

ORIGINAL

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MESSER, CAPARELLO & SELF  
A PROFESSIONAL ASSOCIATION

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RECORDS AND REPORTING

April 28, 2000

**BY HAND DELIVERY**

Ms. Blanca Bayo, Director  
Division of Records and Reporting  
Room 110, Easley Building  
Florida Public Service Commission  
2540 Shumard Oak Blvd.  
Tallahassee, Florida 32399-0850

Re: FPSC Docket No. 990721-EG

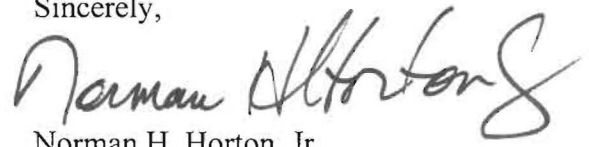
Dear Ms. Bayo:

Enclosed for filing on behalf of Florida Public Utilities Company are the original and five copies of the available cost effectiveness analysis for the conservation programs submitted in this docket.

Please acknowledge receipt of these documents by stamping the extra copy of this letter "filed" and returning the same to me.

Thank you for your assistance.

Sincerely,



Norman H. Horton, Jr.

- AFA \_\_\_\_\_
- APP \_\_\_\_\_
- CAF \_\_\_\_\_
- CMU \_\_\_\_\_
- CTR \_\_\_\_\_
- EAG Goad
- LEG \_\_\_\_\_
- MAS \_\_\_\_\_
- OPC \_\_\_\_\_
- RRR \_\_\_\_\_
- SEC I
- WAW \_\_\_\_\_
- OTH Copatti

NHH/amb  
Enclosure  
cc: Mr. Reese Goad, Division of Electric and Gas (with analysis)  
Mr. Mike Peacock

DOCUMENT NUMBER-DATE  
05265 APR 28 00  
FPSC-RECORDS/REPORTING

ORIGINAL

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	-0.50	kW/Cus
(2) Change in Peak kW per Customer at generator	-0.61	kW Gen/Cus
(3) kW Line Loss Percentage	5.99%	
(4) Change in kWh per Customer at generator	(971)	kWh/Cus/Yr
(5) kWh Line Loss Percentage	4.50%	
(6) Group Line Loss Multiplier	1.0014	
(7) Annual Change in Customer kWh at Meter	(929)	kWh/Cus/Yr
* (8) Change in Winter kW per Cust at meter	-0.90	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	1.4084	
(5) K-Factor for T&D	1.4038	
* (6) Switch: Rev Req (0) or Val-of-Def (1)	1	

**III. Utility & Customer Costs**

(1) Utility Nonrecurring Cost Per Customer	\$200.00	\$/Cus
(2) Utility Recurring Cost Per Customer	\$0.25	\$/Cus/Year
(3) Utility Cost Escalation Rate	0.00%	
(4) Customer Equipment Cost	\$475.00	\$/Cus
(5) Customer Equipment Cost Escalation Rate	3.50%	
(6) Customer O&M Cost	\$0.00	\$/Cus/Year
(7) Customer O&M Cost Escalation Rate	3.50%	
* (8) Customer Tax Credit Per Installation	\$0.00	\$/Cus
* (9) Customer Tax Credit Escalation Rate	3.50%	
(10) Change in Supply Costs	\$0.00	\$/Cus/Year
* (11) Supply Costs Escalation Rate	3.50%	
* (12) Utility Discount Rate	8.07%	
* (13) Utility AFUDC Rate	9.84%	
* (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	2001
(2) In-Service Year For Incremental Generation	2001 **
(3) In-Service Year For Incremental T & D	2002
(4) Base Year Incremental Generation Cost	\$234.85 \$/kW
(5) Base Year Incremental Transmission Cost	\$58.33 \$/kW
(6) Base Year Incremental Distribution Cost	\$34.18 \$/kW
(7) Gen, Tran, & Dist Cost Escalation Rate	3.50%
(8) Generator Fixed O & M Cost	\$3.21 \$/kW/Yr
(9) Generator Fixed O&M Escalation Rate	2.88%
(10) Transmission Fixed O & M Cost	\$0.73 \$/kW/Yr
(11) Distribution Fixed O & M Cost	\$0.85 \$/kW/Yr
(12) T&D Fixed O&M Escalation Rate	3.50%
(13) Incremental Gen Variable O & M Costs	\$0.389 \$/kW/Yr
(14) Incre Gen Variable O&M Cost Esc Rate	3.52%
(15) Incremental Gen Capacity Factor	3.40%
(16) Incremental Generating Unit Fuel Cost	\$0.0363 \$/kWh
(17) Incremental Gen Unit Fuel Esc Rate	3.34%
(18) Incremental Purchased Capacity Cost	\$22.71 \$/kW/YR
(19) Incremental Capacity Cost Esc Rate	2.38%

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)	\$0.0122	\$/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**

	<b>RIM</b>	<b>Participants'</b>
NPV Benefits(\$000s)	\$302	\$202
NPV Costs (\$000s)	\$276	\$196
NPV Net Benefits (\$000s)	\$25	\$6
Benefit:Cost Ratio	1.09	1.03

\*\* The relevant avoidable generation unit is a combustion turbine peaking unit. Since the kilowatt savings occur at the time of the system peak, this is the appropriate unit against which to measure cost savings.

**INPUT DATA – PART 2**  
Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code

1	2	3	4	5	6	7	8	9	10	11
<u>Year</u>	<u>Cumulative Total Participating Customers</u>	<u>Cumulative Participating Customers Adj Free Rides</u>	<u>Utility Average System Fuel Cost (C / kWh)</u>	<u>Marginal Fuel Cost (Decreases) (C / kWh)</u>	<u>Marginal Fuel Cost (Increases) (C / kWh)</u>	<u>Replacement Fuel Cost (C / kWh)</u>	<u>Program kW Effectiveness Factor</u>	<u>Program kWh Effectiveness Factor</u>	<u>Other Costs (\$000)</u>	<u>Other Benefits (\$000)</u>
2001	57	57	3.3200	3.3200	3.3200	3.3200	1.00	1.00	\$0	\$0
2002	114	114	3.3500	3.3500	3.3500	3.3500	1.00	1.00	\$0	\$0
2003	172	172	3.3800	3.3800	3.3800	3.3800	1.00	1.00	\$0	\$0
2004	230	230	3.4100	3.4100	3.4100	3.4100	1.00	1.00	\$0	\$0
2005	288	288	3.4500	3.4500	3.4500	3.4500	1.00	1.00	\$0	\$0
2006	347	347	3.4800	3.4800	3.4800	3.4800	1.00	1.00	\$0	\$0
2007	381	381	3.5200	3.5200	3.5200	3.5200	1.00	1.00	\$0	\$0
2008	416	416	3.5800	3.5800	3.5800	3.5800	1.00	1.00	\$0	\$0
2009	451	451	3.6500	3.6500	3.6500	3.6500	1.00	1.00	\$0	\$0
2010	486	486	3.7200	3.7200	3.7200	3.7200	1.00	1.00	\$0	\$0
2011	486	486	3.3770	3.3770	3.3770	3.3770	1.00	1.00	\$0	\$0
2012	486	486	3.8300	3.8300	3.8300	3.8300	1.00	1.00	\$0	\$0
2013	486	486	3.8900	3.8900	3.8900	3.8900	1.00	1.00	\$0	\$0
2014	486	486	3.9500	3.9500	3.9500	3.9500	1.00	1.00	\$0	\$0
2015	486	486	4.0100	4.0100	4.0100	4.0100	1.00	1.00	\$0	\$0
2016	486	486	4.0700	4.0700	4.0700	4.0700	1.00	1.00	\$0	\$0
2017	486	486	4.1300	4.1300	4.1300	4.1300	1.00	1.00	\$0	\$0
2018	486	486	4.1900	4.1900	4.1900	4.1900	1.00	1.00	\$0	\$0
2019	486	486	4.2500	4.2500	4.2500	4.2500	1.00	1.00	\$0	\$0
2020	486	486	4.3100	4.3100	4.3100	4.3100	1.00	1.00	\$0	\$0
2021	486	486	4.3800	4.3800	4.3800	4.3800	1.00	1.00	\$0	\$0
2022	486	486	4.4500	4.4500	4.4500	4.4500	1.00	1.00	\$0	\$0
2023	486	486	4.5100	4.5100	4.5100	4.5100	1.00	1.00	\$0	\$0
2024	486	486	4.5800	4.5800	4.5800	4.5800	1.00	1.00	\$0	\$0
2025	486	486	4.6500	4.6500	4.6500	4.6500	1.00	1.00	\$0	\$0
2026	486	486	4.7200	4.7200	4.7200	4.7200	1.00	1.00	\$0	\$0
2027	486	486	4.7900	4.7900	4.7900	4.7900	1.00	1.00	\$0	\$0
2028	486	486	4.8600	4.8600	4.8600	4.8600	1.00	1.00	\$0	\$0
2029	486	486	4.9300	4.9300	4.9300	4.9300	1.00	1.00	\$0	\$0
2030	486	486	5.0100	5.0100	5.0100	5.0100	1.00	1.00	\$0	\$0

