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COMMISSION  
CLERK



June 14, 2010

Ms. Ann Cole  
Commission Clerk  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

Dear Ms. Cole:

RE: Gulf Power Company's Demand Side Management Plan (Docket No. 100154-EG)

Gulf Power has discovered a few minor errors in parts of the data associated with four items in the Company's DSM Plan filed on March 30, 2010. It is important to note that none of these discovered errors reduce Gulf's projected plan achievement; and, in fact, one of the corrections results in an upward adjustment in total winter and summer mW demand reductions. Also, Gulf's responses to Staff's First and Second Data Requests reflect the corrected information described herein.

The errors have been corrected and the revised pages are attached for insertion into the DSM Plan. The following is a brief description for each of the changes appearing on the pages to be replaced.

**1. Home Energy Reporting Program**

**Page 1-3**

In the column labeled "Annual (1a)", the savings resulting from the Home Energy Reporting program were inadvertently excluded from the GWh Plan Reductions for years 2011, 2012 and 2013. This omission does not affect the "Cumulative (1b)" column for the following reason. For years 2011-2013, Gulf's proposed DSM Plan includes savings associated with the Home Energy Reporting program. This program motivates behavioral change in energy consumption. Due to the uncertainty of the long-term sustainability of these savings, Gulf did not reflect them in the cumulative savings column beyond the three years of program deployment. If during the initial three year implementation of this program, the program results support longer-term benefit, then Gulf will reflect those savings in progress towards the cumulative goal.

**Pages 4-1 through 4-4**

These pages reflect corrections in the cost effectiveness results for the Home Energy Reporting program. Cost effectiveness analyses now correctly reflect utility program costs as recurring costs per customer versus non-recurring cost per customer.

COM \_\_\_\_\_  
APA \_\_\_\_\_  
ECR \_\_\_\_\_  
GCL \_\_\_\_\_  
RAD 13  
SSC \_\_\_\_\_  
ADM \_\_\_\_\_  
OPC \_\_\_\_\_  
CLK \_\_\_\_\_

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**2. Summer & Winter Targets for 2010**

**Page 1-6**

The “DSM Plan Annual Winter mW Reduction” and “DSM Plan Annual Summer mW Reduction” columns omitted the 2010 demand reductions accruing due to participation in the Commercial/Industrial RTP program.

The “DSM Plan Cumulative Winter mW Reduction” and “DSM Plan Cumulative Summer mW Reduction” columns in the Commercial/Industrial table for years 2010 - 2019 should reflect the addition of the 2010 RTP program annual demand reductions.

**3. Refrigerator Recycling Program**

**Page 2-67**

The cost effectiveness test results indicated in the table have been updated to reflect corrections in the cost effectiveness evaluation of the Refrigerator Recycling Program as described below.

**Pages 4-97 through 4-100**

These pages reflect corrections in the cost effectiveness results for the Refrigerator Recycling Program as follows: The original evaluation failed to account for ongoing savings from systems removed from participants’ homes throughout the program life.

**4. Insulation – Ceiling Roof & Reflective Roof**

**Page 2-79**

The cost effectiveness test results indicated in the table for the Insulation – Ceiling/Roof and Reflective Roof Programs reflect correction in the cost effectiveness evaluations as described below.

**Pages 4-117 through 4-120**

These pages reflect corrections in the cost effectiveness results for the Insulation – Ceiling/roof Program as follows: The Insulation – ceiling/roof analysis projected participation for the years 2011 – 2019 versus the corrected participation years of 2010 – 2019.

**Pages 4-137 through 4-140**

These pages reflect corrections in the cost effectiveness results for the Reflective Roof Program as follows: The Reflective Roof measure failed to account for the savings in the final year of program life from measures installed by participants and inappropriately credited back program cost, incentive cost and participant cost in the final year.

Ms. Ann Cole  
June 14, 2010  
Page Three

Please insert the attached pages to replace the similarly numbered pages in the original and 15 copies of the DSM Plan filed by Gulf Power Company on March 30, 2010.

Sincerely,

A handwritten signature in black ink that reads "Susan D. Ritenour". The signature is written in a cursive style with a large initial 'S'.

lw

Attachment

cc w/attach: Beggs & Lane  
Jeffrey A. Stone  
Florida Public Service Commission  
Katherine E. Fleming  
Florida Solar Energy Industry Association  
Suzanne Brownless  
SACE  
George Cavros  
Wal-Mart  
Rick D. Chamberlain

## 2010 Demand-Side Management Plan



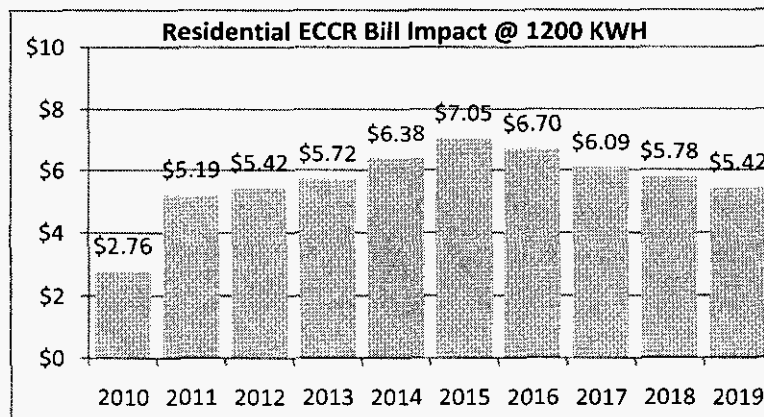
approximately 460%. In addition, the reduced energy consumption associated with these programs represents a non-fuel revenue impact of approximately \$198 million to Gulf Power over this same ten year period. The following table provides additional details of these projections:

DSM Plan Reductions (GWh) (1)			DSM Plan Cost (2)		Residential ECCR Impacts @ 1200 kWh <sup>1</sup> (3)	Non-fuel Revenue Impact (4) (1b x \$ / MWH)	DSM Plan costs + Non-fuel Revenue Impacts (2a + 2b + 4)
Year	Annual (1a)	Cumulative (1b)	Energy Efficiency and Demand Response (2a)	Renewables (2b)			
<i>Current</i>					\$1.25		
2010	18	18	\$22,720,243	\$900,338	\$2.76	\$1,052,820	\$24,673,401
2011	46	64	\$44,707,290	\$900,338	\$5.19	\$3,700,400	\$49,308,028
2012	62	114	\$48,679,305	\$900,338	\$5.42	\$6,841,120	\$56,420,763
2013	68	171	\$53,192,692	\$900,338	\$5.72	\$10,436,598	\$64,529,628
2014	77	236	\$60,536,084	\$900,338	\$6.38	\$14,802,654	\$76,239,076
2015	76	312	\$69,183,865		\$7.05	\$22,167,904	\$91,351,769
2016	71	384	\$67,132,391		\$6.70	\$27,657,096	\$94,789,487
2017	67	451	\$62,468,902		\$6.09	\$32,065,404	\$94,534,306
2018	64	515	\$60,396,381		\$5.78	\$37,602,300	\$97,998,681
2019	61	576	\$57,903,385		\$5.42	\$41,558,400	\$99,461,785
<b>TOTALS</b>		<b>576</b>	<b>\$546,920,537</b>	<b>\$4,501,690</b>		<b>\$197,884,696</b>	<b>\$749,306,923</b>
<b>Total measure impact<sup>2</sup></b>		<b>5,764</b>				<b>\$407,885,490</b>	

<sup>1</sup> Residential Class ECCR impacts of the program costs in 2a and 2b based on Gulf's standard ECCR calculation, calculated by applying those program costs to the residential class ECCR demand and energy allocation factors, summing the resulting costs, dividing that sum by the kWh energy sales for that customer class, and multiplying by 1200.

<sup>2</sup> assumes average 10 year life of measures implemented each year of Plan

The projected residential ECCR impacts for each year of the Plan are shown in the following table:



Overall, Gulf Power Company’s 2010 DSM Plan has been designed to achieve the cumulative ten year demand and energy numeric goals set by the FPSC in the Goals Order. A summary of the annual program targets by market, residential and commercial/industrial, is provided below:

<b>Residential Savings at the Generator</b>						
	<b>DSM Plan Annual gWh Reduction</b>	<b>DSM Plan Cumulative gWh Reduction</b>	<b>DSM Plan Annual Winter mW Reduction</b>	<b>DSM Plan Cumulative Winter mW Reduction</b>	<b>DSM Plan Annual Summer mW Reduction</b>	<b>DSM Plan Cumulative Summer mW Reduction</b>
<b>Year</b>	<b>Reduction</b>	<b>Reduction</b>	<b>Reduction</b>	<b>Reduction</b>	<b>Reduction</b>	<b>Reduction</b>
2010	15.4	15.4	5.9	5.9	5.0	5.0
2011	40.1	55.5	11.5	17.3	10.6	15.6
2012	54.5	98.6	14.5	29.0	13.6	26.5
2013	57.3	144.4	17.2	43.5	17.0	40.8
2014	65.1	198.1	19.0	59.8	19.4	57.4
2015	63.2	261.3	18.6	78.4	18.9	76.2
2016	58.5	319.9	17.0	95.3	17.0	93.2
2017	55.2	375.1	16.4	111.7	16.0	109.2
2018	52.7	427.8	15.9	127.6	15.2	124.3
2019	50.3	478.0	15.5	143.2	14.4	138.8

<b>Commercial/Industrial Savings at the Generator</b>						
	<b>DSM Plan Annual gWh Reduction</b>	<b>DSM Plan Cumulative gWh Reduction</b>	<b>DSM Plan Annual Winter mW Reduction</b>	<b>DSM Plan Cumulative Winter mW Reduction</b>	<b>DSM Plan Annual Summer mW Reduction</b>	<b>DSM Plan Cumulative Summer mW Reduction</b>
<b>Year</b>	<b>Reduction</b>	<b>Reduction</b>	<b>Reduction</b>	<b>Reduction</b>	<b>Reduction</b>	<b>Reduction</b>
2010	2.6	2.6	3.4	3.4	6.2	6.2
2011	5.6	8.3	1.1	4.5	2.1	8.3
2012	7.5	15.8	1.4	5.9	2.8	11.0
2013	10.4	26.3	1.8	7.7	3.9	14.9
2014	11.8	38.1	2.1	9.8	4.4	19.4
2015	13.0	51.0	2.1	11.9	4.9	24.3
2016	12.8	63.8	2.1	14.0	4.9	29.1
2017	11.9	75.7	2.0	16.1	4.5	33.6
2018	11.6	87.3	1.9	18.0	4.4	38.0
2019	10.7	98.0	1.8	19.8	4.0	42.0

The contribution, by program, to the cumulative ten year energy reduction goals is illustrated in the following tables:

This program will be administered by an independent third party contractor who also will have primary responsibility for program promotion and outreach.

