

Andrew Marcaccio Senior Counsel

January 6, 2022

VIA ELECTRONIC MAIL

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

RE: Docket 5189 – 2022 Annual Energy Efficiency Program Plan <u>Economic Multipliers Update</u> Updated E-5 Secondary Tables

Dear Ms. Massaro:

On behalf of The Narragansett Electric Company d/b/a National Grid ("National Grid" or the "Company"), enclosed, please find a document entitled "Economic Multipliers Update" and updated E-5 Secondary Tables applying the updated economic multipliers for filing in the above referenced docket.¹

Thank you for your attention to this filing. If you have any questions or concerns, please do not hesitate to contact me at 401-784-4263.

Sincerely,

Ched m

Andrew S. Marcaccio

Enclosure

cc: Docket 5189 Service List John Bell, Division Margaret Hogan, Esq. Jon Hagopian, Esq.

¹ Per the Commission's request, the Company is providing one copy of this transmittal for the Commission's file in this docket and six (6) copies, 3-hole punched for the Commission.

Certificate of Service

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

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

Joanne M. Scanlon

January 6, 2022 Date

Docket No. 5189 - National Grid – 2022 Annual Energy Efficiency Program Service list updated 11/29/2021

Name /Address	E-mail Distribution List	Phone		
National Grid	Andrew.Marcaccio@nationalgrid.com;	401-784-4263		
Andrew Marcaccio, Esq.	Jennifer.Hutchinson@nationalgrid.com;			
National Grid 280 Melrose St.	Joanne.scanlon@nationalgrid.com;	_		
Providence, RI 02907	Celia.obrien@nationalgrid.com;	-		
		-		
	Matthew.Chase@nationalgrid.com;	_		
	Timothy.Roughan@nationalgrid.com;			
	John.Tortorella@nationalgrid.com;			
Leticia Pimentel, Esq.	Christopher.Porter@nationalgrid.com;			
Robinson & Cole LLP	BENJAMIN.RIVERS@nationalgrid.com;			
One Financial Plaza, 14th Floor Providence, RI 02903	John.Richards@nationalgrid.com;	_		
	angela.li@nationalgrid.com;	-		
	Jessica.Darling@nationalgrid.com;			
	Matthew.Ray2@nationalgrid.com;	_		
	<u>Joshua.Kessler@nationalgrid.com;</u> LPimentel@rc.com;	-		
	hseddon@rc.com;	-		
	<u>inseducine relevani</u> ,			
Division of Public Utilities and	Margaret.L.Hogan@dpuc.ri.gov;	401-780-2120		
Carriers	Jon.hagopian@dpuc.ri.gov;			
Margaret L. Hogan, Esq.	john.bell@dpuc.ri.gov;	_		
	Joel.munoz@dpuc.ri.gov;			
Tim Woolf	twoolf@synapse-energy.com;			
Jennifer Kallay				
Synapse Energy Economics	jkallay@synapse-energy.com;			
22 Pearl Street Cambridge, MA 02139				
Camonage, MA 02157				

