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Regulatory & Pricing Manager

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October 12, 2016

VIA ELECTRONIC FILING

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

Re: Petition for an increase in rates by Gulf Power Company, Docket No. 160186-EI

Re: Petition for approval of 2016 depreciation and dismantlement studies, approval of proposed depreciation rates and annual dismantlement accruals and Plant Smith Units 1 and 2 regulatory asset amortization by Gulf Power Company, Docket No. 160170-EI

Dear Ms. Stauffer:

Attached is the Direct Testimony and Exhibit of Gulf Power Company Witness John N. Floyd.

(Document 7 of 29)

Sincerely,

A handwritten signature in blue ink that reads "Robert L. McGee, Jr." with a stylized flourish at the end.

Robert L. McGee, Jr.
Regulatory & Pricing Manager

**BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION**

DOCKET NO. 160186-EI



Gulf Power

**TESTIMONY AND EXHIBIT
OF
JOHN N. FLOYD**

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GULF POWER COMPANY
Before the Florida Public Service Commission
Prepared Direct Testimony of
John N. Floyd
Docket No. 160186-EI
In Support of Rate Relief
Date of Filing: October 12, 2016

Q. Please state your name and business address.
A. My name is John Floyd and my business address is One Energy Place,
Pensacola, Florida 32520.

Q. What is your position?
A. I am employed by Gulf Power Company (Gulf or the Company) as the
Energy Efficiency & Renewables Manager.

Q. Please describe your educational background and business experience.
A. I received a Bachelor Degree in Electrical Engineering from Auburn
University in 1985. After serving four years in the U.S. Air Force, I began
my career in the electric utility industry at Gulf Power in 1990 and have held
various positions with the Company in Power Generation, Metering, Power
Delivery and Marketing. In my present position, I am responsible for the
development and implementation of Gulf's customer program offerings
including the programs in the Company's Demand-Side Management
(DSM) Plan.

1 Q. What is the purpose of your testimony?

2 A. My testimony describes two new DSM programs for which the Company is
3 seeking approval. I also propose modifications to existing DSM programs.
4 I describe the details of the programs and explain why these programs are
5 appropriate for approval and in the best interest of Gulf's customers.

6
7 Q. Are you sponsoring any exhibits?

8 A. Yes, I sponsor Exhibit JNF-1, Schedules 1 through 4. This exhibit was
9 prepared under my direction and control, and the information contained
10 therein is true and correct to the best of my knowledge and belief.

11
12 Q. Why is Gulf asking for new DSM programs in this proceeding?

13 A. As discussed by Gulf Witness McGee, the Company is proposing
14 improvements to our residential rate offerings. One of these
15 improvements is a structural change that involves lowering the Energy
16 Charge and increasing the Base Charge for all of Gulf's existing
17 residential rates. The proposed changes in the residential rate structure
18 allow more cost-effective energy efficiency programs to be offered by the
19 Company. Furthermore, the additional Commercial/Industrial program I
20 propose is supported by simultaneous changes to the base rate offering,
21 Large Power Service Time-of-Use Conservation (LPT).

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1 Q. How does the structural change to residential rates detailed by Mr. McGee
2 affect DSM cost-effectiveness?

3 A. The lower Energy Charge proposed in the new residential rate structure
4 affects the results of the Rate Impact Measure (RIM) and Participant Test
5 (PT) cost-effectiveness tests which were used to set the DSM goals in
6 Docket No. 130202-EI. With a lower Energy Charge, more measures
7 pass the RIM test and enable the Company to offer more cost-effective
8 DSM programs.

9
10 Q. How does the lower Energy Charge in the new rate structure impact the
11 Participant Test result?

12 A. The lower Energy Charge increases the length of the customer payback
13 period, resulting in a slightly lower PT ratio for measures included in Gulf's
14 DSM Plan. However, the higher RIM scores allow higher incentives to be
15 offered, translating to a higher overall savings for Gulf's DSM Plan. This
16 includes new measures that would be cost-effective due to the rate
17 structure change.

18
19 Q. How are DSM goals set for Gulf Power?

20 A. The Commission sets seasonal peak demand and annual energy
21 conservation goals for Gulf Power every five years for the upcoming ten
22 year period. These goals are based upon costs derived from Gulf's
23 generation, transmission, and distribution planning processes. The goals
24 represent the total cost-effective winter and summer peak MW demand
25 reductions and the annual GWh savings that are reasonably achievable

1 through implementation of demand-side programs in Gulf Power's service
2 area. The basis for the goals is the MW and GWh associated with
3 projected adoption of measures that passed both the RIM and PT.
4

5 Q. When were DSM goals last set for Gulf Power?

6 A. The Company's current goals were established by the Commission in
7 Order No. PSC-14-0696-FOF-EU issued on December 16, 2014.
8

9 Q. Please explain how DSM programs are developed to meet the established
10 goals.

11 A. Pursuant to Rule 25-17.0021(4), F.A.C., Gulf filed a DSM Plan with the
12 Commission on March 16, 2015. The DSM Plan included DSM programs
13 designed to meet the goals approved in Order No. PSC-14-0696-FOF-EU.
14 The Company's DSM Plan was approved as set forth in Order No. PSC-
15 15-0330-PAA-EG.
16

17 Q. What DSM programs is the Company proposing to add or modify?

18 A. Gulf is proposing to add one new residential program, add measures to an
19 existing residential program, and increase the incentive caps on existing
20 residential programs. We are also proposing to add a new commercial
21 program.
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1 **I. RESIDENTIAL DSM PROGRAMS**

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Q. Please describe the new residential program.

A. Gulf is proposing a new ceiling insulation program that is targeted to customers with little or no existing ceiling insulation. Adding ceiling insulation is one of the most cost-effective measures a customer can take to reduce heating and cooling expenses. Although this program will be available to all residential customers, it is Gulf's belief that a majority of customers qualifying for this program will have lower income levels. The program will provide vouchers for, or direct installation of, ceiling insulation as a way of minimizing the out of pocket expense to the customer. A program description along with a set of proposed program standards for this new program is included as Schedule 1 of Exhibit JNF-1.

Q. Please describe the proposed modifications to existing residential programs.

A. Gulf is proposing to modify our HVAC Efficiency program to include heat pump equipment measures. These new measures will complement a number of existing equipment maintenance measures that improve the performance of existing and new HVAC systems, resulting in energy and peak demand savings. The addition of these new measures will also increase the number of HVAC contractors wishing to participate in our current program.

1 Incentives for similar equipment measures were a part of Gulf Power's
2 HVAC Efficiency program in the 2010 DSM Plan and were well-received
3 by customers and participating contractors. However, these measures
4 were not included in the 2015 DSM Plan due to failing RIM scores during
5 the goal setting process. With the proposed residential rate structure
6 changes, these new measures become cost-effective. A revised program
7 description along with a revised set of proposed program standards for
8 this modified program is included as Schedule 2 of Exhibit JNF-1.