**Program Benefits and Cost Effectiveness**

The energy and demand savings associated with this program were developed using a variety of sources, including: measure savings data from the Itron study; computer-based engineering modeling software; and actual program performance data gathered by Gulf Power or its energy efficiency program contractors.

Cost-effective results are shown for the RIM, TRC, and PCT, and are based on the incentive levels identified below.

Measure	Max Incentive	Per Unit Reduction			Cost effectiveness test		
		Energy kWh	Summer Peak kW	Winter Peak kW	RIM	TRC	PT
Refrigerator Recycling	\$35	738	.08	.08	0.68	2.46	99.00

**Monitoring and Evaluation**

Gulf Power will monitor and evaluate program performance and progress toward goal achievement on a continual basis. Gulf, or its designee, will randomly perform full field verification of installation on a minimum of 10 percent of the recycled appliances to ensure compliance with program standards.

**Program Benefits and Cost Effectiveness**

The following kW demand and kWh energy saving evaluations were developed using a variety of sources including measure savings data from the Itron study, computer-based engineering modeling software, and actual program performance data gathered by Gulf Power or its energy efficiency program contractors. Evaluation results are shown for RIM, TRC, and PT, and are based on the maximum incentives identified in the following table.

Measure	Max Incentives	Per Unit Reduction			Cost effectiveness test		
		Energy kWh	Summer Peak kW	Winter Peak kW	RIM	TRC	PT
HVAC Upgrade – Air Source A/C or Heat Pump	\$225/ton	652	0.15	0	0.90	2.89	4.22
HVAC upgrade – Geothermal	\$500/ton	685	0.29	0.27	0.92	1.65	1.68
Heat Pump Water Heater	\$7,500/5 ton	41,241	10	11.80	0.97	3.18	4.60
Insulation – ceiling / roof	0.15/sq ft	.863	.00052	.00011	1.28	4.53	4.69
Window Film	\$2.00/sq ft	11	.00325	0	0.98	2.39	3.22
Lighting: T-5, T-8 Retrofit; Hard-wired CFL	\$150/kW	4,380	1.0	1.0	1.02	3.50	5.67
Lighting: LED Exit Signs, Display Case	\$300/kW	4,380	1.0	1.0	1.00	2.49	3.28
Lighting: Occupancy Sensor	\$25/unit	800	.20	.20	1.04	5.76	20.84
Reflective Roof	\$0.90/ sq ft	2.45	0.00091	0	1.00	2.50	2.96

**Monitoring and Evaluation**

Gulf Power will monitor and evaluate program performance and progress toward goal achievement on a continual basis. Participating customer information will be recorded in the

INPUT DATA -- PART 1

Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code

I. Program Demand Impacts and Line Losses

(1) Change in Peak kW Customer at meter	-0.06	kW/Cus
(2) Change in Peak kW per Customer at generator	-0.08	kW Gen/Cus
(3) kW Line Loss Percentage	14.21%	
(4) Change in kWh per Customer at generator	(327)	kWh/Cus/Yr
(5) kWh Line Loss Percentage	9.05%	
(6) Group Line Loss Multiplier	1.0007	
(7) Annual Change in Customer kWh at Meter	(300)	kWh/Cus/Yr
* (8) Change in Winter kW per Cust at meter	-0.06	kW/Cus

II. Economic Life and K-Factors

(1) DSM Program Study Period	4	Years
(2) Economic Life of Incremental Generation	40	Years
(3) Economic Life of Incremental T&D	35	Years
(4) K-Factor for Generation	1.4640	
(5) K-Factor for T&D	1.4604	
* (6) Switch: Rev Req (0) or Val-of-Def (1)	1	

III. Utility & Customer Costs

(1) Utility Nonrecurring Cost Per Customer	\$0.00	\$/Cus
(2) Utility Recurring Cost Per Customer	\$10.00	\$/Cus/Year
(3) Utility Cost Escalation Rate	1.70%	
(4) Customer Equipment Cost	\$25.00	\$/Cus
(5) Customer Equipment Cost Escalation Rate	1.70%	
(6) Customer O&M Cost	\$0.00	\$/Cus/Year
(7) Customer O&M Cost Escalation Rate	1.70%	
* (8) Customer Tax Credit Per Installation	\$0.00	\$/Cus
* (9) Customer Tax Credit Escalation Rate	1.70%	
* (10) Change in Supply Costs	\$0.00	\$/Cus/Year
* (11) Supply Costs Escalation Rate	1.70%	
* (12) Utility Discount Rate	8.44%	
* (13) Utility AFUDC Rate	7.48%	
* (14) Utility Nonrecurring Rebate/Incentive	\$0.00	\$/Cus
* (15) Utility Recurring Rebate/Incentive	\$0.00	\$/Cus/Year
* (16) Utility Rebate/Incentive Escalation Rate	0.00%	

IV. Incremental Generation, Transmission, & Distribution Costs

(1) Base Year	2009	
(2) In-Service Year For Incremental Generation	2014 **	
(3) In-Service Year For Incremental T & D	2011	
(4) Base Year Incremental Generation Cost	\$819.89	\$/kW
(5) Base Year Incremental Transmission Cost	\$249.00	\$/kW
(6) Base Year Incremental Distribution Cost	\$110.75	\$/kW
(7) Gen, Tran, & Dist Cost Escalation Rate	1.70%	
(8) Generator Fixed O & M Cost	\$54.55	\$/kW/Yr
(9) Generator Fixed O&M Escalation Rate	0.54%	
(10) Transmission Fixed O & M Cost	\$3.11	\$/kW/Yr
(11) Distribution Fixed O & M Cost	\$2.77	\$/kW/Yr
(12) T&D Fixed O&M Escalation Rate	1.70%	
(13) Incremental Gen Variable O & M Costs	\$0.000	\$/kW/Yr
(14) Incre Gen Variable O&M Cost Esc Rate	0.00%	
(15) Incremental Gen Capacity Factor	40.80%	
(16) Incremental Generating Unit Fuel Cost	\$0.0833	\$/kWh
(17) Incremental Gen Unit Fuel Esc Rate	3.61%	
(18) Incremental Purchased Capacity Cost	\$30.56	\$/KW/YR
(19) Incremental Capacity Cost Esc Rate	23.96%	

Stop Revenue Loss at In-Service Year? (Y=1, N=0) 0

V. (1) Non-Fuel Cost In Customer Bill (Base Year)

(1) Non-Fuel Cost In Customer Bill (Base Year)	\$0.0509	\$/kWh
(2) Non-Fuel Escalation Rate	Per Table	
(3) Customer Demand Charge Per kW (Base Year)	\$0.0000	\$/kW/Mo
(4) Demand Charge Escalation Rate	Per Table	
* (5) Average Annual Change in Monthly Billing kW	0	kW/Mo.

Summary Results for This Analysis

	TRC	Participants'	RIM
NPV Benefits (\$000s)	\$2,883	\$3,173	\$2,883
NPV Costs (\$000s)	\$1,745	\$821	\$4,097
NPV Net Benefits (\$000s)	\$1,138	\$2,352	(\$1,214)
Benefit:Cost Ratio	1.652	3.866	0.704

\* Supplemental information.

\*\* The relevant avoidable generation unit is a combined cycle unit.

Revised  
4-1



**Total Resource Cost-Effectiveness Measure  
Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code**

1	2	3	4	5	6	7	8	9	10	11	12	13
Year	Change in Electric Supply Costs (\$000s)	Utility's Program Costs (\$000s)	Participants' Program Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Incremental Generation Cap Costs (\$000s)	Incremental T&D Cap Costs (\$000s)	Incremental Prog Induced Fuel Costs (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2009	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2010	\$0	\$356	\$890	\$0	\$0	\$0	\$0	(\$1,025)	\$1,246	\$1,025	(\$221)	(\$204)
2011	\$0	\$362	\$0	\$0	\$0	\$0	(\$130)	(\$1,049)	\$362	\$1,179	\$817	\$491
2012	\$0	\$368	\$0	\$0	\$0	\$0	(\$132)	(\$1,060)	\$368	\$1,192	\$824	\$1,138
<b>Nominal</b>		\$1,086	\$890				(\$262)	(\$3,135)	\$1,976	\$3,397	\$1,421	
<b>NPV</b>		\$925	\$821	\$0	\$0	\$0	(\$214)	(\$2,669)	\$1,745	\$2,883	\$1,138	
<b>Discount Rate =</b>		8.44%										
<b>Benefit/Cost Ratio =</b>		1.65										

Revised  
4-2

**Participants' Cost-Effectiveness Measure  
Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code**

1	2	3	4	5	6	7	8	9	10	11	12
Year	Customer Equip Costs (\$000s)	Customer O&M Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Change in Participants' Electric Bills (\$000s)	Tax Credits (\$000s)	Utility Paid Rebates & Incentives (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2009	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2010	\$890	\$0	\$0	\$0	(\$1,254)	\$0	\$0	\$890	\$1,254	\$364	\$336
2011	\$0	\$0	\$0	\$0	(\$1,237)	\$0	\$0	\$0	\$1,237	\$1,237	\$1,388
2012	\$0	\$0	\$0	\$0	(\$1,230)	\$0	\$0	\$0	\$1,230	\$1,230	\$2,352
<b>Nominal NPV</b>	\$890	\$0	\$0	\$0	(\$3,720)	\$0	\$0	\$890	\$3,720	\$2,830	
	\$757	\$0	\$0	\$0	(\$3,173)	\$0	\$0	\$821	\$3,173	\$2,352	
<b>Discount Rate =</b>		8.44%									
<b>Benefit/Cost Ratio =</b>		3.87									

