

**Table E-1
National Grid
Electric DSM Funding Sources in 2019 by Sector
\$(000)**

	<u>Projections by Sector</u>			Total
	Income Eligible Residential	Non-Income Eligible Residential	Commercial & Industrial	
(1) Projected Budget (from E-2):	\$15,883.13	\$46,222.54	\$48,256.34	\$110,362.01
Sources of Other Funding:				
(2) Projected DSM Commitments at Year-End 2018:	\$0.00	\$0.00	\$0.00	\$0.00
(3) Projected Year-End 2018 Fund Balance and Interest:	\$0.00	(\$430.45)	\$4,326.42	\$3,895.97
(4) Projected FCM Payments from ISO-NE:	\$665.60	\$8,974.30	\$13,945.10	\$23,585.08
(5) Total Other Funding:	\$665.60	\$8,543.85	\$18,271.52	\$27,481.06
(6) Customer Funding Required:	\$15,217.53	\$37,678.69	\$29,984.82	\$82,881.0
(7) Forecasted kWh Sales:	204,962,351	2,763,353,818	4,293,953,687	7,262,269,856
(8) Energy Efficiency Program charge per kWh, excluding uncollectible recovery:				\$0.01141
(9) Proposed System Reliability Factor per kWh, excluding uncollectible recovery:				<u>-\$0.00001</u>
(10) Total Proposed Energy Efficiency Charge per kWh, excluding uncollectible recovery:				\$0.01140
(11) Currently Effective Uncollectible Rate				1.30%
(12) Energy Efficiency Program charge per kWh, including uncollectible recovery:				\$0.01155
(13) Currently Effective EE Charge				<u>\$0.00972</u>
(14) Proposed Adjustment to Reflect Fully Reconciling Funding Mechanism				\$0.00183

Notes:

- (1) Projected Budget from E-2 includes OER and EERMC costs allocated to each sector based on forecasted sales and RIIB costs allocated to C&I sector.
- (2) DSM Commitments are projects that are under construction with anticipated completion in 2018.
- (3) Fund balance projections include projected revenue and spend through year end with Low Income sector set to \$0 through projected subsidization from other sectors, minus commitments which are illustrated separately on line (2). The Company proposes to refile this table with updated Fund Balance projections on December 1, 2018 as proposed in Section 6(a) of the Plan's Main Text.
- (4) The total projection of FCM revenue is allocated by kWh sales to each sector.
- (5) Line (2) + Line (3) + Line (4)
- (6) Line (1) - Line (5)
- (7) Per Company Forecast
- (8) Line (6) ÷ Line (7), truncated to 5 decimal places
- (9) Truncated to 5 decimal places
- (11) Proposed System Reliability Factor is from the 2019 System Reliability Procurement Plan. Charge reflects projected year-end 2018 fund balance.
- (10) Line (8) + Line (9)
- (11) Uncollectible rate approved in Docket No 4770.
- (12) Line (10) ÷ (1-Line (11), truncated to 5 decimal places
- (13) Currently Effective EE Charge includes System Reliability Factor and uncollectible recovery.
- (14) Line (13) - Line (12)