Incremental Generation Capacity Costs or Benefits

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

1	2	3	4	5	6	(6a)	7
Year	Incremental Owned Gen. Capacity Cost (\$000s)	Incremental Generation Fixed O&M (\$000s)	Incremental Generation Variable O&M (\$000s)	Fuel Cost for the Incr. Cap. (\$000s)	Replacement Fuel Cost (\$000s)	Incremental Purchased Gen. Capacity Cost (\$000s)	Incremental Gen. Capacity Costs (\$000s)
2001		(\$0)	(\$0)	(\$0)	(\$0)	(\$1)	(\$1)
2002		(\$0)	(\$0)	(\$1)	(\$1)	(\$2)	(\$2)
2003		(\$0)	(\$0)	(\$1)	(\$1)	(\$2)	(\$3)
2004		(\$0)	(\$0)	(\$2)	(\$1)	(\$3)	(\$4)
2005		(\$1)	(\$0)	(\$2)	(\$2)	(\$4)	(\$5)
2006		(\$1)	(\$0)	(\$3)	(\$2)	(\$5)	(\$7)
2007		(\$1)	(\$0)	(\$3)	(\$2)	(\$6)	(\$8)
2008		(\$1)	(\$0)	(\$3)	(\$3)	(\$7)	(\$9)
2009		(\$1)	(\$0)	(\$4)	(\$3)	(\$8)	(\$10)
2010		(\$1)	(\$0)	(\$4)	(\$3)	(\$8)	(\$11)
2011		(\$1)	(\$0)	(\$4)	(\$3)	(\$9)	(\$11)
2012		(\$1)	(\$0)	(\$4)	(\$3)	(\$9)	(\$11)
2013		(\$1)	(\$0)	(\$4)	(\$3)	(\$9)	(\$11)
2014		(\$1)	(\$0)	(\$5)	(\$3)	(\$9)	(\$12)
2015		(\$1)	(\$0)	(\$5)	(\$4)	(\$9)	(\$12)
2016		(\$1)	(\$0)	(\$5)	(\$4)	(\$10)	(\$12)
2017		(\$1)	(\$0)	(\$5)	(\$4)	(\$10)	(\$13)
2018		(\$2)	(\$0)	(\$5)	(\$4)	(\$10)	(\$13)
2019		(\$2)	(\$0)	(\$6)	(\$4)	(\$10)	(\$14)
2020		(\$2)	(\$0)	(\$6)	(\$4)	(\$11)	(\$14)
2021		(\$2)	(\$0)	(\$6)	(\$4)	(\$11)	(\$15)
2022		(\$2)	(\$0)	(\$6)	(\$4)	(\$11)	(\$15)
2023		(\$2)	(\$0)	(\$7)	(\$4)	(\$11)	(\$16)
2024		(\$2)	(\$0)	(\$7)	(\$4)	(\$12)	(\$16)
2025		(\$2)	(\$0)	(\$7)	(\$4)	(\$12)	(\$17)
2026		(\$2)	(\$0)	(\$7)	(\$4)	(\$12)	(\$17)
2027		(\$2)	(\$0)	(\$8)	(\$4)	(\$12)	(\$18)
2028		(\$2)	(\$0)	(\$8)	(\$4)	(\$13)	(\$19)
2029		(\$2)	(\$0)	(\$8)	(\$4)	(\$13)	(\$19)
2030		(\$2)	(\$0)	(\$8)	(\$4)	(\$13)	(\$20)
Nominal		(\$40)	(\$5)	(\$144)	(\$96)	(\$261)	(\$355)
NPV	\$0	(\$12)	(\$2)	(\$41)	(\$30)	(\$73)	(\$104)



Incremental T&D Capacity and Incremental Fuel

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

1 Year	2 Incremental Transmission Capacity Cost (\$000s)	3 Incremental Transmission O&M Cost (\$000s)	4 Total Incremental Trans. Cost (\$000s)	5 Incremental Distribution Capacity Cost (\$000s)	6 Incremental Distribution O&M Cost (\$000s)	7 Total Incremental Dist. Cost (\$000s)	8 Effective Incremental Fuel Costs (\$000s)
2001	\$0	\$0	\$0	\$0	\$0	\$0	(\$2)
2002	(\$0)	(\$0)	(\$0)	(\$0)	(\$0)	(\$0)	(\$4)
2003	(\$1)	(\$0)	(\$1)	(\$0)	(\$0)	(\$0)	(\$6)
2004	(\$1)	(\$0)	(\$1)	(\$0)	(\$0)	(\$1)	(\$8)
2005	(\$1)	(\$0)	(\$1)	(\$1)	(\$0)	(\$1)	(\$10)
2006	(\$1)	(\$0)	(\$1)	(\$1)	(\$0)	(\$1)	(\$12)
2007	(\$1)	(\$0)	(\$2)	(\$1)	(\$0)	(\$1)	(\$13)
2008	(\$2)	(\$0)	(\$2)	(\$1)	(\$0)	(\$1)	(\$14)
2009	(\$2)	(\$0)	(\$2)	(\$1)	(\$0)	(\$1)	(\$16)
2010	(\$2)	(\$0)	(\$2)	(\$1)	(\$0)	(\$2)	(\$18)
2011	(\$2)	(\$0)	(\$2)	(\$1)	(\$0)	(\$2)	(\$16)
2012	(\$2)	(\$0)	(\$2)	(\$1)	(\$0)	(\$2)	(\$18)
2013	(\$2)	(\$0)	(\$3)	(\$1)	(\$0)	(\$2)	(\$18)
2014	(\$2)	(\$0)	(\$3)	(\$1)	(\$0)	(\$2)	(\$19)
2015	(\$2)	(\$0)	(\$3)	(\$1)	(\$0)	(\$2)	(\$19)
2016	(\$2)	(\$0)	(\$3)	(\$1)	(\$0)	(\$2)	(\$19)
2017	(\$3)	(\$0)	(\$3)	(\$1)	(\$0)	(\$2)	(\$19)
2018	(\$3)	(\$0)	(\$3)	(\$2)	(\$0)	(\$2)	(\$20)
2019	(\$3)	(\$0)	(\$3)	(\$2)	(\$0)	(\$2)	(\$20)
2020	(\$3)	(\$0)	(\$3)	(\$2)	(\$0)	(\$2)	(\$20)
2021	(\$3)	(\$0)	(\$3)	(\$2)	(\$1)	(\$2)	(\$21)
2022	(\$3)	(\$0)	(\$3)	(\$2)	(\$1)	(\$2)	(\$21)
2023	(\$3)	(\$0)	(\$4)	(\$2)	(\$1)	(\$2)	(\$21)
2024	(\$3)	(\$0)	(\$4)	(\$2)	(\$1)	(\$2)	(\$22)
2025	(\$3)	(\$0)	(\$4)	(\$2)	(\$1)	(\$3)	(\$22)
2026	(\$3)	(\$1)	(\$4)	(\$2)	(\$1)	(\$3)	(\$22)
2027	(\$4)	(\$1)	(\$4)	(\$2)	(\$1)	(\$3)	(\$23)
2028	(\$4)	(\$1)	(\$4)	(\$2)	(\$1)	(\$3)	(\$23)
2029	(\$4)	(\$1)	(\$4)	(\$2)	(\$1)	(\$3)	(\$23)
2030	(\$4)	(\$1)	(\$5)	(\$2)	(\$1)	(\$3)	(\$24)
Nominal	(\$68)	(\$10)	(\$79)	(\$40)	(\$12)	(\$52)	(\$511)
NPV	(\$20)	(\$3)	(\$22)	(\$11)	(\$3)	(\$15)	(\$161)









