850.444.6111

# ORIGINAL



November 8, 1999

Ms. Blanca S. Bayo, Director Division of Records and Reporting Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee FL 32399-0870

Dear Ms. Bayo:

Docket No. 981591-EG RE:

Enclosed are an original and fifteen copies of Gulf Power Company's Post-Hearing Brief and Statement of Issues and Positions to be filed in the above docket.

Also enclosed is a 3.5 inch double sided, high density diskette containing the Brief and Statement in WordPerfect 8 in Windows format as prepared on a Windows NT based computer.

Sincerely,

Linda G. Malone

Assistant Secretary and Assistant Treasurer

inda G. Malene

lw

**AFA** 

APP

CAF CMU

CIR

LEG MAS OPC

PAI

SEC

WAW

**Enclosure** 

Beggs and Lane CC:

Jeffrey A. Stone, Esquire

Gulf Power Company

Susan D. Ritenour

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NOV -9 8

FPSC-RECORDS/REPORTING

ORIGINAL

#### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for authority to implement Good Cents Conversion Program

by Gulf Power Company

Docket No.:

981591-EG

Filed:

November 9, 1999

**GULF POWER COMPANY'S** POST-HEARING BRIEF AND STATEMENT OF ISSUES AND POSITIONS

Gulf Power Company ["Gulf", "Gulf Power" and the "Company"], by and through its undersigned attorneys, and pursuant to Rule 25-22.038(3), Florida Administrative Code, and in accordance with the Order Establishing Procedure in this docket, Order No. PSC-99-1217-PCO-EG. hereby submits the Company's post-hearing brief on issues 1-7 as identified in Order No. PSC-99-1801-PHO-EG, and the Company's post-hearing statement of issues and positions related thereto.

# INTRODUCTION

The Good Cents Conversion Program ["program"] promotes the installation of high efficiency heat pumps to replace older, inefficient combustion heating equipment. It is undisputed that the high efficiency heat pump is the most efficient HVAC system available for residential use. The program offers a \$200 cash rebate as an incentive to customers to replace their inefficient equipment with a new heat pump having at least an 11.0 seasonal energyefficiency ratio (SEER). For each unit installed under this program, a reduction in Gulf's weather-sensitive peak demand (summer peak demand) of 1.9 kilowatts at the meter and an annual reduction in electrical energy consumption of 1,030 kilowatt-hours is expected to result. In addition, reduction in natural gas consumption and demand will also occur directly as a result

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of this program. These results meet and further the goals of the Florida Energy Efficiency and Conservation Act (FEECA).

The Good Cents Conversion Program satisfies the Commission-approved methodology for determining cost-effectiveness of conservation programs. A cost-effectiveness ratio result of one or greater was achieved by this program under all three measures for cost-effectiveness: the Ratepayer Impact Measure (RIM) test, the Participant's test and the Total Resource Cost (TRC) test. This result is not changed even if the positions argued by the intervenors regarding Gulf's cost-effectiveness analysis are adopted. The program is still cost-effective.

FEECA mandates the utilization of the most efficient and cost-effective energy systems available be it electric, renewables, or gas. No preference to any source is intended or stated in FEECA. Gulf's proposed program promotes the most efficient HVAC technology, while meeting one or more of FEECA's stated goals. It is difficult, if not impossible, for a program to meet all of the goals FEECA seeks to achieve, however, those programs that meet one or more of those goals do add to conservation efforts overall. This program does meet one or more of the goals of FEECA, is cost-effective, and promotes the use of high efficiency equipment. The Good Cents Conversion program meets the requirements for cost recovery through the ECCR and said recovery should be approved by this Commission.

# **STATEMENT OF ISSUES AND POSITIONS**

**ISSUE 1:** Is Gulf Power Company's proposed Good Cents Conversion Program costeffective?

#### \*SUMMARY OF GULF'S POSITION:

Yes. Using very conservative assumptions, the Good Cents Conversion Program passes all cost effectiveness tests as follows: RIM = 1.19, Participant = 1.39, TRC = 1.88. Peoples Gas System [Peoples] advocates an analysis that uses only the savings associated with a change from a 10.0 SEER heat pump to an 11.0 SEER heat pump, a program analysis period of 15 years and the exclusion of the monthly customer charge in the gas cost. The program is still cost-effective under each of the three cost-effectiveness tests if these three assumptions are used in the analysis.