**Table E-2
National Grid
2019 Electric Energy Efficiency Program Budget (\$000)**

	Program Planning & Administration	Marketing	Rebates and Other Customer Incentives	Sales, Technical Assistance & Training	Evaluation & Market Research	Shareholder Incentive	Grand Total
Non-Income Eligible Residential							
Residential New Construction	\$67.0	\$2.5	\$449.4	\$301.4	\$38.3		\$858.6
ENERGY STAR® HVAC	\$86.6	\$108.4	\$1,945.8	\$556.6	\$26.6		\$2,724.0
EnergyWise	\$415.7	\$414.6	\$13,414.9	\$1,392.9	\$139.5		\$15,777.5
EnergyWise Multifamily	\$103.3	\$43.8	\$2,150.0	\$721.0	\$46.8		\$3,064.9
ENERGY STAR® Lighting	\$401.4	\$515.8	\$13,328.7	\$638.4	\$83.9		\$14,968.2
Residential Consumer Products	\$91.4	\$568.3	\$737.4	\$709.8	\$17.6		\$2,124.5
Home Energy Reports	\$99.1	\$10.9	\$2,501.2	\$10.2	\$19.7		\$2,641.2
Residential ConnectedSolutions	\$8.7	\$8.7	\$162.0	\$103.8	\$0.0		\$283.1
Energy Efficiency Education Programs	\$0.0	\$40.0	\$0.0	\$0.0	\$0.0		\$40.0
Residential Pilots	\$43.4	\$24.5	\$104.1	\$50.8	\$0.0		\$222.7
Community Based Initiatives - Residential	\$6.2	\$56.3	\$59.1	\$0.0	\$0.0		\$121.5
Comprehensive Marketing - Residential	\$5.7	\$550.8	\$0.0	\$0.0	\$0.0		\$556.5
Residential Shareholder Incentive	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2,143.8	\$2,143.8
Subtotal - Non-Income Eligible Residential	\$1,328.4	\$2,344.6	\$34,852.6	\$4,484.8	\$372.4	\$2,143.8	\$45,526.6
Income Eligible Residential							
Single Family - Income Eligible Services	\$353.0	\$129.1	\$9,184.8	\$1,820.5	\$207.2		\$11,694.7
Income Eligible Multifamily	\$111.7	\$9.5	\$2,682.3	\$525.3	\$54.2		\$3,382.9
Income Eligible Shareholder Incentive	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$753.9	\$753.9
Subtotal - Income Eligible Residential	\$464.7	\$138.6	\$11,867.1	\$2,345.8	\$261.4	\$753.9	\$15,831.5
Commercial & Industrial							
Large Commercial New Construction	\$281.8	\$377.5	\$2,931.1	\$1,311.0	\$134.8		\$5,036.1
Large Commercial Retrofit	\$851.9	\$288.0	\$18,411.12	\$3,917.21	\$688.3		\$24,156.5
Small Business Direct Install	\$356.9	\$356.7	\$7,165.0	\$459.3	\$375.0		\$8,712.8
Commercial ConnectedSolutions	\$12.2	\$6.5	\$1,810.0	\$195.5	\$0.0		\$2,024.1
Commercial Pilots	\$19.4	\$30.0	\$87.5	\$61.0	\$0.0		\$197.9
Community Based Initiatives - C&I	\$1.7	\$18.8	\$19.7	\$0.0	\$0.0		\$40.1
Finance Costs	\$0.0	\$0.0	\$5,000.0	\$0.0	\$0.0		\$5,000.0
Commercial & Industrial Shareholder Incentive	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2,007.28	\$2,007.3
Subtotal - Commercial & Industrial	\$1,523.9	\$1,077.4	\$35,424.4	\$5,943.9	\$1,198.1	\$2,007.3	\$47,174.9
Regulatory							
OER	\$811.3	\$0.0	\$0.0	\$0.0	\$206.3		\$1,017.6
EERMC	\$811.3	\$0.0	\$0.0	\$0.0	\$0.0		\$811.3
Subtotal - Regulatory	\$1,622.7	\$0.0	\$0.0	\$0.0	\$206.3	\$0.0	\$1,828.9
Grand Total	\$4,939.7	\$3,560.6	\$82,144.1	\$12,774.5	\$2,038.1	\$4,905.0	\$110,362.0
System Reliability Procurement							\$439.3

Notes:

- (1) 2018 Large Commercial Retrofit Commitments (\$000): \$2,800.0
- (2) For more information on Finance Costs, please refer to the 2019 C&I Program Description, Attachment 2.
- (3) OER and EERMC total 2.0% of customers' EE Program Charge collected on Table E-1, minus 2%.
\$225,000 is included in OER budget for Evaluation and Market Research to comply with Senate Bill 2500, enacted in June 2018. The law requires the OER to hire an energy consulting company or firm to review and confirm reported energy savings.
- (4) Finance Costs include \$5.0 million transfer to the Rhode Island Infrastructure Bank Efficient Buildings Fund and \$0 to the Company's revolving loan funds. Finance Costs are detailed in Table E-10.
- (5) System Reliability funds are included for illustrative purposes. They are part of the 2019 System Reliability Procurement Report, filed as a separate docket.