RIEERMC	marisa@desautelesq.com;	401-477-0023
Marisa Desautel, Esq.	<u>mansa@desadteresq.com</u> ,	401-477-0023
Office of Marisa Desautel, LLC	mdewey@desautelesq.com;	
55 Pine St.	guerard@optenergy.com;	
Providence, RI 02903	ross@optenergy.com;	
	<u>1033@Optenergy.com</u> ,	
Mike Guerard, Optimal Energy		
Acadia Center	HWebster@acadiacenter.org;	401-276-0600 x402
Hank Webster, Director & Staff		
Atty.		
Office of Energy Resources (OER)	Albert.Vitali@doa.ri.gov;	401-222-8880
Albert Vitali, Esq.		
Dept. of Administration	Nancy.Russolino@doa.ri.gov;	
Division of Legal Services	Christopher.Kearns@energy.ri.gov;	
One Capitol Hill, 4 th Floor	Nicholas.Ucci@energy.ri.gov;	
Providence, RI 02908	Becca.Trietch@energy.ri.gov;	
	Carrie.Gill@energy.ri.gov;	
Nick Ucci, Commissioner	Anika.Kreckel.CTR@energy.ri.gov;	
	Nathan.Cleveland@energy.ri.gov;	
	runnan.elevenand e energy.m.gov,	
Original & 9 copies file w/:	Luly.massaro@puc.ri.gov;	401-780-2107
Luly E. Massaro, Commission Clerk	John.Harrington@puc.ri.gov;	
John Harrington, Commission Counsel	Alan.nault@puc.ri.gov;	—
Public Utilities Commission	Todd.bianco@puc.ri.gov;	—
89 Jefferson Blvd.		
Warwick, RI 02888	Emma.Rodvien@puc.ri.gov;	
Interested Party/Individual		
Frederick Sneesby	Frederick.sneesby@dhs.ri.gov;	
Dept. of Human Services		
Chris Vitale, Esq., RI Infrastructure	cvitale@hvlawltd.com;	
Bank	SUsatine@riib.org;	
	<u>bostune e mo.org</u> ,	
Ronald Reybitz	rjreybitz@pplweb.com;	
Stephen Breininger		
PPL Electric Utilities	skbreininger@pplweb.com;	
	- · · ·	
Green Energy Consumers Alliance	Larry@massenergy.org;	
Larry Chretien, Executive Director		
Kai Salem	kai@greenenergyconsumers.org;	
	priscilla@greenenergyconsumers.org;	

ECONOMIC MULTIPLIERS UPDATE

Corrections to Plan

In preparing responses to the PUC's Sixth Set of Data Requests, the Company identified an error in the economic multipliers used for the 2022 Energy Efficiency Plan found on Bates 391. This error was due to the way participant costs were entered in REMI. The corrected multipliers are below.

	Original (Bates 391)	Updated
Electric Programs		•
Residential		
Residential New Construction (RNC)	\$1.40	\$1.56
HVAC	\$1.42	\$1.58
EnergyWise	\$0.93	\$1.05
EnergyWise Multifamily	\$1.34	\$1.45
Residential Lighting	\$1.59	\$1.72
Residential Products	\$1.52	\$1.65
Home Energy Reports	\$1.00	\$1.11
Single Family - Income Eligible Services	\$0.86	\$0.96
Income Eligible Multifamily	\$1.19	\$1.30
Commercial and Industrial		
Large Commercial New Construction	\$3.11	\$2.74
Large Commercial Retrofit	\$5.80	\$5.28
Small Business Direct Install	\$1.97	\$1.53
Total Electric Portfolio	\$2.14	\$2.05
Gas Programs		
Residential		
ENERGY STAR® HVAC	\$0.83	\$0.97
EnergyWise	\$1.01	\$1.08
EnergyWise Multifamily	\$1.63	\$1.70
Home Energy Reports	\$1.06	\$1.12
Residential New Construction	\$0.22	\$0.34
Single Family - Income Eligible Services	\$0.99	\$1.05
Income Eligible Multifamily	\$1.55	\$1.62
Commercial and Industrial		
Large Commercial New Construction	\$1.42	\$0.74

The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 5189 In Re: 2022 Annual Energy Efficiency Plan Economic Multiplier Update Page 2 of 3

	Original (Bates 391)	Updated
Large Commercial Retrofit	\$2.53	\$2.10
Small Business Direct Install	\$1.75	\$1.39
Commercial & Industrial Multifamily	\$1.89	\$1.55
Total Gas Portfolio	\$1.26	\$1.19
Combined Heat and Power (CHP)		
Total CHP Project <3 MW	\$2.13	\$1.94
Demand Response		
Residential ConnectedSolutions	\$0.83	\$0.83
Commercial ConnectedSolutions	\$2.19	\$2.19
Total Demand Response Portfolio	\$2.02	\$2.02

This error applies to the economic benefits claimed in the electric and gas energy efficiency portfolios for the Provisional Plan, Provisional Plan 2 and Alternative Base Plan¹. This does not change the economic benefits claimed by the demand response programs. These changes have no impact on energy savings, non-economic benefit targets, or PIM-eligible net benefits. These changes result in a slight decrease in the benefit cost ratios in the three plans due to the reduction in economic benefits in the commercial and industrial programs.

