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FPSC - COMMISSION CLERK

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GULF POWER
A SOUTHERN COMPANY

April 24, 2015

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

Re: Docket No. 150086-EG

Dear Ms. Stauffer:

Enclosed are the original and five copies of Gulf Power Company's response to Staff's First Data Request pertaining to Gulf's petition for approval of its demand-side management plan. Also enclosed is a DVD containing electronic versions of all tables in Excel format as requested.

Sincerely,

Robert L. McGee, Jr.
Regulatory and Pricing Manager

COM ____
AFD ____
APA ____
ECO 2
ENG 2+CD
GCL 1
IDM ____
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Enclosures

cc: Florida Public Service Commission
Lee Eng Tan, Senior Attorney, Office of General Counsel
Beggs & Lane
Jeffrey A. Stone, Esq.

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1. Please provide the estimated costs of each program's incentives, administrative & equipment costs, and total costs for the ten-year goals period (nominal and net present value). Also, please provide the percentage of total costs that are used for incentives by program. As part of this response, please provide an electronic version of the table below in Excel format with your response.

Program Costs (Nominal)				
Program Name	Incentives	Administrative & Equipment	Total	Percent Incentives
[Residential]				
Residential Subtotal				
[Comm/Industrial]				
Comm/Ind. Subtotal				
Common Expenses				
Total				

Program Costs (NPVI)				
Program Name	Incentives	Administrative & Equipment	Total	Percent Incentives
[Residential]				
Residential Subtotal				
[Comm/Industrial]				
Comm/Ind. Subtotal				
Common Expenses				
Total				

RESPONSE:

See tables on pages 2 and 3.

Program Costs (Nominal) ($000s)				
Program Name	**Incentives**	**Administrative & Equipment**	**Total**	**Percent Incentives**
Residential Programs				
Residential Energy Audit & Education	-	27,370	27,370	0%
Residential Community Energy Saver	1,375	5,000	6,375	22%
Residential HVAC Maintenance	3,305	4,131	7,436	44%
Residential HVAC Quality Installation	2,738	4,563	7,300	38%
Residential Duct Repair	2,775	2,313	5,088	55%
Residential High Performance Window	1,037	363	1,399	74%
Residential Reflective Roof	1,420	89	1,509	94%
Residential Energy Star Window A/C	50	20	70	71%
Energy Select	-	74,316	74,316	0%
Residential Program Subtotal	**12,699**	**118,164**	**130,863**	**10%**
Commercial/Industrial Programs				
Comm/Industrial Energy Audit	-	9,087	9,087	0%
Commercial HVAC Retrocommissioning	283	353	636	44%
Commercial Geothermal Heat Pump	441	441	883	50%
Commercial Ceiling/Roof Insulation	593	593	1,185	50%
Commercial Reflective Roof	875	875	1,750	50%
Commercial/Industrial Programs Subtotal	**2,191**	**11,349**	**13,540**	**16%**
Total	**14,891**	**129,512**	**144,403**	**10%**

Program Costs (NPV) ($000s)				
Program Name	Incentives	Administrative & Equipment	Total	Percent Incentives
Residential Programs				
Residential Energy Audit & Education	-	18,491	18,491	0%
Residential Community Energy Saver	929	3,378	4,307	22%
Residential HVAC Maintenance	2,027	2,534	4,561	44%
Residential HVAC Quality Installation	1,712	2,854	4,567	37%
Residential Duct Repair	1,609	1,341	2,949	55%
Residential High Performance Window	629	220	849	74%
Residential Reflective Roof	854	53	908	94%
Residential Energy Star Window A/C	34	14	47	71%
Energy Select	-	48,797	48,797	0%
Residential Program Subtotal	**7,794**	**77,681**	**85,475**	**9%**
Commercial/Industrial Programs				
Comm/Industrial Energy Audit	-	6,139	6,139	0%
Commercial HVAC Retrocommissioning	185	232	417	44%
Commercial Geothermal Heat Pump	282	282	565	50%
Commercial Ceiling/Roof Insulation	374	374	747	50%
Commercial Reflective Roof	580	580	1,159	50%
Commercial/Industrial Programs Subtotal	**1,421**	**7,606**	**9,027**	**16%**
Total	**9,215**	**85,287**	**94,503**	**10%**

2. Please provide the estimated costs of each program's administrative & equipment costs, costs for the ten-year goals period (nominal and net present value), broken into the categories detailed in the table below. As part of this response, please provide an electronic version of the table below in Excel format with your response.

Program Administrative & Equipment Costs (Nominal)									
Program Name	Depreciation & Return	Payroll & Benefits	Materials & Supplies	Outside Services	Advertising	Vehicles & Travel	Other	Revenues (if any)	Total
[Residential]									
Residential Total									
[Comm/Ind.]									
Comm/Ind. Total									
Common Expenses									
Total									

Program Administrative & Equipment Costs (NPV)									
Program Name	Depreciation & Return	Payroll & Benefits	Materials & Supplies	Outside Services	Advertising	Vehicles & Travel	Other	Revenues (if any)	Total
[Residential]									
Residential Total									
[Comm/Ind.]									
Comm/Ind. Total									
Common Expenses									
Total									

RESPONSE:

Gulf provides responses in the following tables based upon participation projections developed as part of its proposed DSM Plan. In the absence of an approved Plan, Gulf has estimated administrative and equipment costs based upon historical program breakdowns and without new contractual agreements in place for outside services.

Program Administrative & Equipment Costs (Nominal)									
Program Name	Depreciation & Return	Payroll & Benefits	Materials & Supplies	Outside Services	Advertising	Vehicles & Travel	Other	Revenues (if any)	Total
Residential Energy Audit and Education	$ 100,150	$19,520,100	$ 2,283,773	$ -	$ 3,500,000	$ 696,257	$ -	$ -	$ 27,376,280
Residential Community Energy Saver	$ -	$ 227,500	$ 22,500	$ 4,750,000	$ -	$ -	$ -	$ -	$ 5,000,000
Residential Custom Incentive	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Residential HVAC Maintenance	$ -	$ 735,363	$ 57,838	$ 3,305,000	$ -	$ 33,050	$ -	$ -	$ 4,131,250
Residential HVAC Quality Installation	$ -	$ 852,125	$ 63,875	$ 3,650,000	$ -	$ 36,500	$ -	$ -	$ 4,562,500
Residential Duct Repair	$ -	$ 411,625	$ 32,375	$ 1,850,000	$ -	$ 18,500	$ -	$ -	$ 2,312,500
Residential High Performance Window	$ -	$ 304,500	$ 43,500	$ 10,875	$ -	$ 3,675	$ -	$ -	$ 362,500
Residential Reflective Roof	$ -	$ 74,550	$ 10,650	$ 2,663	$ -	$ 888	$ -	$ -	$ 88,750
Residential Energy Star Window A/C	$ -	$ 10,200	$ 2,000	$ 7,800	$ -	$ 300	$ -	$ -	$ 20,000
Energy Select	$ 26,108,587	$15,494,866	$ 12,014,237	$17,178,314	$ 3,421,875	$ 97,877	$ -	$ -	$ 74,315,757
Residential Total	$ 26,208,737	$37,830,828	$ 14,540,748	$30,756,452	$ 6,921,875	$1,146,896	$ -	$ -	$ 118,183,337
									$ -
Commercial/Industrial Energy Audit	$ -	$ 2,664,900	$ 882,923	$ 103,687	$ -	$ 165,900	$ -	$ -	$ 3,817,410
Commercial HVAC Retrocommissioning	$ -	$ 24,013	$ 44,494	$ 282,500	$ -	$ 2,119	$ -	$ -	$ 353,125
Commercial Geothermal Heat Pump	$ -	$ 283,888	$ 90,888	$ 4,413	$ -	$ 22,063	$ -	$ -	$ 441,250
Commercial Ceiling/Roof Insulation	$ -	$ 515,475	$ 41,475	$ 5,925	$ -	$ 29,625	$ -	$ -	$ 592,500
Commercial Reflective Roof	$ -	$ 261,250	$ 83,250	$ 8,750	$ -	$ 43,750	$ -	$ -	$ 875,000
Commercial /Industrial Custom Incentive	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Comm/Ind. Total	$ -	$ 3,659,586	$ 1,062,800	$ 405,275	$ -	$ 263,456	$ -	$ -	$ 11,348,925
Common Expenses	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total	$ 26,208,737	$41,210,414	$ 15,603,548	$31,458,727	$ 6,921,875	$1,410,352	$ -	$ -	$ 129,532,262

Program Administrative & Equipment Costs (NPV)									
Program Name	Depreciation & Return	Payroll & Benefits	Materials & Supplies	Outside Services	Advertising	Vehicles & Travel	Other	Revenues (if any)	Total
Residential Energy Audit and Education	$ 67,600	$13,187,281	$ 2,225,869	$ -	$ 2,364,511	$ 696,023	$ -	$ -	$18,890,662
Residential Community Energy Saver	$ -	$ 153,693	$ 15,200	$ 3,208,979	$ -	$ -	$ -	$ -	$ 3,377,872
Residential Custom Incentive	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Residential HVAC Maintenance	$ -	$ 451,022	$ 35,474	$ 2,027,064	$ -	$ 20,271	$ -	$ -	$ 2,533,830
Residential HVAC Quality Installation	$ -	$ 509,032	$ 38,158	$ 2,180,280	$ -	$ 21,803	$ -	$ -	$ 2,854,117
Residential Duct Repair	$ -	$ 238,611	$ 18,767	$ 1,072,409	$ -	$ 10,734	$ -	$ -	$ 1,340,511
Residential High Performance Window	$ -	$ 154,904	$ 26,401	$ 6,600	$ -	$ 2,200	$ -	$ -	$ 220,004
Residential Reflective Roof	$ -	$ 44,844	$ 6,406	$ 1,602	$ -	$ 534	$ -	$ -	$ 53,386
Residential Energy Star Window A/C	$ -	$ 6,881	$ 1,351	$ 5,134	$ -	$ 135	$ -	$ -	$ 13,511
Energy Select	$ 17,143,397	$10,174,225	$ 7,888,778	$11,279,610	$ 2,246,869	$ 64,268	$ -	$ -	$48,797,146
Residential Total	$ 17,211,996	$24,949,493	$ 10,257,534	$19,884,687	$ 4,611,379	$ 796,967	$ -	$ -	$77,681,035
									$ -
Commercial/Industrial Energy Audit	$ -	$ 3,360,663	$ 596,190	$ 76,048	$ -	$ 112,077	$ -	$ -	$ 4,144,979
Commercial HVAC Retrocommissioning	$ -	$ 15,759	$ 29,201	$ 185,400	$ -	$ 1,391	$ -	$ -	$ 231,751
Commercial Geothermal Heat Pump	$ -	$ 245,615	$ 78,762	$ 3,822	$ -	$ 19,119	$ -	$ -	$ 347,316
Commercial Ceiling/Roof Insulation	$ -	$ 325,145	$ 26,161	$ 3,737	$ -	$ 18,686	$ -	$ -	$ 373,729
Commercial Reflective Roof	$ -	$ 504,749	$ 40,572	$ 5,796	$ -	$ 28,980	$ -	$ -	$ 579,596
Commercial /Industrial Custom Incentive	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Comm/Ind. Total	$ -	$ 4,451,430	$ 771,885	$ 287,805	$ -	$ 179,250	$ -	$ -	$ 5,806,371
Common Expenses	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total	$ 17,211,996	$29,400,923	$ 11,029,419	$20,172,492	$ 4,611,379	$ 976,217	$ -	$ -	$83,487,406

3. For each program that includes "Outside Services" costs in Data Request No. 2 above, please detail what those "Outside Services" include.