9
10 Also as a result of the residential rate structure change, Gulf is proposing
11 to increase the maximum incentives for (a) the reflective roofing measure
12 in the Residential Building Efficiency program, and (b) the HVAC
13 maintenance and duct repair measures in the HVAC Efficiency program.
14 These program modifications should result in Gulf achieving higher energy
15 savings. Revised program descriptions are included as Schedule 2 of
16 Exhibit JNF-1.

17
18 Q. How much additional seasonal peak demand and annual energy savings
19 do you expect to achieve with these new and modified residential
20 programs?

21 A. Gulf expects to achieve savings of 28.1 GWh of energy, 9.7 MW of
22 summer peak demand and 17.0 MW of winter peak demand as a result of
23 these new and modified programs throughout the timeframe of the 2015
24 DSM Plan. A table depicting these annual savings is included as
25 Schedule 3 of Exhibit JNF-1.

1 Q. Would these new and modified residential DSM programs be cost-
2 effective if the Commission does not approve the Company's proposed
3 residential rate structure change?

4 A. No.

5

6

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II. NEW COMMERCIAL/INDUSTRIAL PROGRAM

8

9 Q. Are you also recommending a new Commercial/Industrial DSM program?

10 A. Yes, I am recommending establishing the existing Critical Peak Option
11 (CPO) available for rate LPT as a DSM program.

12

13 Q. Please explain how the CPO rate currently works.

14 A. The CPO rate option provides qualifying customers an opportunity to
15 realize reduced On-Peak Demand Charges in conjunction with a higher
16 Critical Peak Demand Charge. As explained by Gulf Witness Evans, the
17 option introduces a third demand charge for customers on the LPT rate.
18 This third tier demand charge is in addition to the Maximum Demand
19 Charge, On-Peak Demand Charge, Energy Charge and Base Charge rate
20 components found in these rates. The demand charge applicable to that
21 critical peak period is higher than the On-Peak Demand Charge, but
22 customers with load management abilities avoid, or substantially reduce,
23 their demand during these short periods, resulting in bill savings to the
24 customer and reduced peak demand requirements on Gulf's grid.

25

1 Q. Please describe how this new DSM program changes the current CPO.

2 A. As part of this program, qualifying commercial and industrial customers
3 will choose the CPO option in the same way they do currently. This
4 change replaces the reduced On-Peak Demand Charge with a capacity
5 credit. Customers participating in this program will receive the On-Peak
6 Capacity credit for measured demand during the on-peak period and will
7 be subject to the Critical Peak Demand Charge for all measured demand
8 during the critical period. Credits provided during on-peak periods and
9 revenues collected during critical peak periods will be accounted for in the
10 Energy Conservation Cost Recovery (ECCR) clause. Also, Gulf proposes
11 to reduce the minimum notice provision to one hour and to eliminate
12 restrictions on the frequency and duration of critical peak periods.

13
14 Q. Why is Gulf proposing to reduce the minimum notification for a critical
15 peak event to one hour?

16 A. First, reducing the minimum notice provision will enable Gulf to utilize the
17 CPO program in a manner which is more consistent with its objective—to
18 provide demand reduction during peak load conditions. The current
19 minimum of one business day's notice requires Gulf to project system
20 peak loading conditions one or more days ahead of time. In some
21 circumstances, this may result in Gulf unnecessarily scheduling a critical
22 event when expected peak conditions do not materialize. Conversely, it
23 may result in Gulf not being able to utilize this capacity when peaking or
24 otherwise critical loading conditions develop quickly. This change also
25 more closely aligns this program with Gulf's residential critical peak

1 programs RSVP and RSTOU, both of which contain thirty minute minimum
2 notice provisions.

3

4 Q. Why is Gulf proposing to eliminate restrictions on the frequency and
5 duration of critical peak periods?

6 A. Under the current CPO, critical peak periods are limited to one to two
7 hours in duration and a total of 87 hours in a calendar year. The total
8 number of critical peak periods may not exceed one per day and four per
9 week. As I discuss later in my testimony, Gulf's proposal to address On-
10 Peak Capacity credits and Critical Peak Demand Charges through the
11 ECCR will ensure that the program remains cost-effective (i.e., passes the
12 RIM test) and is, therefore, beneficial for Gulf's general body of customers.
13 Because the program will remain cost-effective, Gulf believes it is
14 appropriate to eliminate restrictions which could otherwise impair Gulf's
15 implementation of the program for the full benefit of its general body of
16 customers.

17

18 Q. How is the On-Peak Capacity credit determined?

19 A. The On-Peak Capacity credit is determined based on the value of avoided
20 capacity during a critical peak period. For 2017, this value is \$4.75 per
21 kW.

22

23 Q. How is the Critical Peak Demand Charge determined?

24 A. The Critical Peak Demand Charge is set at an amount to encourage
25 maximum demand reduction during a critical peak event as well as to

1 ensure the benefits of the On-Peak Capacity credits are realized to Gulf's
2 customer base. For 2017, the Critical Peak Demand Charge is \$57.00 per
3 kW.

4
5 Q. Why is Gulf proposing these changes to CPO?

6 A. The CPO offering was first made available for Gulf Power customers in
7 2012. Over this period of time, Gulf has gained experience with the
8 offering and determined that repurposing the offering as a DSM program
9 and addressing the variability in the time differentiated rates through
10 ECCR is appropriate and beneficial for Gulf's general body of customers.
11 The CPO's primary function is to provide peak demand savings.
12 Therefore, it fits naturally in Gulf's suite of DSM offerings which also serve
13 to reduce peak demand and energy consumption. Also, the value of
14 capacity resources fluctuates from time to time based on the timing and
15 type of Gulf's resource needs. Presently, the benefit provided to
16 participating customers in the form of a reduced On- Peak Demand
17 Charge is embedded in Gulf's base rates and is not cost-effective based
18 on Gulf's current planning assumptions. Inclusion of the CPO as a DSM
19 program provides for annual opportunities through the ECCR process to
20 adjust the On-Peak Demand Charge (using a capacity credit) and the
21 Critical Peak Demand Charge to ensure the rate option remains cost-
22 effective for all of Gulf's customers.

1 Q. Is there any precedent for shifting base rate pricing components to
2 ECCR?

3 A. Yes. This Commission has previously approved moving variable
4 components of rates from base revenues to cost recovery clause
5 revenues in Orders No. PSC-12-0179-FOF-EI issued April 3, 2012 and
6 PSC-13-0670-S-EI issued December 19, 2013. In Order No. PSC-12-
7 0179-FOF-EI, the Commission approved moving the variable components
8 of Gulf's Residential Variable Service Pricing (RSVP) associated with
9 Gulf's Energy Select program into ECCR. In this order, the Commission
10 recognized that this pricing variability was a part of the approved DSM
11 program and approved recovery as such. In Order No. PSC-13-0670-S-EI
12 the Commission approved a stipulation that included moving the variability
13 in Gulf's Real Time Pricing (RTP) rate schedule into the fuel cost recovery
14 clause (FCR). In that proceeding, Gulf noted that the variability in the RTP
15 prices was represented by fuel cost differences and accordingly proposed
16 recovery of that variability in FCR.