# Discussion:

The Good Cents Conversion Program is cost-effective under the Commission-approved methodology for assessing cost-effectiveness. [Tr. 23] This methodology recognizes three cost-effectiveness tests: the Ratepayer Impact Measure (RIM) test, the Participant's test and the Total Resource Cost (TRC) test. A result of at least 1.00 is required under the Commission's methodology for a program to be cost-effective under any of these tests. [Tr. 23] Using very conservative assumptions which are discussed herein at Issue 2, the Good Cents Conversion Program passes all cost effectiveness tests as follows: RIM = 1.19, Participant = 1.39, TRC = 1.88. [Tr. 24, 152]

Peoples disagrees with several assumptions used by Gulf in the cost-effectiveness evaluation. Peoples advocates an analysis that uses only the savings associated with a change from a 10.0 SEER heat pump to an 11.0 SEER heat pump, a program analysis period of 15 years and the exclusion of the monthly customer charge in the gas cost. [Tr. 99-101] The discussion under Issue 2 addresses the flaws in Peoples' assumptions. While Gulf disagrees with Peoples'

assumptions, the program is still cost-effective under each of the three cost-effectiveness tests if these three assumptions by Peoples are utilized. [Tr. 152-53]

During the hearing, concern was raised as to the impact, if any, of those potential program participants who would already be changing their HVAC systems to a higher efficiency system. These participants may be characterized as free riders. Gulf conducted a sensitivity using an assumption of 25% free riders which it believes to be a higher percentage than would occur. Even with this level of free ridership the program is still cost-effective having a RIM value of 1.59. [Tr. 57]

**ISSUE 2:** Is Gulf Power Company's cost-effectiveness analysis based on accurate assumptions?

# \*SUMMARY OF GULF'S POSITION:

Yes. Gulf utilized conservative and accurate assumptions in its cost-effectiveness analysis. Gulf assumed a 1680 square foot home with a central air-conditioning unit having a SEER of 7 and a central gas furnace with an Annual Fuel Utilization Efficiency (AFUE) of 68%. The existing system was assumed to be replaced with a heat pump having a Seasonal Energy Efficiency Ratio (SEER) of 11.0 and a Heating Season Performance Factor (HSPF) of 7.4. A thirty year analysis period is appropriate and was utilized.

## Discussion:

Gulf utilized conservative and accurate assumptions in its cost-effectiveness analysis.

Gulf assumed a 1680 square foot home with a central air-conditioning unit having a SEER of 7 and a central gas furnace with an AFUE of 68%. The existing system was assumed to be replaced with a heat pump having a SEER of at least 11 and a HSPF of 7.4. [Tr. 24-25] A customer incentive of \$200 and a dealer incentive of \$50 are also assumptions input into the cost-

effectiveness analysis. [Tr. 22] A thirty year analysis period was appropriately utilized as it represents the life of the generating unit that Gulf is seeking to defer or avoid through its conservation efforts with this program. [Tr. 51-53]

As discussed under Issue 1, the program is cost-effective utilizing the aforementioned assumptions. A reduction in annual electricity use of 1,030 kWh is expected from the implementation of this program, as is a 1.90 kW per participant reduction in summer peak kilowatt demand at the meter. [Tr. 22, 25] Conservation of 302 therms of natural gas annually per participant is also achieved by the program. [Tr. 25]

Gulf's analysis assumes reductions in summer peak demand and annual kWh consumption associated with replacing a central air-conditioning unit having a SEER of 7 and a central gas furnace with an AFUE of 68% with a heat pump having a SEER of at least 11 and a HSPF of 7.4. [Tr. 22-25, 148-50] This assumption is valid and reasonable. The appropriate SEER change for analysis is undeniably the SEER of the unit coming out compared to the SEER of the unit going in as the replacement unit. [Tr. 150] The most important focus must be on whether the replacement of an old inefficient unit with a new higher efficiency unit will occur. Abundant credible testimony in the record supports that the low efficiency units which would be candidates for replacement by Gulf's program are not at or near the end of the normal useful life and would not be expected, with any reasonable degree of probability, to otherwise be replaced by the customer. [Tr. 148] This is fully discussed herein at Issue 3. A key underlying aspect of this program is that it is expected to motivate customers with older less efficient HVAC systems to replace them with newer high-efficient units before their existing systems have reached the end of their useful life. The reason for a higher SEER unit being installed is the implementation

