1001	1050	69,012	1.5%	4,111,716	87.5%
1051	1100	59,825	1.3%	4,171,541	88.7%
1101	1150	52,929	1.1%	4,224,470	89.9%
1151	1200	46,823	1.0%	4,271,293	90.9%
1201	1250	41,318	0.9%	4,312,611	91.8%
1251	1300	36,461	0.8%	4,349,072	92.5%
1301	1350	32,730	0.7%	4,381,802	93.2%
1351	1400	29,056	0.6%	4,410,858	93.8%
1401	1450	25,718	0.5%	4,436,576	94.4%
1451	1500	22,844	0.5%	4,459,420	94.9%
1501	126700	240,964	5.1%	4,700,384	100.0%
Total		4,700,384		4,700,384	

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**One-Way Frequencies
 Results
 The FREQ Procedure**

Residential A-16 and A-60 Customers eliminated cancel re-bills, negative usage and bills outside of the normal billing days

TOT KWH QY MIN	TOT KWH QY MAX	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	50	164,010	3.2%	164,010	3.2%
51	100	158,361	3.1%	322,371	6.3%
101	150	244,867	4.8%	567,238	11.1%
151	200	305,042	6.0%	872,280	17.1%
201	250	332,894	6.5%	1,205,174	23.6%
251	300	341,925	6.7%	1,547,099	30.3%
301	350	339,152	6.6%	1,886,251	36.9%
351	400	328,263	6.4%	2,214,514	43.4%
401	450	308,730	6.0%	2,523,244	49.4%
451	500	285,403	5.6%	2,808,647	55.0%
501	550	259,834	5.1%	3,068,481	60.1%
551	600	231,730	4.5%	3,300,211	64.6%
601	650	207,201	4.1%	3,507,412	68.7%
651	700	183,012	3.6%	3,690,424	72.3%
701	750	160,508	3.1%	3,850,932	75.4%
751	800	141,000	2.8%	3,991,932	78.2%
801	850	124,001	2.4%	4,115,933	80.6%
851	900	108,351	2.1%	4,224,284	82.7%
901	950	95,970	1.9%	4,320,254	84.6%
951	1000	83,735	1.6%	4,403,989	86.3%
1001	1050	74,028	1.4%	4,478,017	87.7%
1051	1100	64,180	1.3%	4,542,197	89.0%
1101	1150	56,721	1.1%	4,598,918	90.1%
1151	1200	50,045	1.0%	4,648,963	91.1%
1201	1250	44,241	0.9%	4,693,204	91.9%
1251	1300	38,976	0.8%	4,732,180	92.7%
1301	1350	35,008	0.7%	4,767,188	93.4%
1351	1400	31,029	0.6%	4,798,217	94.0%
1401	1450	27,348	0.5%	4,825,565	94.5%
1451	1500	24,270	0.5%	4,849,835	95.0%
1501	126700	256,028	5.0%	5,105,863	100.0%
Total		5,105,863		5,105,863	

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NERI 22-8

Request:

- a. Please explain the reasoning and methodology for the \$8.50 customer charge on Rate A-60 customers.
- b. Please identify the impact of the \$8.50 customer charge on the following Rate A-60 customers:
 - i. Average energy use customer
 - ii. Low energy use customer
 - iii. High energy use customer
- c. How does the \$8.50 customer charge impact the 15 percent fixed total bill discount for Rate A-60 customers?
- d. Please explain how the \$8.50 customer charge will affect Rate A-60 customer's energy usage.
- e. Please explain how the phasing-in of the fixed charge will effectively mitigate the bill impact on a Rate A-60 customer.

Response:

- a. As discussed in the Pre-Filed Direct Testimony of Company Witness Howard S. Gorman on Page 25, Line 21 through Page 28, Line 14 (Bates Pages 30-32 of Book 12) and the response to NERI 7-13, a copy of which accompanies this response as Attachment NERI 22-8, the costs considered for the Rate A-16/ -60 fixed customer charge include customer-related costs plus demand-related costs equal to 0.50 kW of demand per customer-month. Based on the sample reviewed, that level of demand is reached in 93 percent of customer-months, and by every residential customer at least once per year. Therefore, the proposed Rate A-16/A-60 charge of \$8.50 per month is intended to recover customer-related costs, as well as the cost for a demand level actually reached by the customers but is not proposed at the full level of \$15.39 per month. In addition, for Rate A-60 customers, the proposed charge is phased in over three years at \$2.75 per month in year 1, \$5.50 in year 2 and \$8.50 in year 3. The final proposed charge of \$8.50 per month is approximately 55 percent of the maximum considered. Please see the Company's response to NERI 22-1 for the reasoning behind assessing the proposed charge to Rate A-60 customers.
- b. Please see Attachment NERI 22-3-1, Pages 1-3, for the requested information.

- c. The proposed low income discount of 15 percent is independent from the proposed \$8.50 fixed customer charge.
- d. Please see the Company's response to NERI 22-9.
- e. The table below shows how the proposed rate design for Rate A-60 customers mitigates total bill impacts by phasing the fixed monthly charge.

Total Bill Increase Over Previous Year			
Monthly kWh	Year 1	Year 2	Year 3
150	1.8%	8.2%	8.3%
300	(2.1%)	4.4%	4.6%
400	(3.0%)	3.4%	3.5%
500	(3.6%)	2.7%	2.9%
600	(4.1%)	2.3%	2.4%
700	(4.4%)	2.0%	2.1%
1,200	(5.1%)	1.2%	1.3%

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4770
Responses to NERI's Seventh Set of Data Requests
Issued March 2, 2018

NERI 7-13

Request:

Subject: Book 12-Gorman-COSS

Reference p. 28, ll. 4-7. Please explain how the witness' proposed method relates to the actual usage and level of demand by individual customers.

Response:

The costs considered for the Rate A-16 fixed customer charge include customer-related costs plus demand-related costs equal to 0.50 kW of demand per customer-month. Based on the sample reviewed, that level of demand is reached in 93 percent of customer-months, and by every residential customer at least once per year. Therefore, the proposed Rate A-16 customer charge of \$8.50 per month is intended to recover the cost for a demand level actually reached by the customers but is not proposed at the full level of \$15.39 per month, as the current Rate A-16 customer charge is \$5.00 per month. Therefore, the Company is proposing to gradually increase the customer charge to a level that will eventually recover both customer-related and a portion of demand-related costs.

Prepared by or under the supervision of: Howard Gorman

NERI 22-9

Request:

Please provide estimates of elasticity of demand for residential customers and low-income customers.

- a. Please further identify how the following two program changes will affect elasticity of demand for low-income customers:
 - i. 15 percent fixed total bill discount
 - ii. Fixed customer charge of \$8.45 for Rate A-60 customers

Response:

Narragansett Electric has not examined the issue of price elasticity of demand.