17
18 Q. Is there precedent for recovering capacity credits in the ECCR expenses?

19 A. Yes. Tampa Electric Company, Duke Energy Florida, and Florida Power
20 & Light all recover capacity payments for similar, though not identical,
21 programs through the ECCR mechanism.

22
23 Q. Is this program cost-effective?

24 A. Yes. The value of the capacity credits is determined through the DSM
25 cost-effectiveness process in the same way that all other programs or

1 measures are evaluated. This process establishes the value of avoiding,
2 or deferring, capacity additions. The RIM test is the basis for the On-Peak
3 Capacity credit, ensuring that all customers benefit regardless of whether
4 they elect, or are even eligible, for this rate option. The Critical Peak
5 Demand Charge ensures that customers electing this rate option have an
6 economic incentive to respond to critical peak events when they are
7 called. If participating customers respond, capacity savings are realized
8 for the general body of customers. Alternatively, if participating customers
9 do not respond, they must pay the Critical Peak Demand Charge and the
10 associated revenues are returned to the general body of customers
11 through the ECCR process. A program description for the CPO program,
12 along with the related cost-effectiveness results, is attached as Schedule
13 4 of Exhibit JNF-1.

14

15 Q. How many customers do you project will participate in the CPO program?

16 A. At this time Gulf is projecting that the 21 customers currently electing
17 service under the CPO option would remain on this program. Gulf is not
18 projecting any additional customers will subscribe initially.

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III. SUMMARY

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Q. Would you please summarize your testimony?

A. Gulf is proposing expansion of the Company’s DSM Plan as a result of improved cost effectiveness resulting from the proposed structural change to the Company’s residential rates. In addition, Gulf is proposing to move cost recovery for the On-Peak Demand Credit and Critical Peak Demand Charge associated with CPO to the ECCR mechanism.

Q. Does this conclude your testimony?

A. Yes.

AFFIDAVIT

STATE OF FLORIDA)
)
COUNTY OF ESCAMBIA)

Docket No. 160186-EI

Before me the undersigned authority, personally appeared John N. Floyd, who being first duly sworn, deposes, and says that he is the Energy Efficiency & Renewables Manager of Gulf Power Company, a Florida corporation, that the foregoing is true and correct to the best of his knowledge, information, and belief. He is personally known to me.

s/ John N. Floyd
John N. Floyd
Energy Efficiency & Renewables Manager

Sworn to and subscribed before me this 5th day of October, 2016.

Melissa Darnes
Notary Public, State of Florida at Large

Commission No. FF912698

My Commission Expires. December 17, 2019



MELISSA DARNES
MY COMMISSION # FF 912698
EXPIRES: December 17, 2019
Bonded Thru Budget Notary Services

Exhibit

Insulation Improvement Program
Program Start Date: 2017

Program Description:

The Ceiling Insulation Program encourages addition of ceiling insulation to reduce heating and cooling energy use. This program targets customers with little or no ceiling insulation through existing programs such as in-home energy audits and Community Energy Saver. The availability of this program will also be promoted through partner low-income agencies in order to increase awareness. Once qualified, a customer will either receive a voucher or direct installation services as a means of reducing the out of pocket expense. Gulf will utilize participating contractors to provide installation services. Specific eligibility requirements for the program are provided in the Program Participation Standards.

Program Benefits and Cost Effectiveness

The energy and demand savings associated with this program were developed using a variety of sources, including: measure savings data from the Itron study; computer-based engineering modeling software.

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

Measure	Max Incentive (per participant)	Units	Per Unit Reduction			Cost effectiveness test		
			Energy kWh	Summer Peak kW	Winter Peak kW	RIM	TRC	PT
Insulation	\$1,000	per home	953	0.50	0.63	1.03	2.92	2.96

Monitoring and Evaluation

Gulf Power will monitor and evaluate program performance and progress toward goal achievement on a continual basis. Participating customer information will be recorded in the program reporting and tracking database. Gulf, or its designee, will randomly perform a field verification on a minimum of 10% of installations to ensure compliance with program standards.

Ceiling Insulation

At the Meter						
	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual kWh Reduction	Total Annual Winter kW Reduction	Total Annual Summer kW Reduction
Year	Reduction	Reduction	Reduction	Reduction	Reduction	Reduction
2015	953	0.63	0.50	0	0	0
2016	953	0.63	0.50	0	0	0
2017	953	0.63	0.50	285,900	189	150
2018	953	0.63	0.50	667,100	441	350
2019	953	0.63	0.50	953,000	630	500
2020	953	0.63	0.50	953,000	630	500
2021	953	0.63	0.50	953,000	630	500
2022	953	0.63	0.50	953,000	630	500
2023	953	0.63	0.50	953,000	630	500
2024	953	0.63	0.50	953,000	630	500

At the Generator						
	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual kWh Reduction	Total Annual Winter kW Reduction	Total Annual Summer kW Reduction
Year	Reduction	Reduction	Reduction	Reduction	Reduction	Reduction
2015	1,004	0.78	0.62	0	0	0
2016	1,004	0.78	0.62	0	0	0
2017	1,004	0.78	0.62	301,053	233	185
2018	1,004	0.78	0.62	702,456	543	431
2019	1,004	0.78	0.62	1,003,509	776	616
2020	1,004	0.78	0.62	1,003,509	776	616
2021	1,004	0.78	0.62	1,003,509	776	616
2022	1,004	0.78	0.62	1,003,509	776	616
2023	1,004	0.78	0.62	1,003,509	776	616
2024	1,004	0.78	0.62	1,003,509	776	616

Customers and Participation Rates					
	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants
Year	Customers	Customers	Participants	%	Participants
2015	392,015	390,238	0	0.0%	0
2016	397,625	395,848	0	0.0%	0
2017	404,186	402,409	300	0.1%	300
2018	410,463	408,686	700	0.2%	1,000
2019	416,121	414,344	1,000	0.5%	2,000
2020	421,420	419,643	1,000	0.7%	3,000
2021	425,977	424,200	1,000	0.9%	4,000
2022	429,938	428,161	1,000	1.2%	5,000
2023	433,642	431,865	1,000	1.4%	6,000
2024	436,925	435,148	1,000	1.6%	7,000

**Insulation Improvement Program
Participation Standards**

1. Participation is available to all residential customers in Gulf Power's service area residing in a single family premises.
2. A customer must have an energy audit (or energy assessment in the Community Energy Saver program) conducted in order to determine the existing insulation level.
3. Customers must have no more than R-11 existing insulation in order to qualify.
4. Upon qualification, the customer will receive a voucher for insulation services up to \$500. The maximum value of the voucher will be based on total square footage of the insulated space.
5. Participating contractors will install R-19 value of additional qualifying insulation.
6. Qualifying insulation products include cellulose, fiberglass, mineral (rock or slag) wool, or natural fibers. In addition, spray foam insulation applied to the under side of the roof deck is also eligible. If spray foam is utilized to seal and semi-condition an existing attic, any and all insulation already present in that attic should be completely removed.
7. Customers constructing new homes are not eligible for this incentive.
8. Gulf, or its designee, will randomly perform field verification on a minimum of 10% of installations to ensure compliance with program standards.
9. Neither the payment of an incentive, nor any inspection, observation or verification by the Company shall be deemed to be or construed as a representation, assurance, guaranty, or warranty by the Company of the safety, durability, suitability, or reliability of the installation or equipment.
10. The reporting requirements for this program will be in accordance with Rule 25-17.0021 (5), F.A.C.