Directionally, the change in multipliers slightly increases the economic benefits generated by residential and income eligible programs, and slightly decreases the economic benefits generated by the commercial and industrial programs.

The economic benefits associated with the Provisional Plan have been adjusted using the updated economic multipliers in "Table E-5 Secondary – Provisional Plan – Refiled 1-6-2022" which is attached hereto. This results in a reduction of economic benefits for the electric portfolio of approximately \$19M in benefits. This accounts for approximately 3.6% of total benefits in the Provisional Plan.

The economic benefits associated with the Provisional Plan 2 have been adjusted using the updated economic multipliers in "Table E-5 Secondary – Provisional Plan 2 – Refiled 1-6-2022" which is attached hereto. This results in a reduction of economic benefits for the electric

¹ The response to PUC 7-9 with updates to the Alternative Base Plan use the updated economic multipliers. The response to PUC 2-17 with the original Alternative Base Plan use the incorrect economic multipliers.

portfolio of approximately \$16.5M in benefits. This accounts for approximately 3.3% of total benefits in the Provisional Plan 2.

The economic benefits associated with the Alternative Base Plan have been adjusted using the updated economic multipliers in "Table E-5 Secondary – Alternative Base Plan – Refiled 1-6-2022" which is attached hereto. This results in a reduction of economic benefits for the electric portfolio of approximately \$14.8M in benefits. This accounts for approximately 3.1% of total benefits in the Alternative Base Plan.

Table E-5 - Secondary - Alternative Base Plan - Refile 1/6/2022 National Grid Calculation of 2022 Program Year Cost-Effectiveness with Economic Benefits Included All Dollar Values in (\$000)