Revised  
4-3

**Ratepayers' Impact Cost-Effectiveness Measure**  
**Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code**

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Year	Change in Electric Supply Costs (\$000s)	Utility's Program Costs (\$000s)	Utility Paid Rebates & Incentives (\$000s)	Change in Electric Revenues (\$000)	Incremental Generation Cap Costs (\$000s)	Incremental T&D Cap Costs (\$000s)	Incremental Prog Induced Fuel Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits to All Customers (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2009	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
2010	\$0.000	\$355.950	\$0.000	(\$1,254.165)	\$0.000	\$0.000	(\$1,025.037)	\$0.000	\$0.000	\$1,610.115	\$1,025.037	(\$585.078)	(\$539.555)
2011	\$0.000	\$362.001	\$0.000	(\$1,236.601)	\$0.000	(\$129.752)	(\$1,049.304)	\$0.000	\$0.000	\$1,598.602	\$1,179.055	(\$419.547)	(\$896.355)
2012	\$0.000	\$368.155	\$0.000	(\$1,229.574)	\$0.000	(\$131.958)	(\$1,060.478)	\$0.000	\$0.000	\$1,597.730	\$1,192.436	(\$405.294)	(\$1,214.217)
<b>Nominal NPV</b>	\$1,086.106	\$924.850	\$0.000	(\$3,172.563)	\$0.000	(\$261.709)	(\$3,134.819)	\$0.000	\$0.000	\$4,806.446	\$3,396.528	(\$1,409.918)	
<b>Discount Rate =</b>		8.44%											
<b>Benefit/Cost Ratio =</b>		0.70											

Revised  
4-4

INPUT DATA -- PART 1

Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code

I. Program Demand Impacts and Line Losses

(1) Change in Peak kW Customer at meter	-0.08	kW/Cus
(2) Change in Peak kW per Customer at generator	-0.11	kW Gen/Cus
(3) kW Line Loss Percentage	14.21%	
(4) Change in KWh per Customer at generator	(805)	kWh/Cus/Yr
(5) kWh Line Loss Percentage	9.05%	
(6) Group Line Loss Multiplier	1.0007	
(7) Annual Change in Customer kWh at Meter	(738)	kWh/Cus/Yr
* (8) Change in Winter kW per Cust at meter	-0.08	kW/Cus

II. Economic Life and K-Factors

(1) DSM Program Study Period	16	Years
(2) Economic Life of Incremental Generation	40	Years
(3) Economic Life of Incremental T&D	35	Years
(4) K-Factor for Generation	1.4640	
(5) K-Factor for T&D	1.4604	
* (6) Switch: Rev Req (0) or Val-of-Def (1)	1	

III. Utility & Customer Costs

(1) Utility Nonrecurring Cost Per Customer	\$335.00	\$/Cus
(2) Utility Recurring Cost Per Customer	\$0.00	\$/Cus/Year
(3) Utility Cost Escalation Rate	0.00%	
(4) Customer Equipment Cost	\$0.00	\$/Cus
(5) Customer Equipment Cost Escalation Rate	1.70%	
(6) Customer O&M Cost	\$0.00	\$/Cus/Year
(7) Customer O&M Cost Escalation Rate	1.70%	
* (8) Customer Tax Credit Per Installation	\$0.00	\$/Cus
* (9) Customer Tax Credit Escalation Rate	1.70%	
* (10) Change in Supply Costs	\$0.00	\$/Cus/Year
* (11) Supply Costs Escalation Rate	1.70%	
* (12) Utility Discount Rate	8.44%	
* (13) Utility AFUDC Rate	7.48%	
* (14) Utility Nonrecurring Rebate/Incentive	\$35.00	\$/Cus
* (15) Utility Recurring Rebate/Incentive	\$0.00	\$/Cus/Year
* (16) Utility Rebate/Incentive Escalation Rate	0.00%	

IV. Incremental Generation, Transmission, & Distribution Costs

(1) Base Year	2009
(2) In-Service Year For Incremental Generation	2014 **
(3) In-Service Year For Incremental T & D	2010
(4) Base Year Incremental Generation Cost	\$819.89 \$/kW
(5) Base Year Incremental Transmission Cost	\$137.53 \$/kW
(6) Base Year Incremental Distribution Cost	\$69.97 \$/kW
(7) Gen, Tran, & Dist Cost Escalation Rate	1.70%
(8) Generator Fixed O & M Cost	\$54.55 \$/kW/Yr
(9) Generator Fixed O&M Escalation Rate	0.58%
(10) Transmission Fixed O & M Cost	\$1.72 \$/kW/Yr
(11) Distribution Fixed O & M Cost	\$2.77 \$/kW/Yr
(12) T&D Fixed O&M Escalation Rate	1.70%
(13) Incremental Gen Variable O & M Costs	\$0.000 \$/kW/Yr
(14) Incre Gen Variable O&M Cost Esc Rate	0.00%
(15) Incremental Gen Capacity Factor	40.80%
(16) Incremental Generating Unit Fuel Cost	\$0.0801 \$/kWh
(17) Incremental Gen Unit Fuel Esc Rate	3.59%
(18) Incremental Purchased Capacity Cost	\$30.56 \$/KW/YR
(19) Incremental Capacity Cost Esc Rate	8.49%

Stop Revenue Loss at In-Service Year? (Y=1, N=0) 0

V. (1) Non-Fuel Cost in Customer Bill (Base Year)

(1) Non-Fuel Cost in Customer Bill (Base Year)	\$0.0509 \$/kWh
(2) Non-Fuel Escalation Rate	Per Table
(3) Customer Demand Charge Per kW (Base Year)	\$0.0000 \$/kW/Mo
(4) Demand Charge Escalation Rate	Per Table
* (5) Average Annual Change in Monthly Billing kW	0 kW/Mo.

Summary Results for This Analysis

	TRC	Participants'	RIM
NPV Benefits(\$000s)	\$12,582	\$13,422	\$12,582
NPV Costs (\$000s)	\$5,121	\$0	\$18,543
NPV Net Benefits (\$000s)	\$7,461	\$13,422	(\$5,961)
Benefit:Cost Ratio	2.457	99.000	0.679

\* Supplemental information.

\*\* The relevant avoidable generation unit is a combined cycle unit.

Revised  
4-97

Total Resource Cost-Effectiveness Measure  
 Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code

1	2	3	4	5	6	7	8	9	10	11	12	13
Year	Change in Electric Supply Costs (\$000s)	Utility's Program Costs (\$000s)	Participants' Program Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Incremental Generation Cap Costs (\$000s)	Incremental T&D Cap Costs (\$000s)	Incremental Prog Induced Fuel Costs (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2009	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2010	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2011	\$0	\$586.25	\$0	\$0	\$0	\$0	(\$5)	(\$123)	\$586	\$129	(\$458)	(\$389)
2012	\$0	\$1,172.50	\$0	\$0	\$0	\$0	(\$16)	(\$372)	\$1,173	\$388	(\$785)	(\$1,005)
2013	\$0	\$1,172.50	\$0	\$0	\$0	\$0	(\$27)	(\$658)	\$1,173	\$685	(\$488)	(\$1,358)
2014	\$0	\$1,172.50	\$0	\$0	\$0	(\$196)	(\$38)	(\$892)	\$1,173	\$1,126	(\$46)	(\$1,389)
2015	\$0	\$1,172.50	\$0	\$0	\$0	(\$255)	(\$50)	(\$1,368)	\$1,173	\$1,673	\$500	(\$1,081)
2016	\$0	\$670.00	\$0	\$0	\$0	(\$291)	(\$57)	(\$1,604)	\$670	\$1,952	\$1,282	(\$353)
2017	\$0	\$670.00	\$0	\$0	\$0	(\$328)	(\$65)	(\$1,821)	\$670	\$2,214	\$1,544	\$454
2018	\$0	\$670.00	\$0	\$0	\$0	(\$365)	(\$73)	(\$2,079)	\$670	\$2,518	\$1,848	\$1,345
2019	\$0	\$670.00	\$0	\$0	\$0	(\$404)	(\$81)	(\$2,367)	\$670	\$2,852	\$2,182	\$2,316
2020	\$0	\$0	\$0	\$0	\$0	(\$410)	(\$82)	(\$2,336)	\$0	\$2,827	\$2,827	\$3,476
2021	\$0	\$0	\$0	\$0	\$0	(\$415)	(\$84)	(\$2,342)	\$0	\$2,841	\$2,841	\$4,551
2022	\$0	\$0	\$0	\$0	\$0	(\$420)	(\$85)	(\$2,407)	\$0	\$2,913	\$2,913	\$5,567
2023	\$0	\$0	\$0	\$0	\$0	(\$426)	(\$86)	(\$2,497)	\$0	\$3,009	\$3,009	\$6,535
2024	\$0	\$0	\$0	\$0	\$0	(\$432)	(\$88)	(\$2,601)	\$0	\$3,120	\$3,120	\$7,461
Nominal NPV		\$7,956				(\$3,941)	(\$837)	(\$23,468)	\$7,956	\$28,246	\$20,289	
		\$5,121	\$0	\$0	\$0	(\$1,716)	(\$379)	(\$10,487)	\$5,121	\$12,582	\$7,461	
Discount Rate =		8.44%										
Benefit/Cost Ratio =		2.46										

