### DG 09-049 (National Grid Gas Energy Efficiency) Program Year 2 (January 1, 2010 - December 31, 2010) Actual Results

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Shareholder Incentive Template-National Grid NH B/C Component

	National Grid	Northern
Benefits:		
Avoided Generation, Transmmission & Distributions costs for: Program Participants Market effects (e.g. spillover, post-program adoptions)	Yes Yes (zero) (1)	Yes Yes (zero)
Customer Benefits (including O&M)	Yes (zero)	Yes (zero)
Quantifiable avoided resource costs (e.g. water, electricity)	Yes (2)	Yes (zero)
Adder for other non-quantified benefits (e.g. environmental and other)	Yes (15%)	Yes (15%)
Costs:		
Program costs (e.g. incentives, admin, monitoring, evaluation for: Utility Costs (i.e. for admin, monitoring, evaluation, marketing, rebates) Program participants (i.e. incremental costs not reimbursed by rebates) Market effects (e.g. spillover, post-program adoptions)	Yes Yes Yes (zero)	Yes Yes Yes (zero)
Customer Costs (including O&M)	Yes (zero)	Yes (zero)
Quantifiable additional resource costs (e.g. water, electricity)	Yes (zero)	Yes (zero)
Utility Performance Incentives	Yes (3)	Yes (3)

#### footnotes:

- (1) Staff defers consideration of National Grid's "Market Effects" benefits and costs to the next program year filing.
- (2) Electric benefits are identified for the following Residential programs High Efficiency Heating ECM 92% and ENERGY STAR Windows. These benefits are included in National Grid's benefits benchmark.
- (3) Performance Incentives are 8% (i.e. 8% of program budgets) consistent with Commission approved guidelines in Order No. 23,574 and 23,850. but, the 8% rate may change pursuant to the agreement calling for the Settling Parties to participate in good faith in any Commission sponsored generic proceeding to determine the appropriateness of the 8% rate level for utility-sponsored energy efficiency programs.

  The Performance Incentive amount is included in the cost component of the B/C ratio at the Sector-level only for purposes of calculating and measuring the B/C component of the Shareholder Incentive.

DG 09-049 (National Grid Gas Energy Efficiency) Program Year 2 (January 1, 2010 - December 31, 2010) Actual Results Shareholder Incentive Template-National Grid Savings Component	Exhibit-D Page 2 of 6
Gas Savings in MMBTU's resulting from Energy Efficiency Measures Installed in the Program Year	
Number of Participants served in the annual program year time period MMBTU Savings per Participant Per Year Total MMBTU Savings Per Year Measure Life of Measures installed in the annual program year time period Grand Total MMBTU Savings Benchmark for Performance Incentive	4,192 18.66 78,227 19.17 1,499,657
Electric Savings in kWh's resulting from Energy Efficiency Measures Installed in the Program Year  Number of Participants served in the annual program year time period kWh Savings per Participant  Total kWh Savings Per Participant Per Year  Measure Life of Measures installed in the annual program year time period  Grand Total kWh Savings Benchmark for Performance Incentive	-

Benefit Cost (B/C) Benchmark for Computing Shareholder Incentives - National Grid