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	-4.65	kW/Cus
(2) Change in Peak kW per Customer at generator	-5.67	kW Gen/Cus
(3) kW Line Loss Percentage	5.99%	
(4) Change in kWh per Customer at generator	(9,061)	kWh/Cus/Yr
(5) kWh Line Loss Percentage	4.50%	
(6) Group Line Loss Multiplier	1.0014	
(7) Annual Change in Customer kWh at Meter	(8,671)	kWh/Cus/Yr
* (8) Change in Winter kW per Cust at meter	-0.36	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	1.4084	
(5) K-Factor for T&D	1.4038	
* (6) Switch: Rev Req (0) or Val-of-Def (1)	1	

**III. Utility & Customer Costs**

(1) Utility Nonrecurring Cost Per Customer	\$800.00	\$/Cus
(2) Utility Recurring Cost Per Customer	\$0.00	\$/Cus/Year
(3) Utility Cost Escalation Rate	0.00%	
(4) Customer Equipment Cost	\$111.00	\$/Cus
(5) Customer Equipment Cost Escalation Rate	3.50%	
(6) Customer O&M Cost	\$0.00	\$/Cus/Year
(7) Customer O&M Cost Escalation Rate	3.50%	
* (8) Customer Tax Credit Per Installation	\$0.00	\$/Cus
* (9) Customer Tax Credit Escalation Rate	3.50%	
* (10) Change in Supply Costs	\$0.00	\$/Cus/Year
* (11) Supply Costs Escalation Rate	3.50%	
* (12) Utility Discount Rate	8.07%	
* (13) Utility AFUDC Rate	9.84%	
* (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	2001	
(2) In-Service Year For Incremental Generation	2001	**
(3) In-Service Year For Incremental T & D	2002	
(4) Base Year Incremental Generation Cost	\$234.85	\$/kW
(5) Base Year Incremental Transmission Cost	\$58.33	\$/kW
(6) Base Year Incremental Distribution Cost	\$34.18	\$/kW
(7) Gen, Tran, & Dist Cost Escalation Rate	3.50%	
(8) Generator Fixed O & M Cost	\$3.21	\$/kW/Yr
(9) Generator Fixed O&M Escalation Rate	2.88%	
(10) Transmission Fixed O & M Cost	\$0.73	\$/kW/Yr
(11) Distribution Fixed O & M Cost	\$0.85	\$/kW/Yr
(12) T&D Fixed O&M Escalation Rate	3.50%	
(13) Incremental Gen Variable O & M Costs	\$0.389	\$/kW/Yr
(14) Incre Gen Variable O&M Cost Esc Rate	3.52%	
(15) Incremental Gen Capacity Factor	3.40%	
(16) Incremental Generating Unit Fuel Cost	\$0.0363	\$/kWh
(17) Incremental Gen Unit Fuel Esc Rate	3.34%	
(18) Incremental Purchased Capacity Cost	\$22.71	\$/KW/YR
(19) Incremental Capacity Cost Esc Rate	2.38%	

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)	\$0.0278	\$/kWh
(2) Non-Fuel Escalation Rate	Per Table	
(3) Customer Demand Charge Per kW (Base Year)	\$2.085	\$/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**

	RIM	Participants'
NPV Benefits(\$000s)	\$539	\$471
NPV Costs (\$000s)	\$527	\$9
NPV Net Benefits (\$000s)	\$12	\$462
Benefit:Cost Ratio	1.02	53.22

\*\* The relevant avoidable generation unit is a combustion turbine peaking unit. Since the kilowatt savings occur at the time of the system peak, this is the appropriate unit against which to measure cost savings.

**INPUT DATA – PART 2**  
**Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code**

1	2	3	4	5	6	7	8	9	10	11
<u>Year</u>	<u>Cumulative Total Participating Customers</u>	<u>Cumulative Participating Customers Adj Free Rides</u>	<u>Utility Average System Fuel Cost (C / kWh)</u>	<u>Marginal Fuel Cost (Decreases) (C / kWh)</u>	<u>Marginal Fuel Cost (Increases) (C / kWh)</u>	<u>Replacement Fuel Cost (C / kWh)</u>	<u>Program kW Effectiveness Factor</u>	<u>Program kWh Effectiveness Factor</u>	<u>Other Costs (\$000)</u>	<u>Other Benefits (\$000)</u>
2001	10	10	3.3200	3.3200	3.3200	3.3200	1.00	1.00	\$0	\$0
2002	20	20	3.3500	3.3500	3.3500	3.3500	1.00	1.00	\$0	\$0
2003	30	30	3.3800	3.3800	3.3800	3.3800	1.00	1.00	\$0	\$0
2004	41	41	3.4100	3.4100	3.4100	3.4100	1.00	1.00	\$0	\$0
2005	52	52	3.4500	3.4500	3.4500	3.4500	1.00	1.00	\$0	\$0
2006	63	63	3.4800	3.4800	3.4800	3.4800	1.00	1.00	\$0	\$0
2007	71	71	3.5200	3.5200	3.5200	3.5200	1.00	1.00	\$0	\$0
2008	79	79	3.5800	3.5800	3.5800	3.5800	1.00	1.00	\$0	\$0
2009	87	87	3.6500	3.6500	3.6500	3.6500	1.00	1.00	\$0	\$0
2010	95	95	3.7200	3.7200	3.7200	3.7200	1.00	1.00	\$0	\$0
2011	95	95	3.3770	3.3770	3.3770	3.3770	1.00	1.00	\$0	\$0
2012	95	95	3.8300	3.8300	3.8300	3.8300	1.00	1.00	\$0	\$0
2013	95	95	3.8900	3.8900	3.8900	3.8900	1.00	1.00	\$0	\$0
2014	95	95	3.9500	3.9500	3.9500	3.9500	1.00	1.00	\$0	\$0
2015	95	95	4.0100	4.0100	4.0100	4.0100	1.00	1.00	\$0	\$0
2016	95	95	4.0700	4.0700	4.0700	4.0700	1.00	1.00	\$0	\$0
2017	95	95	4.1300	4.1300	4.1300	4.1300	1.00	1.00	\$0	\$0
2018	95	95	4.1900	4.1900	4.1900	4.1900	1.00	1.00	\$0	\$0
2019	95	95	4.2500	4.2500	4.2500	4.2500	1.00	1.00	\$0	\$0
2020	95	95	4.3100	4.3100	4.3100	4.3100	1.00	1.00	\$0	\$0
2021	95	95	4.3800	4.3800	4.3800	4.3800	1.00	1.00	\$0	\$0
2022	95	95	4.4500	4.4500	4.4500	4.4500	1.00	1.00	\$0	\$0
2023	95	95	4.5100	4.5100	4.5100	4.5100	1.00	1.00	\$0	\$0
2024	95	95	4.5800	4.5800	4.5800	4.5800	1.00	1.00	\$0	\$0
2025	95	95	4.6500	4.6500	4.6500	4.6500	1.00	1.00	\$0	\$0
2026	95	95	4.7200	4.7200	4.7200	4.7200	1.00	1.00	\$0	\$0
2027	95	95	4.7900	4.7900	4.7900	4.7900	1.00	1.00	\$0	\$0
2028	95	95	4.8600	4.8600	4.8600	4.8600	1.00	1.00	\$0	\$0
2029	95	95	4.9300	4.9300	4.9300	4.9300	1.00	1.00	\$0	\$0
2030	95	95	5.0100	5.0100	5.0100	5.0100	1.00	1.00	\$0	\$0