RESPONSE:

Community Energy Saver Program - Outside Services includes vendor expenses for program management and delivery.

Residential HVAC Efficiency Improvement and Commercial HVAC Retrocommissioning programs - Includes program management services such as: contractor and technician training, contractor technical assistance, quality assurance inspections, contractor relations, reporting, incentive processing, records retention and administration of participant surveys.

Energy Select - Outside Services are being provided for Equipment installation and maintenance, software hosting and support for the applications used in managing the program, marketing services, customer communication and paging services.

Additional Outside Services expenses are incurred for the High Performance Window, Reflective Roof, Energy Star Window A/C, Geothermal Heat Pump, Ceiling/Roof Insulation and Reflective Roof programs to facilitate the issuance and tracking of incentive payments to customers.

4. For each program that includes "Other" costs in Data Request No. 2 above, please detail what those "Other" costs include.

RESPONSE:

Not applicable.

5. Please provide the estimated costs of each program's incentive costs, costs for the ten-year goals period (nominal and net present value), broken into the categories detailed in the table below. As part of this response, please provide an electronic version of the table below in Excel format with your response.

Program Incentives (Nominal)			
Program Name	Incentives (Non-Recurring)	Incentives (Recurring)	Total
[Residential]			
Residential Subtotal			
[Comm/Industrial]			
Comm/Ind. Subtotal			
Common Expenses			
Total			

Program Incentives (NPV)			
Program Name	Incentives (Non-Recurring)	Incentives (Recurring)	Total
[Residential]			
Residential Subtotal			
[Comm/Industrial]			
Comm/Ind. Subtotal			
Common Expenses			
Total			

RESPONSE:

See tables on pages 2 and 3.

Program Incentives (Nominal) ($000s)			
Program Name	Incentives (Non-Recurring)	Incentives (Recurring)	Total
Residential Programs			
Residential Community Energy Saver	1,375	-	1,375
Residential HVAC Maintenance	3,305	-	3,305
Residential HVAC Quality Installation	2,738	-	2,738
Residential Duct Repair	2,775	-	2,775
Residential High Performance Window	1,037	-	1,037
Residential Reflective Roof	1,420	-	1,420
Residential Energy Star Window A/C	50	-	50
Energy Select	-	-	-
Residential Program Subtotal	**12,699**	**-**	**12,699**
Commercial/Industrial Programs			
Commercial HVAC Retrocommissioning	283	-	283
Commercial Geothermal Heat Pump	441	-	441
Commercial Ceiling/Roof Insulation	593	-	593
Commercial Reflective Roof	875	-	875
Commercial/Industrial Programs Subtotal	**2,191**	**-**	**2,191**
Total	**14,891**	**-**	**14,891**

Program Incentives (NPV) ($000s)			
Program Name	Incentives (Non-Recurring)	Incentives (Recurring)	Total
Residential Programs			
Residential Community Energy Saver	929	-	929
Residential HVAC Maintenance	2,027	-	2,027
Residential HVAC Quality Installation	1,712	-	1,712
Residential Duct Repair	1,609	-	1,609
Residential High Performance Window	629	-	629
Residential Reflective Roof	854	-	854
Residential Energy Star Window A/C	34	-	34
Energy Select	-	-	-
Residential Program Subtotal	**7,794**	**-**	**7,794**
Commercial/Industrial Programs			
Commercial HVAC Retrocommissioning	185	-	185
Commercial Geothermal Heat Pump	282	-	282
Commercial Ceiling/Roof Insulation	374	-	374
Commercial Reflective Roof	580	-	580
Commercial/Industrial Programs Subtotal	**1,421**	**-**	**1,421**
Total	**9,215**	**-**	**9,215**

6. Please provide for each program with demand and energy savings the net present value of the benefits and costs described in the Rate Impact Measure Test and detailed in the table below. As part of this response, please provide an electronic version of the table below in Excel format with your response.

Program Name	Benefits					Costs					Net Benefit
	Gen	T&D	Fuel	Other	Total	Utility	Incentives	Lost Revenues	Other	Total	
[Residential]											
Residential Subtotal											
[Comm/Industrial]											
Comm/Ind. Subtotal											
Total											

RESPONSE:

Program Name	Benefits ($000s)					Costs ($000s)					Net Benefit
	Gen	T&D	Fuel	Other	Total	Utility	Incentives	Lost Revenues	Other	Total	
Residential Programs											
Residential Community Energy Saver	1,078	841	13,436	-	15,355	3,378	929	25,129	-	29,436	(14,080)
Residential HVAC Maintenance	6,934	4,931	13,059	-	24,925	2,534	2,027	24,033	-	28,594	(3,668)
Residential HVAC Quality Installation	5,685	4,118	10,865	-	20,669	2,854	1,712	20,067	-	24,633	(3,965)
Residential Duct Repair	2,421	1,633	3,490	-	7,545	1,341	1,609	6,372	-	9,321	(1,776)
Residential High Performance Window	1,336	942	1,827	-	4,105	220	629	3,360	-	4,209	(104)
Residential Reflective Roof	1,289	902	2,339		4,530	53	854	4,295	-	5,203	(673)
Residential Energy Star Window A/C	77	60	115	-	251	14	34	214	-	262	(10)
Energy Select	21,178	17,581	6,901	-	45,659	17,092	-	18,867	-	35,959	9,700
Residential Program Subtotal	**39,999**	**31,009**	**52,031**	**-**	**123,039**	**27,485**	**7,794**	**102,337**	**-**	**137,616**	**(14,577)**
Commercial/Industrial Programs											
Commercial HVAC Retrocommissioning	755	574	1,824	-	3,153	232	185	3,045	-	3,462	(309)
Commercial Geothermal Heat Pump	456	338	795	-	1,588	282	282	1,409	-	1,973	(386)
Commercial Ceiling/Roof Insulation	1,615	1,181	1,921	-	4,717	374	374	3,565	-	4,312	405
Commercial Reflective Roof	5,225	4,003	10,146	-	19,374	580	580	17,732	-	18,892	483
Commercial/Industrial Programs Subtotal	**8,051**	**6,095**	**14,686**	**-**	**28,832**	**1,467**	**1,421**	**25,751**	**-**	**28,639**	**193**
Total	**48,050**	**37,104**	**66,717**	**-**	**151,872**	**28,952**	**9,215**	**128,088**	**-**	**166,255**	**(14,384)**

7. Please provide for each program with demand and energy savings the net present value of the benefits and costs described in the Total Resource Cost Test and detailed in the table below. As part of this response, please provide an electronic version of the table below in Excel format with your response.

Program Name	Benefits					Costs				Net Benefit
	Gen	T&D	Fuel	Other	Total	Utility	Participant	Other	Total	
[Residential]										
Residential Subtotal										
[Comm/Industrial]										
Comm/Ind. Subtotal										
Total										

RESPONSE:

Program Name	Benefits ($000s)					Costs ($000s)				Net Benefit
	Gen	T&D	Fuel	Other	Total	Utility	Participant	Other	Total	
Residential Programs										
Residential Community Energy Saver	1,078	841	13,436	-	15,355	3,378	929	-	4,307	11,048
Residential HVAC Maintenance	6,934	4,931	13,059	-	24,925	2,534	4,054	-	6,588	18,337
Residential HVAC Quality Installation	5,685	4,118	10,865	-	20,669	2,854	2,283	-	5,137	15,531
Residential Duct Repair	2,421	1,633	3,490	-	7,545	1,341	4,826	-	6,166	1,378
Residential High Performance Window	1,336	942	1,827	-	4,105	220	2,508	-	2,728	1,377
Residential Reflective Roof	1,289	902	2,339		4,530	53	1,134	-	1,187	3,342
Residential Energy Star Window A/C	77	60	115	-	251	14	59	-	73	178
Energy Select	21,178	17,581	6,901	-	45,659	17,092	-	-	17,092	28,568
Residential Program Subtotal	**39,999**	**31,009**	**52,031**	**-**	**123,039**	**27,485**	**15,794**	**-**	**43,279**	**79,760**
Commercial/Industrial Programs										
Commercial HVAC Retrocommissioning	755	574	1,824	-	3,153	232	578	-	810	2,343
Commercial Geothermal Heat Pump	456	338	795	-	1,588	282	608	-	890	698
Commercial Ceiling/Roof Insulation	1,615	1,181	1,921	-	4,717	374	1,221	-	1,595	3,123
Commercial Reflective Roof	5,225	4,003	10,146	-	19,374	580	7,883	-	8,462	10,912
Commercial/Industrial Programs Subtotal	**8,051**	**6,095**	**14,686**	**-**	**28,832**	**1,467**	**10,290**	**-**	**11,757**	**17,075**
Total	**48,050**	**37,104**	**66,717**	**-**	**151,872**	**28,952**	**26,083**	**-**	**55,036**	**96,836**

8. Please provide for each program with demand and energy savings the net present value of the benefits and costs described in the Participants Test and detailed in the table below. As part of this response, please provide an electronic version of the table below in Excel format with your response.