Revised  
4-98

**Participants' Cost-Effectiveness Measure**  
**Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code**

1	2	3	4	5	6	7	8	9	10	11	12
Year	Customer Equip Costs (\$000s)	Customer O&M Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Change in Participants' Electric Bills (\$000s)	Tax Credits (\$000s)	Utility Paid Rebates & Incentives (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2009	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2010	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0.00
2011	\$0	\$0	\$0	\$0	(\$152)	\$0	\$61	\$0	\$213	\$213	\$181
2012	\$0	\$0	\$0	\$0	(\$454)	\$0	\$123	\$0	\$576	\$576	\$633
2013	\$0	\$0	\$0	\$0	(\$768)	\$0	\$123	\$0	\$890	\$890	\$1,277
2014	\$0	\$0	\$0	\$0	(\$1,110)	\$0	\$123	\$0	\$1,233	\$1,233	\$2,099
2015	\$0	\$0	\$0	\$0	(\$1,671)	\$0	\$123	\$0	\$1,794	\$1,794	\$3,203
2016	\$0	\$0	\$0	\$0	(\$1,950)	\$0	\$70	\$0	\$2,020	\$2,020	\$4,348
2017	\$0	\$0	\$0	\$0	(\$2,162)	\$0	\$70	\$0	\$2,232	\$2,232	\$5,516
2018	\$0	\$0	\$0	\$0	(\$2,455)	\$0	\$70	\$0	\$2,525	\$2,525	\$6,734
2019	\$0	\$0	\$0	\$0	(\$2,760)	\$0	\$70	\$0	\$2,830	\$2,830	\$7,993
2020	\$0	\$0	\$0	\$0	(\$2,878)	\$0	\$0	\$0	\$2,878	\$2,878	\$9,174
2021	\$0	\$0	\$0	\$0	(\$2,996)	\$0	\$0	\$0	\$2,996	\$2,996	\$10,307
2022	\$0	\$0	\$0	\$0	(\$3,111)	\$0	\$0	\$0	\$3,111	\$3,111	\$11,393
2023	\$0	\$0	\$0	\$0	(\$3,222)	\$0	\$0	\$0	\$3,222	\$3,222	\$12,430
2024	\$0	\$0	\$0	\$0	(\$3,345)	\$0	\$0	\$0	\$3,345	\$3,345	\$13,422
<b>Nominal</b>					(\$29,035)		\$831		\$29,866	\$29,866	
<b>NPV</b>	\$0	\$0	\$0	\$0	(\$12,887)	\$0	\$535	\$0	\$13,422	\$13,422	
<b>Discount Rate =</b>		8.44%									
<b>Benefit/Cost Ratio =</b>		99.00									

Revised  
4-99

**Ratepayers' Impact Cost-Effectiveness Measure**  
**Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code**

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Year	Change in Electric Supply Costs (\$000s)	Utility's Program Costs (\$000s)	Utility Paid Rebates & Incentives (\$000s)	Change in Electric Revenues (\$000)	Incremental Generation Cap Costs (\$000s)	Incremental T&D Cap Costs (\$000s)	Incremental Prog Induced Fuel Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits to All Customers (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2009	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
2010	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
2011	\$0.000	\$586,250	\$61,250	(\$152,102)	\$0.000	(\$5,202)	(\$123,309)	\$0.000	\$0.000	\$799,602	\$128,511	(\$671,091)	(\$570,724)
2012	\$0.000	\$1,172,500	\$122,500	(\$453,713)	\$0.000	(\$15,870)	(\$371,638)	\$0.000	\$0.000	\$1,748,713	\$387,508	(\$1,361,205)	(\$1,638,280)
2013	\$0.000	\$1,172,500	\$122,500	(\$767,908)	\$0.000	(\$26,900)	(\$657,720)	\$0.000	\$0.000	\$2,062,908	\$684,620	(\$1,378,288)	(\$2,635,129)
2014	\$0.000	\$1,172,500	\$122,500	(\$1,110,007)	(\$195,563)	(\$38,301)	(\$892,495)	\$0.000	\$0.000	\$2,405,007	\$1,126,359	(\$1,278,648)	(\$3,487,961)
2015	\$0.000	\$1,172,500	\$122,500	(\$1,671,053)	(\$254,658)	(\$50,081)	(\$1,368,230)	\$0.000	\$0.000	\$2,966,053	\$1,672,968	(\$1,293,085)	(\$4,283,316)
2016	\$0.000	\$670,000	\$70,000	(\$1,949,805)	(\$290,686)	(\$57,400)	(\$1,604,311)	\$0.000	\$0.000	\$2,689,805	\$1,952,396	(\$737,408)	(\$4,701,594)
2017	\$0.000	\$670,000	\$70,000	(\$2,162,289)	(\$327,615)	(\$64,953)	(\$1,821,058)	\$0.000	\$0.000	\$2,902,289	\$2,213,626	(\$688,663)	(\$5,061,829)
2018	\$0.000	\$670,000	\$70,000	(\$2,455,321)	(\$365,468)	(\$72,747)	(\$2,079,395)	\$0.000	\$0.000	\$3,195,321	\$2,517,610	(\$677,711)	(\$5,388,753)
2019	\$0.000	\$670,000	\$70,000	(\$2,760,230)	(\$404,268)	(\$80,787)	(\$2,367,181)	\$0.000	\$0.000	\$3,500,230	\$2,852,235	(\$647,994)	(\$5,677,020)
2020	\$0.000	\$0.000	\$0.000	(\$2,878,181)	(\$409,550)	(\$82,160)	(\$2,335,724)	\$0.000	\$0.000	\$2,878,181	\$2,827,434	(\$50,747)	(\$5,697,839)
2021	\$0.000	\$0.000	\$0.000	(\$2,995,708)	(\$414,822)	(\$83,557)	(\$2,342,134)	\$0.000	\$0.000	\$2,995,708	\$2,840,612	(\$155,095)	(\$5,756,516)
2022	\$0.000	\$0.000	\$0.000	(\$3,111,246)	(\$420,385)	(\$84,977)	(\$2,407,311)	\$0.000	\$0.000	\$3,111,246	\$2,912,673	(\$198,573)	(\$5,825,796)
2023	\$0.000	\$0.000	\$0.000	(\$3,222,208)	(\$425,941)	(\$86,422)	(\$2,496,652)	\$0.000	\$0.000	\$3,222,208	\$3,009,015	(\$213,193)	(\$5,894,390)
2024	\$0.000	\$0.000	\$0.000	(\$3,345,205)	(\$431,591)	(\$87,891)	(\$2,600,619)	\$0.000	\$0.000	\$3,345,205	\$3,120,101	(\$225,104)	(\$5,961,181)
<b>Nominal</b>		\$7,956,250	\$831,250	(\$29,034,974)	(\$3,940,646)	(\$837,248)	(\$23,467,776)			\$37,822,474	\$28,246,670	(\$9,576,805)	
<b>NPV</b>		\$5,121,138	\$535,044	(\$12,887,096)	(\$1,716,239)	(\$379,093)	(\$10,486,765)	\$0.000	\$0.000	\$18,543,278	\$12,582,097	(\$5,961,181)	
<b>Discount Rate =</b>		8.44%											
<b>Benefit/Cost Ratio =</b>		0.68											

Revised  
4-100

INPUT DATA -- PART 1

Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code

I. Program Demand Impacts and Line Losses

(1) Change in Peak kW Customer at meter	0.00	kW/Cus
(2) Change in Peak kW per Customer at generator	0.00	kW Gen/Cus
(3) kW Line Loss Percentage	14.21%	
(4) Change in kWh per Customer at generator	(1)	kWh/Cus/Yr
(5) kWh Line Loss Percentage	9.05%	
(6) Group Line Loss Multiplier	1.0007	
(7) Annual Change in Customer kWh at Meter	(1)	kWh/Cus/Yr
(8) Change in Winter kW per Cust at meter	0.00	kW/Cus

II. Economic Life and K-Factors

(1) DSM Program Study Period	30	Years
(2) Economic Life of Incremental Generation	40	Years
(3) Economic Life of Incremental T&D	35	Years
(4) K-Factor for Generation	1.4640	
(5) K-Factor for T&D	1.4604	
(6) Switch: Rev Req (0) or Val-of-Def (1)	1	

III. Utility & Customer Costs

(1) Utility Nonrecurring Cost Per Customer	\$0.20	\$/Cus
(2) Utility Recurring Cost Per Customer	\$0.00	\$/Cus/Year
(3) Utility Cost Escalation Rate	0.00%	
(4) Customer Equipment Cost	\$0.40	\$/Cus
(5) Customer Equipment Cost Escalation Rate	1.70%	
(6) Customer O&M Cost	\$0.00	\$/Cus/Year
(7) Customer O&M Cost Escalation Rate	1.70%	
(8) Customer Tax Credit Per Installation	\$0.00	\$/Cus
(9) Customer Tax Credit Escalation Rate	1.70%	
(10) Change in Supply Costs	\$0.00	\$/Cus/Year
(11) Supply Costs Escalation Rate	1.70%	
(12) Utility Discount Rate	8.44%	
(13) Utility AFUDC Rate	7.48%	
(14) Utility Nonrecurring Rebate/Incentive	\$0.15	\$/Cus
(15) Utility Recurring Rebate/Incentive	\$0.00	\$/Cus/Year
(16) Utility Rebate/Incentive Escalation Rate	0.00%	

IV. Incremental Generation, Transmission, & Distribution Costs

(1) Base Year	2009
(2) In-Service Year For Incremental Generation	2014 **
(3) In-Service Year For Incremental T & D	2011
(4) Base Year Incremental Generation Cost	\$819.89 \$/kW
(5) Base Year Incremental Transmission Cost	\$249.00 \$/kW
(6) Base Year Incremental Distribution Cost	\$110.75 \$/kW
(7) Gen, Tran, & Dist Cost Escalation Rate	1.70%
(8) Generator Fixed O & M Cost	\$54.55 \$/kW/Yr
(9) Generator Fixed O&M Escalation Rate	0.62%
(10) Transmission Fixed O & M Cost	\$3.11 \$/kW/Yr
(11) Distribution Fixed O & M Cost	\$2.77 \$/kW/Yr
(12) T&D Fixed O&M Escalation Rate	1.70%
(13) Incremental Gen Variable O & M Costs	\$0.000 \$/kW/Yr
(14) Incre Gen Variable O&M Cost Esc Rate	0.00%
(15) Incremental Gen Capacity Factor	40.80%
(16) Incremental Generating Unit Fuel Cost	\$0.0833 \$/kWh
(17) Incremental Gen Unit Fuel Esc Rate	2.69%
(18) Incremental Purchased Capacity Cost	\$30.56 \$/KW/YR
(19) Incremental Capacity Cost Esc Rate	5.83%

Stop Revenue Loss at In-Service Year? (Y=1, N=0) 0

V. (1) Non-Fuel Cost in Customer Bill (Base Year)

(1) Non-Fuel Cost in Customer Bill (Base Year)	\$0.0246 \$/kWh
(2) Non-Fuel Escalation Rate	Per Table
(3) Customer Demand Charge Per kW (Base Year)	\$5.4200 \$/kW/Mo
(4) Demand Charge Escalation Rate	Per Table
(5) Average Annual Change in Monthly Billing kW	-0.00052 kW/Mo.