HVAC Efficiency Improvement Program
Program Start Date: 2015

Program Description

The Heating, Ventilation and Air Conditioning (HVAC) Efficiency Improvement program is designed to increase energy efficiency and improve HVAC cooling and heating system performance for both new and existing single-family, multi-family and permanently anchored manufactured homes. Because as much as half of the energy used in a home goes to cooling and heating, customers can save energy and money by installing an efficient system.

Individual Measures

HVAC Upgrade – This measure provides energy savings through the purchase and installation of high efficiency cooling and heating systems in new and existing homes. Incentives of increasing value will be offered for the following equipment efficiency levels:

- 15 SEER A/C or heat pump (Tier 1)
- 16 SEER A/C or heat pump (Tier 2)
- 17 SEER (and higher) A/C or heat pump (Tier 3)

HVAC Maintenance – This measure offers basic re-commissioning of existing HVAC systems at a reduced cost to the customer. This measure is designed to aid participating contractors in diagnosing the performance of the HVAC cooling system with the support of an independent computerized quality control process. These diagnoses include refrigerant level, evaporator airflow, refrigerant metering performance, and condenser performance. Based on the results, the best course of action to bring the system to its full efficiency will be attempted. Incentives to bring the system to its full efficiency will be realized by the customer through reduced pricing by participating contractors.

HVAC Quality Installation – This measure encourages proper refrigerant charge and airflow of HVAC systems by commissioning new system installations in new and existing homes with the support of an independent computerized quality control process. This process includes an analysis of the refrigerant level, evaporator airflow, refrigerant metering performance, and condenser performance to insure that the system is operating at its designed efficiency level.

Duct Repair – This measure provides energy savings through eliminating or reducing air distribution losses by sealing and repairing the air distribution system – air handler, air ducts, return plenums, supply plenums and any connecting structure. Incentives to seal the duct system using a program-approved

prescriptive approach will be realized by the customer through reduced pricing by participating contractors.

Gulf Power will utilize an independent third party contractor to administer the HVAC Efficiency Improvement Program. Customers will realize the financial incentives associated with each qualifying measure through reduced pricing by the participating HVAC contractors.

Gulf Power will utilize the participating HVAC contractor network, the Residential Energy Audit Program, web-based resources, and other means to increase customer awareness of this program.

Specific eligibility requirements for the program are provided in the Program Participation Standards.

Program Benefits and Cost Effectiveness

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

Cost-effectiveness results are shown for RIM, TRC, and PT, and are based on the maximum incentive levels identified below.

Measure	Max Incentive (per system)	Per Unit Reduction			Cost effectiveness test		
		Energy kWh	Summer Peak kW	Winter Peak kW	RIM	TRC	PT
HVAC Tier 1	\$300	1,927	0.31	0.62	1.02	6.14	6.58
HVAC Tier 2	\$450	3,326	0.48	0.90	1.01	8.73	9.33
HVAC Tier 3	\$650	4,517	0.86	1.35	1.09	11.12	10.91
HVAC Maintenance	\$200	607	.24	.07	1.26	5.65	5.35
HVAC Quality Installation	\$100	451	.18	.08	1.31	6.93	7.46
Duct Repair	\$315	303	.15	1.11	1.02	1.63	1.67

Monitoring and Evaluation

Gulf Power will monitor and evaluate program performance and progress toward goal achievement on a continual basis. Participating customer information will be recorded in the independent third party program reporting and tracking database, including customer data, details of participating measures, incentives paid, and energy and demand savings.

All participants will be subject to verification to validate information including, but not limited to:

- Verify that the applicant is a current Gulf Power customer
- Verify that the measure installation meets program specifications

Gulf, or its designee, will randomly perform field verification of installation on a minimum of 10% of installations to ensure compliance with program standards.

The following program performance indicators will be monitored and evaluated to determine the program's effectiveness:

- Number of completed qualifying installations;
- Total amount of incentive payments made;
- Number of disqualified installations;
- Number of contractors actively promoting each program measure.

Gulf will complete a periodic evaluation of the results to ensure the average savings per residence and the number of participants is consistent with the program objectives and expectations, including customer satisfaction.

Residential HVAC Maintenance						
At the Meter						
	Per Customer	Per Customer	Per Customer	Total Annual	Total Annual	Total Annual
	kWh	Winter kW	Summer kW	kWh	Winter kW	Summer kW
Year	Reduction	Reduction	Reduction	Reduction	Reduction	Reduction
2015	607	0.07	0.24	485,600	54	189
2016	607	0.07	0.24	728,400	82	283
2017	607	0.07	0.24	1,456,800	163	566
2018	607	0.07	0.24	2,185,200	245	850
2019	607	0.07	0.24	2,549,400	286	991
2020	607	0.07	0.24	3,035,000	340	1,180
2021	607	0.07	0.24	3,035,000	340	1,180
2022	607	0.07	0.24	3,035,000	340	1,180
2023	607	0.07	0.24	3,035,000	340	1,180
2024	607	0.07	0.24	3,035,000	340	1,180
At the Generator						
	Per Customer	Per Customer	Per Customer	Total Annual	Total Annual	Total Annual
	kWh	Winter kW	Summer kW	kWh	Winter kW	Summer kW
Year	Reduction	Reduction	Reduction	Reduction	Reduction	Reduction
2015	639	0.08	0.29	511,337	67	233
2016	639	0.08	0.29	767,005	101	349
2017	639	0.08	0.29	1,534,010	201	698
2018	639	0.08	0.29	2,301,016	302	1,046
2019	639	0.08	0.29	2,684,518	352	1,221
2020	639	0.08	0.29	3,195,855	419	1,453
2021	639	0.08	0.29	3,195,855	419	1,453
2022	639	0.08	0.29	3,195,855	419	1,453
2023	639	0.08	0.29	3,195,855	419	1,453
2024	639	0.08	0.29	3,195,855	419	1,453
Customers and Participation Rates						
	Total	Total	Annual	Cumulative	Cumulative	
	Number of	Number of	Number of	Penetration	Number of	
	Customers	Eligible Customers	Program Participants	Level %	Program Participants	
Year	Customers	Customers	Participants	%	Participants	
2015	392,015	390,238	800	0.2%	800	
2016	397,625	395,848	1,200	0.5%	2,000	
2017	404,186	402,409	2,400	1.1%	4,400	
2018	410,463	408,686	3,600	2.0%	8,000	
2019	416,121	414,344	4,200	2.9%	12,200	
2020	421,420	419,643	5,000	4.1%	17,200	
2021	425,977	424,200	5,000	5.2%	22,200	
2022	429,938	428,161	5,000	6.4%	27,200	
2023	433,642	431,865	5,000	7.5%	32,200	
2024	436,925	435,148	5,000	8.5%	37,200	