**Table E-3
National Grid
Derivation of the 2019 Spending and Implementation Budgets (\$000)**

	Proposed 2018 Budget From E-2	Commitments	Regulatory Costs	Shareholder Incentive	Eligible Sector Spending Budget for Shareholder Incentive on E-9	Implementation Expenses for Cost- Effectiveness on E-5
Non-Income Eligible Residential						
Residential New Construction	\$858.6					\$858.6
ENERGY STAR@ HVAC	\$2,724.0					\$2,724.0
EnergyWise	\$15,777.5					\$15,777.5
EnergyWise Multifamily	\$3,064.9					\$3,064.9
ENERGY STAR@ Lighting	\$14,968.2					\$14,968.2
Residential Consumer Products	\$2,124.5					\$2,124.5
Home Energy Reports	\$2,641.2					\$2,641.2
Residential ConnectedSolutions	\$283.1					\$283.1
Energy Efficiency Education Programs	\$40.0					\$40.0
Residential Pilots	\$222.7					\$222.7
Community Based Initiatives - Residential	\$121.5					\$121.5
Comprehensive Marketing - Residential	\$556.5					\$556.5
Residential Shareholder Incentive	\$2,143.8			\$2,143.8		\$0.0
Subtotal - Non-Income Eligible Residential	\$45,526.6	\$0.0	\$0.0	\$2,143.8	\$42,876.9	\$43,382.8
Income Eligible Residential						
Single Family - Income Eligible Services	\$11,694.7					\$11,694.7
Income Eligible Multifamily	\$3,382.9					\$3,382.9
Income Eligible Shareholder Incentive	\$753.9			\$753.9		\$0.0
Subtotal - Income Eligible Residential	\$15,831.5	\$0.0	\$0.0	\$753.9	\$15,077.6	\$15,077.6
Commercial & Industrial						
Large Commercial New Construction	\$5,036.1	\$0.0				\$5,036.1
Large Commercial Retrofit	\$24,156.5	\$2,800.0				\$21,356.5
Small Business Direct Install	\$8,712.8	\$0.0				\$8,712.8
Commercial ConnectedSolutions	\$2,024.1					\$2,024.1
Commercial Pilots	\$197.9					\$197.9
Community Based Initiatives - C&I	\$40.1					\$40.1
Finance Costs	\$5,000.0					\$5,000.0
Commercial & Industrial Shareholder Incentive	\$2,007.3			\$2,007.3		\$0.0
Subtotal - Commercial & Industrial	\$47,174.9	\$2,800.0	\$0.0	\$2,007.3	\$40,145.6	\$42,367.7
Regulatory						
OER	\$1,017.6		\$1,017.6			\$1,017.6
EERMC	\$811.3		\$811.3			\$811.3
Subtotal - Regulatory	\$1,828.9	\$0.0	\$1,828.9	\$0.0	\$0.0	\$1,828.9
Grand Total	\$110,362.0	\$2,800.0	\$1,828.9	\$4,905.0	\$98,100.2	\$102,657.0

Notes:

- (1) Spending budget = Total Budget from E-2 minus commitments, regulatory costs, pilots, Demand Response, and shareholder incentive.
- (2) Implementation Expenses = Total Budget from E-2 minus commitments and shareholder incentive.
- (3) Finance Costs include \$5.0 million transfer to the Rhode Island Infrastructure Bank Efficient Buildings Fund and \$0 to the Company's revolving loan funds. Finance Costs are detailed in Table E-10.

**Table E-4
National Grid
Proposed 2019 Budget Compared to Approved 2018 Budget (\$000)**

	Proposed Implementation Budget 2019	Approved Implementation Budget 2018	Difference
Non-Income Eligible Residential			
Residential New Construction	\$858.6	\$764.6	\$94.0
ENERGY STAR® HVAC	\$2,724.0	\$2,206.6	\$517.4
EnergyWise	\$15,777.5	\$14,916.3	\$861.2
EnergyWise Multifamily	\$3,064.9	\$3,062.6	\$2.3
ENERGY STAR® Lighting	\$14,968.2	\$6,768.6	\$8,199.6
Residential Consumer Products	\$2,124.5	\$1,831.1	\$293.4
Home Energy Reports	\$2,641.2	\$2,629.3	\$11.8
Residential ConnectedSolutions	\$283.1	N/A	N/A
Energy Efficiency Education Programs	\$40.0	\$40.0	\$0.0
Residential Pilots	\$222.7	\$922.6	-\$699.9
Community Based Initiatives - Residential	\$121.5	\$163.0	-\$41.5
Comprehensive Marketing - Residential	\$556.5	\$556.7	-\$0.2
Subtotal - Non-Income Eligible Residential	\$43,382.8	\$33,861.5	\$9,521.3
Income Eligible Residential			
Single Family - Income Eligible Services	\$11,694.7	\$9,329.3	\$2,365.4
Income Eligible Multifamily	\$3,382.9	\$2,557.4	\$825.6
Subtotal - Income Eligible Residential	\$15,077.6	\$11,886.7	\$3,191.0
Commercial & Industrial			
Large Commercial New Construction	\$5,036.1	\$6,111.7	-\$1,075.6
Large Commercial Retrofit	\$21,356.5	\$24,030.7	-\$2,674.2
Small Business Direct Install	\$8,712.8	\$6,924.5	\$1,788.3
Commercial ConnectedSolutions	\$2,024.1	N/A	N/A
Community Based Initiatives - C&I	\$40.1	\$40.9	-\$0.8
Commercial Pilots	\$197.9	\$993.8	-\$795.9
Finance Costs	\$5,000.0	\$0.0	\$5,000.0
RI Infrastructure Bank	\$0.0	\$5,000.0	-\$5,000.0
Subtotal Commercial & Industrial	\$42,367.7	\$43,101.6	-\$734.0
Regulatory			
EERMC	\$811.3	\$686.1	\$125.3
OER	\$1,017.6	\$686.1	\$331.5
Subtotal Regulatory	\$1,828.9	\$1,372.1	\$456.8
TOTAL IMPLEMENTATION BUDGET	\$102,657.0	\$90,221.9	\$12,435.1
OTHER EXPENSE ITEMS			
Commitments	\$2,800.0	\$0.0	\$2,800.0
Company Incentive	\$4,905.0	\$4,346.7	\$558.3
Subtotal - Other Expense Items	\$7,705.0	\$4,346.7	\$3,358.3
TOTAL BUDGET	\$110,362.0	\$94,568.6	\$15,793.4