Summary Results for This Analysis

	TRC	Participants'	RIM
NPV Benefits (\$000s)	\$2,007	\$1,432	\$2,007
NPV Costs (\$000s)	\$443	\$306	\$1,569
NPV Net Benefits (\$000s)	\$1,564	\$1,126	\$438
Benefit:Cost Ratio	4.527	4.685	1.279

\* Supplemental information.

\*\* The relevant avoidable generation unit is a combined cycle unit.

Revised  
4-117



Total Resource Cost-Effectiveness Measure  
 Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code

1	2	3	4	5	6	7	8	9	10	11	12	13
Year	Change in Electric Supply Costs (\$000s)	Utility's Program Costs (\$000s)	Participants' Program Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Incremental Generation Cap Costs (\$000s)	Incremental T&D Cap Costs (\$000s)	Incremental Prog Induced Fuel Costs (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2009	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2010	\$0	\$6	\$12	\$0	\$0	\$0	\$0	(\$3)	\$18	\$3	(\$16)	(\$14)
2011	\$0	\$11	\$23	\$0	\$0	\$0	(\$3)	(\$7)	\$34	\$10	(\$24)	(\$35)
2012	\$0	\$16	\$34	\$0	\$0	\$0	(\$5)	(\$14)	\$50	\$20	(\$30)	(\$58)
2013	\$0	\$20	\$44	\$0	\$0	\$0	(\$8)	(\$25)	\$64	\$34	(\$30)	(\$80)
2014	\$0	\$24	\$52	\$0	\$0	(\$40)	(\$13)	(\$30)	\$76	\$84	\$7	(\$75)
2015	\$0	\$27	\$59	\$0	\$0	(\$55)	(\$18)	(\$48)	\$86	\$121	\$35	(\$54)
2016	\$0	\$29	\$66	\$0	\$0	(\$71)	(\$23)	(\$64)	\$95	\$159	\$64	(\$18)
2017	\$0	\$31	\$71	\$0	\$0	(\$89)	(\$29)	(\$81)	\$102	\$199	\$97	\$33
2018	\$0	\$32	\$75	\$0	\$0	(\$107)	(\$36)	(\$99)	\$107	\$242	\$135	\$98
2019	\$0	\$33	\$79	\$0	\$0	(\$127)	(\$42)	(\$120)	\$112	\$290	\$178	\$177
2020	\$0	\$0	\$0	\$0	\$0	(\$129)	(\$43)	(\$119)	\$0	\$291	\$291	\$297
2021	\$0	\$0	\$0	\$0	\$0	(\$131)	(\$44)	(\$119)	\$0	\$293	\$293	\$408
2022	\$0	\$0	\$0	\$0	\$0	(\$132)	(\$44)	(\$123)	\$0	\$299	\$299	\$512
2023	\$0	\$0	\$0	\$0	\$0	(\$134)	(\$45)	(\$127)	\$0	\$306	\$306	\$611
2024	\$0	\$0	\$0	\$0	\$0	(\$136)	(\$46)	(\$132)	\$0	\$314	\$314	\$704
2025	\$0	\$0	\$0	\$0	\$0	(\$138)	(\$47)	(\$138)	\$0	\$322	\$322	\$792
2026	\$0	\$0	\$0	\$0	\$0	(\$139)	(\$48)	(\$144)	\$0	\$330	\$330	\$875
2027	\$0	\$0	\$0	\$0	\$0	(\$141)	(\$48)	(\$149)	\$0	\$338	\$338	\$954
2028	\$0	\$0	\$0	\$0	\$0	(\$143)	(\$49)	(\$155)	\$0	\$347	\$347	\$1,028
2029	\$0	\$0	\$0	\$0	\$0	(\$145)	(\$50)	(\$157)	\$0	\$352	\$352	\$1,098
2030	\$0	\$0	\$0	\$0	\$0	(\$147)	(\$51)	(\$161)	\$0	\$359	\$359	\$1,164
2031	\$0	\$0	\$0	\$0	\$0	(\$149)	(\$52)	(\$165)	\$0	\$365	\$365	\$1,225
2032	\$0	\$0	\$0	\$0	\$0	(\$151)	(\$53)	(\$169)	\$0	\$373	\$373	\$1,283
2033	\$0	\$0	\$0	\$0	\$0	(\$153)	(\$54)	(\$173)	\$0	\$380	\$380	\$1,337
2034	\$0	\$0	\$0	\$0	\$0	(\$155)	(\$54)	(\$178)	\$0	\$387	\$387	\$1,388
2035	\$0	\$0	\$0	\$0	\$0	(\$157)	(\$55)	(\$182)	\$0	\$394	\$394	\$1,436
2036	\$0	\$0	\$0	\$0	\$0	(\$160)	(\$56)	(\$186)	\$0	\$402	\$402	\$1,482
2037	\$0	\$0	\$0	\$0	\$0	(\$162)	(\$57)	(\$190)	\$0	\$409	\$409	\$1,524
2038	\$0	\$0	\$0	\$0	\$0	(\$164)	(\$58)	(\$194)	\$0	\$417	\$417	\$1,564
<b>Nominal NPV</b>		\$230	\$514			(\$3,256)	(\$1,133)	(\$3,451)	\$744	\$7,840	\$7,096	
		\$138	\$306	\$0	\$0	(\$840)	(\$297)	(\$870)	\$443	\$2,007	\$1,564	
		Discount Rate = 8.44%										
		Benefit/Cost Ratio = 4.53										

Revised  
4-118

**Participants' Cost-Effectiveness Measure**  
**Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code**

1	2	3	4	5	6	7	8	9	10	11	12
Year	Customer Equip Costs (\$000s)	Customer O&M Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Change in Participants' Electric Bills (\$000s)	Tax Credits (\$000s)	Utility Paid Rebates & Incentives (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2009	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2010	\$12	\$0	\$0	\$0	(\$3)	\$0	\$4	\$12	\$8	(\$4)	(\$4)
2011	\$23	\$0	\$0	\$0	(\$10)	\$0	\$8	\$23	\$18	(\$5)	(\$8)
2012	\$34	\$0	\$0	\$0	(\$19)	\$0	\$12	\$34	\$31	(\$3)	(\$10)
2013	\$44	\$0	\$0	\$0	(\$31)	\$0	\$15	\$44	\$46	\$3	(\$8)
2014	\$52	\$0	\$0	\$0	(\$46)	\$0	\$18	\$52	\$64	\$12	(\$0)
2015	\$59	\$0	\$0	\$0	(\$72)	\$0	\$20	\$59	\$92	\$33	\$20
2016	\$66	\$0	\$0	\$0	(\$95)	\$0	\$22	\$66	\$117	\$51	\$49
2017	\$71	\$0	\$0	\$0	(\$116)	\$0	\$23	\$71	\$140	\$69	\$85
2018	\$75	\$0	\$0	\$0	(\$143)	\$0	\$24	\$75	\$168	\$93	\$129
2019	\$79	\$0	\$0	\$0	(\$173)	\$0	\$25	\$79	\$197	\$119	\$182
2020	\$0	\$0	\$0	\$0	(\$180)	\$0	\$0	\$0	\$180	\$180	\$256
2021	\$0	\$0	\$0	\$0	(\$187)	\$0	\$0	\$0	\$187	\$187	\$326
2022	\$0	\$0	\$0	\$0	(\$194)	\$0	\$0	\$0	\$194	\$194	\$394
2023	\$0	\$0	\$0	\$0	(\$200)	\$0	\$0	\$0	\$200	\$200	\$458
2024	\$0	\$0	\$0	\$0	(\$208)	\$0	\$0	\$0	\$208	\$208	\$520
2025	\$0	\$0	\$0	\$0	(\$214)	\$0	\$0	\$0	\$214	\$214	\$579
2026	\$0	\$0	\$0	\$0	(\$220)	\$0	\$0	\$0	\$220	\$220	\$634
2027	\$0	\$0	\$0	\$0	(\$228)	\$0	\$0	\$0	\$228	\$228	\$687
2028	\$0	\$0	\$0	\$0	(\$236)	\$0	\$0	\$0	\$236	\$236	\$738
2029	\$0	\$0	\$0	\$0	(\$244)	\$0	\$0	\$0	\$244	\$244	\$786
2030	\$0	\$0	\$0	\$0	(\$252)	\$0	\$0	\$0	\$252	\$252	\$832
2031	\$0	\$0	\$0	\$0	(\$260)	\$0	\$0	\$0	\$260	\$260	\$876
2032	\$0	\$0	\$0	\$0	(\$268)	\$0	\$0	\$0	\$268	\$268	\$918
2033	\$0	\$0	\$0	\$0	(\$276)	\$0	\$0	\$0	\$276	\$276	\$957
2034	\$0	\$0	\$0	\$0	(\$284)	\$0	\$0	\$0	\$284	\$284	\$994
2035	\$0	\$0	\$0	\$0	(\$292)	\$0	\$0	\$0	\$292	\$292	\$1,030
2036	\$0	\$0	\$0	\$0	(\$300)	\$0	\$0	\$0	\$300	\$300	\$1,064
2037	\$0	\$0	\$0	\$0	(\$309)	\$0	\$0	\$0	\$309	\$309	\$1,096
2038	\$0	\$0	\$0	\$0	(\$317)	\$0	\$0	\$0	\$317	\$317	\$1,126
<b>Nominal</b>	\$514				(\$5,377)		\$172	\$514	\$5,549	\$5,035	
<b>NPV</b>	\$282	\$0	\$0	\$0	(\$1,328)	\$0	\$103	\$306	\$1,432	\$1,126	
<b>Discount Rate =</b>		8.44%									
<b>Benefit/Cost Ratio =</b>		4.69									