E	n	e	ľ	g	y

						Au	dit			Ene	erav				
				Hiç						Ana	alysis				
Residential Programs	faatustas	Lov			iciency		lome				rnet Guide		nergy Star	-	sidential
Residential Programs	footnotes	inc	ome	He	ating	Pe	rtormance	We	atherization	Edu	ication	Н	omes	Sı	b-Total
7 a															
Benefits:															
Avoided Generation, Transmmission & Distributions costs for:															
Program Participants	(a)	\$	977,702	\$	3,136,063		-	\$	5,602,231			\$		\$	9,774,556
Market effects (e.g. spillover, post-program adoptions)	(b)	\$	-	\$	•	\$	-	\$	-	\$	-	\$	•		
Customer Benefits (including O&M)	(c)	\$	-	\$	-	\$		\$		\$		5	-		
Quantifiable avoided resource costs (e.g. water, electricity)	(d)	\$						\$		\$		\$	-		
Adder for other non-quantified benefits (e.g. environmental and other)	(e)														
Total Benefits		\$	977,702	\$	3,136,063	\$	-	\$	5,602,231	\$		\$	58,559	\$	9,774,556
Costs:  Program costs (e.g. incentives, admin, monitoring, evaluation for:		\$ \$ \$	595,992 - -	\$ \$	576,423 398,085 -	\$ \$	122,379	\$ \$	1,146,032 752,760	\$	-	999	14,040		2,443,244 1,164,885
Customer Costs (including O&M)	(c)	\$	-	\$		\$	-	\$		\$		\$	-		
Quantifiable additional resource costs (e.g. water, electricity)	(h)	\$	-	\$	-	\$	-	\$		\$	-	\$			
Total Costs		\$	595,992	\$	974,508	\$	122,379	\$	1,898,792			\$	16,458	\$	3,608,129
Utility Shareholder Incentive at the Sector Level*	(i)		n/a		n/a		n/a		n/a		n/	a	n/a	<u>a</u>	\$238,469
Total Costs Including Utility Shareholder Incentives at Sector Level				_										\$	3,846,599
Benefit Cost Ratio by Sector (i.e. B/C Benchmark for Shareholder Incent	ive Calc.)		1.64		3.22				2.95				3.56	_	2.54

DG 09-049 (National Grid Gas Energy Efficiency) Program Year 2 (January 1, 2010 - December 31, 2010) Actual Results

Benefit Cost (B/C) Benchmark for Computing Shareholder Incentives - National Grid

Benefit Cost (B/C) Benchmark for Computing Shareholder Incentives - National Grid  C&I Programs	footnotes	Commercia Energy Efficiency	Spac	Efficiency e and r Heating	Business Internet Audit		C&I Sub-Total	
Benefits:								
Avoided Generation, Transmmission & Distributions costs for: Program Participants Market effects (e.g. spillover, post-program adoptions)	(a)	\$ 5,055,1	04 \$	2,103,131	\$ \$	-	s s	7,158,236
Customer Benefits (including O&M)	(c)		0	0		0		0
Quantifiable avoided resource costs (e.g. water, electricity)	(d)	\$ -		0	\$	-	\$	
Adder for other non-quantified benefits (e.g. environmental and other)	(e)							
Total Benefits		\$ 5,055,1	04 \$	2,103,131	\$		\$	7,158,236
Costs:  Program costs (e.g. incentives, admin, monitoring, evaluation for: Utility Costs (i.e. for admin, monitoring, evaluation, marketing, rebates) Program participants (i.e. incremental costs not reimbursed by rebates) Market effects (e.g. spillover, post-program adoptions)	(g) (f)	\$ 877,5 \$ 1,902,6 \$		253,880 460,298 0		8,858 - -	\$ \$ \$	1,140,304 2,362,975
Customer Costs (including O&M)	(c)	\$ -		0	\$	-	\$	-
Quantifiable additional resource costs (e.g. water, electricity)	(h)	\$ -		0	\$	_	\$	
Total Costs		\$ 2,780,2	42 \$	714,178	\$	8,858	\$	3,503,279
Utility Shareholder Incentive at the Sector Level*			n/a	n/a		n/a		\$95,559 \$3,598,837
Total Costs Including Utility Shareholder Incentives at Sector Level	(i)							\$3,586,637
Benefit Cost Ratio by Sector (i.e. B/C Benchmark for Shareholder Incentive Calc.)		1.	82	2.94				1.99

DG 09-049 (National Grid Gas Energy Efficiency) Program Year 2 (January 1, 2010 - December 31, 2010) Actual Results