Notes:

- (1) Program Implementation Budget excludes Commitments, Company Incentive; derived on Table E-3
- (2) Total Budget includes Implementation, Commitments; illustrated on Table E-3
- (3) There is no change in Finance Costs from 2018 to 2019. The \$5.0 million transfer to the Rhode Island Infrastructure Bank Efficient Buildings Fund is now included in the Finance Cost line. The Company has not included any fund injections to the revolving loan fund in the 2019 Plan.
- (4) OER 2019 budget includes \$206,300 for Evaluation and Market Research to comply with Senate Bill 2500, enacted in June 2018. The law requires the OER to hire an energy consulting company or firm to review and confirm reported energy savings.
- (5) The EnergyStar ENERGY STAR® Lighting budget increase is driven by an 88% in the number of lightbulbs incented over the 2018 Annual Plan.
- (6) The Single Family - Income Eligible Services budget increase is driven by increasing the number of jobs for existing measures including heating system replacements and weatherizations and also offering new measures such as Heat Pump Minisplits.
- (7) The Large Commercial New Construction budget decrease is due to a net decrease in MWh savings from the 2018 Annual Plan and from identifying cost efficiencies.
- (8) The Large Commercial Retrofit budget decrease is due to a net decrease in MWh savings from the 2018 Annual Plan and from identifying cost efficiencies.
- (9) The Small Business Direct Install budget increase is due to a net increase in MWh savings from the 2018 Annual Plan.

Table E-5
National Grid
Calculation of 2019 Program Year Cost-Effectiveness
All Dollar Values in (\$000)

	RI Test Benefit/ Cost¹	Total Benefit	Program Implementation Expenses²	Customer Contribution	Shareholder Incentive	¢/Lifetime kWh
Non-Income Eligible Residential						
Residential New Construction	3.25	\$ 4,416.5	\$ 858.6	\$ 501.8		10.5
ENERGY STAR® HVAC	3.22	\$ 13,638.9	\$ 2,724.0	\$ 1,505.9		10.7
EnergyWise	1.94	\$ 35,562.8	\$ 15,777.5	\$ 2,541.9		46.9
EnergyWise Multifamily	3.11	\$ 10,547.9	\$ 3,064.9	\$ 330.0		11.8
Home Energy Reports	3.58	\$ 9,464.0	\$ 2,641.2	\$ -		10.9
ENERGY STAR® Lighting	5.41	\$ 73,326.0	\$ 14,968.2	\$ (1,405.4)		5.3
Residential Consumer Products	3.13	\$ 8,715.4	\$ 2,124.5	\$ 664.0		9.7
Residential ConnectedSolutions	3.24	\$ 918.5	\$ 283.1	\$ -		N/A
Energy Efficiency Education Programs			\$ 40.0			
Residential Pilots			\$ 222.7			
Community Based Initiatives - Residential			\$ 121.5			
Comprehensive Marketing - Residential			\$ 556.5			
n-Income Eligible Residential SUBTOTAL	3.15	\$ 156,590.0	\$ 43,382.8	\$ 4,138.1	\$ 2,143.8	11.1
Income Eligible Residential						
Single Family - Income Eligible Services	2.87	\$ 33,594.5	\$ 11,694.7	\$ -		27.2
Income Eligible Multifamily	3.05	\$ 10,315.1	\$ 3,382.9	\$ -		11.1
Income Eligible Residential SUBTOTAL	2.77	\$ 43,909.6	\$ 15,077.6	\$ -	\$ 753.9	20.5
Commercial & Industrial						
Large Commercial New Construction	7.20	\$ 38,947.6	\$ 5,036.1	\$ 369.9		3.2
Large Commercial Retrofit	7.57	\$ 250,017.9	\$ 21,356.5	\$ 11,689.5		3.8
Small Business Direct Install	3.10	\$ 34,882.9	\$ 8,712.8	\$ 2,556.7		7.7
Commercial ConnectedSolutions	8.32	\$ 16,839.9	\$ 2,024.1	\$ -		N/A
Commercial Pilots			\$ 197.9			
Community Based Initiatives - C&I			\$ 40.1			
Finance Costs			\$ 5,000.0			
C&I SUBTOTAL	5.78	\$ 340,688.3	\$ 42,367.7	\$ 14,616.1	\$ 2,007.3	4.8
Regulatory						
OER			\$ 1,017.6			
EERMC			\$ 811.3			
Regulatory SUBTOTAL			\$ 1,828.9			
TOTAL	4.28	\$ 541,188.0	\$ 102,657.0	\$ 18,754.3	\$ 4,905.0	7.2

Notes:

(1) RI Test B/C Test = (Energy + Capacity + Resource Benefits+Economic Benefits + Carbon Benefits) / (Program Implementation + Customer Contribution + Shareholder Incentive)

Also includes effects of free-ridership and spillover.