Revised  
4-119

**Ratepayers' Impact Cost-Effectiveness Measure**  
**Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code**

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Year	Change in Electric Supply Costs (\$000s)	Utility's Program Costs (\$000s)	Utility Paid Rebates & Incentives (\$000s)	Change in Electric Revenues (\$000)	Incremental Generation Cap Costs (\$000s)	Incremental T&D Cap Costs (\$000s)	Incremental Prog Induced Fuel Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits to All Customers (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2009	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
2010	\$0.000	\$5.993	\$4.495	(\$3.467)	\$0.000	\$0.000	(\$2.525)	\$0.000	\$0.000	\$13.954	\$2.525	(\$11.430)	(\$10.541)
2011	\$0.000	\$11.026	\$8.270	(\$9.713)	\$0.000	(\$2.734)	(\$7.339)	\$0.000	\$0.000	\$29.009	\$10.073	(\$18.936)	(\$26.645)
2012	\$0.000	\$16.100	\$12.075	(\$18.822)	\$0.000	(\$5.411)	(\$14.434)	\$0.000	\$0.000	\$46.997	\$19.844	(\$27.153)	(\$47.940)
2013	\$0.000	\$20.392	\$15.294	(\$30.962)	\$0.000	(\$8.891)	(\$24.895)	\$0.000	\$0.000	\$66.648	\$33.786	(\$32.861)	(\$71.707)
2014	\$0.000	\$23.959	\$17.969	(\$46.197)	(\$40.194)	(\$13.091)	(\$30.268)	\$0.000	\$0.000	\$88.125	\$83.554	(\$4.571)	(\$74.756)
2015	\$0.000	\$26.864	\$20.148	(\$71.841)	(\$54.826)	(\$17.930)	(\$48.300)	\$0.000	\$0.000	\$118.853	\$121.055	\$2.203	(\$73.401)
2016	\$0.000	\$29.173	\$21.879	(\$94.775)	(\$71.058)	(\$23.333)	(\$64.289)	\$0.000	\$0.000	\$145.827	\$158.680	\$12.853	(\$66.111)
2017	\$0.000	\$30.950	\$23.213	(\$116.408)	(\$88.661)	(\$29.231)	(\$80.710)	\$0.000	\$0.000	\$170.571	\$198.602	\$28.032	(\$51.447)
2018	\$0.000	\$32.261	\$24.196	(\$143.487)	(\$107.428)	(\$35.560)	(\$99.354)	\$0.000	\$0.000	\$199.943	\$242.341	\$42.398	(\$30.995)
2019	\$0.000	\$33.164	\$24.873	(\$172.547)	(\$127.173)	(\$42.261)	(\$120.138)	\$0.000	\$0.000	\$230.584	\$289.572	\$58.988	(\$4.754)
2020	\$0.000	\$0.000	\$0.000	(\$179.623)	(\$128.834)	(\$42.979)	(\$119.152)	\$0.000	\$0.000	\$179.623	\$290.966	\$111.343	\$40.925
2021	\$0.000	\$0.000	\$0.000	(\$186.686)	(\$130.524)	(\$43.710)	(\$118.917)	\$0.000	\$0.000	\$186.686	\$293.151	\$106.466	\$81.203
2022	\$0.000	\$0.000	\$0.000	(\$193.646)	(\$132.243)	(\$44.453)	(\$122.517)	\$0.000	\$0.000	\$193.646	\$299.312	\$105.667	\$118.070
2023	\$0.000	\$0.000	\$0.000	(\$200.357)	(\$133.990)	(\$45.208)	(\$127.081)	\$0.000	\$0.000	\$200.357	\$306.280	\$105.923	\$152.150
2024	\$0.000	\$0.000	\$0.000	(\$207.760)	(\$135.768)	(\$45.977)	(\$131.870)	\$0.000	\$0.000	\$207.760	\$313.615	\$105.855	\$183.559
2025	\$0.000	\$0.000	\$0.000	(\$213.899)	(\$137.576)	(\$46.759)	(\$137.658)	\$0.000	\$0.000	\$213.899	\$321.993	\$108.094	\$213.136
2026	\$0.000	\$0.000	\$0.000	(\$220.002)	(\$139.414)	(\$47.554)	(\$143.510)	\$0.000	\$0.000	\$220.002	\$330.478	\$110.476	\$241.013
2027	\$0.000	\$0.000	\$0.000	(\$228.194)	(\$141.284)	(\$48.362)	(\$148.803)	\$0.000	\$0.000	\$228.194	\$338.449	\$110.256	\$266.670
2028	\$0.000	\$0.000	\$0.000	(\$235.655)	(\$143.185)	(\$49.184)	(\$154.916)	\$0.000	\$0.000	\$235.655	\$347.286	\$111.631	\$290.626
2029	\$0.000	\$0.000	\$0.000	(\$244.258)	(\$145.119)	(\$50.021)	(\$157.124)	\$0.000	\$0.000	\$244.258	\$352.264	\$108.006	\$312.001
2030	\$0.000	\$0.000	\$0.000	(\$252.449)	(\$147.086)	(\$50.871)	(\$160.874)	\$0.000	\$0.000	\$252.449	\$358.831	\$106.382	\$331.416
2031	\$0.000	\$0.000	\$0.000	(\$260.111)	(\$149.086)	(\$51.736)	(\$164.645)	\$0.000	\$0.000	\$260.111	\$365.467	\$105.356	\$349.147
2032	\$0.000	\$0.000	\$0.000	(\$267.891)	(\$151.120)	(\$52.615)	(\$168.878)	\$0.000	\$0.000	\$267.891	\$372.613	\$104.723	\$365.401
2033	\$0.000	\$0.000	\$0.000	(\$275.793)	(\$153.189)	(\$53.510)	(\$173.238)	\$0.000	\$0.000	\$275.793	\$379.937	\$104.144	\$380.308
2034	\$0.000	\$0.000	\$0.000	(\$283.821)	(\$155.293)	(\$54.419)	(\$177.529)	\$0.000	\$0.000	\$283.821	\$387.241	\$103.420	\$393.959
2035	\$0.000	\$0.000	\$0.000	(\$291.981)	(\$157.432)	(\$55.345)	(\$181.672)	\$0.000	\$0.000	\$291.981	\$394.449	\$102.468	\$406.432
2036	\$0.000	\$0.000	\$0.000	(\$300.275)	(\$159.608)	(\$56.285)	(\$185.892)	\$0.000	\$0.000	\$300.275	\$401.785	\$101.511	\$417.827
2037	\$0.000	\$0.000	\$0.000	(\$308.708)	(\$161.821)	(\$57.242)	(\$190.160)	\$0.000	\$0.000	\$308.708	\$409.224	\$100.516	\$428.232
2038	\$0.000	\$0.000	\$0.000	(\$317.286)	(\$164.072)	(\$58.215)	(\$194.347)	\$0.000	\$0.000	\$317.286	\$416.634	\$99.349	\$437.717
<b>Nominal NPV</b>		\$229.882	\$172.411	(\$5,376.610)	(\$3,255.984)	(\$1,132.889)	(\$3,451.136)			\$5,778.903	\$7,840.009	\$2,061.106	
		\$137.836	\$103.377	(\$1,328.148)	(\$839.838)	(\$297.145)	(\$870.094)	\$0.000	\$0.000	\$1,569.361	\$2,007.077	\$437.717	
Discount Rate =		8.44%											
Benefit/Cost Ratio =		1.28											

Revised  
4-1-20

**INPUT DATA – PART 1**

**Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code**

**I. Program Demand Impacts and Line Losses**

(1) Change in Peak kW Customer at meter	0.00	kW/Cus
(2) Change in Peak kW per Customer at generator	0.00	kW Gen/Cus
(3) kW Line Loss Percentage	14.21%	
(4) Change in kWh per Customer at generator	(3)	kWh/Cus/Yr
(5) kWh Line Loss Percentage	9.05%	
(6) Group Line Loss Multiplier	1.0007	
(7) Annual Change in Customer kWh at Meter	(2)	kWh/Cus/Yr
* (8) Change in Winter kW per Cust at meter	0.00	kW/Cus

**II. Economic Life and K-Factors**

(1) DSM Program Study Period	31	Years
(2) Economic Life of Incremental Generation	40	Years
(3) Economic Life of Incremental T&D	35	Years
(4) K-Factor for Generation	1.4640	
(5) K-Factor for T&D	1.4604	
* (6) Switch: Rev Req (0) or Val-of-Def (1)	1	

**III. Utility & Customer Costs**

(1) Utility Nonrecurring Cost Per Customer	\$0.60	\$/Cus
(2) Utility Recurring Cost Per Customer	\$0.00	\$/Cus/Year
(3) Utility Cost Escalation Rate	0.00%	
(4) Customer Equipment Cost	\$1.80	\$/Cus
(5) Customer Equipment Cost Escalation Rate	1.70%	
(6) Customer O&M Cost	\$0.00	\$/Cus/Year
(7) Customer O&M Cost Escalation Rate	1.70%	
* (8) Customer Tax Credit Per Installation	\$0.00	\$/Cus
* (9) Customer Tax Credit Escalation Rate	1.70%	
* (10) Change in Supply Costs	\$0.00	\$/Cus/Year
* (11) Supply Costs Escalation Rate	1.70%	
* (12) Utility Discount Rate	8.44%	
* (13) Utility AFUDC Rate	7.48%	
* (14) Utility Nonrecurring Rebate/Incentive	\$0.90	\$/Cus
* (15) Utility Recurring Rebate/Incentive	\$0.00	\$/Cus/Year
* (16) Utility Rebate/Incentive Escalation Rate	0.00%	

**IV. Incremental Generation, Transmission, & Distribution Costs**

(1) Base Year	2009
(2) In-Service Year For Incremental Generation	2014 **
(3) In-Service Year For Incremental T & D	2011
(4) Base Year Incremental Generation Cost	\$819.89 \$/kW
(5) Base Year Incremental Transmission Cost	\$249.00 \$/kW
(6) Base Year Incremental Distribution Cost	\$110.75 \$/kW
(7) Gen, Tran, & Dist Cost Escalation Rate	1.70%
(8) Generator Fixed O & M Cost	\$54.55 \$/kW/Yr
(9) Generator Fixed O&M Escalation Rate	0.63%
(10) Transmission Fixed O & M Cost	\$3.11 \$/kW/Yr
(11) Distribution Fixed O & M Cost	\$2.77 \$/kW/Yr
(12) T&D Fixed O&M Escalation Rate	1.70%
(13) Incremental Gen Variable O & M Costs	\$0.00 \$/kW/Yr
(14) Incre Gen Variable O&M Cost Esc Rate	0.00%
(15) Incremental Gen Capacity Factor	40.80%
(16) Incremental Generating Unit Fuel Cost	\$0.0815 \$/kWh
(17) Incremental Gen Unit Fuel Esc Rate	2.65%
(18) Incremental Purchased Capacity Cost	\$30.56 \$/KW/YR
(19) Incremental Capacity Cost Esc Rate	5.73%

Stop Revenue Loss at In-Service Year? (Y=1, N=0) 0

**V. (1) Non-Fuel Cost In Customer Bill (Base Year)**

(1) Non-Fuel Cost In Customer Bill (Base Year)	\$0.0246	\$/kWh
(2) Non-Fuel Escalation Rate	Per Table	
(3) Customer Demand Charge Per kW (Base Year)	\$5.4200	\$/kW/Mo
(4) Demand Charge Escalation Rate	Per Table	
* (5) Average Annual Change in Monthly Billing kW	-0.00091	kW/Mo.