MMBTU Savings Benchmark for Computing Shareholder Incentives - National Grid

Residential Programs		Low	High Efficiency	& Home		Energy Analysis Internet Guide	Energy Star	Residential
Gas Savings in MMBTU's from Measures Installed in the Program Year	footnotes	Income	Heating	Performance	Weatherization	Education	Homes	Sub-Total
Number of Participants	0)	336	1.38	2 (	1,224	961	9	3.912
MMBTU Savings per Participant Per Year	(k)	12.1	11.	5 0.0			22.1	11.1
Total MMBTU Savings Per Year		4,080	15,867		23,378		199	43,524
Measure Life of Measures installed during the program year	(1)	20.00	16.8		20.00	1.00	25.00	18.87
Grand Total MMBTU Savings Benchmark for Performance Incentive		81,600	267,366	-	467,568		4,978	821,512

Electric Savings in kWh's from Measures Installed in the Program Year

Number of Participants
kWh Savings per Participant
Total kWh Savings Per Participant Per Year
Measure Life of Measures installed in the annual program year time period
Grand Total kWh Savings Benchmark for Performance Incentive

C&I	Programs	7		

Gas Savings in MMBTU's from Measures Installed in the Program Year Number of Participants MMBTU Savings per Participant Per Year Total MMBTU Savings Per Year Measure Life of Measures installed during the program year Grand Total MMBTU Savings Benchmark for Performance Incentive

Commercial Energy Efficiency	High Efficiency Space and Water Heating	Business Internet Audit	C&I Sub-Total
83	129	68	28
296.6	78.1	-	123.9
24,622	10,081		34,703
19	20	1	1-
478,730	199,415		502,973

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Footnotes for Budget Benefit Cost Ratio-National Grid

(a) Residential and C&I Program	n Avoided Gen., Tran	s. & Distribution for Pr	ogram Participants
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Residential Programs:	Low Income	High Efficiency Heating	& Home Performance	Weatherization	Energy Analysis Internet Guide Education	Energy Star Homes	Residential Sub-Total
Number of Participants * MMBTU Savings per Participant per year**	336	1,382				9	3,912 11
Total MMBTU Savings Per Year Number of years in the Measure Life**	4,080		· 15		1	199 25	43,524 19
Grand Total MMBTU Lifetime Savings for Benchmark for Performance Incentive Lifetime Therm Savings	81,600 816,000	.267,366 2,673,655		467,568 4,675,680	:	4,978 49,781	821,512 8,215,116
Rate of Savings per MMBTU *** Grand Total Dollar Savings	\$ 12.45 \$ 1,015,920			\$ 12.45 \$ 5,821,222		\$ 12.45 \$ 61,978	\$ 12.45 \$ 10,227,820
	Commercial Energy	High Efficiency Space and	Business	C&I			
C&I Programs:	Efficiency	Water Heating	Internet Audit	Sub-Total	•8		
Number of Participants * MMBTU Savings per Participant per year**	83 297	129 78	68	280 124			
Total MMBTU Savings Per Year Number of years in the Measure Life	24,622 19	20		34,703 14			
Grand Total MMBTU Savings for Benchmark for Performance Incentive Lifetime Therm Savings	478,730 4,787,303	199,415 1,994,146	:	678,145 6,781,449			
Rate of Savings per MMBTU *** Grand Total Dollar Savings	\$ 12.45 \$ 5,960,192			\$ 12.45 \$ 8,442,904			

**Energy Audit** 

Residential Programs	Low		h Efficiency H ter Heating,	We	atherization	8	Residential Internet	Energy Audit & Home		New Home Construction				
											R	esidential Tech	Re	esidential Sub-
	Income		Controls				Audit	Performance		w/Energy Star		Demo		Total
Number of Participants		336	1,224		1,224		961		928	9		0		4,682
Participant Incremental Cost	\$	-	\$ 325	\$	615	\$	-	\$	~	\$1,560	\$		\$	249
Program Participant Cost	\$	-	\$ 398,085	\$	752,760	\$	-	\$	-	\$14,040	\$	-	\$	1,164,885
											_			