Residential Quality Installation						
At the Meter						
	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual kWh Reduction	Total Annual Winter kW Reduction	Total Annual Summer kW Reduction
Year	Reduction	Reduction	Reduction	Reduction	Reduction	Reduction
2015	451	0.08	0.18	902,000	166	350
2016	451	0.08	0.18	902,000	166	350
2017	451	0.08	0.18	947,100	174	368
2018	451	0.08	0.18	1,172,600	216	455
2019	451	0.08	0.18	1,623,600	299	630
2020	451	0.08	0.18	2,074,600	382	805
2021	451	0.08	0.18	2,300,100	423	893
2022	451	0.08	0.18	2,300,100	423	893
2023	451	0.08	0.18	2,300,100	423	893
2024	451	0.08	0.18	2,300,100	423	893
At the Generator						
	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual kWh Reduction	Total Annual Winter kW Reduction	Total Annual Summer kW Reduction
Year	Reduction	Reduction	Reduction	Reduction	Reduction	Reduction
2015	475	0.10	0.22	949,806	204	431
2016	475	0.10	0.22	949,806	204	431
2017	475	0.10	0.22	997,296	215	453
2018	475	0.10	0.22	1,234,748	266	560
2019	475	0.10	0.22	1,709,651	368	776
2020	475	0.10	0.22	2,184,554	470	991
2021	475	0.10	0.22	2,422,005	521	1,099
2022	475	0.10	0.22	2,422,005	521	1,099
2023	475	0.10	0.22	2,422,005	521	1,099
2024	475	0.10	0.22	2,422,005	521	1,099
Customers and Participation Rates						
	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants	
Year	Customers	Customers	Participants	%	Participants	
2015	392,015	390,238	2,000	0.5%	2,000	
2016	397,625	395,848	2,000	1.0%	4,000	
2017	404,186	402,409	2,100	1.5%	6,100	
2018	410,463	408,686	2,600	2.1%	8,700	
2019	416,121	414,344	3,600	3.0%	12,300	
2020	421,420	419,643	4,600	4.0%	16,900	
2021	425,977	424,200	5,100	5.2%	22,000	
2022	429,938	428,161	5,100	6.3%	27,100	
2023	433,642	431,865	5,100	7.5%	32,200	
2024	436,925	435,148	5,100	8.6%	37,300	

Residential Duct Repair

At the Meter						
	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual kWh Reduction	Total Annual Winter kW Reduction	Total Annual Summer kW Reduction
Year	Reduction	Reduction	Reduction	Reduction	Reduction	Reduction
2015	303	1.11	0.15	151,500	555	74
2016	303	1.11	0.15	151,500	555	74
2017	303	1.11	0.15	303,000	1,110	148
2018	303	1.11	0.15	454,500	1,665	222
2019	303	1.11	0.15	606,000	2,220	296
2020	303	1.11	0.15	757,500	2,775	370
2021	303	1.11	0.15	909,000	3,330	444
2022	303	1.11	0.15	1,060,500	3,885	518
2023	303	1.11	0.15	1,212,000	4,440	592
2024	303	1.11	0.15	1,212,000	4,440	592

At the Generator						
	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual kWh Reduction	Total Annual Winter kW Reduction	Total Annual Summer kW Reduction
Year	Reduction	Reduction	Reduction	Reduction	Reduction	Reduction
2015	319	1.37	0.18	159,530	684	91
2016	319	1.37	0.18	159,530	684	91
2017	319	1.37	0.18	319,059	1,367	182
2018	319	1.37	0.18	478,589	2,051	273
2019	319	1.37	0.18	638,118	2,734	365
2020	319	1.37	0.18	797,648	3,418	456
2021	319	1.37	0.18	957,177	4,101	547
2022	319	1.37	0.18	1,116,707	4,785	638
2023	319	1.37	0.18	1,276,236	5,469	729
2024	319	1.37	0.18	1,276,236	5,469	729

Customers and Participation Rates					
	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants
Year	Customers	Customers	Participants	%	Participants
2015	392,015	390,238	500	0.1%	500
2016	397,625	395,848	500	0.3%	1,000
2017	404,186	402,409	1,000	0.5%	2,000
2018	410,463	408,686	1,500	0.9%	3,500
2019	416,121	414,344	2,000	1.3%	5,500
2020	421,420	419,643	2,500	1.9%	8,000
2021	425,977	424,200	3,000	2.6%	11,000
2022	429,938	428,161	3,500	3.4%	14,500
2023	433,642	431,865	4,000	4.3%	18,500
2024	436,925	435,148	4,000	5.2%	22,500

HVAC Tier 1

At the Meter						
	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual kWh Reduction	Total Annual Winter kW Reduction	Total Annual Summer kW Reduction
Year	Reduction	Reduction	Reduction	Reduction	Reduction	Reduction
2015	1,927	0.62	0.31	0	0	0
2016	1,927	0.62	0.31	0	0	0
2017	1,927	0.62	0.31	433,575	140	70
2018	1,927	0.62	0.31	529,925	171	85
2019	1,927	0.62	0.31	626,275	202	101
2020	1,927	0.62	0.31	674,450	217	109
2021	1,927	0.62	0.31	722,625	233	116
2022	1,927	0.62	0.31	770,800	248	124
2023	1,927	0.62	0.31	818,975	264	132
2024	1,927	0.62	0.31	867,150	279	140

At the Generator						
	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual kWh Reduction	Total Annual Winter kW Reduction	Total Annual Summer kW Reduction
Year	Reduction	Reduction	Reduction	Reduction	Reduction	Reduction
2015	2,029	0.76	0.38	0	0	0
2016	2,029	0.76	0.38	0	0	0
2017	2,029	0.76	0.38	456,554	172	86
2018	2,029	0.76	0.38	558,011	210	105
2019	2,029	0.76	0.38	659,468	248	124
2020	2,029	0.76	0.38	710,196	267	134
2021	2,029	0.76	0.38	760,924	286	143
2022	2,029	0.76	0.38	811,652	305	153
2023	2,029	0.76	0.38	862,381	325	162
2024	2,029	0.76	0.38	913,109	344	172

Customers and Participation Rates					
	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants
Year	Customers	Customers	Participants	%	Participants
2015	392,015	390,238	0	0.0%	0
2016	397,625	395,848	0	0.0%	0
2017	404,186	402,409	225	0.1%	225
2018	410,463	408,686	275	0.1%	500
2019	416,121	414,344	325	0.2%	825
2020	421,420	419,643	350	0.3%	1,175
2021	425,977	424,200	375	0.4%	1,550
2022	429,938	428,161	400	0.5%	1,950
2023	433,642	431,865	425	0.5%	2,375
2024	436,925	435,148	450	0.6%	2,825