of this program and the effect of the program's incentive. The conservation benefits are either nothing because no new equipment is being installed or are the SEER difference between the existing equipment and the new equipment that is being installed as a result of this program. Thus, Peoples' argument that only those benefits attributable to going from 10 SEER to 11 SEER heat pump equipment should be included in the cost-effectiveness calculation is wrong. That assumption can only be true if the customer was going to replace an existing unit with a 10 SEER unit without the incentive, which is simply not the case. [Tr. 149] The number of people who would already be changing their HVAC systems to a higher efficiency system, the so-called free rider effect, is few. [Tr. 57] Here the entire increase in efficiency from 7 SEER to 11 SEER or higher is the direct result of Gulf's incentive through this program and the entire savings from 7 SEER to 11 SEER is appropriately included in the cost-effectiveness analysis for this program. Moreover, Gulf was conservative in its SEER assumption by including only those savings attributable to 11 SEER equipment. The average SEER installed under the program is expected to be greater than 11 SEER. [Tr. 150] In an effort to be conservative, Gulf did not include the savings associated with the expected installations of equipment with higher than 11 SEER. [Tr. 150-51] Again, the focus is on whether a replacement of an existing older inefficient unit will occur. The starting point is not an assumption that a replacement will occur. The record does not support that the customer will be replacing their older, inefficient units absent this program.

The existence of Gulf Power's water heating program has been made an issue in this proceeding and serves as the basis for much of People's negative position regarding the demand reduction assumptions used by Gulf in its determination of this program's cost-effectiveness.

[Tr. 105-06] The water heating program is not linked to the Good Cents Conversion Program,

nor is it subject to FEECA as cost recovery through the ECCR has not been sought. [Tr. 163] Peoples argues that the water heating program will add summer peak demand such that it offsets the summer peak demand reduction achieved under the Good Cents Conversion Program. [Tr. 105-06, 163-64] This ignores the presence of a timer on the water heater that will keep the water heater off during peak hours. The customer has no incentive to disable or otherwise not use the timer because its use results in a monetary benefit to that customer in the form of lower energy bills. [Tr. 163-64] In addition, no record evidence shows how much the supposed increase would be. In fact, the coincident demand of a water heater is not the same as or greater than the demand reductions achieved through the Good Cents Conversion Program. [Tr. 164] The water heating program has no effect on whether the Good Cents Conversion Program meets the requirements of FEECA and satisfies the cost-effectiveness requirements for recovery through ECCR.

In analyzing this program's cost-effectiveness, Gulf uses a thirty year analysis period which is reasonable and comports with Commission precedent. The Commission has approved the use of an avoided or deferred utility resource for the program period analysis, and has not typically used the participant's expected equipment life as the analysis period. [Tr. 154] In fact, Tampa Electric Company, a member company of TECO Energy along with Peoples, has a program approved for conservation cost recovery that pays customers for participation in direct load control that uses an analysis period of thirty years. That program is the Prime Time Load Management Program. That thirty year analysis period is based on a generating unit, not equipment service life. [See Docket 941173-EG] Several other Florida utilities have HVAC replacement programs which utilize an analysis period based not on equipment service life, but rather the life of a generating unit. [See Dockets 941170-EG, 941171-EG and 941173-EG] The

thirty-year analysis period used in Gulf's cost-effectiveness analysis represents Gulf's avoided or deferred utility resource for the planning horizon for new generation. Therefore, Gulf has included a valid, reasonable assumption of a thirty year analysis period which comports with the Commission's precedent. The thirty year period is also valid for the analysis period in that once customers switch to higher efficiency equipment they tend to replace that equipment with similar equipment and continue enjoying the economic benefits of having changed to higher efficiency equipment. [Tr. 53, 59]

The use of "service life" as the analysis period for cost-effectiveness is inappropriate as discussed herein above. Moreover, Mr. McCormick's use of 15 years as that service life is in error. The flaws of Mr. McCormick's reliance on a 15-year service life for heat pumps is further explored in Issue 3 below. Peoples fails to provide any reasonable basis for using service life as the analysis period or for the alleged 15 year service life of a heat pump.