(2) For Implementation Expenses derivation, see Table E-3.

(3) ENERGY STAR® Lighting customer cost is negative due to a high free-ridership rate. Any financial incentives paid to free-riders are counted as a cost because the Company incurred those costs as part of the overall cost of the Plan regardless of whether the participant is free-rider or not. Therefore the Company reduces benefits and the customer cost by the net-to-gross ratio but not the incentives.

Table E-5A
National Grid
Calculation of 2019 Program Year Cost-Effectiveness with TRC Test
All Dollar Values in (\$000)

	TRC Benefit/ Cost¹	Total Benefit	Program Implementation Expenses²	Customer Contribution	Shareholder Incentive	¢/Lifetime kWh
Non-Income Eligible Residential						
Residential New Construction	2.04	\$ 2,773.1	\$ 858.6	\$ 501.8		10.5
ENERGY STAR® HVAC	2.06	\$ 8,701.3	\$ 2,724.0	\$ 1,505.9		10.7
EnergyWise	1.08	\$ 19,866.1	\$ 15,777.5	\$ 2,541.9		46.9
EnergyWise Multifamily	2.13	\$ 7,247.0	\$ 3,064.9	\$ 330.0		11.8
Home Energy Reports	2.26	\$ 5,962.0	\$ 2,641.2	\$ -		10.9
ENERGY STAR® Lighting	3.67	\$ 49,795.5	\$ 14,968.2	\$ (1,405.4)		5.3
Residential Consumer Products	2.11	\$ 5,880.9	\$ 2,124.5	\$ 664.0		9.7
Residential ConnectedSolutions	3.24	\$ 918.5	\$ 283.1			
Energy Efficiency Education Programs			\$ 40.0			
Residential Pilots			\$ 222.7			
Community Based Initiatives - Residential			\$ 121.5			
Comprehensive Marketing - Residential			\$ 556.5			
Non-Income Eligible Residential SUBTOTAL	2.04	\$ 101,144.4	\$ 43,382.8	\$ 4,138.1	\$ 2,143.8	11.1
Income Eligible Residential						
Single Family - Income Eligible Services	1.93	\$ 22,519.5	\$ 11,694.7	\$ -		27.2
Income Eligible Multifamily	2.05	\$ 6,933.9	\$ 3,382.9	\$ -		11.1
Income Eligible Residential SUBTOTAL	1.86	\$ 29,453.4	\$ 15,077.6	\$ -	\$ 753.9	20.5
Commercial & Industrial						
Large Commercial New Construction	4.84	\$ 26,145.0	\$ 5,036.1	\$ 369.9		3.2
Large Commercial Retrofit	5.38	\$ 177,673.7	\$ 21,356.5	\$ 11,689.5		3.8
Small Business Direct Install	1.79	\$ 20,173.7	\$ 8,712.8	\$ 2,556.7		7.7
Commercial ConnectedSolutions	8.32	\$ 16,839.9	\$ 2,024.1			
Commercial Pilots			\$ 197.9			
Community Based Initiatives - C&I			\$ 40.1			
Finance Costs			\$ 5,000.0			
C&I SUBTOTAL	4.08	\$ 240,832.3	\$ 42,367.7	\$ 14,616.1	\$ 2,007.3	4.8
Regulatory						
OER			\$ 1,017.6			
EERMC			\$ 811.3			
Regulatory SUBTOTAL			\$ 1,828.9			
TOTAL	2.94	\$ 371,430.1	\$ 102,657.0	\$ 18,754.3	\$ 4,905.0	7.2

Notes:

(1) TRC B/C Test = (Energy + Capacity + Resource Benefits) / (Program Implementation + Customer Contribution + Shareholder Incentive)
Also includes effects of free-ridership and spillover.

(2) For Implementation Expenses derivation, see Table E-3.

(3) ENERGY STAR® Lighting customer cost is negative due to a high free-ridership rate. Any financial incentives paid to free-riders are counted as a cost because the Company incurred those costs as part of the overall cost of the Plan regardless of whether the participant is free-rider or not. Therefore the Company reduces benefits and the customer cost by the net-to-gross ratio but not the incentives.