HVAC Tier 2

At the Meter						
	Per Customer kWh	Per Customer Winter kW	Per Customer Summer kW	Total Annual kWh	Total Annual Winter kW	Total Annual Summer kW
Year	Reduction	Reduction	Reduction	Reduction	Reduction	Reduction
2015	3,326	0.90	0.48	0	0	0
2016	3,326	0.90	0.48	0	0	0
2017	3,326	0.90	0.48	449,010	122	65
2018	3,326	0.90	0.48	548,790	149	79
2019	3,326	0.90	0.48	648,570	176	94
2020	3,326	0.90	0.48	698,460	189	101
2021	3,326	0.90	0.48	748,350	203	108
2022	3,326	0.90	0.48	798,240	216	115
2023	3,326	0.90	0.48	848,130	230	122
2024	3,326	0.90	0.48	898,020	243	130

At the Generator						
	Per Customer kWh	Per Customer Winter kW	Per Customer Summer kW	Total Annual kWh	Total Annual Winter kW	Total Annual Summer kW
Year	Reduction	Reduction	Reduction	Reduction	Reduction	Reduction
2015	3,502	1.11	0.59	0	0	0
2016	3,502	1.11	0.59	0	0	0
2017	3,502	1.11	0.59	472,808	150	80
2018	3,502	1.11	0.59	577,876	183	98
2019	3,502	1.11	0.59	682,944	216	115
2020	3,502	1.11	0.59	735,478	233	124
2021	3,502	1.11	0.59	788,013	249	133
2022	3,502	1.11	0.59	840,547	266	142
2023	3,502	1.11	0.59	893,081	283	151
2024	3,502	1.11	0.59	945,615	299	160

Customers and Participation Rates					
	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants
Year	Customers	Customers	Participants	%	Participants
2015	392,015	390,238	0	0.0%	0
2016	397,625	395,848	0	0.0%	0
2017	404,186	402,409	135	0.0%	135
2018	410,463	408,686	165	0.1%	300
2019	416,121	414,344	195	0.1%	495
2020	421,420	419,643	210	0.2%	705
2021	425,977	424,200	225	0.2%	930
2022	429,938	428,161	240	0.3%	1,170
2023	433,642	431,865	255	0.3%	1,425
2024	436,925	435,148	270	0.4%	1,695

HVAC Tier 3

At the Meter						
	Per Customer kWh	Per Customer Winter kW	Per Customer Summer kW	Total Annual kWh	Total Annual Winter kW	Total Annual Summer kW
Year	Reduction	Reduction	Reduction	Reduction	Reduction	Reduction
2015	4,517	1.35	0.86	0	0	0
2016	4,517	1.35	0.86	0	0	0
2017	4,517	1.35	0.86	355,714	106	68
2018	4,517	1.35	0.86	434,761	130	83
2019	4,517	1.35	0.86	513,809	154	98
2020	4,517	1.35	0.86	553,333	165	105
2021	4,517	1.35	0.86	592,856	177	113
2022	4,517	1.35	0.86	632,380	189	120
2023	4,517	1.35	0.86	671,904	201	128
2024	4,517	1.35	0.86	711,428	213	135

At the Generator						
	Per Customer kWh	Per Customer Winter kW	Per Customer Summer kW	Total Annual kWh	Total Annual Winter kW	Total Annual Summer kW
Year	Reduction	Reduction	Reduction	Reduction	Reduction	Reduction
2015	4,756	1.66	1.06	0	0	0
2016	4,756	1.66	1.06	0	0	0
2017	4,756	1.66	1.06	374,567	131	83
2018	4,756	1.66	1.06	457,804	160	102
2019	4,756	1.66	1.06	541,041	189	120
2020	4,756	1.66	1.06	582,659	204	130
2021	4,756	1.66	1.06	624,278	218	139
2022	4,756	1.66	1.06	665,896	233	148
2023	4,756	1.66	1.06	707,515	247	158
2024	4,756	1.66	1.06	749,133	262	167

Customers and Participation Rates					
	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants
Year	Customers	Customers	Participants	%	Participants
2015	392,015	390,238	0	0.0%	0
2016	397,625	395,848	0	0.0%	0
2017	404,186	402,409	79	0.0%	79
2018	410,463	408,686	96	0.0%	175
2019	416,121	414,344	114	0.1%	289
2020	421,420	419,643	123	0.1%	411
2021	425,977	424,200	131	0.1%	543
2022	429,938	428,161	140	0.2%	683
2023	433,642	431,865	149	0.2%	831
2024	436,925	435,148	158	0.2%	989

HVAC Efficiency Improvement Program

Participation Standards

1. Participation is available to all residential customers in Gulf Power's service area.
2. Except in the case of the Quality Installation fee paid directly to the HVAC Contractor for performance of the QI measure, participating HVAC Contractors will subtract the incentives paid by Gulf Power from the customer's invoice for services provided as specified below:

HVAC Upgrade – New installations and replacements of systems in new and existing single-family, multi-family and permanent anchored manufactured homes:

- a. \$150 for a minimum 15 SEER heat pump or A/C with 90% AFUE gas furnace.
- b. \$250 for a minimum 16 SEER heat pump or A/C with 90% AFUE gas furnace.
- c. \$350 for a minimum 17 SEER (or higher) heat pump or A/C with 90% AFUE gas furnace.
- d. All HVAC Upgrades must be installed and commissioned following the HVAC Efficiency Improvement Program's "Quality Installation" guidelines and procedures.

HVAC Maintenance- Single Family ("stand-alone residence"), Multi-Family (includes two or more attached residences), and permanently anchored manufactured homes.

- a. \$50 for repair, minimum refrigerant charge adjustment up to 1 lb., non-ductwork airflow adjustment, and filter clean/replace
- b. \$40 for indoor coil clean
- c. \$25 for outdoor coil clean

Quality Installation- Single Family ("stand-alone residence") & Multi-Family (includes two or more attached residences)

- a. \$75 fee paid directly to the HVAC Contractor for proper commissioning of a new HVAC system installation

Duct Repair:

Single Family ("stand-alone residence")

- a. \$250 for qualifying duct seal

Multi-family Structures (includes two or more attached residences)

- b. \$150 for qualifying duct seal

3. Qualifying equipment must be new, operational, and must be purchased and installed during the effective dates of the program.
4. All services must be provided by a Certified Technician of a Participating HVAC Contractor and must be completed during the effective dates of the program. The Program Administrator is responsible for the certification of all Participating HVAC Contractors and technicians.
5. Gulf, or its designee, will randomly perform field verifications on a minimum of 10% of contractor installations to ensure compliance with program standards. All applications for program incentives will be verified prior to payment.
6. Neither the payment of an incentive, nor any inspection, observation or verification by the Company shall be deemed to be or construed as a representation, assurance, guaranty, or warranty by the Company of the safety, durability, suitability, or reliability of the installation or equipment.
7. The reporting requirements for this program will be in accordance with Rule 25-17.0021 (5), F.A.C.

Residential Building Efficiency Program
Program Start Date: 2015

Program Description

The Residential Building Efficiency Program is designed as an umbrella efficiency program for existing and new residential customers to encourage the installation of eligible equipment and materials as a means of reducing energy and demand. The goal of the program is to increase awareness and customer demand for energy saving measures; increase availability and market penetration; and contribute toward long-term energy savings and peak demand reductions.