Incremental Generation Capacity Costs or Benefits

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

1	2	3	4	5	6	(6a)	7
Year	Incremental Owned Gen. Capacity Cost (\$000s)	Incremental Generation Fixed O&M (\$000s)	Incremental Generation Variable O&M (\$000s)	Fuel Cost for the Incrum. Cap. (\$000s)	Replacement Fuel Cost (\$000s)	Incremental Purchased Gen. Capacity Cost (\$000s)	Incremental Gen. Capacity Costs (\$000s)
2001		(\$0)	(\$0)	(\$1)	(\$1)	(\$1)	(\$2)
2002		(\$0)	(\$0)	(\$1)	(\$1)	(\$3)	(\$3)
2003		(\$1)	(\$0)	(\$2)	(\$2)	(\$4)	(\$5)
2004		(\$1)	(\$0)	(\$3)	(\$2)	(\$6)	(\$7)
2005		(\$1)	(\$0)	(\$3)	(\$3)	(\$7)	(\$9)
2006		(\$1)	(\$0)	(\$4)	(\$4)	(\$9)	(\$11)
2007		(\$2)	(\$0)	(\$5)	(\$4)	(\$11)	(\$13)
2008		(\$2)	(\$0)	(\$6)	(\$5)	(\$12)	(\$15)
2009		(\$2)	(\$0)	(\$7)	(\$5)	(\$14)	(\$17)
2010		(\$2)	(\$0)	(\$8)	(\$6)	(\$15)	(\$19)
2011		(\$2)	(\$0)	(\$8)	(\$5)	(\$15)	(\$20)
2012		(\$2)	(\$0)	(\$8)	(\$6)	(\$16)	(\$20)
2013		(\$2)	(\$0)	(\$8)	(\$6)	(\$16)	(\$21)
2014		(\$2)	(\$0)	(\$8)	(\$6)	(\$17)	(\$21)
2015		(\$3)	(\$0)	(\$9)	(\$6)	(\$17)	(\$22)
2016		(\$3)	(\$0)	(\$9)	(\$7)	(\$17)	(\$23)
2017		(\$3)	(\$0)	(\$9)	(\$7)	(\$18)	(\$24)
2018		(\$3)	(\$0)	(\$10)	(\$7)	(\$18)	(\$24)
2019		(\$3)	(\$0)	(\$10)	(\$7)	(\$19)	(\$26)
2020		(\$3)	(\$0)	(\$11)	(\$7)	(\$19)	(\$26)
2021		(\$3)	(\$0)	(\$11)	(\$7)	(\$20)	(\$27)
2022		(\$3)	(\$0)	(\$12)	(\$7)	(\$20)	(\$28)
2023		(\$3)	(\$0)	(\$12)	(\$7)	(\$20)	(\$29)
2024		(\$3)	(\$0)	(\$12)	(\$7)	(\$21)	(\$30)
2025		(\$3)	(\$0)	(\$13)	(\$7)	(\$21)	(\$31)
2026		(\$4)	(\$1)	(\$13)	(\$8)	(\$22)	(\$32)
2027		(\$4)	(\$1)	(\$14)	(\$8)	(\$23)	(\$33)
2028		(\$4)	(\$1)	(\$14)	(\$8)	(\$23)	(\$34)
2029		(\$4)	(\$1)	(\$15)	(\$8)	(\$24)	(\$35)
2030		(\$4)	(\$1)	(\$15)	(\$8)	(\$24)	(\$36)
Nominal		(\$73)	(\$10)	(\$260)	(\$172)	(\$471)	(\$641)
NPV	\$0	(\$21)	(\$3)	(\$74)	(\$53)	(\$130)	(\$185)

Incremental T&D Capacity and Incremental Fuel

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

1	2	3	4	5	6	7	8
Year	Incremental Transmission Capacity Cost (\$000s)	Incremental Transmission O&M Cost (\$000s)	Total Incremental Trans. Cost (\$000s)	Incremental Distribution Capacity Cost (\$000s)	Incremental Distribution O&M Cost (\$000s)	Total Incremental Dist. Cost (\$000s)	Effective Incremental Fuel Costs (\$000s)
2001	\$0	\$0	\$0	\$0	\$0	\$0	(\$3)
2002	(\$1)	(\$0)	(\$1)	(\$0)	(\$0)	(\$0)	(\$6)
2003	(\$1)	(\$0)	(\$1)	(\$1)	(\$0)	(\$1)	(\$9)
2004	(\$1)	(\$0)	(\$1)	(\$1)	(\$0)	(\$1)	(\$13)
2005	(\$2)	(\$0)	(\$2)	(\$1)	(\$0)	(\$1)	(\$16)
2006	(\$2)	(\$0)	(\$2)	(\$1)	(\$0)	(\$2)	(\$20)
2007	(\$2)	(\$0)	(\$3)	(\$1)	(\$0)	(\$2)	(\$23)
2008	(\$3)	(\$0)	(\$3)	(\$2)	(\$0)	(\$2)	(\$26)
2009	(\$3)	(\$0)	(\$4)	(\$2)	(\$1)	(\$2)	(\$29)
2010	(\$4)	(\$1)	(\$4)	(\$2)	(\$1)	(\$3)	(\$32)
2011	(\$4)	(\$1)	(\$4)	(\$2)	(\$1)	(\$3)	(\$29)
2012	(\$4)	(\$1)	(\$4)	(\$2)	(\$1)	(\$3)	(\$33)
2013	(\$4)	(\$1)	(\$5)	(\$2)	(\$1)	(\$3)	(\$33)
2014	(\$4)	(\$1)	(\$5)	(\$2)	(\$1)	(\$3)	(\$34)
2015	(\$4)	(\$1)	(\$5)	(\$3)	(\$1)	(\$3)	(\$35)
2016	(\$4)	(\$1)	(\$5)	(\$3)	(\$1)	(\$3)	(\$35)
2017	(\$5)	(\$1)	(\$5)	(\$3)	(\$1)	(\$3)	(\$36)
2018	(\$5)	(\$1)	(\$5)	(\$3)	(\$1)	(\$4)	(\$36)
2019	(\$5)	(\$1)	(\$6)	(\$3)	(\$1)	(\$4)	(\$37)
2020	(\$5)	(\$1)	(\$6)	(\$3)	(\$1)	(\$4)	(\$37)
2021	(\$5)	(\$1)	(\$6)	(\$3)	(\$1)	(\$4)	(\$38)
2022	(\$5)	(\$1)	(\$6)	(\$3)	(\$1)	(\$4)	(\$38)
2023	(\$6)	(\$1)	(\$6)	(\$3)	(\$1)	(\$4)	(\$39)
2024	(\$6)	(\$1)	(\$7)	(\$3)	(\$1)	(\$4)	(\$39)
2025	(\$6)	(\$1)	(\$7)	(\$4)	(\$1)	(\$5)	(\$40)
2026	(\$6)	(\$1)	(\$7)	(\$4)	(\$1)	(\$5)	(\$41)
2027	(\$6)	(\$1)	(\$7)	(\$4)	(\$1)	(\$5)	(\$41)
2028	(\$7)	(\$1)	(\$8)	(\$4)	(\$1)	(\$5)	(\$42)
2029	(\$7)	(\$1)	(\$8)	(\$4)	(\$1)	(\$5)	(\$42)
2030	(\$7)	(\$1)	(\$8)	(\$4)	(\$1)	(\$5)	(\$43)
Nominal	(\$124)	(\$18)	(\$142)	(\$72)	(\$22)	(\$94)	(\$924)
NPV	(\$35)	(\$5)	(\$40)	(\$21)	(\$6)	(\$27)	(\$287)