Program Name	Benefits					Costs				Net Benefit
	Bill Savings	Tax Credits	Incentive	Other	Total	Equipment	O&M	Other	Total	
[Residential]										
Residential Subtotal										
[Comm/Industrial]										
Comm/Ind. Subtotal										
Total										

RESPONSE:

Program Name	Benefits ($000s)					Costs ($000s)				Net Benefit
	Bill Savings	Tax Credits	Incentive	Other	Total	Equipment	O&M	Other	Total	
Residential Programs										
Residential Community Energy Saver	25,129	-	929	-	26,058	929	-	-	929	25,129
Residential HVAC Maintenance	24,033	-	2,027	-	26,060	4,054	-	-	4,054	22,006
Residential HVAC Quality Installation	20,067	-	1,712	-	21,779	2,283			2,283	19,496
Residential Duct Repair	6,372	-	1,609	-	7,981	4,826	-	-	4,826	3,155
Residential High Performance Window	3,360	-	629	-	3,989	2,508	-	-	2,508	1,481
Residential Reflective Roof	4,295	-	854	-	5,149	1,134	-	-	1,134	4,015
Residential Energy Star Window A/C	214	-	34	-	248	59	-	-	59	189
Energy Select	18,867	-	-	-	18,867	-	-	-	-	18,867
Residential Program Subtotal	**102,337**	**-**	**7,794**	**-**	**110,131**	**15,794**	**-**	**-**	**15,794**	**94,337**
Commercial/Industrial Programs										
Commercial HVAC Retrocommissioning	3,045	-	185	-	3,230	578	-	-	578	2,652
Commercial Geothermal Heat Pump	1,409	-	282	-	1,691	1,694	(1,086)	-	608	1,083
Commercial Ceiling/Roof Insulation	3,565	-	374	-	3,939	1,221	-	-	1,221	2,718
Commercial Reflective Roof	17,732	-	580	-	18,312	7,883	-	-	7,883	10,429
Commercial/Industrial Programs Subtotal	**25,751**	**-**	**1,421**	**-**	**27,172**	**11,376**	**(1,086)**	**-**	**10,290**	**16,882**
Total	**128,088**	**-**	**9,215**	**-**	**137,303**	**27,169**	**(1,086)**	**-**	**26,083**	**111,220**

9. Please provide the actual and projected Energy Conservation Cost Recovery Clause annual funds in nominal dollars for the period 2010 through 2024. As part of this response, please provide an electronic version of the table below in Excel format with your response.

Year	ECCR Expenditures
2010	
2011	
2012	
2013	
2014	
2015	
2016	
2017	
2018	
2019	
2020	
2021	
2022	
2023	
2024	

RESPONSE:

Year	ECCR Expenditures ($)
2010	9,859,407
2011	15,003,596
2012	22,885,826
2013	27,431,962
2014	17,412,618
2015	11,957,587
2016	12,098,137
2017	12,328,687
2018	12,742,087
2019	13,337,637
2020	14,451,501
2021	15,465,991
2022	16,429,155
2023	17,347,945
2024	18,244,234

2015 ECCR annual expenditure projected based upon 2015 Proposed DSM Plan.

10. Please provide the actual and projected monthly customer bill associated with the ECCR for a residential and commercial/industrial customer with the usage described in the table below, in nominal dollars. Please also provide the actual and projected total monthly customer bill. As part of this response, please provide an electronic version of the table below in Excel format with your response.

Year	Residential Customer 1,200 kWh/mo		Commercial/Industrial Customer 400,000 kWh/mo & 1,000 kW Peak	
	ECCR Portion ($)	Total Bill ($)	ECCR Portion ($)	Total Bill ($)
2010				
2011				
2012				
2013				
2014				
2015				
2016				
2017				
2018				
2019				
2020				
2021				
2022				
2023				
2024				

RESPONSE:

See table on page 2.

Year	Residential Customer 1,200 kWh/mo		Commercial/Industrial Customer 400,000 kWh/mo & 1,000 kW Peak	
	ECCR Portion ($)	Total Bill ($)	ECCR Portion ($)	Total Bill ($)
*2010	1.30	149.36	380.00	40,842.41
*2011	0.96	145.15	284.00	39,529.58
*2012	3.07	148.72	956.00	40,138.58
*2013	2.71	139.58	840.00	35,982.88
*2014	2.71	154.71	836.00	39,549.06
*2015	3.11	163.33	960.00	41,839.14
2016	1.39	161.57	408.51	41,273.50
2017	1.40	161.58	411.77	41,276.84
2018	1.43	161.61	422.22	41,287.56
2019	1.49	161.67	442.32	41,308.18
2020	1.60	161.80	476.02	41,342.74
2021	1.70	161.90	505.37	41,372.84
2022	1.80	161.99	532.10	41,400.26
2023	1.88	162.08	556.95	41,425.75
2024	1.97	162.17	580.49	41,449.89

*Years 2010-2015 reflect actual rates in effect at January 1 of each year.

11. Do any of the programs in the company's DSM Plan include savings associated with Compact Fluorescent Lightbulbs? If so, please identify the baseline used.

RESPONSE:

Yes. The Community Energy Saver program includes the provision and installation of up to five compact fluorescent bulbs. This is a direct install program which removes existing operational incandescent bulbs and replaces them with compact fluorescent bulbs. Therefore the baseline is estimated to be an average 65 watt incandescent bulb for each replacement as opposed to what might be expected to be replaced on burnout due to the Energy Independence and Security Act (EISA) standards.

12. Please identify each program in the company's DSM Plan that include measures with an estimated 2 year or less payback period, and which measures are included by program.

RESPONSE:

The Community Energy Saver program contains the following measures that have been identified as having a two year or less payback:

Compact fluorescent light bulbs
Faucet aerators
Low-flow showerheads

13. For each program that includes measures with an estimated 2 year or less payback period, please provide the amount of savings (kWh, Win kW, and Sum kW) associated with these measures for each program and for the entire DSM Plan. As part of this response, please provide an electronic version of the table below in Excel format with your response.

[Program Name or DSM Plan Combined]						
Year	Program Savings from 2-Year Payback Measures (Savings @ Generator)					
	Per Customer			Total Annual		
	kWh Reduction	Winter kW Reduction	Summer kW Reduction	kWh Reduction	Winter kW Reduction	Summer kW Reduction
2015						
2016						
2017						
2018						
2019						
2020						
2021						
2022						
2023						
2024						

RESPONSE:

Residential Community Energy Saver						
Year	Program Savings from 2-Year Payback Measures (Savings @ Generator)					
	Per Customer			Total Annual		
	kWh Reduction	Winter kW Reduction	Summer kW Reduction	kWh Reduction	Winter kW Reduction	Summer kW Reduction
2015	761	0.12	0.06	1,903,298	305	139
2016	761	0.12	0.06	1,903,298	305	139
2017	761	0.12	0.06	1,903,298	305	139
2018	761	0.12	0.06	1,903,298	305	139
2019	761	0.12	0.06	1,903,298	305	139
2020	761	0.12	0.06	1,903,298	305	139
2021	761	0.12	0.06	1,903,298	305	139
2022	761	0.12	0.06	1,903,298	305	139
2023	761	0.12	0.06	1,903,298	305	139
2024	761	0.12	0.06	1,903,298	305	139

14. Please provide the annual avoided cost savings associated with each of the following four scenarios for a measure that reduces energy or demand by: 1,000 kWh, 1 kW Summer Demand, 1 kW Winter Demand, or 1 kW Summer and Winter Demand. Please provide the savings through the longest time period used to evaluate the programs in your DSM Plan.

Year	Savings by Measure Type							
	1,000 kWh		1 kW Summer		1 kW Winter		1 kW Sum & Win	
	Nominal	Real	Nominal	Real	Nominal	Real	Nominal	Real
2015								
2016								
2017								
2018								
2019								
2020								
2021								
2022								
2023								
2024								

RESPONSE:

See table on page 2.

Year	Savings by Measure Type ($000s)							
	1,000 kWh		1 kW Summer		1 kW Winter		1kW Sum & Win	
	Nominal	Real	Nominal	Real	Nominal	Real	Nominal	Real
2015	$42	$39	$71	$66	0	0	$71	$66
2016	$96	$82	$144	$124	0	0	$144	$124
2017	$157	$125	$220	$176	0	0	$220	$176
2018	$218	$161	$299	$221	0	0	$299	$221
2019	$288	$197	$381	$261	0	0	$381	$261
2020	$367	$233	$465	$296	0	0	$465	$296
2021	$458	$270	$552	$326	0	0	$552	$326
2022	$555	$303	$643	$351	0	0	$643	$351
2023	$669	$339	$2,009	$1,018	0	0	$2,009	$1,018
2024	$744	$349	$2,273	$1,067	0	0	$2,273	$1,067
2025	$778	$339	$2,314	$1,008	0	0	$2,314	$1,008
2026	$810	$327	$2,356	$951	0	0	$2,356	$951
2027	$847	$317	$2,399	$898	0	0	$2,399	$898
2028	$897	$311	$2,443	$848	0	0	$2,443	$848
2029	$931	$300	$2,488	$801	0	0	$2,488	$801
2030	$979	$292	$2,533	$756	0	0	$2,533	$756
2031	$1,017	$281	$2,579	$714	0	0	$2,579	$714
2032	$1,058	$271	$2,627	$674	0	0	$2,627	$674
2033	$1,112	$265	$2,675	$636	0	0	$2,675	$636
2034	$1,165	$257	$2,724	$601	0	0	$2,724	$601
2035	$1,207	$247	$2,774	$567	0	0	$2,774	$567
2036	$1,256	$238	$2,825	$536	0	0	$2,825	$536
2037	$1,297	$228	$2,876	$506	0	0	$2,876	$506
2038	$1,351	$220	$2,928	$477	0	0	$2,928	$477
2039	$1,415	$214	$2,981	$451	0	0	$2,981	$451
2040	$1,462	$205	$3,035	$425	0	0	$3,035	$425
2041	$1,545	$201	$3,090	$402	0	0	$3,090	$402
2042	$1,588	$191	$3,146	$379	0	0	$3,146	$379
2043	$1,655	$185	$3,203	$358	0	0	$3,203	$358

* Values provided above assume 1,000 participants per year for the 10 year plan period for cumulative participation of 10,000.

The company conducts planning based on a summer peaking condition therefore no value is assigned to winter demand savings within the cost effectiveness evaluations. This accounts for the zero values shown in the table above under the 1 kW Winter Scenario.

15. For each demand response program, use the table below to provide the information listed on an annual basis for customer participation. Please also provide a summary of all demand response programs using the chart below. As part of this response, please provide an electronic version of the table below in Excel format with your response.