Peoples takes issue with Gulf's gas cost assumptions. [Tr. 104] Testimony was offered by Peoples stating that Gulf overstated the cost of gas in its cost-effectiveness evaluation by including the customer charge in the average gas price. [Tr. 104] This testimony conveniently ignores the fact that Gulf's gas cost assumption is intended to cover all combustion furnace applications throughout Northwest Florida where Gulf serves customers, not just those in People's service territory. There are eight natural gas distributors offering residential service using 13 different rate schedules in Northwest Florida. [Tr. 157-59] Four distributors billing under six of the rate schedules include a customer charge, which ranges from \$4 to \$7 per month on their monthly billings. Therefore, Peoples could only be correct in its position with regard to customers with multiple gas appliances taking service on one of the six rate schedules which

include a customer charge. This liberalism in gas cost is offset by the conservative number of total therms of gas savings and the fact that propane users are excluded from the gas cost figure. [Tr. 158-159] In the end, however, the gas cost issue raised by Peoples is without meaningful impact. Removing the customer charge from those schedules in which it was included still results in Gulf's Good Cents Conversion Program being cost-effective.

Gulf acknowledged that an assumption that it had initially made in one of the costeffectiveness scenarios was in error. [Tr. 152] This error was an overstatement of the customer's expected equipment cost where a change from a gas furnace and a 10 SEER air conditioning system to an 11 SEER heat pump system was being examined [Tr. 152] The erroneous original assumption was that this cost would be \$3000. The \$3000 represents going from a 7 SEER unit to an 11 SEER unit. However, since the customer is already planning to upgrade their equipment to a minimum of 10 SEER, only the incremental equipment cost to go beyond the 10 SEER air conditioner and gas furnace to an 11 SEER heat pump is the correct cost to be included in the analysis for this scenario. [Tr. 152] This amount is expected to be \$1300. [Tr. 152] This obviously is not the same as the cost differential of going from a 10 SEER heat pump to and 11 SEER heat pump. The changing of a gas furnace to a heat pump includes a new indoor unit, additional wiring, flue changes, patching of holes, capping of gas lines and other similar structural changes which incur costs. [Tr. 70-71] This is much different than going from a 10 SEER heat pump to a higher SEER heat pump. [Tr. 70 -72] The \$1300 was obtained from HVAC dealers. [Tr. 186] In any event, the cost of equipment in the aforementioned scenario must be less than the \$3000 amount for going from a gas furnace and an old air conditioner to a new high efficiency heat pump where it is assumed that the customer is going to spend the

money to make the replacement and is now just looking at the increment of going to a heat pump instead of the gas furnace and air conditioner. [Tr. 186] The \$1300 cost of equipment is the only amount supported by the record and is a reasonable amount based on information from HVAC dealers.

**ISSUE 3:** Under Gulf Power Company's proposed Good Cents Conversion Program, are customers likely to replace existing inefficient heating, ventilating, and air-conditioning (HVAC) equipment only if it fails?

#### \*SUMMARY OF GULF'S POSITION:

No. The low efficiency units which would be candidates for replacement by Gulf's program are not at or near the end of the normal useful life and would not be expected, with any reasonable degree of probability, to otherwise be replaced by the customer. Additionally, Gulf expects its program to specifically encourage customers to change out equipment prior to the end of its functional life.

## Discussion:

The low efficiency units which would be candidates for replacement under the Good Cents Conversion Program are not likely to have failed or to be at the end of their normal useful lives. [Tr. 32, 149] In fact, the \$200 customer incentive is being utilized by Gulf to encourage customers to change to higher efficiency units prior to the failure of their existing lower efficiency units. [Tr. 149-50] Customers are likely to replace functioning, though inefficient, existing equipment and not just equipment that has failed.

The eligible program participants that Gulf is targeting with the Good Cents Conversion program have existing HVAC equipment installations that are 10 to 15 years old. [Exhibit 3, pages 1 - 7] It is undisputed that HVAC equipment installations that are targeted by this program have service life expectancy greater than 15 years. In fact, both Gulf and Peoples have witnesses

who testified that HVAC units installed since the 1980's are expected to have service life expectancy in excess of 15 years. [Tr. 131-32, 114-15] This clearly includes those units that are 10 to 15 years old given that it is nearly 2000.