**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)
2001	\$1	\$0	\$0	\$0	(\$5)	\$0	\$0	\$1	\$5	\$4	\$4
2002	\$1	\$0	\$0	\$0	(\$11)	\$0	\$0	\$1	\$11	\$9	\$13
2003	\$1	\$0	\$0	\$0	(\$16)	\$0	\$0	\$1	\$16	\$15	\$26
2004	\$1	\$0	\$0	\$0	(\$22)	\$0	\$0	\$1	\$22	\$21	\$42
2005	\$1	\$0	\$0	\$0	(\$28)	\$0	\$0	\$1	\$28	\$27	\$62
2006	\$1	\$0	\$0	\$0	(\$34)	\$0	\$0	\$1	\$34	\$33	\$84
2007	\$1	\$0	\$0	\$0	(\$39)	\$0	\$0	\$1	\$39	\$38	\$108
2008	\$1	\$0	\$0	\$0	(\$44)	\$0	\$0	\$1	\$44	\$42	\$132
2009	\$1	\$0	\$0	\$0	(\$49)	\$0	\$0	\$1	\$49	\$47	\$158
2010	\$1	\$0	\$0	\$0	(\$54)	\$0	\$0	\$1	\$54	\$52	\$184
2011	\$0	\$0	\$0	\$0	(\$51)	\$0	\$0	\$0	\$51	\$51	\$207
2012	\$0	\$0	\$0	\$0	(\$54)	\$0	\$0	\$0	\$54	\$54	\$230
2013	\$0	\$0	\$0	\$0	(\$55)	\$0	\$0	\$0	\$55	\$55	\$252
2014	\$0	\$0	\$0	\$0	(\$55)	\$0	\$0	\$0	\$55	\$55	\$272
2015	\$0	\$0	\$0	\$0	(\$56)	\$0	\$0	\$0	\$56	\$56	\$291
2016	\$0	\$0	\$0	\$0	(\$56)	\$0	\$0	\$0	\$56	\$56	\$309
2017	\$0	\$0	\$0	\$0	(\$57)	\$0	\$0	\$0	\$57	\$57	\$325
2018	\$0	\$0	\$0	\$0	(\$57)	\$0	\$0	\$0	\$57	\$57	\$341
2019	\$0	\$0	\$0	\$0	(\$58)	\$0	\$0	\$0	\$58	\$58	\$355
2020	\$0	\$0	\$0	\$0	(\$58)	\$0	\$0	\$0	\$58	\$58	\$368
2021	\$0	\$0	\$0	\$0	(\$59)	\$0	\$0	\$0	\$59	\$59	\$381
2022	\$0	\$0	\$0	\$0	(\$60)	\$0	\$0	\$0	\$60	\$60	\$392
2023	\$0	\$0	\$0	\$0	(\$60)	\$0	\$0	\$0	\$60	\$60	\$403
2024	\$0	\$0	\$0	\$0	(\$61)	\$0	\$0	\$0	\$61	\$61	\$414
2025	\$0	\$0	\$0	\$0	(\$61)	\$0	\$0	\$0	\$61	\$61	\$423
2026	\$0	\$0	\$0	\$0	(\$62)	\$0	\$0	\$0	\$62	\$62	\$432
2027	\$0	\$0	\$0	\$0	(\$62)	\$0	\$0	\$0	\$62	\$62	\$440
2028	\$0	\$0	\$0	\$0	(\$63)	\$0	\$0	\$0	\$63	\$63	\$448
2029	\$0	\$0	\$0	\$0	(\$64)	\$0	\$0	\$0	\$64	\$64	\$455
2030	\$0	\$0	\$0	\$0	(\$64)	\$0	\$0	\$0	\$64	\$64	\$462
<b>Nominal NPV</b>	\$12	\$0	\$0	\$0	(\$1,475)	\$0	\$0	\$12	\$1,475	\$1,463	
<b>Discount Rate =</b>	8	8.07%									
<b>Benefit/Cost Ratio =</b>	\$8	53.22						\$9	\$471	\$462	