	Total	0	Customer	Performance	¢/Lifetime
Cost ¹	Benefit	-	Contribution	Incentive	kWh
Cost	Denem	Expenses	Contribution	incentive	K V II
3.21	\$6.574.1	\$1.501.3	\$547.2		13.7
3.32	\$22,320.6	\$4,867.0	\$1,848.5		8.6
2.04	\$33,090.5	\$15,680.0	\$530.6		120.3
2.89	\$10,887.2		\$532.0		18.1
3.15	\$8,333.3	\$2,641.3	\$0.0		9.8
3.25	\$14,329.6	\$2,797.8	\$1,606.6		9.3
2.42	\$4,390.9	\$1,813.2	\$0.0		N/A
	·	\$0.0			
		\$0.0			
		\$255.1			
		\$247.9			
2.62	\$99,926.1	\$33,042.9	\$5,064.9	\$0.0	18.9
2.90	\$38,506.8	\$13,279.9	\$0.0		34.5
3.66	\$12,970.0	\$3,539.9	\$0.0		14.6
3.06	\$51,476.8	\$16,819.8	\$0.0	\$0.0	26.8
6.00	\$59,281.3	\$9,135.5	\$742.5		5.1
6.19	\$205,790.2	\$25,166.6	\$8,064.5		10.6
2.42	\$26,342.0	\$8,984.2	\$1,923.1		16.9
4.61	\$20,243.2	\$4,393.6	\$0.0		N/A
		\$0.0			
		\$85.0			
		\$2,000.0			
		\$157.5			
4.71	\$311,656.7	\$49,922.4	\$10,730.1	\$5,500.0	10.6
		\$1.636.4			
3.59	\$463,059.6	: /	\$15,795.0	\$5,500.0	14.8
	3.32 2.04 2.89 3.15 3.25 2.42 2.90 3.66 3.06 6.00 6.19 2.42 4.61 4.71 4.71	Benefit/ Cost ¹ Total Benefit 3.21 \$6,574.1 3.32 \$22,320.6 2.04 \$33,090.5 2.89 \$10,887.2 3.15 \$8,333.3 3.25 \$14,329.6 2.42 \$4,390.9 2.42 \$4,390.9 2.42 \$4,390.9 2.62 \$99,926.1 2.90 \$38,506.8 3.66 \$12,970.0 3.06 \$51,476.8 6.00 \$59,281.3 6.19 \$205,790.2 2.42 \$26,342.0 4.61 \$20,243.2 4.71 \$311,656.7 9 \$311,656.7	Benefit/ Total Implementation Cost ¹ Benefit Expenses ² 3.21 \$6,574.1 \$1,501.3 3.32 \$22,320.6 \$4,867.0 2.04 \$33,090.5 \$15,680.0 2.89 \$10,887.2 \$3,239.5 3.15 \$8,333.3 \$2,641.3 3.25 \$14,329.6 \$2,797.8 2.42 \$4,390.9 \$1,813.2 \$0.0 \$0.0 \$2.42 \$4,390.9 \$1,813.2 \$0.0 \$20.0 \$2.42 \$4,390.9 \$1,813.2 \$0.0 \$255.1 \$2.42 \$4,390.9 \$1,813.2 \$2.42 \$4,390.9 \$2.62 \$99,926.1 \$33,042.9 \$13,279.9 \$3,66 \$12,970.0 \$3,539.9 \$3,66 \$2.90 \$38,506.8 \$13,279.9 3.06 \$51,476.8 \$16,819.8 \$2.900 \$35,59.9 <td< td=""><td>Benefit/ Total Implementation Customer Cost¹ Benefit Expenses² Contribution 3.21 \$6,574.1 \$1,501.3 \$547.2 3.32 \$22,320.6 \$4,867.0 \$1,848.5 2.04 \$33,090.5 \$15,680.0 \$530.6 2.89 \$10,887.2 \$3,239.5 \$532.0 3.15 \$8,333.3 \$2,641.3 \$0.0 3.25 \$14,329.6 \$2,797.8 \$1,606.6 2.42 \$4,390.9 \$1,813.2 \$0.0 3.25 \$14,329.6 \$2,797.8 \$1,606.6 2.42 \$4,390.9 \$1,813.2 \$0.0 \$247.9 \$0.0 \$247.9 2.62 \$99,926.1 \$33,042.9 \$5,064.9 \$247.9 \$0.0 \$3.66 \$12,970.0 \$3,539.9 \$0.0 3.66 \$12,970.0 \$3,539.9 \$0.0 \$0.0 \$0.0 \$0.0 \$0.0 \$0.0 \$0.0 \$0.0 \$0.0 \$0.0 \$0.0<!--</td--><td>Benefit/ Total Implementation Customer Performance Cost¹ Benefit Expenses² Contribution Incentive 3.21 \$6,574.1 \$1,501.3 \$547.2 \$533.3 \$522,320.6 \$4,867.0 \$1,848.5 \$530.6 \$550.6 \$500.0 <td< td=""></td<></td></td></td<>	Benefit/ Total Implementation Customer Cost ¹ Benefit Expenses ² Contribution 3.21 \$6,574.1 \$1,501.3 \$547.2 3.32 \$22,320.6 \$4,867.0 \$1,848.5 2.04 \$33,090.5 \$15,680.0 \$530.6 2.89 \$10,887.2 \$3,239.5 \$532.0 3.15 \$8,333.3 \$2,641.3 \$0.0 3.25 \$14,329.6 \$2,797.8 \$1,606.6 2.42 \$4,390.9 \$1,813.2 \$0.0 3.25 \$14,329.6 \$2,797.8 \$1,606.6 2.42 \$4,390.9 \$1,813.2 \$0.0 \$247.9 \$0.0 \$247.9 2.62 \$99,926.1 \$33,042.9 \$5,064.9 \$247.9 \$0.0 \$3.66 \$12,970.0 \$3,539.9 \$0.0 3.66 \$12,970.0 \$3,539.9 \$0.0 \$0.0 \$0.0 \$0.0 \$0.0 \$0.0 \$0.0 \$0.0 \$0.0 \$0.0 \$0.0 </td <td>Benefit/ Total Implementation Customer Performance Cost¹ Benefit Expenses² Contribution Incentive 3.21 \$6,574.1 \$1,501.3 \$547.2 \$533.3 \$522,320.6 \$4,867.0 \$1,848.5 \$530.6 \$550.6 \$500.0 <td< td=""></td<></td>	Benefit/ Total Implementation Customer Performance Cost ¹ Benefit Expenses ² Contribution Incentive 3.21 \$6,574.1 \$1,501.3 \$547.2 \$533.3 \$522,320.6 \$4,867.0 \$1,848.5 \$530.6 \$550.6 \$500.0 <td< td=""></td<>