Individual Measures

Reflective Roof

The Reflective Roof measure will provide Gulf's residential customers with an incentive to install ENERGY STAR qualified cool/reflective roofing products when constructing a new home or replacing the roof on an existing residence. The objective of this measure is to significantly decrease the amount of heat that is transferred through roof assemblies and into vented attic spaces which, in turn, decreases the transfer of heat into the home's conditioned living area. Reducing this heat transfer reduces the HVAC cooling load on the home and lowers HVAC operating costs. In new home construction, reduced HVAC loads may also result in the installation of lower capacity HVAC equipment and its subsequent potential for additional energy, demand and cost benefits.

ENERGY STAR Window A/C

The Window A/C measure will provide Gulf Power residential customers an incentive to purchase and install ENERGY STAR rated window A/C units. The objective of this measure is to increase the efficiency of window A/C units above the minimum available efficiency upon new installation or replacement. After-purchase rebates will be utilized for this measure. Gulf Power will utilize the existing contractor network, the Residential Energy Audit Program, web-based resources, and other means to increase customer awareness for the measures included in this program.

High Performance Window

The High Performance Window measure will provide residential customers with an incentive to install high efficiency windows in existing or new residential applications. The objective of the measure is to reduce solar heat gain into a home which, in turn, leads to reduced HVAC loads and operating costs. In new home construction, reduced HVAC loads may also result in the installation of lower

capacity HVAC equipment with the resulting potential for additional energy, demand and cost benefits.

- This program includes high efficiency replacement windows for use in existing homes when the customer is considering removing old, inefficient, or otherwise defective windows.
- This program includes the installation of new high efficiency windows in new residential construction.

Specific eligibility requirements for the program are provided in the Program Participation Standards.

Program Benefits and Cost Effectiveness

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

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

Measure	Max Incentive (per participant)	Units	Per Unit Reduction			Cost effectiveness test		
			Energy kWh	Summer Peak kW	Winter Peak kW	RIM	TRC	PT
Reflective Roof	\$531	per home	1,029	.41	0	1.19	4.20	3.78
Energy Star Window A/C	\$44	per unit	82	.04	0	1.01	2.28	3.67
High Performance Window	\$460	per home	391	.21	.24	1.01	1.74	1.79

Monitoring and Evaluation

Gulf Power will monitor and evaluate program performance and progress toward goal achievement on a continual basis. Participating customer information will be recorded in the program reporting and tracking database. This will include, but is not limited to, the date the application was received and processed along with the issue date of rebate.

All rebate applications and accompanying proof of purchase documentation will be subject to verification to validate information including, but not limited to:

- Verify that applicant is an existing Gulf Power customer
- Review application for completeness
- Verify that the measure installation meets program specifications

Gulf, or its designee, will randomly perform field verifications on a minimum of 10% of installations to ensure compliance with program standards.

The following program performance indicators will be monitored and evaluated to determine the program's effectiveness:

- Number of completed qualifying installations;
- Total amount of incentive payments made;
- Number of disqualified installations;
- Number of contractors and/or retailers actively promoting each program measure;
- Manufacturer and model of the most commonly installed qualifying equipment or material for each measure.

Gulf will complete a periodic evaluation of the results to ensure the average savings per residence and the number of participants is consistent with the program objectives and expectations, including customer satisfaction.

Residential Reflective Roof						
At the Meter						
	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual kWh Reduction	Total Annual Winter kW Reduction	Total Annual Summer kW Reduction
Year	Reduction	Reduction	Reduction	Reduction	Reduction	Reduction
2015	1,029	0	0.41	102,900	0	41
2016	1,029	0	0.41	154,350	0	62
2017	1,029	0	0.41	257,250	0	103
2018	1,029	0	0.41	308,700	0	123
2019	1,029	0	0.41	360,150	0	144
2020	1,029	0	0.41	411,600	0	164
2021	1,029	0	0.41	463,050	0	185
2022	1,029	0	0.41	565,950	0	226
2023	1,029	0	0.41	668,850	0	267
2024	1,029	0	0.41	771,750	0	308
At the Generator						
	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual kWh Reduction	Total Annual Winter kW Reduction	Total Annual Summer kW Reduction
Year	Reduction	Reduction	Reduction	Reduction	Reduction	Reduction
2015	1,084	0	0.50	108,354	0	50
2016	1,084	0	0.50	162,531	0	76
2017	1,084	0	0.50	270,884	0	126
2018	1,084	0	0.50	325,061	0	151
2019	1,084	0	0.50	379,238	0	177
2020	1,084	0	0.50	433,415	0	202
2021	1,084	0	0.50	487,592	0	227
2022	1,084	0	0.50	595,945	0	278
2023	1,084	0	0.50	704,299	0	328
2024	1,084	0	0.50	812,653	0	379
Customers and Participation Rates						
	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants	
Year	Customers	Customers	Participants	%	Participants	
2015	392,015	390,238	100	0.0%	100	
2016	397,625	395,848	150	0.1%	250	
2017	404,186	402,409	250	0.1%	500	
2018	410,463	408,686	300	0.2%	800	
2019	416,121	414,344	350	0.3%	1,150	
2020	421,420	419,643	400	0.4%	1,550	
2021	425,977	424,200	450	0.5%	2,000	
2022	429,938	428,161	550	0.6%	2,550	
2023	433,642	431,865	650	0.7%	3,200	
2024	436,925	435,148	750	0.9%	3,950	

Residential Energy Star Window A/C

At the Meter						
	Per Customer	Per Customer	Per Customer	Total Annual	Total Annual	Total Annual
	kWh	Winter kW	Summer kW	kWh	Winter kW	Summer kW
Year	Reduction	Reduction	Reduction	Reduction	Reduction	Reduction
2015	82	0	0.04	16,400	0	9
2016	82	0	0.04	16,400	0	9
2017	82	0	0.04	16,400	0	9
2018	82	0	0.04	16,400	0	9
2019	82	0	0.04	16,400	0	9
2020	82	0	0.04	16,400	0	9
2021	82	0	0.04	16,400	0	9
2022	82	0	0.04	16,400	0	9
2023	82	0	0.04	16,400	0	9
2024	82	0	0.04	16,400	0	9

At the Generator						
	Per Customer	Per Customer	Per Customer	Total Annual	Total Annual	Total Annual
	kWh	Winter kW	Summer kW	kWh	Winter kW	Summer kW
Year	Reduction	Reduction	Reduction	Reduction	Reduction	Reduction
2015	86	0	0.05	17,269	0	11
2016	86	0	0.05	17,269	0	11
2017	86	0	0.05	17,269	0	11
2018	86	0	0.05	17,269	0	11
2019	86	0	0.05	17,269	0	11
2020	86	0	0.05	17,269	0	11
2021	86	0	0.05	17,269	0	11
2022	86	0	0.05	17,269	0	11
2023	86	0	0.05	17,269	0	11
2024	86	0	0.05	17,269	0	11