C&I Programs	Co	mmercial Energy Efficiency	Spa	n Efficiency ce and er Heating	Building Operator Certification		Online		Building Prac		C	ki b-Totai
Number of Participants		83		129		- (		68			0	280
Participant Incremental Cost	\$	22,924	\$	3,568				0	\$	-	\$	-
Program Participant Cost	\$	1 902 676	2	460 208	2	_	•	12	e	12		2 262 075

<sup>\*</sup> In Demand

\*\* The values are variable for program year measurement purposes and based upon the B/C model assumptions.

\*\*\* Source: Per email communication with J. Cunningham. Consistent with 2007 Synapse Avoided Cost Study.

## Exhibit D - Shareholder Incentive Page 1 of 2

#### **National Grid Gas Energy Efficiency**

#### Shareholder Incentive Year TWO- January 1, 2010 - December 31, 2010

#### **Commercial/Industrial Incentive**

<ol> <li>Target Benefit/Cost Ratio         Actual Benefit/Cost Ratio</li> <li>Threshold Benefit/Cost Ratio</li> <li>Target Benefits         Actual Benefits         4. Threshold Benefits     </li> <li>Budget</li> <li>CE Percentage</li> </ol>	2.01 1.99 1.00 11,038,062 \$7,158,236 \$7,174,740 \$2,411,290 4.00%
<ul><li>7. Lifetime Benefits Percentage</li><li>8. Target C/I Incentive</li></ul>	4.00% <b>\$192,903</b>
Actual C/I Incentive	\$95,559
9. Cap	\$289,355
Residential Incentive	
<ul> <li>10. Target Benefit/Cost Ratio     Actual Benefit/Cost Ratio</li> <li>11. Threshold Benefit/Cost Ratio</li> <li>12. Target Benefits     Actual Benefits</li> <li>13. Threshold Benefits</li> <li>14. Budget</li> <li>15. CE Percentage</li> <li>16. Lifetime Benefits Percentage</li> </ul>	2.15 2.54 1.00 \$8,644,460 \$9,774,556 \$5,618,899 \$2,575,126 4.00% 4.00%
17. Target Residential Incentive	\$206,010
Actual Residential Incentive	\$238,469
18. Cap	\$309,015
19. TOTAL INCENTIVE	\$291,015

# Exhibit D - Shareholder Incentive Page 2 of 2 National Grid Gas Energy Efficiency Target Benefit-Cost Ratio by Sector Year TWO- January 1, 2010 - December 31, 2010

Commercial & Industrial:	<u>Planned</u>	<b>Actual</b>
1. Benefits (Value) From Eligible Programs	\$11,038,062	\$7,158,236
2. Implementation Expenses	\$2,295,901	\$1,117,477
3. Customer Contribution	\$2,893,873	\$2,362,975
4. Evaluation Expense	\$115,389	\$22,827
5. Shareholder Incentive	\$192,903	\$95,559
6. Total Costs Including Shareholder Incentive	\$5,498,066	\$3,598,837
7. Benefit/Cost Ratio - C&I Sector	2.01	1.99
8. Implementation Plus Evaluation Expense - C&I Sector	\$2,411,290	\$1,140,304
Residential:		
9. Benefits (Value) From Eligible Programs	\$8,644,460	\$9,774,556
10. Implementation Expenses	\$2,526,304	\$2,422,638
11. Customer Contribution	\$1,248,016	\$1,164,885
12. Evaluation Expense	\$48,822	\$20,606
13. Shareholder Incentive	\$206,010	\$238,469
14. Total Costs Including Shareholder Incentive	\$4,029,152	\$3,846,599
15. Benefit/Cost Ratio - Residential Sector	2.15	2.54
16. Implementation Plus Evaluation Expense - Residential Se	ector <b>\$2,575,126</b>	\$2,443,244