**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)
2001	\$0	\$8	\$0	(\$5)	(\$2)	\$0	(\$3)	\$0	\$0	\$13	\$5	(\$9)	(\$9)
2002	\$0	\$8	\$0	(\$11)	(\$3)	(\$1)	(\$6)	\$0	\$0	\$19	\$10	(\$8)	(\$16)
2003	\$0	\$8	\$0	(\$16)	(\$5)	(\$2)	(\$9)	\$0	\$0	\$24	\$16	(\$8)	(\$24)
2004	\$0	\$9	\$0	(\$22)	(\$7)	(\$2)	(\$13)	\$0	\$0	\$31	\$22	(\$9)	(\$31)
2005	\$0	\$9	\$0	(\$28)	(\$9)	(\$3)	(\$16)	\$0	\$0	\$37	\$28	(\$9)	(\$37)
2006	\$0	\$9	\$0	(\$34)	(\$11)	(\$4)	(\$20)	\$0	\$0	\$43	\$35	(\$8)	(\$42)
2007	\$0	\$6	\$0	(\$39)	(\$13)	(\$5)	(\$23)	\$0	\$0	\$45	\$40	(\$5)	(\$45)
2008	\$0	\$6	\$0	(\$44)	(\$15)	(\$5)	(\$26)	\$0	\$0	\$50	\$46	(\$4)	(\$47)
2009	\$0	\$6	\$0	(\$49)	(\$17)	(\$6)	(\$29)	\$0	\$0	\$55	\$52	(\$3)	(\$49)
2010	\$0	\$6	\$0	(\$54)	(\$19)	(\$7)	(\$32)	\$0	\$0	\$60	\$58	(\$2)	(\$50)
2011	\$0	\$0	\$0	(\$51)	(\$20)	(\$7)	(\$29)	\$0	\$0	\$51	\$56	\$6	(\$47)
2012	\$0	\$0	\$0	(\$54)	(\$20)	(\$7)	(\$33)	\$0	\$0	\$54	\$61	\$6	(\$45)
2013	\$0	\$0	\$0	(\$55)	(\$21)	(\$8)	(\$33)	\$0	\$0	\$55	\$62	\$7	(\$42)
2014	\$0	\$0	\$0	(\$55)	(\$21)	(\$8)	(\$34)	\$0	\$0	\$55	\$63	\$8	(\$39)
2015	\$0	\$0	\$0	(\$56)	(\$22)	(\$8)	(\$35)	\$0	\$0	\$56	\$65	\$9	(\$36)
2016	\$0	\$0	\$0	(\$56)	(\$23)	(\$8)	(\$35)	\$0	\$0	\$56	\$66	\$10	(\$33)
2017	\$0	\$0	\$0	(\$57)	(\$24)	(\$9)	(\$36)	\$0	\$0	\$57	\$68	\$11	(\$30)
2018	\$0	\$0	\$0	(\$57)	(\$24)	(\$9)	(\$36)	\$0	\$0	\$57	\$70	\$12	(\$27)
2019	\$0	\$0	\$0	(\$58)	(\$26)	(\$9)	(\$37)	\$0	\$0	\$58	\$71	\$14	(\$23)
2020	\$0	\$0	\$0	(\$58)	(\$26)	(\$10)	(\$37)	\$0	\$0	\$58	\$73	\$15	(\$20)
2021	\$0	\$0	\$0	(\$59)	(\$27)	(\$10)	(\$38)	\$0	\$0	\$59	\$75	\$16	(\$17)
2022	\$0	\$0	\$0	(\$60)	(\$28)	(\$10)	(\$38)	\$0	\$0	\$60	\$77	\$17	(\$13)
2023	\$0	\$0	\$0	(\$60)	(\$29)	(\$11)	(\$39)	\$0	\$0	\$60	\$78	\$18	(\$10)
2024	\$0	\$0	\$0	(\$61)	(\$30)	(\$11)	(\$39)	\$0	\$0	\$61	\$80	\$20	(\$7)
2025	\$0	\$0	\$0	(\$61)	(\$31)	(\$11)	(\$40)	\$0	\$0	\$61	\$82	\$21	(\$4)
2026	\$0	\$0	\$0	(\$62)	(\$32)	(\$12)	(\$41)	\$0	\$0	\$62	\$84	\$22	(\$0)
2027	\$0	\$0	\$0	(\$62)	(\$33)	(\$12)	(\$41)	\$0	\$0	\$62	\$86	\$24	\$3
2028	\$0	\$0	\$0	(\$63)	(\$34)	(\$13)	(\$42)	\$0	\$0	\$63	\$88	\$25	\$6
2029	\$0	\$0	\$0	(\$64)	(\$35)	(\$13)	(\$42)	\$0	\$0	\$64	\$90	\$27	\$9
2030	\$0	\$0	\$0	(\$64)	(\$36)	(\$14)	(\$43)	\$0	\$0	\$64	\$93	\$28	\$12
<b>Nominal NPV</b>		\$76		(\$1,475)	(\$641)	(\$236)	(\$924)			\$1,551	\$1,801	\$250	
		\$56	\$0	(\$471)	(\$185)	(\$67)	(\$287)	\$0	\$0	\$527	\$539	\$12	
<b>Discount Rate =</b>		8.07%											
<b>Benefit/Cost Ratio =</b>		1.02											



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	-1.50	kW/Cus
(2) Change in Peak kW per Customer at generator	-1.83	kW Gen/Cus
(3) kW Line Loss Percentage	5.99%	
(4) Change in kWh per Customer at generator	(5,225)	kWh/Cus/Yr
(5) kWh Line Loss Percentage	4.50%	
(6) Group Line Loss Multiplier	1.0014	
(7) Annual Change in Customer kWh at Meter	(5,000)	kWh/Cus/Yr
* (8) Change in Winter kW per Cust at meter	-2.00	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	1.4084	
(5) K-Factor for T&D	1.4038	
* (6) Switch: Rev Req (0) or Val-of-Def (1)	1	

III. Utility & Customer Costs

(1) Utility Nonrecurring Cost Per Customer	\$350.00	\$/Cus
(2) Utility Recurring Cost Per Customer	\$0.00	\$/Cus/Year
(3) Utility Cost Escalation Rate	0.00%	
(4) Customer Equipment Cost	\$2,500.00	\$/Cus
(5) Customer Equipment Cost Escalation Rate	3.50%	
(6) Customer O&M Cost	\$0.00	\$/Cus/Year
(7) Customer O&M Cost Escalation Rate	3.50%	
* (8) Customer Tax Credit Per Installation	\$0.00	\$/Cus
* (9) Customer Tax Credit Escalation Rate	3.50%	
(10) Change in Supply Costs	\$0.00	\$/Cus/Year
(11) Supply Costs Escalation Rate	3.50%	
* (12) Utility Discount Rate	8.07%	
* (13) Utility AFUDC Rate	9.84%	
* (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	2001	
(2) In-Service Year For Incremental Generation	2001	**
(3) In-Service Year For Incremental T & D	2002	
(4) Base Year Incremental Generation Cost	\$234.85	\$/kW
(5) Base Year Incremental Transmission Cost	\$58.33	\$/kW
(6) Base Year Incremental Distribution Cost	\$34.18	\$/kW
(7) Gen, Tran, & Dist Cost Escalation Rate	3.50%	
(8) Generator Fixed O & M Cost	\$3.21	\$/kW/Yr
(9) Generator Fixed O&M Escalation Rate	2.88%	
(10) Transmission Fixed O & M Cost	\$0.73	\$/kW/Yr
(11) Distribution Fixed O & M Cost	\$0.85	\$/kW/Yr
(12) T&D Fixed O&M Escalation Rate	3.50%	
(13) Incremental Gen Variable O & M Costs	\$0.389	\$/kW/Yr
(14) Incre Gen Variable O&M Cost Esc Rate	3.52%	
(15) Incremental Gen Capacity Factor	3.40%	
(16) Incremental Generating Unit Fuel Cost	\$0.0363	\$/kWh
(17) Incremental Gen Unit Fuel Esc Rate	3.34%	
(18) Incremental Purchased Capacity Cost	\$22.71	\$/kW/Yr
(19) Incremental Capacity Cost Esc Rate	2.38%	

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)	\$0.0122	\$/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

	RIM	Participants'
NPV Benefits (\$000s)	\$765	\$644
NPV Costs (\$000s)	\$720	\$622
NPV Net Benefits (\$000s)	\$45	\$21
Benefit:Cost Ratio	1.06	1.03

\*\* The relevant avoidable generation unit is a combustion turbine peaking unit. Since the kilowatt savings occur at the time of the system peak, this is the appropriate unit against which to measure cost savings.