**Table E-6A
National Grid
Summary of 2019 Demand Response Benefits and Savings**

	Benefits (000's)											Load Reduction (KW)	MWh Saved	
	Total	Capacity					Energy			Non Electric	Societal	Summer	Annual	Lifetime
		Summer Generation	Capacity DRIPE	Trans	Dist	Reliability	Summer		Energy DRIPE	Non Resource	Carbon			
							Peak	Off Peak						
Non-Income Eligible Residential														
Residential ConnectedS	\$919	\$33.03	\$554.1	\$166	\$144	\$20	\$0.17	\$0.11	\$0.15	\$0	\$0.25	1,564	8	8
Commercial & Industrial														
Commercial Connected	\$16,840	\$539.32	\$9,047.1	\$3,644	\$3,168	\$442	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	34,300	0	0
TOTAL	\$17,758	\$572	\$9,601	\$3,810	\$3,313	\$462	\$0	\$0	\$0	\$0	\$0	35,864	8	8

Table E-7
National Grid
Comparison of 2019 and 2018 Goals

	Proposed 2019				Approved 2018		Difference	
	Annual Summer Demand Savings (kW)	Annual Energy Savings (MWh)	Demand Response (kW)	Planned Unique Participants	Annual Demand Savings (kW)	Annual Energy Savings (MWh)	Annual Summer Demand Savings (kW)	Annual Energy Savings (MWh)
Non-Income Eligible Residential								
Residential New Construction	112	756		550	49	619	63	137
ENERGY STAR® HVAC	590	2,710		2,187	433	2,091	158	619
EnergyWise	1,287	8,182		10,250	286	6,157	1,001	2,024
EnergyWise Multifamily	283	3,593		4,000	329	4,207	-46	-614
Home Energy Reports	4,278	24,130		291,149	3,325	25,054	952	-924
ENERGY STAR® Lighting	6,681	48,381		236,810	4,413	38,891	2,268	9,490
Residential Consumer Products	668	3,925		13,359	429	2,849	239	1,076
Residential ConnectedSolutions			1,564				N/A	N/A
Non-Income Eligible Residential SUBTOTAL	13,898	91,677	1,564	558,305	9,264	79,868	4,634	11,809
Income Eligible Residential								
Single Family - Income Eligible Services	815	3,742		3,000	696	4,185	120	-443
Income Eligible Multifamily	223	3,219		5,000	170	3,287	54	-68
Income Eligible Residential SUBTOTAL	1,039	6,961		8,000	865	7,472	174	-511
Commercial & Industrial								
Large Commercial New Construction	1,409	10,863		84	1,728	13,959	-319	-3,096
Large Commercial Retrofit	12,558	73,013		2,610	11,910	75,616	648	-2,603
Small Business Direct Install	1,213	12,163		617	1,034	9,940	179	2,222
Commercial ConnectedSolutions			34,300				N/A	N/A
C&I SUBTOTAL	15,180	96,038	34,300	3,311	14,673	99,515	508	-3,477
TOTAL	30,117	194,677	35,864	569,615	24,802	186,855	5,315	7,821

Notes:

- (1) Planned 2018 participation takes into account net-to-gross and estimates unique participation by taking into account 2017 unique customer accounts to savings ratios. Therefore the number of planned measures may be more than the estimated participants shown. For measure counts please view the widget tables in Attachments 1 and 2. Table E-7 no longer includes a comparison to the previous year's participation. Due to the way unique participation is calculated it is not possible to compare year-over-year results.
- (2) There are additional Low Income participants in Residential New Construction.
- (3) A customer can participate in more than one program, for example, ENERGY STAR® Lighting and Home Energy Reports, therefore the population reached can be more than 100%.