**Summary Results for This Analysis**

	TRC	Participants	RIM
NPV Benefits(\$000s)	\$14,368	\$13,051	\$14,368
NPV Costs (\$000s)	\$5,747	\$4,412	\$14,386
NPV Net Benefits (\$000s)	\$8,622	\$8,639	(\$18)
Benefit:Cost Ratio	2.500	2.958	0.999

\* Supplemental information.

\*\* The relevant avoidable generation unit is a combined cycle unit.

Revised  
4-137

**Total Resource Cost-Effectiveness Measure**  
**Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code**

1	2	3	4	5	6	7	8	9	10	11	12	13
Year	Change in Electric Supply Costs (\$000s)	Utility's Program Costs (\$000s)	Participants' Program Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Incremental Generation Cap Costs (\$000s)	Incremental T&D Cap Costs (\$000s)	Incremental Prog Induced Fuel Costs (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2009	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2010	\$0	\$60	\$183	\$0	\$0	\$0	\$0	(\$23)	\$243	\$23	(\$220)	(\$203)
2011	\$0	\$120	\$372	\$0	\$0	\$0	(\$17)	(\$71)	\$492	\$88	(\$404)	(\$546)
2012	\$0	\$180	\$568	\$0	\$0	\$0	(\$34)	(\$144)	\$748	\$178	(\$570)	(\$993)
2013	\$0	\$240	\$770	\$0	\$0	\$0	(\$58)	(\$254)	\$1,010	\$313	(\$698)	(\$1,498)
2014	\$0	\$240	\$783	\$0	\$0	(\$254)	(\$83)	(\$297)	\$1,023	\$634	(\$389)	(\$1,757)
2015	\$0	\$300	\$996	\$0	\$0	(\$349)	(\$114)	(\$483)	\$1,296	\$947	(\$349)	(\$1,972)
2016	\$0	\$300	\$1,013	\$0	\$0	(\$447)	(\$147)	(\$635)	\$1,313	\$1,229	(\$84)	(\$2,019)
2017	\$0	\$240	\$824	\$0	\$0	(\$528)	(\$174)	(\$755)	\$1,064	\$1,458	\$394	(\$1,813)
2018	\$0	\$240	\$838	\$0	\$0	(\$612)	(\$202)	(\$887)	\$1,078	\$1,702	\$624	(\$1,513)
2019	\$0	\$240	\$852	\$0	\$0	(\$697)	(\$232)	(\$1,033)	\$1,092	\$1,961	\$869	(\$1,126)
2020	\$0	\$0	\$0	\$0	\$0	(\$706)	(\$236)	(\$1,027)	\$0	\$1,969	\$1,969	(\$318)
2021	\$0	\$0	\$0	\$0	\$0	(\$715)	(\$240)	(\$1,026)	\$0	\$1,981	\$1,981	\$431
2022	\$0	\$0	\$0	\$0	\$0	(\$725)	(\$244)	(\$1,058)	\$0	\$2,027	\$2,027	\$1,138
2023	\$0	\$0	\$0	\$0	\$0	(\$734)	(\$248)	(\$1,097)	\$0	\$2,079	\$2,079	\$1,807
2024	\$0	\$0	\$0	\$0	\$0	(\$744)	(\$252)	(\$1,137)	\$0	\$2,134	\$2,134	\$2,440
2025	\$0	\$0	\$0	\$0	\$0	(\$754)	(\$256)	(\$1,186)	\$0	\$2,196	\$2,196	\$3,041
2026	\$0	\$0	\$0	\$0	\$0	(\$764)	(\$261)	(\$1,236)	\$0	\$2,260	\$2,260	\$3,611
2027	\$0	\$0	\$0	\$0	\$0	(\$774)	(\$265)	(\$1,282)	\$0	\$2,322	\$2,322	\$4,151
2028	\$0	\$0	\$0	\$0	\$0	(\$785)	(\$270)	(\$1,335)	\$0	\$2,389	\$2,389	\$4,664
2029	\$0	\$0	\$0	\$0	\$0	(\$795)	(\$274)	(\$1,351)	\$0	\$2,421	\$2,421	\$5,143
2030	\$0	\$0	\$0	\$0	\$0	(\$806)	(\$279)	(\$1,385)	\$0	\$2,470	\$2,470	\$5,594
2031	\$0	\$0	\$0	\$0	\$0	(\$817)	(\$284)	(\$1,419)	\$0	\$2,519	\$2,519	\$6,018
2032	\$0	\$0	\$0	\$0	\$0	(\$828)	(\$288)	(\$1,455)	\$0	\$2,572	\$2,572	\$6,417
2033	\$0	\$0	\$0	\$0	\$0	(\$840)	(\$293)	(\$1,493)	\$0	\$2,625	\$2,625	\$6,793
2034	\$0	\$0	\$0	\$0	\$0	(\$851)	(\$298)	(\$1,530)	\$0	\$2,679	\$2,679	\$7,147
2035	\$0	\$0	\$0	\$0	\$0	(\$863)	(\$303)	(\$1,565)	\$0	\$2,731	\$2,731	\$7,479
2036	\$0	\$0	\$0	\$0	\$0	(\$875)	(\$309)	(\$1,601)	\$0	\$2,785	\$2,785	\$7,792
2037	\$0	\$0	\$0	\$0	\$0	(\$887)	(\$314)	(\$1,638)	\$0	\$2,839	\$2,839	\$8,086
2038	\$0	\$0	\$0	\$0	\$0	(\$899)	(\$319)	(\$1,674)	\$0	\$2,892	\$2,892	\$8,362
2039	\$0	\$0	\$0	\$0	\$0	(\$912)	(\$325)	(\$1,715)	\$0	\$2,952	\$2,952	\$8,622
Nominal		\$2,160	\$7,200			(\$18,964)	(\$6,617)	(\$31,793)	\$9,360	\$57,374	\$48,014	
NPV		\$1,335	\$4,412	\$0	\$0	(\$4,802)	(\$1,708)	(\$7,858)	\$5,747	\$14,368	\$8,622	
Discount Rate =		8.44%										
Benefit/Cost Ratio =		2.50										

Revised  
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**Participants' Cost-Effectiveness Measure**  
**Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code**

1	2	3	4	5	6	7	8	9	10	11	12
Year	Customer Equip Costs (\$000s)	Customer O&M Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Change in Participants' Electric Bills (\$000s)	Tax Credits (\$000s)	Utility Paid Rebates & Incentives (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2009	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2010	\$183	\$0	\$0	\$0	(\$29)	\$0	\$90	\$183	\$119	(\$64)	(\$59)
2011	\$372	\$0	\$0	\$0	(\$85)	\$0	\$180	\$372	\$265	(\$108)	(\$151)
2012	\$568	\$0	\$0	\$0	(\$169)	\$0	\$270	\$568	\$439	(\$129)	(\$252)
2013	\$770	\$0	\$0	\$0	(\$285)	\$0	\$360	\$770	\$645	(\$125)	(\$343)
2014	\$783	\$0	\$0	\$0	(\$412)	\$0	\$360	\$783	\$772	(\$11)	(\$350)
2015	\$996	\$0	\$0	\$0	(\$657)	\$0	\$450	\$996	\$1,107	\$111	(\$281)
2016	\$1,013	\$0	\$0	\$0	(\$860)	\$0	\$450	\$1,013	\$1,310	\$297	(\$113)
2017	\$824	\$0	\$0	\$0	(\$1,000)	\$0	\$360	\$824	\$1,360	\$536	\$168
2018	\$838	\$0	\$0	\$0	(\$1,179)	\$0	\$360	\$838	\$1,539	\$701	\$506
2019	\$852	\$0	\$0	\$0	(\$1,365)	\$0	\$360	\$852	\$1,725	\$873	\$894
2020	\$0	\$0	\$0	\$0	(\$1,424)	\$0	\$0	\$0	\$1,424	\$1,424	\$1,478
2021	\$0	\$0	\$0	\$0	(\$1,483)	\$0	\$0	\$0	\$1,483	\$1,483	\$2,039
2022	\$0	\$0	\$0	\$0	(\$1,540)	\$0	\$0	\$0	\$1,540	\$1,540	\$2,577
2023	\$0	\$0	\$0	\$0	(\$1,595)	\$0	\$0	\$0	\$1,595	\$1,595	\$3,090
2024	\$0	\$0	\$0	\$0	(\$1,657)	\$0	\$0	\$0	\$1,657	\$1,657	\$3,581
2025	\$0	\$0	\$0	\$0	(\$1,706)	\$0	\$0	\$0	\$1,706	\$1,706	\$4,048
2026	\$0	\$0	\$0	\$0	(\$1,756)	\$0	\$0	\$0	\$1,756	\$1,756	\$4,491
2027	\$0	\$0	\$0	\$0	(\$1,824)	\$0	\$0	\$0	\$1,824	\$1,824	\$4,916
2028	\$0	\$0	\$0	\$0	(\$1,885)	\$0	\$0	\$0	\$1,885	\$1,885	\$5,320
2029	\$0	\$0	\$0	\$0	(\$1,956)	\$0	\$0	\$0	\$1,956	\$1,956	\$5,707
2030	\$0	\$0	\$0	\$0	(\$2,024)	\$0	\$0	\$0	\$2,024	\$2,024	\$6,077
2031	\$0	\$0	\$0	\$0	(\$2,085)	\$0	\$0	\$0	\$2,085	\$2,085	\$6,428
2032	\$0	\$0	\$0	\$0	(\$2,146)	\$0	\$0	\$0	\$2,146	\$2,146	\$6,761
2033	\$0	\$0	\$0	\$0	(\$2,209)	\$0	\$0	\$0	\$2,209	\$2,209	\$7,077
2034	\$0	\$0	\$0	\$0	(\$2,272)	\$0	\$0	\$0	\$2,272	\$2,272	\$7,377
2035	\$0	\$0	\$0	\$0	(\$2,336)	\$0	\$0	\$0	\$2,336	\$2,336	\$7,661
2036	\$0	\$0	\$0	\$0	(\$2,401)	\$0	\$0	\$0	\$2,401	\$2,401	\$7,931
2037	\$0	\$0	\$0	\$0	(\$2,467)	\$0	\$0	\$0	\$2,467	\$2,467	\$8,186
2038	\$0	\$0	\$0	\$0	(\$2,534)	\$0	\$0	\$0	\$2,534	\$2,534	\$8,428
2039	\$0	\$0	\$0	\$0	(\$2,400)	\$0	\$0	\$0	\$2,400	\$2,400	\$8,639
2039	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,639
<b>Nominal</b>	<b>\$7,200</b>				<b>(\$45,740)</b>		<b>\$3,240</b>	<b>\$7,200</b>	<b>\$48,980</b>	<b>\$41,781</b>	
<b>NPV</b>	<b>\$4,068</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>(\$11,049)</b>	<b>\$0</b>	<b>\$2,002</b>	<b>\$4,412</b>	<b>\$13,051</b>	<b>\$8,639</b>	
<b>Discount Rate =</b>		<b>8.44%</b>									
<b>Benefit/Cost Ratio =</b>		<b>2.96</b>									