Notes:

(1) RI Test B/C Test = Total Benefits from Table E-6A including Economic Benefits / Program Implementation Expenses from Table E-3

Also includes effects of free-ridership and spillover.

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

Table E-5 - Secondary - PROVISIONAL PLAN - Refiled 1-6-2022 National Grid Calculation of 2022 Program Year Cost-Effectiveness with Economic Benefits Included All Dollar Values in (\$000)

	RI Test Benefit/	Total	Program Implementation	Customer	Performance	¢/Lifetime
	Cost ¹	Benefit	Expenses ²	Contribution	Incentive	kWh
Non-Income Eligible Residential						
Residential New Construction	3.21	\$6,572.5	\$1,500.3	\$547.2		13.7
ENERGY STAR® HVAC	3.32	\$22,314.1	\$4,862.8	\$1,848.5		8.6
EnergyWise	2.04	\$33,073.5	\$15,663.7	\$530.6		120.2
EnergyWise Multifamily	2.89	\$10,882.6	\$3,236.3	\$532.0		18.1
Home Energy Reports	3.15	\$8,333.3	\$2,641.3	\$0.0		9.8
Residential Consumer Products	3.25	\$14,326.0	\$2,795.6	\$1,606.6		9.3
Residential ConnectedSolutions	2.42	\$4,389.5	\$1,811.5	\$0.0		N/A
Energy Efficiency Education Programs			\$0.0			
Residential Pilots			\$0.0			
Community Based Initiatives - Residential			\$255.1			
Comprehensive Marketing - Residential			\$247.9			
Non-Income Eligible Residential SUBTOTAL	2.62	\$99,891.4	\$33,014.5	\$5,064.9	\$0.0	18.9
Income Eligible Residential						
Single Family - Income Eligible Services	2.90	\$38,493.9	\$13,266.5	\$0.0		34.5
Income Eligible Multifamily	3.67	\$12,965.1	\$3,536.1	\$0.0		14.5
Income Eligible Residential SUBTOTAL	3.06	\$51,459.1	\$16,802.7	\$0.0	\$0.0	26.7
Commercial & Industrial						
Large Commercial New Construction	5.44	\$73,246.5	\$12,453.6	\$1,021.5		6.1
Large Commercial Retrofit	5.84	\$239,678.6	\$30,307.4	\$10,742.0		12.0
Small Business Direct Install	2.39	\$27,949.6	\$9,732.3	\$1,974.1		17.5
Commercial ConnectedSolutions	4.61	\$20,227.9	\$4,386.6	\$0.0		N/A
Commercial Pilots			\$0.0			
Community Based Initiatives - C&I			\$85.0			
Finance Costs			\$2,000.0			
Commercial Workforce Development			\$157.5			
C&I SUBTOTAL	4.61	\$361,102.6	\$59,122.3	\$13,737.6	\$5,500.0	11.6
Bogulatow.						
Regulatory			¢1.011.7			
OER			\$1,911.5			
EERMC			\$1,274.4			
Rhode Island Infrastructure Bank			\$5,000.0			
Regulatory SUBTOTAL			\$8,185.9			
TOTAL	3.62	\$512,453.0	\$117,125.5	\$18,802.5	\$5,500.0	15.2