Table E-8
National Grid
Avoided Costs Used in 2019 Benefit-Cost Model

	Rhode Island					DRIPE for Installations in 2019				
	Winter Peak Energy	Winter Off-Peak Energy	Summer Peak Energy	Summer Off-Peak Energy	Annual Market Capacity Value Weighted Avg	Winter Peak Energy	Winter Off-Peak Energy	Summer Peak Energy	Summer Off-Peak Energy	Annual Market Capacity Value Weighted Avg
Units:	\$/kWh	\$/kWh	\$/kWh	\$/kWh	\$/kW-yr	\$/kWh	\$/kWh	\$/kWh	\$/kWh	\$/kW-yr
Period:										
2019	0.062	0.057	0.042	0.038	88.02	0.06	0.04	0.04	0.03	402.36
2020	0.064	0.061	0.049	0.043	64.99	0.09	0.07	0.07	0.05	503.53
2021	0.067	0.061	0.056	0.047	52.74	0.10	0.08	0.09	0.06	90.61
2022	0.063	0.057	0.052	0.042	50.68	0.10	0.07	0.09	0.06	68.43
2023	0.064	0.057	0.049	0.039	56.80	0.09	0.06	0.07	0.04	45.49
2024	0.068	0.063	0.048	0.044	62.68	0.07	0.05	0.05	0.04	12.05
2025	0.063	0.060	0.050	0.045	70.91	0.05	0.04	0.04	0.03	267.40
2026	0.063	0.059	0.054	0.047	80.87	0.04	0.03	0.03	0.02	364.34
2027	0.068	0.064	0.051	0.045	89.45	0.02	0.01	0.02	0.01	424.20
2028	0.070	0.062	0.055	0.045	95.69	0.01	0.01	0.01	0.01	416.70
2029	0.072	0.066	0.054	0.046	102.17					321.20
2030	0.066	0.062	0.057	0.052	97.66					177.02
2031	0.065	0.061	0.052	0.045	95.69					102.18
2032	0.065	0.060	0.054	0.046	102.17					48.04
2033	0.070	0.061	0.054	0.045	97.66					11.66
2034	0.069	0.058	0.058	0.046	95.69					
2035	0.071	0.064	0.064	0.054	102.17					
2036	0.072	0.064	0.067	0.057	103.86					
2037	0.074	0.065	0.071	0.060	105.57					
2038	0.076	0.066	0.075	0.063	107.32					
2039	0.078	0.067	0.079	0.066	109.09					
2040	0.079	0.068	0.084	0.069	110.89					
2041	0.082	0.069	0.088	0.073	112.72					
2042	0.084	0.070	0.093	0.077	114.58					
2043	0.086	0.071	0.099	0.081	116.47					
2044	0.089	0.073	0.105	0.085	118.40					
2045	0.091	0.075	0.111	0.090	120.35					
2046	0.095	0.077	0.118	0.095	122.34					
2047	0.098	0.079	0.125	0.101	124.36					
2048	0.102	0.082	0.133	0.107	126.41					

Source:
AESC 2018 Study , Appendix B, in 2018 dollars

Table E-9
National Grid
2019 Targeted Shareholder Incentive

Energy Incentive Rate: 3.50%

	(1)	(2)	(3)	(4)	(5)
Sector	Spending Budget \$(000)	Target Incentive \$(000)	Annual kWh Savings Goal	Threshold kWh Savings	Target Incentive Per kWh
Income Eligible Residential	\$15,078	\$528	6,960,964	5,220,723	\$0.076
Non-Income Eligible Residential	\$42,877	\$1,501	91,677,196	68,757,897	\$0.016
Commercial & Industrial	\$40,146	\$1,405	96,038,410	72,028,808	\$0.015
Total	\$98,100	\$3,434	194,676,571	146,007,428	\$0.018

Demand Incentive Rate: 1.50%

	(6)	(7)	(8)	(9)	(10)
Sector	Spending Budget \$(000)	Target Incentive \$(000)	Annual kW Savings Goal	Threshold kW Savings	Target Incentive Per kW
Income Eligible Residential	\$15,078	\$226	1,039	779	\$217.7
Non-Income Eligible Residential	\$42,877	\$643	13,898	10,424	\$46.3
Commercial & Industrial	\$40,146	\$602	15,180	11,385	\$39.7
Total	\$98,100	\$1,472	30,117	22,588	\$48.9

Notes:

(1) and (6) Eligible Spending Budget excludes Commitments, Regulatory Costs, Pilots, and Shareholder Incentive. See Table E-3 for details.

(2) Equal to the incentive rate (3.5%) x Column (1).

(3) and (8) See Table E-7

(4) and (9) 75% of Column (3). No incentive is earned on annual kWh savings in the sector unless the Company achieves at least this threshold level of performance.

(5) Column (2)*1000/Column (3). This illustration is for achieved savings equal to the savings target. The incentive earned per kWh will vary with the percent of the savings target achieved

(7) Equal to the incentive rate (1.5%) x Column (1).

(10) Column (7)*1000/Column (8). This illustration is for achieved savings equal to the savings target. The incentive earned per kW will vary with the percent of the savings target achieved

The shareholder incentive for Energy and Demand incentives will be calculated as follows, where SB is the Spending Budget in the sector:

- From 75% of savings to 100% of savings: Shareholder Incentive = SB x (0.15 x % of savings achieved – 0.10)
- x 0.7 for electric energy savings
- x 0.3 for electric demand savings
- x 1.0 for natural gas savings
- From 100% of savings to 125% of savings: Shareholder Incentive = SB x (0.05 x % of savings achieved)