**INPUT DATA -- PART 2**  
**Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code**

1	2	3	4	5	6	7	8	9	10	11
<u>Year</u>	<u>Cumulative Total Participating Customers</u>	<u>Cumulative Participating Customers Adj Free Rides</u>	<u>Utility Average System Fuel Cost (C / kWh)</u>	<u>Marginal Fuel Cost (Decreases) (C / kWh)</u>	<u>Marginal Fuel Cost (Increases) (C / kWh)</u>	<u>Replacement Fuel Cost (C / kWh)</u>	<u>Program kW Effectiveness Factor</u>	<u>Program kWh Effectiveness Factor</u>	<u>Other Costs (\$000)</u>	<u>Other Benefits (\$000)</u>
2001	30	30	3.3200	3.3200	3.3200	3.3200	1.00	1.00	\$0	\$0
2002	60	60	3.3500	3.3500	3.3500	3.3500	1.00	1.00	\$0	\$0
2003	90	90	3.3800	3.3800	3.3800	3.3800	1.00	1.00	\$0	\$0
2004	120	120	3.4100	3.4100	3.4100	3.4100	1.00	1.00	\$0	\$0
2005	150	150	3.4500	3.4500	3.4500	3.4500	1.00	1.00	\$0	\$0
2006	180	180	3.4800	3.4800	3.4800	3.4800	1.00	1.00	\$0	\$0
2007	210	210	3.5200	3.5200	3.5200	3.5200	1.00	1.00	\$0	\$0
2008	240	240	3.5800	3.5800	3.5800	3.5800	1.00	1.00	\$0	\$0
2009	270	270	3.6500	3.6500	3.6500	3.6500	1.00	1.00	\$0	\$0
2010	300	300	3.7200	3.7200	3.7200	3.7200	1.00	1.00	\$0	\$0
2011	300	300	3.3770	3.3770	3.3770	3.3770	1.00	1.00	\$0	\$0
2012	300	300	3.8300	3.8300	3.8300	3.8300	1.00	1.00	\$0	\$0
2013	300	300	3.8900	3.8900	3.8900	3.8900	1.00	1.00	\$0	\$0
2014	300	300	3.9500	3.9500	3.9500	3.9500	1.00	1.00	\$0	\$0
2015	300	300	4.0100	4.0100	4.0100	4.0100	1.00	1.00	\$0	\$0
2016	300	300	4.0700	4.0700	4.0700	4.0700	1.00	1.00	\$0	\$0
2017	300	300	4.1300	4.1300	4.1300	4.1300	1.00	1.00	\$0	\$0
2018	300	300	4.1900	4.1900	4.1900	4.1900	1.00	1.00	\$0	\$0
2019	300	300	4.2500	4.2500	4.2500	4.2500	1.00	1.00	\$0	\$0
2020	300	300	4.3100	4.3100	4.3100	4.3100	1.00	1.00	\$0	\$0
2021	300	300	4.3800	4.3800	4.3800	4.3800	1.00	1.00	\$0	\$0
2022	300	300	4.4500	4.4500	4.4500	4.4500	1.00	1.00	\$0	\$0
2023	300	300	4.5100	4.5100	4.5100	4.5100	1.00	1.00	\$0	\$0
2024	300	300	4.5800	4.5800	4.5800	4.5800	1.00	1.00	\$0	\$0
2025	300	300	4.6500	4.6500	4.6500	4.6500	1.00	1.00	\$0	\$0
2026	300	300	4.7200	4.7200	4.7200	4.7200	1.00	1.00	\$0	\$0
2027	300	300	4.7900	4.7900	4.7900	4.7900	1.00	1.00	\$0	\$0
2028	300	300	4.8600	4.8600	4.8600	4.8600	1.00	1.00	\$0	\$0
2029	300	300	4.9300	4.9300	4.9300	4.9300	1.00	1.00	\$0	\$0
2030	300	300	5.0100	5.0100	5.0100	5.0100	1.00	1.00	\$0	\$0

Incremental Generation Capacity Costs or Benefits

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

1	2	3	4	5	6	(6a)	7
Year	Incremental Owned Gen. Capacity Cost (\$000s)	Incremental Generation Fixed O&M (\$000s)	Incremental Generation Variable O&M (\$000s)	Fuel Cost for the Incr. Cap. (\$000s)	Replacement Fuel Cost (\$000s)	Incremental Purchased Gen. Capacity Cost (\$000s)	Incremental Gen. Capacity Costs (\$000s)
2001		(\$0)	(\$0)	(\$1)	(\$1)	(\$1)	(\$1)
2002		(\$0)	(\$0)	(\$1)	(\$1)	(\$3)	(\$3)
2003		(\$1)	(\$0)	(\$2)	(\$2)	(\$4)	(\$5)
2004		(\$1)	(\$0)	(\$2)	(\$2)	(\$5)	(\$6)
2005		(\$1)	(\$0)	(\$3)	(\$3)	(\$7)	(\$8)
2006		(\$1)	(\$0)	(\$4)	(\$3)	(\$8)	(\$10)
2007		(\$1)	(\$0)	(\$5)	(\$4)	(\$10)	(\$13)
2008		(\$2)	(\$0)	(\$6)	(\$5)	(\$12)	(\$15)
2009		(\$2)	(\$0)	(\$7)	(\$5)	(\$14)	(\$17)
2010		(\$2)	(\$0)	(\$8)	(\$6)	(\$15)	(\$20)
2011		(\$2)	(\$0)	(\$8)	(\$6)	(\$16)	(\$21)
2012		(\$2)	(\$0)	(\$8)	(\$6)	(\$16)	(\$21)
2013		(\$2)	(\$0)	(\$8)	(\$6)	(\$17)	(\$21)
2014		(\$3)	(\$0)	(\$8)	(\$6)	(\$17)	(\$22)
2015		(\$3)	(\$0)	(\$9)	(\$7)	(\$17)	(\$22)
2016		(\$3)	(\$0)	(\$9)	(\$7)	(\$18)	(\$23)
2017		(\$3)	(\$0)	(\$9)	(\$7)	(\$18)	(\$24)
2018		(\$3)	(\$0)	(\$10)	(\$7)	(\$19)	(\$25)
2019		(\$3)	(\$0)	(\$11)	(\$7)	(\$19)	(\$26)
2020		(\$3)	(\$0)	(\$11)	(\$7)	(\$19)	(\$27)
2021		(\$3)	(\$0)	(\$11)	(\$7)	(\$20)	(\$28)
2022		(\$3)	(\$0)	(\$12)	(\$7)	(\$20)	(\$29)
2023		(\$3)	(\$0)	(\$12)	(\$7)	(\$21)	(\$29)
2024		(\$3)	(\$0)	(\$13)	(\$7)	(\$21)	(\$30)
2025		(\$3)	(\$1)	(\$13)	(\$8)	(\$22)	(\$31)
2026		(\$4)	(\$1)	(\$13)	(\$8)	(\$22)	(\$32)
2027		(\$4)	(\$1)	(\$14)	(\$8)	(\$23)	(\$33)
2028		(\$4)	(\$1)	(\$14)	(\$8)	(\$23)	(\$34)
2029		(\$4)	(\$1)	(\$15)	(\$8)	(\$24)	(\$35)
2030		(\$4)	(\$1)	(\$15)	(\$8)	(\$25)	(\$36)
Nominal		(\$73)	(\$10)	(\$263)	(\$174)	(\$476)	(\$649)
NPV	\$0	(\$21)	(\$3)	(\$74)	(\$53)	(\$131)	(\$186)