[All Demand Response Programs Combined or By Demand Response Program Name]									
Year	Average Number of Participants	Available Capacity (MW)		New Participants	Added Capacity (MW)		Participants Lost	Lost Capacity (MW)	
		Sum	Win		Sum	Win		Sum	Win
2005									
2006									
2007									
2008									
2009									
2010									
2011									
2012									
2013									
2014									

RESPONSE:

Energy Select									
Year	Average Number of Participants	Available Capacity (MW)		New Participants	Added Capacity (MW)		Participants Lost	Lost Capacity (MW)	
		Sum	Win		Sum	Win		Sum	Win
2005	6,300	14.3	18.2	2,023	4.6	5.8	525	1.2	1.5
2006	7,318	16.6	21.1	1,990	4.5	5.8	648	1.5	1.9
2007	8,294	18.8	24.0	1,387	3.1	4.0	751	1.7	2.2
2008	8,774	19.9	25.4	598	1.4	1.7	839	1.9	2.4
2009	8,833	20.1	25.5	1,390	3.2	4.0	1,286	2.9	3.7
2010	8,769	19.9	25.3	1,082	2.5	3.1	1,684	3.8	4.9
2011	8,633	19.6	24.9	984	2.2	2.8	790	1.8	2.3
2012	9,579	21.7	27.7	2,215	5.0	6.4	399	0.9	1.2
2013	11,553	26.2	33.4	2,943	6.7	8.5	810	1.8	2.3
2014	13,504	30.7	39.0	2,468	5.6	7.1	655	1.5	1.9

16. For each demand response program, use the table below to provide the information listed on an annual basis in seasonal peak demand and number of participants. Please also provide a summary of all demand response programs using the chart below. As part of this response, please provide an electronic version of the table below in Excel format with your response.

[All Demand Response Programs Combined or By Demand Response Program Name]										
Year	Summer					Winter				
	Number of Events	Average Event Size		Maximum Event Size		Number of Events	Average Event Size		Maximum Event Size	
	(MW)	(MW)	(Part.)	(MW)	(Part.)	(MW)	(MW)	(Part.)	(MW)	(Part.)
2005										
2006										
2007										
2008										
2009										
2010										
2011										
2012										
2013										
2014										

RESPONSE:

Energy Select										
Year	Summer					Winter				
	Number of Events	Average Event Size		Maximum Event Size		Number of Events	Average Event Size		Maximum Event Size	
		(MW)	(Part.)	(MW)	(Part.)		(MW)	(Part.)	(MW)	(Part.)
2005	3	14.3	6,300	14.3	6,300	0	N/A	N/A	N/A	N/A
2006	4	16.6	7,318	16.6	7,318	2	21.1	7,318	21.1	7,318
2007	7	18.8	8,294	18.8	8,294	1	24.0	8,294	24.0	8,294
2008	1	19.9	8,774	19.9	8,774	2	25.4	8,774	25.4	8,774
2009	3	20.1	8,833	20.1	8,833	2	25.5	8,833	25.5	8,833
2010	8	19.9	8,769	19.9	8,769	6	25.3	8,769	25.3	8,769
2011	6	19.6	8,633	19.6	8,633	3	24.9	8,633	24.9	8,633
2012	2	21.7	9,579	21.7	9,579	0	N/A	N/A	N/A	N/A
2013	0	N/A	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A
2014	2	30.7	13,504	30.7	13,504	8	39.0	13,504	39.0	13,504

17. For each demand response program, use the table below to provide the information listed on an annual basis for seasonal peak activations. Please also provide a summary of all demand response programs using the chart below. As part of this response, please provide an electronic version of the table below in Excel format with your response.

[All Demand Response Programs Combined or By Demand Response Program Name]							
		Summer Peak			Winter Peak		
Years	Average Number of Participants	Activated During Peak? (Y/N)	# of Participants Activated (MW)	Capacity Activated (MW)	Activated During Peak? (Y/N)	# of Participants Activated (MW)	Capacity Activated (MW)
2005							
2006							
2007							
2008							
2009							
2010							
2011							
2012							
2013							
2014							

RESPONSE:

Energy Select							
		Summer Peak			Winter Peak		
Years	Average Number of Participants	Activated During Peak? (Y/N)	# of Participants Activated	Capacity Activated (MW)	Activated During Peak? (Y/N)	# of Participants Activated	Capacity Activated (MW)
2005	6,300	Y	6,300	14.3	N	N/A	N/A
2006	7,318	Y	7,318	16.6	Y	7,318	21.1
2007	8,294	Y	8,294	18.8	Y	8,294	24.0
2008	8,774	Y	8,774	19.9	Y	8,774	25.4
2009	8,833	Y	8,833	20.1	Y	8,833	25.5
2010	8,769	Y	8,769	19.9	Y	8,769	25.3
2011	8,633	Y	8,633	19.6	Y	8,633	24.9
2012	9,579	Y	9,579	21.7	N	N/A	N/A
2013	11,553	N	N/A	N/A	N	N/A	N/A
2014	13,504	Y	13,504	30.7	Y	13,504	39.0

18. For each demand response program, please describe whether the current credit is based upon the company's most recent avoided unit. If not, please explain why and provide how the credit was derived.

RESPONSE:

Gulf does not utilize demand curtailment credits for the Energy Select program. This program is a price responsive load management program with no bill credits provided to the participating customer.

19. For each demand response program, please provide the credit amount that would reduce the value of the program's RIM Test to 1.0.

RESPONSE:

Not applicable.

20. For each demand response program, please discuss whether the company considered reducing the credit provided to customers. As part of this response, please discuss the impacts a lower credit would have on existing participation levels.

RESPONSE:

Not applicable.

21. Please discuss the methodology used to estimate expected participation for each program proposed by your company.

RESPONSE:

For continuing programs, Gulf reviewed the historical participation in the program with consideration given to projected changes in incentive levels, administrative budgets, market conditions, market opportunities and Gulf's total annual DSM goal.

For new programs, Gulf considered the historical participation in similar or related programs along with incentive levels, administrative budgets, market conditions, market opportunities and Gulf's total annual DSM goal.

22. Please compare the projected participation rates of continuing programs with the actual participation rates for the previous ten years (or less, depending upon the start date of the program).

RESPONSE:

Residential Energy Audit
The participation rate for this program is slightly higher than the previous two years but approximately equivalent to its historical average participation.

Residential Community Energy Saver
The participation rate for this program is slightly higher than the previous two years but approximately equivalent to its historical average participation.

Residential Custom Incentive
Gulf has not identified specific eligible projects or estimated customer participation in this program but maintains its availability for use as needed.

Residential HVAC Maintenance
The projected participation rate of this program is significantly lower than the actual program participants through the previous four year period.

Residential Duct Repair
The projected participation rate of this program is significantly lower than the actual program participants through the previous four year period.

Residential High Performance Windows
The projected participation rate of this program is significantly lower than the actual program participants through the previous four year period. However, the average 10 year projection is approximately equivalent to the average historical participation.

Residential Reflective Roof
The average of the first five years of projected participation of this program is approximately equivalent to the average annual historical participation.

Residential Energy Star Window A/C
The projected participation is similar to the participation recognized in two of the four years of historical participation.

Energy Select
The projected participation is slightly lower than the most recent three years of historical participation experienced after technological upgrades to the program equipment were completed.

Commercial/Industrial Energy Analysis
The projected participation is essentially equivalent to the average historical participation.

Commercial HVAC Retrocommissioning
The projected participation is essentially equivalent to the average historical participation.

Commercial Geothermal Heat Pump
The projected participation is essentially equivalent to the previous three year's average historical participation.

Commercial Ceiling/Roof Insulation
The projected participation is significantly higher than the historical average participation.

Commercial Reflective Roof
The projected participation is slightly higher than the historical average participation.

Commercial/Industrial Custom Incentive
Gulf has not identified specific eligible projects or estimated customer participation in this program but maintains its availability for use as needed.

23. For all existing DSM programs that are being continued, please complete the chart below.
    a. For any existing program that Gulf is projecting lesser participation than has been previously realized please explain the reason for the decrease in the projection.
    b. For any existing program that Gulf is projecting greater participation than has been previously realized please explain the reason for the increase in the projection.

Year	Actual Annual Number of Program Participants	Projected Annual Number of Program Participants (Docket No. 150086)
2008		
2009		
2010		
2011		
2012		
2013		
2014		
2015		
2016		
2017		
2018		
2019		
2020		
2021		
2022		
2023		
2024		

RESPONSE:

See tables on pages 2 through 16.

Residential Energy Audit		
Year	Actual Annual Number of Program Participants	Projected Annual Number of Program Participants (Docket No. 150086)
2008	4,714	
2009	7,710	
2010	11,145	
2011	10,029	
2012	8,863	
2013	7,952	
2014	7,927	
2015		8,400
2016		8,400
2017		8,400
2018		8,400
2019		8,400
2020		8,400
2021		8,400
2022		8,400
2023		8,400
2024		8,400

a. Not applicable.
b. The projected participation rate for this program is slightly higher than the most recent two years but approximately equivalent to the seven year historical average of 8,334 per year.

Residential Community Energy Saver		
Year	Actual Annual Number of Program Participants	Projected Annual Number of Program Participants (Docket No. 150086)
2008	-	
2009	-	
2010	-	
2011	1,881	
2012	3,327	
2013	2,220	
2014	2,326	
2015		2,500
2016		2,500
2017		2,500
2018		2,500
2019		2,500
2020		2,500
2021		2,500
2022		2,500
2023		2,500
2024		2,500

a. Not applicable.
b. The projected participation rate for this program is slightly higher than the most recent two years but approximately equivalent to the four year historical average of 2,439 per year.

Landlord/Renter Custom Incentive/Residential Custom Incentive		
Year	Actual Annual Number of Program Participants	Projected Annual Number of Program Participants (Docket No. 150086)
2008	-	
2009	-	
2010	-	
2011	1	
2012	-	
2013	-	
2014	-	
2015		-
2016		-
2017		-
2018		-
2019		-
2020		-
2021		-
2022		-
2023		-
2024		-

a. No specific participation is projected or estimated. This corresponds very closely to the historical performance.
b. Not applicable.

Residential HVAC Maintenance		
Year	Actual Annual Number of Program Participants	Projected Annual Number of Program Participants (Docket No. 150086)
2008	-	
2009	-	
2010	-	
2011	2,789	
2012	6,783	
2013	11,344	
2014	5,134	
2015		800
2016		1,200
2017		2,000
2018		3,200
2019		3,400
2020		3,800
2021		4,200
2022		4,600
2023		4,850
2024		5,000

a. The projected participation is significantly lower than historical due to a reduction in the available incentive amounts and elimination of the Early Retirement measure which required a HVAC Maintenance test of the existing equipment.
b. Not applicable.

Residential Duct Repair		
Year	Actual Annual Number of Program Participants	Projected Annual Number of Program Participants (Docket No. 150086)
2008	-	
2009	-	
2010	-	
2011	170	
2012	5,320	
2013	8,021	
2014	2,647	
2015		500
2016		500
2017		500
2018		500
2019		1,500
2020		2,000
2021		2,500
2022		3,000
2023		3,500
2024		4,000

a. A reduction in the available incentive amount results in reduced participation in the early years of this plan. Additional outreach is projected for the later years to increase participation in the multi-family market to achieve the stated goals.

b. Not applicable.