**Table E-10
National Grid
Revolving Loan Fund Projections**

Large C&I Revolving Loan Fund		Small Business Revolving Loan Fund	
(1) Total Loan Fund Deposits Through 2018	\$ 21,979,678	(1) Total Loan Fund Deposits Through 2018	\$ 4,658,971
(2) Current Loan Fund Balance	\$ 11,383,787	(2) Current Loan Fund Balance	\$ 2,681,454
<i>Loans Paid Year-To-Date</i>	\$ 1,858,283	<i>Loans Paid Year-To-Date</i>	\$ 1,621,771
<i>Repayments Year-To-Date</i>	\$ 3,603,331	<i>Repayments Year-To-Date</i>	\$ 1,617,531
(3) Projected Additional Loans by Year End 2018	\$ 4,664,177	(3) Projected Additional Loans by Year End 2018	\$ 755,000
(4) Projected Additional Repayments by Year End 2018	\$ 2,573,808	(4) Projected Additional Repayments by Year End 2018	\$ 1,155,379
(5) Projected Year End Loan Fund Balance 2018	\$ 9,293,417	(5) Projected Year End Loan Fund Balance 2018	\$ 3,081,833
(6) 2019 Fund Injection	\$ -	(6) 2019 Fund Injection	\$ -
(7) Projected Loan Fund Balance, January 2019	\$ 9,293,417	(7) Projected Loan Fund Balance, January 2019	\$ 3,081,833
(8) Projected Repayments throughout 2019	\$ 6,000,000	(8) Projected Repayments throughout 2019	\$ 2,000,000
(9) Estimated Loans in 2019	\$ 7,400,000	(9) Estimated Loans in 2019	\$ 3,000,000
(10) Projected Year End Loan Fund Balance 2019	\$ 7,893,417	(10) Projected Year End Loan Fund Balance 2019	\$ 2,081,833
Public Sector Revolving Loan Fund		Efficient Buildings Fund	
(1) Total Loan Fund Deposits Through 2018	\$ 1,562,529	(1) Energy Efficiency Funds allocated to EBF through 201	\$ 11,870,447
(2) Current Loan Fund Balance	\$ 291,816	(2) Total EBF Loans Outstanding	\$ 15,587,000
<i>Funds returned to OER</i>	\$ 700,000	<i>Loans Paid Year-To-Date</i>	\$ -
<i>Repayments Year-To-Date</i>	\$ 186,663	<i>Repayments Year-To-Date</i>	\$ 880,890
(3) Projected Additional Loans by Year End	\$ -	(3) Projected Additional Loans by Year End 2018	\$ 5,700,000
(4) Projected Additional Repayments by Year End	\$ 133,330	(4) Projected Additional Repayments by Year End 2018	\$ -
(5) Projected Year End Loan Fund Balance 2018	\$ 425,146	(5) Total EBF Loans Outstanding	\$ 20,406,110
(6) 2019 Fund Injection	\$ -	(6) 2019 Fund Injection	\$ 5,000,000
(7) Projected Loan Fund Balance, January 2019	\$ 425,146	(7) 2019 Beginning of Year EBF Loans Outstanding	\$ 20,406,110
(8) Projected Repayments throughout 2019	\$ 240,000	(8) Projected EBF Loan Repayments in 2019	\$ 1,183,360
(9) Estimated Loans in 2019	\$ -	(9) New EBF loans in 2019	\$ 15,000,000
(10) Projected Year End Loan Fund Balance 2019	\$ 665,146	(10) Projected Year End 2019 EBF Loans Outstanding	\$ 34,222,750
		(11) Energy Efficiency Funds allocated to EBF through 2019	\$ 16,870,447
		(12) Loans to Energy Efficiency Fund Contribution Ratio	2.0

Notes

- 1 Funding injections since loan funds began.
- 2 Current Loan Fund Balance is through July 2018; it includes all loans and repayments made by July 2018. Public Sector Revolving Loan Fund reduced by transfers to RI PEP Incentives. EBF reports in terms of loans outstanding.
- 3 Projected Loans from September to Year-End 2018 is estimated based on projects currently under construction that are anticipated to be paid out by year-end. It is difficult to project this amount accurately due to the fact that projects could be delayed by a month or two resulting in payment occurring in 2019 instead of 2018.
- 4 Projected Repayments from September to Year-End 2018 is estimated based on the monthly average amount of repayments. EBF only receives repayments one time per year so the projected repayments for all of 2018 are included in line (2).
- 5 Equal to (2) - (3) + (4). EBF equal to (2) - (repayments YTD) + (3).
- 6 Proposed 2019 Fund Injection detailed on Table E-2
- 7 Equal to (5) + (6). EBF equal to line (5).
- 8 Assumption based on monthly average repayments in 2018 over 12 month period; repayments accumulate over time and may vary widely.
- 9 Amount projected to be lent to customers in 2019
- 10 Equal to (7) + (8) - (9). EBF equal to (7) - (8) + (9).