Notes:

(1) RI Test B/C Test = Total Benefits from Table E-6A including Economic Benefits / Program Implementation Expenses from Table E-3

Also includes effects of free-ridership and spillover.

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

Table E-5 - Secondary - PROVISIONAL PLAN 2 - Refile 1/6/2022 National Grid Calculation of 2022 Program Year Cost-Effectiveness with Economic Benefits Included All Dollar Values in (\$000)

	RI Test Benefit/	Total	Program Implementation	Customer	Performance	¢/Lifetime
	Cost ¹	Benefit	Expenses ²	Contribution	Incentive	kWh
Non-Income Eligible Residential						
Residential New Construction	3.21	\$6,573.3	\$1,500.8	\$547.2		13.7
ENERGY STAR® HVAC	3.32	\$22,317.4	\$4,865.0	\$1,848.5		8.6
EnergyWise	2.04	\$33,082.3	\$15,672.1	\$530.6		120.3
EnergyWise Multifamily	2.89	\$10,885.0	\$3,238.0	\$532.0		18.1
Home Energy Reports	3.15	\$8,333.3	\$2,641.3	\$0.0		9.8
Residential Consumer Products	3.25	\$14,327.9	\$2,796.7	\$1,606.6		9.3
Residential ConnectedSolutions	2.42	\$4,390.2	\$1,812.3	\$0.0		N/A
Energy Efficiency Education Programs			\$0.0			
Residential Pilots			\$0.0			
Community Based Initiatives - Residential			\$255.1			
Comprehensive Marketing - Residential			\$247.9			
Non-Income Eligible Residential SUBTOTAL	2.62	\$99,909.4	\$33,029.2	\$5,064.9	\$0.0	18.9
Income Eligible Residential						
Single Family - Income Eligible Services	2.90	\$38,500.6	\$13,273.5	\$0.0		34.5
Income Eligible Multifamily	3.67	\$12,967.7		\$0.0		14.6
Income Eligible Residential SUBTOTAL	3.06	\$51,468.2		\$0.0	\$0.0	26.8
Commercial & Industrial						
Large Commercial New Construction	5.51	\$71,831.3	\$12,020.6	\$1,023.3		6.0
Large Commercial Retrofit	6.13	\$214,607.7	\$26,314.7	\$8,672.3		10.8
Small Business Direct Install	2.42	\$26,331.9	\$8,977.6	\$1,923.1		16.9
Commercial ConnectedSolutions	4.61	\$20,235.7	\$4,390.2	\$0.0		N/A
Commercial Pilots			\$0.0			
Community Based Initiatives - C&I			\$85.0			
Finance Costs			\$2,000.0			
Commercial Workforce Development			\$157.5			
C&I SUBTOTAL	4.69	\$333,006.6	\$53,945.6	\$11,618.8	\$5,500.0	10.8
Regulatory						
			¢1 700 0			
OER			\$1,708.2			
EERMC			\$1,138.8			
Rhode Island Infrastructure Bank			\$5,000.0			
Regulatory SUBTOTAL			\$7,846.9			
TOTAL	3.62	\$484,384.2	\$111,633.3	\$16,683.6	\$5,500.0	14.7

Notes:

(1) RI Test B/C Test = Total Benefits from Table E-6A including Economic Benefits / Program Implementation Expenses from Table E-3

Also includes effects of free-ridership and spillover.

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