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Ratepayers' Impact Cost-Effectiveness Measure  
 Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Year	Change in Electric Supply Costs (\$000s)	Utility's Program Costs (\$000s)	Utility Paid Rebates & Incentives (\$000s)	Change in Electric Revenues (\$000)	Incremental Generation Cap Costs (\$000s)	Incremental T&D Cap Costs (\$000s)	Incremental Prog Induced Fuel Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits to All Customers (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2009	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
2010	\$0.000	\$60.000	\$90.000	(\$28.678)	\$0.000	\$0.000	(\$23.389)	\$0.000	\$0.000	\$178.678	\$23.389	(\$155.289)	(\$143.207)
2011	\$0.000	\$120.000	\$180.000	(\$84.820)	\$0.000	(\$16.868)	(\$71.361)	\$0.000	\$0.000	\$364.820	\$88.229	(\$296.591)	(\$395.441)
2012	\$0.000	\$180.000	\$270.000	(\$168.631)	\$0.000	(\$34.309)	(\$143.578)	\$0.000	\$0.000	\$618.631	\$177.887	(\$440.744)	(\$741.104)
2013	\$0.000	\$240.000	\$360.000	(\$285.268)	\$0.000	(\$58.154)	(\$254.479)	\$0.000	\$0.000	\$885.268	\$312.633	(\$572.635)	(\$1,155.264)
2014	\$0.000	\$240.000	\$360.000	(\$412.496)	(\$254.232)	(\$82.799)	(\$297.349)	\$0.000	\$0.000	\$1,012.496	\$634.380	(\$378.116)	(\$1,407.460)
2015	\$0.000	\$300.000	\$450.000	(\$657.194)	(\$349.447)	(\$114.281)	(\$483.306)	\$0.000	\$0.000	\$1,407.194	\$947.034	(\$460.161)	(\$1,890.497)
2016	\$0.000	\$300.000	\$450.000	(\$860.148)	(\$447.083)	(\$146.809)	(\$634.930)	\$0.000	\$0.000	\$1,610.148	\$1,228.821	(\$381.327)	(\$1,906.796)
2017	\$0.000	\$240.000	\$360.000	(\$1,000.092)	(\$528.331)	(\$174.188)	(\$755.319)	\$0.000	\$0.000	\$1,800.092	\$1,457.838	(\$342.254)	(\$1,981.209)
2018	\$0.000	\$240.000	\$360.000	(\$1,178.644)	(\$611.634)	(\$202.457)	(\$887.482)	\$0.000	\$0.000	\$1,778.644	\$1,701.572	(\$77.072)	(\$2,018.387)
2019	\$0.000	\$240.000	\$360.000	(\$1,365.225)	(\$697.043)	(\$231.636)	(\$1,032.574)	\$0.000	\$0.000	\$1,965.225	\$1,961.253	(\$3.972)	(\$2,020.154)
2020	\$0.000	\$0.000	\$0.000	(\$1,423.996)	(\$706.150)	(\$235.573)	(\$1,026.827)	\$0.000	\$0.000	\$1,423.996	\$1,968.551	\$544.555	(\$1,796.752)
2021	\$0.000	\$0.000	\$0.000	(\$1,482.538)	(\$715.412)	(\$238.578)	(\$1,025.548)	\$0.000	\$0.000	\$1,482.538	\$1,980.539	\$498.000	(\$1,808.344)
2022	\$0.000	\$0.000	\$0.000	(\$1,540.066)	(\$724.832)	(\$243.651)	(\$1,058.046)	\$0.000	\$0.000	\$1,540.066	\$2,026.529	\$486.463	(\$1,438.621)
2023	\$0.000	\$0.000	\$0.000	(\$1,595.276)	(\$734.412)	(\$247.793)	(\$1,096.677)	\$0.000	\$0.000	\$1,595.276	\$2,078.882	\$483.606	(\$1,283.022)
2024	\$0.000	\$0.000	\$0.000	(\$1,656.526)	(\$744.155)	(\$252.006)	(\$1,137.350)	\$0.000	\$0.000	\$1,656.526	\$2,133.510	\$476.985	(\$1,141.495)
2025	\$0.000	\$0.000	\$0.000	(\$1,706.419)	(\$754.063)	(\$256.290)	(\$1,185.668)	\$0.000	\$0.000	\$1,706.419	\$2,196.020	\$489.602	(\$1,007.527)
2026	\$0.000	\$0.000	\$0.000	(\$1,755.884)	(\$764.140)	(\$260.647)	(\$1,235.654)	\$0.000	\$0.000	\$1,755.884	\$2,260.441	\$504.556	(\$880.208)
2027	\$0.000	\$0.000	\$0.000	(\$1,823.803)	(\$774.388)	(\$265.078)	(\$1,282.327)	\$0.000	\$0.000	\$1,823.803	\$2,321.792	\$497.989	(\$764.325)
2028	\$0.000	\$0.000	\$0.000	(\$1,885.103)	(\$784.810)	(\$269.584)	(\$1,335.041)	\$0.000	\$0.000	\$1,885.103	\$2,389.435	\$504.332	(\$656.096)
2029	\$0.000	\$0.000	\$0.000	(\$1,956.429)	(\$795.409)	(\$274.167)	(\$1,351.469)	\$0.000	\$0.000	\$1,956.429	\$2,421.045	\$484.616	(\$564.148)
2030	\$0.000	\$0.000	\$0.000	(\$2,023.969)	(\$806.189)	(\$278.828)	(\$1,385.249)	\$0.000	\$0.000	\$2,023.969	\$2,470.265	\$446.296	(\$482.697)
2031	\$0.000	\$0.000	\$0.000	(\$2,084.700)	(\$817.152)	(\$283.568)	(\$1,418.527)	\$0.000	\$0.000	\$2,084.700	\$2,519.247	\$434.547	(\$409.562)
2032	\$0.000	\$0.000	\$0.000	(\$2,146.234)	(\$828.301)	(\$288.388)	(\$1,454.915)	\$0.000	\$0.000	\$2,146.234	\$2,571.605	\$425.371	(\$343.540)
2033	\$0.000	\$0.000	\$0.000	(\$2,208.598)	(\$839.640)	(\$293.291)	(\$1,492.554)	\$0.000	\$0.000	\$2,208.598	\$2,625.484	\$416.886	(\$283.870)
2034	\$0.000	\$0.000	\$0.000	(\$2,271.821)	(\$851.171)	(\$298.277)	(\$1,529.516)	\$0.000	\$0.000	\$2,271.821	\$2,678.964	\$407.143	(\$230.129)
2035	\$0.000	\$0.000	\$0.000	(\$2,335.931)	(\$862.899)	(\$303.348)	(\$1,564.812)	\$0.000	\$0.000	\$2,335.931	\$2,731.059	\$395.128	(\$182.032)
2036	\$0.000	\$0.000	\$0.000	(\$2,400.957)	(\$874.826)	(\$308.505)	(\$1,601.259)	\$0.000	\$0.000	\$2,400.957	\$2,784.590	\$383.633	(\$138.967)
2037	\$0.000	\$0.000	\$0.000	(\$2,468.931)	(\$886.955)	(\$313.749)	(\$1,638.300)	\$0.000	\$0.000	\$2,468.931	\$2,839.005	\$372.074	(\$100.450)
2038	\$0.000	\$0.000	\$0.000	(\$2,533.884)	(\$899.291)	(\$319.083)	(\$1,673.810)	\$0.000	\$0.000	\$2,533.884	\$2,892.184	\$358.300	(\$66.244)
2039	\$0	\$0	\$0	(\$2,400)	(\$912)	(\$325)	(\$1,715)	\$0	\$0	\$2,400	\$2,952	\$552	(\$18)
Nominal NPV	\$2,160,000	\$3,240,000	(\$45,740,077)	(\$18,963,800)	(\$6,617,409)	(\$31,792,706)	\$0.000	\$0.000	\$51,140,077	\$57,373,916	\$6,233,839	(\$17,654)	
Discount Rate =	8.44%												
Benefit/Cost Ratio =	1.00												

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