Residential High Performance Windows		
Year	Actual Annual Number of Program Participants	Projected Annual Number of Program Participants (Docket No. 150086)
2008	-	
2009	-	
2010	-	
2011	471	
2012	658	
2013	1,377	
2014	626	
2015		250
2016		350
2017		450
2018		500
2019		600
2020		700
2021		800
2022		1,000
2023		1,200
2024		1,400

a. The projected participation is significantly lower than the actual historical participation of the previous four year period. The primary reason for the reduced participation projection is a lower incentive amount as compared to 2011-2013. This, in combination with fewer residential measures available, is projected to reduce the number of customers participating in the program in the early years of this plan.

b. No applicable.

Residential Reflective Roof		
Year	Actual Annual Number of Program Participants	Projected Annual Number of Program Participants (Docket No. 150086)
2008	-	
2009	-	
2010	-	
2011	30	
2012	229	
2013	517	
2014	97	
2015		100
2016		150
2017		200
2018		250
2019		300
2020		350
2021		400
2022		500
2023		600
2024		700

a. The projected participation average of 200 units per year for the first five years of the plan is approximately equivalent to the 218 units per year average participation for the previous four years.
b. Not applicable.

Residential Energy Star Window A/C		
Year	Actual Annual Number of Program Participants	Projected Annual Number of Program Participants (Docket No. 150086)
2008	-	
2009	-	
2010	-	
2011	36	
2012	204	
2013	233	
2014	38	
2015		200
2016		200
2017		200
2018		200
2019		200
2020		200
2021		200
2022		200
2023		200
2024		200

a. Not applicable.
b. The projected participation is higher than the most recent historical data but is nearly equivalent to the two prior years. Gulf expects to manage the program to this participation level.

Energy Select		
Year	Actual Annual Number of Program Participants	Projected Annual Number of Program Participants (Docket No. 150086)
2008	(115)	
2009	234	
2010	(363)	
2011*	325	
2012*	1,799	
2013	2,149	
2014	1,754	
2015		1,600
2016		1,600
2017		1,600
2018		1,600
2019		1,600
2020		1,750
2021		1,900
2022		2,050
2023		2,200
2024		2,350

*Includes Energy Select and Energy Select Lite

a. The projected participation is slightly lower than the most recent three years of historical participation experienced after technological upgrades have been made to the program equipment. Gulf expects to maintain this level of new customer additions for the next few years until incremental growth is anticipated.

b. Not applicable.

Commercial/Industrial Energy Analysis		
Year	Actual Annual Number of Program Participants	Projected Annual Number of Program Participants (Docket No. 150086)
2008	317	
2009	588	
2010	472	
2011	476	
2012	420	
2013	567	
2014	487	
2015		500
2016		500
2017		500
2018		500
2019		500
2020		500
2021		500
2022		500
2023		500
2024		500

a. Not applicable.
b. Not applicable.

Commercial HVAC Retrocommissioning		
Year	Actual Annual Number of Program Participants	Projected Annual Number of Program Participants (Docket No. 150086)
2008	-	
2009	-	
2010	-	
2011	323	
2012	307	
2013	254	
2014	64	
2015		250
2016		250
2017		250
2018		250
2019		250
2020		250
2021		275
2022		325
2023		350
2024		375

a. Not applicable.
b. The historic four year average participation of 237 per year is essentially equivalent to the forecasted participation.

Commercial Geothermal Heat Pump		
Year	Actual Annual Number of Program Participants	Projected Annual Number of Program Participants (Docket No. 150086)
2008	3	
2009	14	
2010	3	
2011*	-	
2012*	290	
2013*	128	
2014*	73	
2015*		120
2016*		125
2017*		130
2018*		140
2019*		150
2020*		200
2021*		210
2022*		225
2023*		230
2024*		235

*Tons of geothermal installed

a. Not applicable.
b. Gulf has seen increased awareness and interest in this technology by our customers and believes that it will see participation more similar to the previous three years' average.

Commercial Ceiling/Roof Insulation		
Year	Actual Annual Number of Program Participants	Projected Annual Number of Program Participants (Docket No. 150086)
2008	-	
2009	-	
2010	-	
2011*	22,180	
2012*	80,704	
2013*	190,760	
2014*	4,742	
2015*		225,000
2016*		250,000
2017*		275,000
2018*		300,000
2019*		400,000
2020*		400,000
2021*		450,000
2022*		500,000
2023*		550,000
2024*		600,000

*sq. ft. of insulation installed

a. Not applicable.
b. Gulf believes that it can grow this program to a higher participation level due to growth in the occupancy of existing commercial building space.

Commercial Reflective Roof		
Year	Actual Annual Number of Program Participants	Projected Annual Number of Program Participants (Docket No. 150086)
2008	-	
2009	-	
2010	-	
2011*	85,813	
2012*	424,855	
2013*	1,730,233	
2014*	533,691	
2015*		800,000
2016*		800,000
2017*		800,000
2018*		800,000
2019*		800,000
2020*		850,000
2021*		900,000
2022*		950,000
2023*		1,000,000
2024*		1,050,000

*sq. ft. of reflective roof installed

a. Not applicable.
b. The 10 year average participation projection is essentially equivalent to the previous three years' average participation.

Commercial/Industrial Custom Incentive		
Year	Actual Annual Number of Program Participants	Projected Annual Number of Program Participants (Docket No. 150086)
2008	1	
2009	3	
2010	4	
2011	6	
2012	5	
2013	4	
2014	-	
2015		-
2016		-
2017		-
2018		-
2019		-
2020		-
2021		-
2022		-
2023		-
2024		-

a. Gulf has not identified specific eligible projects or estimated customer participation in this program.
b. Not applicable.

24. Please describe how Gulf determined the rebate amounts provided in its demand-side management plan.

RESPONSE:

For Gulf's Residential HVAC Maintenance and Residential Duct Repair programs, Gulf sought to increase the cost-effectiveness of the programs and manage the program to lower projected participation in better alignment with its approved DSM Goals by decreasing proposed program costs and incentives.

For Gulf's Residential Energy Star Window A/C, Commercial HVAC Retrocommissioning and Commercial Geothermal Heat Pump programs, Gulf reduced proposed incentive levels in order to increase the cost-effectiveness of the programs. In other continuing programs, Gulf has made incentive adjustments through program standard changes over the past three years seeking the incentive levels necessary to achieve program targets commensurate with goals.

For the one new program proposed by Gulf, Residential Quality Installation, Gulf relied on the experience gained in offering other HVAC related programs through its participating contractor network.

25. Please describe how the general assumptions associated with Gulf's avoided unit were developed. In this description please discuss resources relied upon.

RESPONSE:

Performance and cost assumptions for Gulf's 2023 combustion turbine avoided units are identified on Schedule 9 of Gulf's 2014 Ten Year Site Plan (TYSP). Projected performance data for Gulf's avoided units are developed using information provided by Southern Company Services (SCS) Generation Planning. Capital cost estimates and O&M cost models are updated annually by Southern Company Services' Engineering and Construction Services organization.

For gas-fired technologies, such as Gulf's 2023 combustion turbine avoided units applicable to this proceeding, cost data is based upon internally developed, detailed reference plant cost models. New quotes are obtained for major equipment and other equipment, bulk material, and labor is updated for escalation and other potential changes. These cost models are also updated to reflect quantities, costs, and lessons learned from previous Southern Company plant construction.

O&M cost models are also updated based upon current experience in operating similar facilities taking into account the size and type of facility being modeled. Labor wages and other payroll adders are updated annually. Other cost components are adjusted based upon a projected operating profile along with annual escalation.

26. Please describe how Gulf's Generation & Purchased Capacity assumptions were developed. In this description please discuss resources relied upon.

RESPONSE:

Generation Capacity Costs
Capacity costs are derived through the determination of Gulf's next avoided generation unit. This unit is identified in the 2014 Ten Year Site Plan (TYSP) as a combustion turbine unit with a 2023 in-service date.

Generation O&M
Generation O&M costs are derived from the company's cost estimates to operate and maintain the unit identified in the 2014 Ten Year Site Plan.

These costs represent the most current data available related to generation consistent with the 2014 Ten Year Site Plan utilized as the basis for planning in this docket.

27. Please describe how Gulf's Transmission and Distribution Costs assumptions were developed. In this description please discuss resources relied upon.

RESPONSE:

Transmission Capacity Costs
The transmission cost methodology incorporates the annual peak load forecasts, adjusted to compensate for losses, as well as the costs related to transmission line and substation load growth projects, generation network improvements, and transmission improvements for new business. This cost is updated annually.

Transmission O&M
The Transmission O&M factor is the three-year average of Southern Company's Transmission O&M Expenses divided by Transmission Plant in Service. The data source is FERC Form 1. The factor is updated annually.

Distribution Feeder Capacity Costs
The distribution feeder cost methodology incorporates the average feeder length and cost per mile, the cost of feeder devices (gang switches, reclosers, capacitor banks), and the average kW capacity of a feeder. This cost is updated annually.

Distribution Substation Capacity Costs
The distribution substation methodology incorporates historical and forward looking substation project costs and the kW increase in substation capacity. The cost is updated annually.

Distribution O&M
The Distribution O&M factor is the three-year average of Southern Company's Distribution O&M Expenses divided by Distribution Electric Plant in Service. The data source is FERC Form 1. The factor is updated annually.

These costs represent the most current data available related to transmission and distribution consistent with the 2014 Ten Year Site Plan utilized as the basis for planning in this docket.

28. Please describe the avoided unit used in the company's cost-effectiveness evaluations of the programs in its DSM Plan. Is the avoided unit the same as the one used in the goalsetting docket? If not, please explain why and the differences in avoided costs resulting from the change.

RESPONSE:

The avoided unit information utilized in the cost-effectiveness calculations for the DSM Plan is provided in the table below. The avoided unit identified for use in the 2014 goal-setting docket was a 2023 Combined Cycle, and the unit identified below is a 2023 Combustion Turbine. The cost effectiveness evaluations were updated using the most recent data available which was based on the unit identified in the 2014 Ten Year Site Plan. The updated TYSP identified a different unit than was identified in the 2013 Ten Year Site Plan used as the basis for calculations in the 2014 goal-setting docket. A comparison of the change in avoided costs was provided within the 2015 Demand-Side Management Plan on page 4-3.

	2023 Unit
Technology Type:	"F4" Combustion Turbines
In-Service Date:	6/1/2023
Net Capacity:	349 MW
Primary Fuel:	Natural Gas
Projected Unit Financial Data	
Book Life (Years):	40
Total Installed Cost ($/kW):	988
Direct Construction Cost ($/kW):	733
AFUDC Amount ($/kW):	102
Escalation ($/kW):	153
Fixed O&M ($/kW - Yr):	18.03
Variable O&M ($/Mwh):	6.17
K Factor:	1.3881

29. Please discuss whether any measure's demand and energy savings used in the company's cost-effectiveness evaluations of the programs in its DSM Plan differed from the one used in the goalsetting docket. If so, please explain why and the differences in demand and energy savings resulting from the change.