Customers and Participation Rates					
	Total	Total	Annual	Cumulative	Cumulative
	Number of	Number of	Number of	Penetration	Number of
	Customers	Eligible	Program	Level	Program
Year	Customers	Customers	Participants	%	Participants
2015	392,015	390,238	200	0.1%	200
2016	397,625	395,848	200	0.1%	400
2017	404,186	402,409	200	0.1%	600
2018	410,463	408,686	200	0.2%	800
2019	416,121	414,344	200	0.2%	1,000
2020	421,420	419,643	200	0.3%	1,200
2021	425,977	424,200	200	0.3%	1,400
2022	429,938	428,161	200	0.4%	1,600
2023	433,642	431,865	200	0.4%	1,800
2024	436,925	435,148	200	0.5%	2,000

Residential High Performance Window						
At the Meter						
	Per Customer kWh	Per Customer Winter kW	Per Customer Summer kW	Total Annual kWh	Total Annual Winter kW	Total Annual Summer kW
Year	Reduction	Reduction	Reduction	Reduction	Reduction	Reduction
2015	391	0.24	0.21	97,750	61	52
2016	391	0.24	0.21	136,850	85	73
2017	391	0.24	0.21	175,950	109	94
2018	391	0.24	0.21	195,500	121	104
2019	391	0.24	0.21	234,600	145	125
2020	391	0.24	0.21	273,700	169	146
2021	391	0.24	0.21	312,800	194	166
2022	391	0.24	0.21	391,000	242	208
2023	391	0.24	0.21	469,200	290	250
2024	391	0.24	0.21	547,400	339	291
At the Generator						
	Per Customer kWh	Per Customer Winter kW	Per Customer Summer kW	Total Annual kWh	Total Annual Winter kW	Total Annual Summer kW
Year	Reduction	Reduction	Reduction	Reduction	Reduction	Reduction
2015	412	0.30	0.26	102,931	75	64
2016	412	0.30	0.26	144,103	104	90
2017	412	0.30	0.26	185,275	134	115
2018	412	0.30	0.26	205,862	149	128
2019	412	0.30	0.26	247,034	179	154
2020	412	0.30	0.26	288,206	209	179
2021	412	0.30	0.26	329,378	238	205
2022	412	0.30	0.26	411,723	298	256
2023	412	0.30	0.26	494,068	358	307
2024	412	0.30	0.26	576,412	417	359
Customers and Participation Rates						
	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants	
Year	Customers	Customers	Participants	%	Participants	
2015	392,015	390,238	250	0.1%	250	
2016	397,625	395,848	350	0.2%	600	
2017	404,186	402,409	450	0.3%	1,050	
2018	410,463	408,686	500	0.4%	1,550	
2019	416,121	414,344	600	0.5%	2,150	
2020	421,420	419,643	700	0.7%	2,850	
2021	425,977	424,200	800	0.9%	3,650	
2022	429,938	428,161	1,000	1.1%	4,650	
2023	433,642	431,865	1,200	1.4%	5,850	
2024	436,925	435,148	1,400	1.7%	7,250	

Residential Building Efficiency Program
Residential Reflective Roof

Participation Standards

1. Participation is available to all residential customers in Gulf Power's service area.
2. A one-time incentive of \$0.25 per square foot of qualifying roofing products up to a maximum of \$500 per residence.
3. Qualifying roofing products must be new, purchased and installed during the effective dates of the program and installed over conditioned space.
4. Qualifying roofing products must constitute the uppermost surface of the building structure only.
5. Qualifying roofing products must meet the most current ENERGY STAR® guidelines and have an initial solar reflectance as defined below.
 - a. Greater than or equal to 0.65 for low-slope roofs – defined in accordance with ASTM Standard E 1918-97 as roof surfaces with a slope of 2:12 inches, or less.
 - b. Greater than or equal to 0.25 for steep-slope roofs – defined as roof surfaces with a slope greater than 2:12 inches.
6. Prior to payment of incentive, the following conditions must be met:
 - a. Complete incentive application
 - b. Documentation of proof of product qualifications (including manufacturer and the appropriate efficiency specifications of the products)
 - c. Sales receipt documentation including date of installation
 - d. Application must be made within 60 days of the installation of qualifying products
 - e. Installation must pass Gulf Power's verification process
7. Gulf, or its designee, will randomly perform field verifications on a minimum of 10% of installations to ensure compliance with program standards. All applications for program incentives will be verified prior to payment.
8. Neither the payment of an incentive, nor any inspection, observation or verification by the Company shall be deemed to be or construed as a representation, assurance, guaranty, or warranty by the Company of the safety, durability, suitability, or reliability of the installation or equipment.
9. The reporting requirements for this program will be in accordance with Rule 25-17.0021 (5), F.A.C.

Total Residential Programs - Incremental Savings						
At the Meter						
	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual kWh Reduction	Total Annual Winter kW Reduction	Total Annual Summer kW Reduction
Year	Reduction	Reduction	Reduction	Reduction	Reduction	Reduction
2015	0	0	0
2016	0	0	0
2017	2,015,049	1,147	559
2018	2,822,926	2,035	878
2019	3,475,304	1,778	1,093
2020	3,855,693	1,846	1,210
2021	3,750,481	1,860	1,138
2022	3,645,270	1,874	1,066
2023	3,631,109	1,897	1,029
2024	3,526,148	1,373	943
At the Generator						
	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual kWh Reduction	Total Annual Winter kW Reduction	Total Annual Summer kW Reduction
Year	Reduction	Reduction	Reduction	Reduction	Reduction	Reduction
2015	0	0	0
2016	0	0	0
2017	2,121,846	1,412	688
2018	2,972,541	2,507	1,081
2019	3,659,495	2,190	1,346
2020	4,060,044	2,274	1,490
2021	3,949,257	2,291	1,402
2022	3,838,469	2,307	1,313
2023	3,823,558	2,337	1,268
2024	3,713,033	1,691	1,161

Critical Peak Option (CPO) Program
Program Start Date: 2017

Program Description:

This program provides customers an opportunity to receive capacity credits when they reduce demand during Critical Peak periods. The program applicability and eligibility is outlined in Rate Schedule Large Power Time-of-Use (LPT).

Program Benefits and Cost Effectiveness

The reduced capacity benefits for this program are based on reductions during Critical Peak events as described in Rate Schedule LPT.

Cost-effectiveness results are shown for RIM, TRC, and PT, and are based on the On-Peak Capacity credit identified below.

Credits and Charges	Units	Per Unit Reduction			Cost effectiveness test		
		Energy kWh	Summer Peak kW	Winter Peak kW	RIM	TRC	PT
On-Peak Capacity Credit	Per kW of On-Peak billing demand	1	1	1	1.01	99	99
Critical Peak Demand Charge	Per kW of Critical Peak period billing demand	NA	NA	NA	NA	NA	NA

Monitoring and Evaluation

All credits and revenues associated with this program are based on actual metered usage and billed through the Company's monthly billing system. Actual Critical Peak demand reductions will be monitored to ensure the ongoing cost-effectiveness of this program.