Incremental T&D Capacity and Incremental Fuel

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

1	2	3	4	5	6	7	8
Year	Incremental Transmission Capacity Cost (\$000s)	Incremental Transmission O&M Cost (\$000s)	Total Incremental Trans. Cost (\$000s)	Incremental Distribution Capacity Cost (\$000s)	Incremental Distribution O&M Cost (\$000s)	Total Incremental Dist. Cost (\$000s)	Effective Incremental Fuel Costs (\$000s)
2001	\$0	\$0	\$0	\$0	\$0	\$0	(\$5)
2002	(\$1)	(\$0)	(\$1)	(\$0)	(\$0)	(\$0)	(\$11)
2003	(\$1)	(\$0)	(\$1)	(\$1)	(\$0)	(\$1)	(\$16)
2004	(\$1)	(\$0)	(\$1)	(\$1)	(\$0)	(\$1)	(\$21)
2005	(\$2)	(\$0)	(\$2)	(\$1)	(\$0)	(\$1)	(\$27)
2006	(\$2)	(\$0)	(\$2)	(\$1)	(\$0)	(\$1)	(\$33)
2007	(\$2)	(\$0)	(\$3)	(\$1)	(\$0)	(\$2)	(\$39)
2008	(\$3)	(\$0)	(\$3)	(\$2)	(\$0)	(\$2)	(\$45)
2009	(\$3)	(\$0)	(\$4)	(\$2)	(\$1)	(\$2)	(\$51)
2010	(\$4)	(\$1)	(\$4)	(\$2)	(\$1)	(\$3)	(\$58)
2011	(\$4)	(\$1)	(\$4)	(\$2)	(\$1)	(\$3)	(\$53)
2012	(\$4)	(\$1)	(\$5)	(\$2)	(\$1)	(\$3)	(\$60)
2013	(\$4)	(\$1)	(\$5)	(\$2)	(\$1)	(\$3)	(\$61)
2014	(\$4)	(\$1)	(\$5)	(\$2)	(\$1)	(\$3)	(\$62)
2015	(\$4)	(\$1)	(\$5)	(\$3)	(\$1)	(\$3)	(\$63)
2016	(\$4)	(\$1)	(\$5)	(\$3)	(\$1)	(\$3)	(\$64)
2017	(\$5)	(\$1)	(\$5)	(\$3)	(\$1)	(\$4)	(\$65)
2018	(\$5)	(\$1)	(\$6)	(\$3)	(\$1)	(\$4)	(\$66)
2019	(\$5)	(\$1)	(\$6)	(\$3)	(\$1)	(\$4)	(\$67)
2020	(\$5)	(\$1)	(\$6)	(\$3)	(\$1)	(\$4)	(\$68)
2021	(\$5)	(\$1)	(\$6)	(\$3)	(\$1)	(\$4)	(\$69)
2022	(\$6)	(\$1)	(\$6)	(\$3)	(\$1)	(\$4)	(\$70)
2023	(\$6)	(\$1)	(\$7)	(\$3)	(\$1)	(\$4)	(\$71)
2024	(\$6)	(\$1)	(\$7)	(\$3)	(\$1)	(\$5)	(\$72)
2025	(\$6)	(\$1)	(\$7)	(\$4)	(\$1)	(\$5)	(\$73)
2026	(\$6)	(\$1)	(\$7)	(\$4)	(\$1)	(\$5)	(\$74)
2027	(\$7)	(\$1)	(\$8)	(\$4)	(\$1)	(\$5)	(\$75)
2028	(\$7)	(\$1)	(\$8)	(\$4)	(\$1)	(\$5)	(\$76)
2029	(\$7)	(\$1)	(\$8)	(\$4)	(\$1)	(\$5)	(\$77)
2030	(\$7)	(\$1)	(\$8)	(\$4)	(\$1)	(\$6)	(\$79)
Nominal	(\$125)	(\$19)	(\$144)	(\$73)	(\$22)	(\$95)	(\$1,668)
NPV	(\$35)	(\$5)	(\$40)	(\$21)	(\$6)	(\$27)	(\$512)

**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)
2001	\$0	\$11	\$75	\$0	\$0	(\$1)	\$0	(\$5)	\$86	\$7	(\$79)	(\$79)
2002	\$0	\$11	\$78	\$0	\$0	(\$3)	(\$1)	(\$11)	\$88	\$15	(\$74)	(\$147)
2003	\$0	\$11	\$80	\$0	\$0	(\$5)	(\$2)	(\$16)	\$91	\$22	(\$69)	(\$206)
2004	\$0	\$11	\$83	\$0	\$0	(\$6)	(\$2)	(\$21)	\$94	\$30	(\$64)	(\$256)
2005	\$0	\$11	\$86	\$0	\$0	(\$8)	(\$3)	(\$27)	\$97	\$38	(\$58)	(\$299)
2006	\$0	\$11	\$89	\$0	\$0	(\$10)	(\$4)	(\$33)	\$100	\$47	(\$53)	(\$335)
2007	\$0	\$11	\$92	\$0	\$0	(\$13)	(\$4)	(\$39)	\$103	\$56	(\$47)	(\$364)
2008	\$0	\$11	\$95	\$0	\$0	(\$15)	(\$5)	(\$45)	\$106	\$65	(\$41)	(\$388)
2009	\$0	\$11	\$99	\$0	\$0	(\$17)	(\$6)	(\$51)	\$109	\$75	(\$35)	(\$406)
2010	\$0	\$11	\$102	\$0	\$0	(\$20)	(\$7)	(\$58)	\$113	\$85	(\$28)	(\$420)
2011	\$0	\$0	\$0	\$0	\$0	(\$21)	(\$7)	(\$53)	\$0	\$81	\$81	(\$383)
2012	\$0	\$0	\$0	\$0	\$0	(\$21)	(\$7)	(\$60)	\$0	\$88	\$88	(\$345)
2013	\$0	\$0	\$0	\$0	\$0	(\$21)	(\$8)	(\$61)	\$0	\$90	\$90	(\$310)
2014	\$0	\$0	\$0	\$0	\$0	(\$22)	(\$8)	(\$62)	\$0	\$92	\$92	(\$277)
2015	\$0	\$0	\$0	\$0	\$0	(\$22)	(\$8)	(\$63)	\$0	\$94	\$94	(\$245)
2016	\$0	\$0	\$0	\$0	\$0	(\$23)	(\$9)	(\$64)	\$0	\$95	\$95	(\$215)
2017	\$0	\$0	\$0	\$0	\$0	(\$24)	(\$9)	(\$65)	\$0	\$98	\$98	(\$187)
2018	\$0	\$0	\$0	\$0	\$0	(\$25)	(\$9)	(\$66)	\$0	\$100	\$100	(\$160)
2019	\$0	\$0	\$0	\$0	\$0	(\$26)	(\$10)	(\$67)	\$0	\$102	\$102	(\$135)
2020	\$0	\$0	\$0	\$0	\$0	(\$27)	(\$10)	(\$68)	\$0	\$104	\$104	(\$111)
2021	\$0	\$0	\$0	\$0	\$0	(\$28)	(\$10)	(\$69)	\$0	\$107	\$107	(\$89)
2022	\$0	\$0	\$0	\$0	\$0	(\$29)	(\$11)	(\$70)	\$0	\$109	\$109	(\$67)
2023	\$0	\$0	\$0	\$0	\$0	(\$29)	(\$11)	(\$71)	\$0	\$111	\$111	(\$47)
2024	\$0	\$0	\$0	\$0	\$0	(\$30)	(\$11)	(\$72)	\$0	\$113	\$113	(\$28)
2025	\$0	\$0	\$0	\$0	\$0	(\$31)	(\$12)	(\$73)	\$0	\$116	\$116	(\$10)
2026	\$0	\$0	\$0	\$0	\$0	(\$32)	(\$12)	(\$74)	\$0	\$118	\$118	\$7
2027	\$0	\$0	\$0	\$0	\$0	(\$33)	(\$13)	(\$75)	\$0	\$121	\$121	\$23
2028	\$0	\$0	\$0	\$0	\$0	(\$34)	(\$13)	(\$76)	\$0	\$123	\$123	\$38
2029	\$0	\$0	\$0	\$0	\$0	(\$35)	(\$13)	(\$77)	\$0	\$126	\$126	\$53
2030	\$0	\$0	\$0	\$0	\$0	(\$36)	(\$14)	(\$79)	\$0	\$129	\$129	\$66
<b>Nominal NPV</b>		\$105	\$880	\$0	\$0	(\$649)	(\$239)	(\$1,668)	\$985	\$2,556	\$1,571	
		\$76	\$622	\$0	\$0	(\$186)	(\$67)	(\$512)	\$698	\$765	\$66	
		Discount Rate = 8.07%										
		Benefit/Cost Ratio = 1.09										