RESPONSE:

With the exception of the Community Energy Saver program, all of the measures' demand and energy savings in the DSM Plan are the same as those utilized in the goal-setting docket. Gulf combined the different individual measures resulting from multiple building types and base types into marketable, simplistic and easy to understand programs for which it calculated weighted average savings based upon applicable building units or square feet. For example, the number of applicable single family, multi-family and mobile home units or weighted square feet of commercial building types such as office, restaurant, retail, school, etc. times the applicable energy and demand savings.

For the Community Energy Saver program, Itron study measure savings were utilized for all of the measures except the compact fluorescent light bulbs (CFL). For the CFLs, Gulf utilized a calculation of (base incandescent wattage – CFL wattage) x hours of use per year for energy and (base incandescent wattage – CFL wattage) x peak usage factors for summer and winter demand. This was done to account for the expected savings relative to the replacement of operational incandescent bulbs as opposed to replacement of burned out bulbs.

The difference in the demand and energy savings expected in the Community Energy Saver program resulting from this change is indicated as an increase in CFL savings within the program as follows:

	kWh	Winter kW	Summer kW
Goal-setting	143	0.0180	0.0075
Plan	428	0.0262	0.0191
Difference	285	0.0083	0.0116

30. For several of Gulf's proposed programs the Company states that:
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.
    a. How did Gulf weigh the usage of the variety of sources used? Please provide an example.
    b. Please identify any sources not mentioned that Gulf relied on to develop it energy and demand savings.
    c. Please describe any computer-based engineering modeling software used by Gulf to estimate energy and demand savings associated with its proposed programs.

RESPONSE:

a. With the exception of the Community Energy Saver program, the other program and measure savings were each developed using a single approach, not a weighting of multiple sources.

   For the Community Energy Saver program, Itron study measure savings were utilized for all of the measures except the compact fluorescent light bulbs. For the CFLs, Gulf utilized a calculation of (base incandescent wattage – CFL wattage) x hours of use per year for energy and (base incandescent wattage – CFL wattage) x peak usage factors for summer and winter demand.

b. Other sources were not utilized.

c. For commercial applications, Gulf utilizes an internally developed computer based engineering modeling software called EnerSIM. EnerSIM is an hourly building energy simulation model used to predict energy consumption in buildings based on construction characteristics: insulation, occupancy, orientation, local weather, etc., and was used to generate peak demands and energy usage profiles for weather-sensitive end-uses. EnerSIM has been certified and approved by the US Department of Energy and is listed on their website as a "Qualified Software."

31. Please discuss the results of Gulf's Home Energy Reporting program.

RESPONSE:

In general, the results of the Home Energy Reporting (HER) program were positive and fulfilled expectations for energy savings and overall customer experience. This program demonstrated that energy efficiency could be promoted and achieved through the use of non-monetary incentives, most specifically comparative peer analyses and education. Once the program's Home Energy Report direct mailing cycle was fully operational for all program participants in August of 2011, the monthly household energy usage savings never dropped below 1% compared to a control group, as reported by the program vendor. The typical monthly savings rate remained between 1.5% and 2% for the majority of the program's three-year period, with the highest 2.3% monthly energy savings rate occurring in April of 2013.

Although there was no charge for the informative report, some customers did not like the comparison to "similar homes" and requested to be removed from future mailings. In total, the Gulf HER program experienced a cumulative "opt-out" rate of only 0.6%. That is, 0.6% of the customers receiving reports either unsubscribed via the provided web portal, or contacted the company and asked to be removed from the program.

In addition, Gulf approved the commissioning of two customer engagement and satisfaction studies during the program period. In both the 2012 and the 2014 study, customer satisfaction with Gulf Power was higher amongst program participants than it was for the non-participant survey control group. The percentage of customers who reported "liking" the HER was also higher in both surveys than the OPOWER Utility Benchmark.

32. For each program being discontinued by Gulf (see pages 1-4 and 1-5 of Gulf's DSM Plan), please explain why/how Gulf chose to discontinue the program.

RESPONSE:

The following programs will be discontinued for the reasons described below.

While components of the following six program measures passed some aspects of the Rate Impact Measure (RIM) cost-effectiveness screening in Gulf's achievable potential analysis, they only passed in three of the 36 potential combinations of building types and equipment bases. Gulf therefore decided to take a different approach to the promotion of HVAC equipment efficiency by designing a program around the quality installation of this equipment.

HVAC Efficiency Program - HVAC Retirement Tier 1
HVAC Efficiency Program - HVAC Retirement Tier 2
HVAC Efficiency Program - HVAC Retirement Tier 3
HVAC Efficiency Program - HVAC Upgrade Tier 1
HVAC Efficiency Program - HVAC Upgrade Tier 2
HVAC Efficiency Program - HVAC Upgrade Tier 3

The HVAC Efficiency Program - ECM Fan measure was discontinued because it failed eight of the nine potential measure combinations of the (RIM) cost-effectiveness screening in Gulf's achievable potential analysis. In addition, there was very little participation in this measure since it was added to the company's DSM Plan in 2011.

The Energy Select Lite program has been incorporated as part of Gulf's current Energy Select program.

The Commercial Building Efficiency – Lighting: LED Exit Signs, Display Case measure has rapidly declining costs and rapidly increasing adoption as more products come to market. Gulf has found that many of its customers are already performing these lighting upgrades and an incentive is not necessary.

The following programs are discontinued because they failed to pass the Rate Impact Measure (RIM) cost-effectiveness screening in Gulf's achievable potential analysis for all building types and base types:

Residential
Home Energy Reporting
Heat Pump Water Heater
Ceiling Insulation
Variable Speed/Flow Pool Pump
Self-Install Energy Efficiency – Refrigerator
Self-Install Energy Efficiency – Freezer
Self-Install Energy Efficiency – Clothes Washer
Self-Install Energy Efficiency – CFL
Refrigerator Recycling

Commercial
Commercial Building Efficiency – HVAC Upgrade – Air Source A/C or Heat Pump
Commercial Building Efficiency – Heat Pump Water Heater
Commercial Building Efficiency – Window Film
Commercial Building Efficiency – Lighting: T-5, T-8 Retrofit; Hard-wired CFL
Commercial Building Efficiency – Lighting: Occupancy Sensor
Occupancy Sensor HVAC Control
High Efficiency Motor Program – 1 to 5 HP
High Efficiency Motor Program – 6 to 50 HP
High Efficiency Motor Program – 51+ HP
Food Service Efficiency Program – Convection Oven
Food Service Efficiency Program – Fryer
Food Service Efficiency Program – Griddle
Food Service Efficiency Program – Steamer
Food Service Efficiency Program – Holding Cabinet
Food Service Efficiency Program – Ice Machine

33. For each program being discontinued by Gulf (see pages 1-4 and 1-5 of Gulf's DSM Plan), please complete the table below.

Program	RIM Value	Participant Test Value	TRC Value

RESPONSE:

See table on page 2.

Program	RIM Value	Participant Test Value	TRC Value
Residential			
Home Energy Reporting	0.43	12.69	1.60
HVAC Retirement Tier 1	0.68	2.91	1.96
HVAC Retirement Tier 2	0.66	2.56	1.53
HVAC Retirement Tier 3	0.67	1.94	1.12
HVAC Upgrade Tier 1	0.65	5.36	3.13
HVAC Upgrade Tier 2	0.53	2.85	1.06
HVAC Upgrade Tier 3	0.57	1.94	0.86
ECM Fan	0.69	7.12	4.92
Heat Pump Water Heater	0.41	2.55	0.94
Ceiling Insulation	0.41	2.32	0.70
Variable Speed/Flow Pool Pump	0.76	4.69	2.53
Energy Select Lite	Combined with Energy Select		
Self-Install Energy Efficiency - Refrigerator	0.59	5.24	2.83
Self-Install Energy Efficiency - Freezer	0.54	3.37	1.75
Self-Install Energy Efficiency - Clothes Washer	0.51	2.49	1.22
Self-Install Energy Efficiency - CFL	0.45	18.16	8.24
Refrigerator Recycling	0.52	99.99	7.69
Commercial			
HVAC Upgrade	0.46	4.19	0.88
Heat Pump Water Heater	0.80	4.63	3.67
Window Film	0.79	3.37	2.63
Lighting: T-5, T-8 Retrofit; Hard-wired CFL	0.76	5.78	3.23
Lighting: LED Exit Signs, Display Case	0.66	3.39	1.54
Lighting: Occupancy Sensor	0.81	21.38	9.36
Occupancy Sensor HVAC Control	0.54	4.32	1.54
High Efficiency Motor Program 1 to 5 HP	0.28	2.89	0.39
High Efficiency Motor Program 6 to 50 HP	0.68	1.55	1.01
High Efficiency Motor Program 51+ HP	0.73	4.91	3.58
Convection Oven	0.37	2.87	0.57
Fryer	0.33	2.29	0.47
Griddle	0.19	3.25	0.23
Steamer	0.74	35.64	5.26
Holding Cabinet	0.71	12.08	3.90
Ice Machine	0.53	11.05	1.55

34. Please describe how Gulf selected its new programs to implement.

RESPONSE:

Gulf relied primarily on the RIM Portfolio of the Achievable Potential Measure List as found in Schedule 11 of Witness John N. Floyd's testimony in Docket No. 130202-EI to identify available measures for program design and implementation. These measures were all indicated to provide cost-effective, achievable market potential used to set Gulf's DSM Goals. After identification of measures, Gulf compared measures to its current program offerings and packaged measures into marketable programs that could be utilized to achieve the FPSC approved goals.

35. Please provide the following information regarding the Company's current and proposed Conservation Demonstration and Development program:
    a. Provide any information/documentation regarding any planned areas of research under the proposed program.
    b. Provide any information/documentation regarding how the Company plans to implement any proposed or future projects.

RESPONSE:

Conservation Demonstration and Development		
Potential Projects	**Description**	**Implementation Plans**
Power Bill Pre-pay	Analyze customer usage patterns to determine any energy conservation impacts associated with pre-payment of electric service.	This program is currently being evaluated to determine if it's appropriate for inclusion or exclusion from future plans to execute and deliver energy efficiency programs.
Commercial Energy Efficiency Roof Top Unit Program	The Digi-RTU is a Heating, Ventilation, and Air Conditioning (HVAC) rooftop unit control kit that is both a demand management and energy usage device. It is designed to improve the energy efficiency and demand requirements of a rooftop unit as well as solve the humidity, common noise, and frequent on/off issues of a rooftop unit through modulating the capacity of a rooftop unit to match the cooling or heating space requirements.	This program is currently being evaluated to determine if it's appropriate for inclusion or exclusion from future plans to execute and deliver energy efficiency programs.
Home Automation Program	Provide customers with a Home Energy Management system which includes, but not limited to, programmable thermostat, light/appliance modules, door/window sensors and motion sensors. Gulf Power will evaluate customer usage profiles to determine if providing this high level of control can help customers save energy.	This program is currently being evaluated to determine if it's appropriate for inclusion or exclusion from future plans to execute and deliver energy efficiency programs.
Demand Response Water Heating	Analyze how customer energy and water usage profiles may be impacted by the installation of demand response-enabled standard, tank electric water heaters. Once this single end-use-based demand response protocol is commercially available, it may be preferable to whole house DR programs for a specific segment of Gulf's residential customer class.	This program is currently being evaluated to determine if it's appropriate for inclusion or exclusion from future plans to execute and deliver energy efficiency programs.

Conservation Demonstration and Development		
Potential Projects	**Description**	**Implementation Plans**
Ductless HVAC	Monitor and compare customer usage profiles for standard ducted and central split-system HVAC systems versus the usage profiles for "Ductless" mini-split systems. Results will be analyzed to determine the practical and economic viability of ductless systems as an alternative to single and larger central zone-controlled HVAC configurations.	This program is currently being evaluated to determine if it's appropriate for inclusion or exclusion from future plans to execute and deliver energy efficiency programs.
Street Lighting Energy Efficiency Program	Streetlight and streetlight control technology have made significant technological advances in the past few years. Emerging new control technology allows lights to be "dimmed" during low traffic periods of the night, reducing the energy consumed. This program is intended to explore the potential of the newly emerging control technology to save energy and investigate means for Gulf Power to ensure that the customer can benefit from the reduced energy use by capturing the energy saved through dimming and providing adjustments to the customer's lighting bill.	This program is currently being evaluated to determine if it's appropriate for inclusion or exclusion from future plans to execute and deliver energy efficiency programs.
Desiccant-Based Dehumidification (Residential & Commercial)	Evaluate the possible energy- and comfort-related benefits of desiccant assisted dehumidification technologies versus standard compressor/coil-based dehumidification equipment in both residential and commercial buildings. Metrics to be evaluated might include total moisture removal as compared to the tested technologies' contribution to additional sensible heat gain/load within the treated structure.	This program is currently being evaluated to determine if it's appropriate for inclusion or exclusion from future plans to execute and deliver energy efficiency programs.
Solar Work-Place Charging Study	Evaluate the effectiveness of solar canopies for workplace electric vehicle charging to measure effectiveness of solar charging compared to standard grid charging.	This program is currently being evaluated to determine if it's appropriate for inclusion or exclusion from future plans to execute and deliver energy efficiency programs.

Conservation Demonstration and Development		
Potential Projects	**Description**	**Implementation Plans**
Grid Connected Electric Vehicles for Demand Response Applications	This program would study the feasibility of using grid connected electric vehicle charging stations coupled with the battery packs in the vehicles to respond when demand response events are activated.	This program is currently being evaluated to determine if it's appropriate for inclusion or exclusion from future plans to execute and deliver energy efficiency programs.
Pre-Audit Diagnostic Tool	Evaluate the effectiveness of installing a precision temperature measurement device at the thermostat or utilize compatible thermostats to detect the HVAC operation as well as how the home is performing. This will allow Gulf to evaluate the customer's equipment and building envelope to recommend energy efficiency measures.	This program is currently being evaluated to determine if it's appropriate for inclusion or exclusion from future plans to execute and deliver energy efficiency programs.

36. What projects are currently being evaluated under the Company's Conservation Demonstration and Development program? As part of your response, please provide the following: name and description of the project, initial startup date of the project, and year-to-date dollars spent on each project. Additionally, please provide whether or not the company believes said project(s) could result in a potential conservation program. If the company perceives a program is imminent, please provide expected startup date.

Conservation Demonstration and Development			
Project Name	Description	Implementation Date	Expenditures

RESPONSE:

Conservation Demonstration and Development				
Project Name	Description	Implementation Date	Year-to-date Expenditures	Potential Plans
The Community Outreach, Research and Education (C.O.R.E.) Initiative formerly known as the University of West Florida Best House	Gulf Power has entered into a partnership, along with a number of other donors, with the University of West Florida, located in Pensacola, Florida, to help build the BEST (Build Educate Sustain Technology) House. This is a demonstration house that will be used as an educational tool and resource for Northwest Florida.	Jun-09	$0.00	This facility will be used as a center to demonstrate efficient technologies to Gulf's customers. It will provide the opportunity to show the advantages of retrofitting existing homes for energy efficiency in hands on environment.
Variable Geothermal HVAC	This project will monitor and evaluate the effectiveness of a high efficient variable speed ground source heat pump in a residential application. The findings will be used to show how this new technology compares to existing HVAC offerings.			

Conservation Demonstration and Development				
Project Name	**Description**	**Implementation Date**	**Year-to-date Expenditures**	**Potential Plans**
Azalea Trace Heat Pump Water Heater	The project involves the installation of a commercial size (4-ton heating capacity) Heat Pump Water Heater. The unit will serve a commercial laundry room facility at an assisted living facility and provide air conditioning to the clothes drying/folding area. The project will provide a data base for the application of the HPWH in this type facility. No data is on record within Gulf Power for the HPWH application in an assisted living facility.	Mar-14	$5,021.27	The project data will be used to promote energy efficient heat pump water heaters in the production of hot water in this type facility.
10th Ave Hair Salon Heat Pump Water Heater	This project is using a residential HPWH in commercial applications with high usage to compare unit capabilities including performance, reliability, and economic payback. The project will also compare usage of a HPWH versus a gas water heater of same size for the same application.	Aug-14	$8,912.84	The project data will be used to determine if residential Heat Pump Water Heaters can be used successfully in commercial applications with high usage.

37. What current programs has the company offered to its customers as a result of the Conservation Demonstration and Development program? In addition to the name of the program, please provide the description, startup date and year-to-date expenditures for each program.

RESPONSE:

Conservation Demonstration and Development			
Program Name	**Description**	**Start-up Date**	**Year-to-date Expenditures**
Variable Speed Pool Pump Program	The Variable Speed/Flow Pool Pump Program provides an incentive to encourage the installation of high-efficiency variable speed or variable flow pool pumping and control equipment in both new and existing residential applications.	Jun-11	$32,941.24
Commercial Geothermal Heat Pump Program	The HVAC Efficiency Upgrade Program is designed to encourage commercial and industrial (C/I) customers to invest in more efficient HVAC cooling equipment. Installing high efficiency HVAC cooling systems reduces operating costs. The program includes air cooled and water cooled equipment – identified as A/C, heat pump, direct expansion (DX) or geothermal – that provides cooling plus heating.	Jan-05	$0.00
Residential Geothermal Heat Pump Program	This program offers an incentive to encourage the installation of high efficiency cooling and heating systems in new homes or in existing homes needing a replacement unit. Incentives will be up to 50% of the incremental cost above minimum code equipment for the following: 14 EER geothermal closed-loop heat pump (Tier 3)	Jan-95	$77,580.00

38. Please provide the amount spent on Conservation Demonstration and Development programs for each of the past five years. Please provide the corresponding project name, implementation date, and dollar amount for each project.

RESPONSE:

Conservation Demonstration and Development								
Project Name	Implementation Date	2010	2011	2012	2013	2014	2015 Mar YTD	Total
Electrode Boiler	Jan-07	5,404.37						5,404.37
McDonald's Geothermal Project	Jan-08	5,392.37	35,475.87	25,485.28	14,800.43			81,153.95
UWF BEST House	Jun-09	5,392.37	20,771.67	50,191.80				76,355.84
Variable Speed Pool Pump	Jul-09	5,392.37	20,771.67					26,164.04
EnergySelect Electric Vehicle Project - Prius	Dec-09	26,392.37	20,909.64	24,273.93	846.99			72,422.93
Extended Range Electric Vehicle - Volt	Dec-10	45,238.21	20,771.67					66,009.88
EnergySelect Electric Vehicle Pilot	Nov-10			3,083.34	8,539.27	4,500.00	0.00	16,122.61
Plasma Waste Facility	Aug-10	45,392.38	20,771.67	420.61				66,584.66
NEST Thermostat	Mar-12			39,896.41	29,663.17			69,559.58
Variable Geothermal HVAC	Nov-12				21,103.58			21,103.58
Azalea Trace Heat Pump Water Heater	Mar-14					31,967.85	5,021.27	31,967.85
10th Ave Hair Salon Heat Pump Water Htr	Aug-14					24,633.76	8,912.84	24,633.76
Total		**138,604.44**	**139,472.19**	**143,351.37**	**74,953.44**	**61,101.61**	**13,934.11**	**557,483.05**

39. Please complete the following chart using excel format to illustrate the Company's expected projects in the Conservation Demonstration and Development:

Conservation Demonstration and Development – Project Name			
Year	Project Name	Description	Expected Expenditures
2015			
2016			
2017			
2018			
2019			
2020			
2021			
2022			
2023			
2024			

RESPONSE:

Conservation Demonstration and Development – Project Name			
Year	Project Name	Description	Expected Expenditures
2015	10th Ave Hair Salon Heat Pump Water Heater	This project is using a residential HPWH in commercial applications with high usage to compare unit capabilities including performance, reliability, and economic payback. The project will also compare usage of a HPWH versus a gas water heater of same size for the same application.	$22,195.00
2015	Residential Service Time of Use Rate Pilot	The proposed Residential Service Time of Use (RSTOU) rate pilot will provide residential customers the opportunity to use customer-owned equipment to automatically respond and take advantage of a variable pricing structure with a critical peak credit component.	$200,000.00
2015	Demand Response Water Heating	Customer energy and water usage profiles will be analyzed to determine whether they are impacted by the installation of demand response-enabled standard, tank electric water heaters. Once this single end-use-based demand response protocol is commercially available, it may be preferable to whole house DR programs for a specific segment of Gulf's residential customer class.	TBD

Conservation Demonstration and Development – Project Name			
Year	**Project Name**	**Description**	**Expected Expenditures**
2016	10th Ave Hair Salon Heat Pump Water Heater	This project is using a residential HPWH in commercial applications with high usage to compare unit capabilities including performance, reliability, and economic payback. The project will also compare usage of a HPWH versus a gas water heater of same size for the same application.	$12,660.00
2016	Residential Service Time of Use Rate Pilot	The proposed Residential Service Time of Use (RSTOU) rate pilot will provide residential customers the opportunity to use customer-owned equipment to automatically respond and take advantage of a variable pricing structure with a critical peak credit component.	$110,000.00
2016	Home Automation Program	Provide customers with a Home Energy Management system which includes, but is not limited to, programmable thermostat, light/appliance modules, door/window sensors and motion sensors. Gulf Power will evaluate customer usage profiles to determine if providing this high level of control can help customers save energy.	TBD
2016	Power Bill Pre-pay	Analyze customer usage patterns to determine any energy conservation impacts associated with pre-payment of electric service.	TBD
2016	Pre-Audit Diagnostic Tool	Evaluate the effectiveness of installing a precision temperature measurement device at the thermostat or utilize compatible thermostats to detect the HVAC operation as well as how the home is performing. This will allow Gulf to evaluate the customer's equipment and building envelope to recommend energy efficiency measures.	TBD
2017	Residential Service Time of Use Rate Pilot	The proposed Residential Service Time of Use (RSTOU) rate pilot will provide residential customers the opportunity to use customer-owned equipment to automatically respond and take advantage of a variable pricing structure with a critical peak credit component.	$98,000.00
2017	Solar Work-Place Charging Study	Evaluate the effectiveness of solar canopies for workplace electric vehicle charging to measure effectiveness of solar charging compared to standard grid charging.	TBD
2017	Grid Connected Electric Vehicles for Demand Response applications	This program would study the feasibility of using grid connected electric vehicle charging stations coupled with the battery packs in the vehicles to respond when demand response events are activated.	TBD
2017	Street Lighting Energy Efficiency Program	Streetlight and streetlight control technology have made significant technological advances in the past few years. Emerging new control technology allows lights to be "dimmed" during low traffic periods of the night, reducing the energy consumed. This program is intended to explore the potential of the newly emerging control technology to save energy and investigate means for Gulf Power to ensure that the customer can benefit from the reduced energy use by capturing the energy saved through dimming and providing adjustments to the customer's lighting bill.	TBD

Conservation Demonstration and Development – Project Name			
Year	**Project Name**	**Description**	**Expected Expenditures**
2018	Desiccant-Based Dehumidification (Residential & Commercial)	Evaluate the possible energy- and comfort-related benefits of desiccant assisted dehumidification technologies versus standard compressor/coil-based dehumidification equipment in both residential and commercial buildings. Metrics to be evaluated might include total moisture removal as compared to the tested technologies' contribution to additional sensible heat gain/load within the treated structure.	TBD
2018	Ductless HVAC	Monitor and compare customer usage profiles for standard ducted and central split-system HVAC systems versus the usage profiles for "Ductless" mini-split systems. Results will be analyzed to determine the practical and economic viability of ductless systems as an alternative to single and larger central zone-controlled HVAC configurations.	TBD
2019			
2020			
2021			
2022			
2023			
2024			
Totals			$420,660.00

40. Please list any energy saving measures or products given to customers in the Residential Energy Audit and Education Program. Please separate your response by each sub-program. (example: the Energy Audit Program.)

RESPONSE:

The company does not routinely provide energy saving products to customers during an energy audit. However, Gulf has occasionally provided CFL light bulbs as a promotion for participating Energy Audit customers. Gulf has also provided CFL light bulbs to customers attending energy education exhibits as part of its Community Awareness and Education measure. In addition, as part of the School-based Awareness and Education measure, Gulf has provided watt monitors, infrared thermometers, digital thermometers, light meters and other tools to student/faculty "energy teams" for use in auditing their own school facilities.

41. On page 2-3 of its DSM plan filing, Gulf states that it intends to "expand its long standing energy efficiency outreach efforts to the low-income customer segment." Please provide a detailed description of any planned expansion of the existing low income program.

RESPONSE:

In an effort to expand the reach of services provided to low-income customers, Gulf plans to expand current partnerships with the various low income assistance agencies and organizations that already exist within Gulf's service area. Gulf will provide educational materials that focus on basic energy efficiency awareness, as well as the benefits of low-cost, no-cost, and two-year payback measures and equipment. Gulf will also provide educational resources to increase awareness of solar and other renewable energy opportunities in low-income applications. These educational materials will be made available to all partner organizations and agencies who service the low-income customer segment for distribution to all qualifying individuals and families at the point of need and/or initial contact with these third-party low-income service providers. Gulf will also work with partner agencies to provide training to agency clients on understanding payback and making sound choices when considering energy-related purchases. These additional initiatives are intended to supplement the continuation of the Community Energy Saver program at slightly increased participation levels.

42. Gulf describes the Residential Community Energy Saver program as an assistance to low-income families. In its 2013 ECCR final true-up report, Gulf reported 2,220 customers participating with an average $340 expended per customer/family. Gulf estimates that 2,500 families will participate in year 2015.
    a. What does Gulf propose that will increase participation in this program?
    b. Please describe how will Gulf measure the effectiveness of this program in terms of energy and demand savings.

RESPONSE:

a. For 2015, Gulf plans to work closely with the program administrator to identify customer neighborhoods or geographical areas to employ a door-to-door implementation strategy with a coinciding informational and educational communications campaign. This program also will leverage relationships with local weatherization agencies and low-income housing providers to identify additional program participants and gain additional efficiency measure installations.

b. The program's kW demand and kWh energy savings will be determined by recording the actual number of measures installed in each participating customer premise times the energy and demand savings projected for the respective measure.

43. In Gulf's 2013 ECCR Final True-Up report, the company reported one participant in the Residential Custom Incentive Landlord/Renter Program with an expenditure of $138,402.
For the 2015 goal period, Gulf did not report any expected participation in this program.
    a. Please describe examples of measures that may be deployed through this program.
    b. Please describe if these measures are provided to the landlord, renter/customer or both.

RESPONSE:

a. Examples include but are not limited to the cost-effective deployment of the following measures:

- CFL or LED light bulbs
- Hot water pipe wrap
- Water heater temperature check and adjustment
- Low-flow faucet aerators
- Low-flow shower heads
- HVAC filters
- Weatherstripping
- Air sealing
- Water heating and distribution
- HVAC replacement
- Windows
- Insulation
- Appliances

b. The customized project assistance could be provided to either party dependent upon the measure type. Most would be deployed to the landlord as a means of offsetting the investment where the landlord has no economic incentive from the measure energy savings.

44. Gulf's proposed modifications to its Residential HVAC Efficiency Improvement program reduces assistance to the customer in 2015 and beyond. In the 2013 ECCR final True-up Report, Gulf reported 21,887 participants, while the proposed plan estimated participation is 3,700.
    a. Please explain the primary reasons why Gulf proposed these modification to its HVAC program?
    b. Please discuss the primary reasons Gulf projects the reduction in customer participation compared to the existing program.

RESPONSE:

a. The primary reason Gulf has proposed these modifications is to increase the Rate Impact Measure (RIM) cost-effectiveness of the program.

b. Gulf projects a reduction in the program participation due to lower incentives and elimination of the Early Retirement and Upgrade measures from the program.

45. Gulf's Residential Building Efficiency program will continue with High Performance window programs and Reflective Roof Program and add a new program, Energy Star Window A/C program.
    a. Please explain why Gulf added the Energy Star Window A/C Program.

RESPONSE:

a. Gulf has simply moved the Energy Star Window A/C measure into the Residential Building Efficiency program whereas the measure was a part of the Self-Install Energy Efficiency program in the 2010 DSM Plan.

46. Gulf's Commercial HVAC Retro commissioning Program has adjusted this programs rebate to $100. What prompted the company to make this rebate limit?

RESPONSE:

The incentive for this program was reduced in order to increase the program's Rate Impact Measure (RIM) cost-effectiveness.

47. Gulf's Commercial Geothermal Heat Pump program reported the annual number of program participants in "Tons of A/C" and that 120 tons is estimated for 2015. Please also report the number of program participants.

RESPONSE:

	Commercial Geothermal Heat Pump	
	Annual Number of Tons of Geothermal	Annual Number of Estimated Program Participants
2015	120	19
2016	125	20
2017	130	21
2018	140	22
2019	150	24
2020	200	32
2021	210	33
2022	225	36
2023	230	37
2024	235	37

48. Gulf's Commercial Ceiling/Roof Insulation program reported the annual number of program participants would be number of square feet installed. Please also report the number of program participants.

RESPONSE:

	Commercial Ceiling/Roof Insulation	
	Annual Number of Square Feet of Ceiling/Roof Insulation	Annual Number of Estimated Program Participants
2015	225,000	29
2016	250,000	33
2017	275,000	36
2018	300,000	39
2019	400,000	52
2020	400,000	52
2021	450,000	59
2022	500,000	65
2023	550,000	72
2024	600,000	79

49. Gulf's Commercial Reflective Roof program reported the annual number of program participants as number of square feet installed. Please also report the number of program participants.

RESPONSE:

	Commercial Reflective	
	Annual Number of Square Feet of Reflective Roof	Annual Number of Estimated Program Participants
2015	800,000	34
2016	800,000	34
2017	800,000	34
2018	800,000	34
2019	800,000	34
2020	850,000	36
2021	900,000	38
2022	950,000	40
2023	1,000,000	43
2024	1,050,000	45

50. The table on page 2-23 of Gulf's proposed DSM Plan indicates that the individual measures contained in Gulf's Residential Building Efficiency Program do not pass RIM.
    a. Please explain whether these measures pass RIM in Gulf's goal-setting analysis?
    b. Does the Residential Building Efficiency Program pass RIM when all the individual measures are considered as a whole? If so, please provide the RIM analysis.
    c. Did Gulf consider reducing the proposed incentives or any administrative cost savings in order to make the program cost-effective under RIM? If so, please explain. If not, why not?
    d. Why does Gulf contend that it is appropriate to include this program in its proposed DSM Plan, given the results of Gulf's RIM analysis?

RESPONSE:

a. These measures passed the RIM screening in Gulf's goal-setting analysis and contributed energy and demand savings to Gulf's approved goals.

b. Gulf has not performed this analysis but would not expect energy and demand savings to change significantly enough for these measures to pass in combination with one another if they were to appear in this specific combination. Therefore, Gulf would not expect the RIM cost-effectiveness results to change appreciably.

c. Yes. Gulf considered many combinations of incentives and administrative costs that could potentially increase the RIM cost-effectiveness of these measures. However, to meet the program participation projections necessary to meet the Commission approved DSM goals, Gulf felt it necessary to set the incentives and administrative costs at the proposed levels indicated in the Plan.

d. Gulf is required to submit a Plan to meet the Commission approved DSM goals as assigned in Order No. PSC-14-0696-FOF-EU. These measures, and all other measures included in the proposed DSM programs, passed the RIM screening in Gulf's goal-setting analysis and contributed energy and demand savings to Gulf's approved goals. Utilizing the company's most current planning assumptions, the RIM results for all evaluated measures have degraded due to lower avoided costs and higher rates. Gulf believes these measures provide the most cost-effective means of achieving the goals approved by the Commission and provide valuable assistance to our customers.