Mr. McCormick erroneously asserts that HVAC service life is 15 years and therefore the fact that Gulf's program targets units that are 10 to 15 years old means that the targeted units of Gulf's program are at or near the end of their useful life. In his testimony regarding service life of HVAC equipment, Mr. McCormick relied on findings of the Air Conditioning and Refrigeration Institute (ARI). [Exhibit 3] ARI found that HVAC life expectancy is currently well in excess of 15 years. [Tr. 98, 114] Thus, Mr. McCormick's own source for determining service life supports Gulf's position that the low efficiency units which would be candidates for replacement under the Good Cents Conversion Program are not likely to have failed or to be at the end of their normal useful lives. Mr. McCormick also relies on the 1999 American Society of Heating Refrigerating and Air Conditioning Engineers (ASHRAE) Handbook Heating, Ventilating and Air-conditioning Applications which shows an estimate of 15 years for his position that the service life of a residential central air conditioning unit or heat pump is 15 years. The ASHRAE findings are based on antiquated data related to units installed in the period 1964 through 1974 and fail to account for improvements in service life for units manufactured since 1985. [Tr. 129] In addition, the AHRAE table finds its support in a survey conducted in 1986 which was based on the opinions of HVAC dealers, not a scientific sampling. [Tr. 126-27] The fatal flaw of the ASHRAE findings is the fact that it is based on survey data that only studied units that were removed from service for any reason, but failed to consider units still in service. [Tr. 127] This flaw resulted in a greatly understated service life of 15 years. [Tr. 126] The total

number of units installed, replaced and left in service must be known to draw a valid conclusion of service life in a survey such as that done by ASHRAE. Finally, the ASHRAE findings are intended to be an estimate of service life on a nationwide basis. Mr. McCormick failed to recognize and account for the undisputed evidence that HVAC systems operating in Northwest Florida are reasonably expected to have a service life that is somewhat greater than the national average. [Tr. 128] Mr. McCormick's position is flawed and is not supported even by the sources which he has relied upon in reaching his conclusions. In addition, the ASHRAE data is presented as "service life", which would include removal for a variety of reasons other than failure, making it a different and lower measure than "useful life" or "functional life".

Mr. Shell testified to the expected failure rate of HVAC units installed in the Northwest Florida area. [Tr. 132-33] For units that are 15 years old, the probability of failure during the next year was found to be 5%. Units that are 10 years old were found to have a 4% probability of failure. [Tr. 133] This testimony was not disputed. Overall, the units that would be the focus of this program are not reasonably expected to be at or near the end of their useful life. [Tr. 141] The greater weight of credible evidence reveals that HVAC equipment has a service life of 22 years. [Tr. 132] This is far in excess of the 10 to 15 year old units that Gulf is targeting with this program. Simply, the units targeted for replacement by the Good Cents Conversion Program are not at or near the end of their useful life or service life.

**ISSUE 4:** Is Gulf Power Company's proposed Good Cents Conversion Program an energy conservation program, or, rather, electricity competing with natural gas?

#### \*SUMMARY OF GULF'S POSITION:

The Good Cents Conversion Program is an energy conservation program. The program reduces energy consumption and peak demand and is cost-effective using the Commission's approved methodology and is consistent with the Florida Energy Efficiency and Conservation Act (FEECA). The only competitive effect of the program is natural, resulting from the infusion of a superior high-efficiency HVAC product into the HVAC system market. FEECA advocates the use of high-efficiency systems.

## Discussion:

The Good Cents Conversion program is an energy conservation program; it reduces the participant's annual electrical consumption by 1,030 kilowatt-hours and reduces peak demand by 1.9 kilowatts. The program is cost-effective using the Commission's approved methodology.

[Tr. 23, 152] Using very conservative assumptions, the Good Cents Conversion Program passes all cost effectiveness tests as follows: RIM = 1.19, Participant = 1.39, TRC = 1.88. [Tr. 23, 152] Likewise, the Good Cents Conversion program is consistent with the Florida Energy Efficiency and Conservation Act (FEECA). [Tr.26-27] A program qualifies for cost recovery pursuant to FEECA if it meets one of several goals of FEECA. [Tr. 26-27] Two of FEECA's goals are that a program result in a reduction of a utility's weather-sensitive peak electrical demand or that a program reduce electric consumption by a utility's customers. [Section 366.81, Florida Statutes] The Good Cents Conversion program meets both of these goals in that it results in a reduction of Gulf's weather-sensitive peak electrical demand and reduces electric consumption. [Tr. 26-27] The issue as to whether the Good Cents Conversion Program meets the requirements of FEECA is discussed herein at Issue 5.

A program which promotes the installation of an HVAC technology having a higher

efficiency instead of an older, less efficient technology will result in a natural competitive effect. [Tr. 73-74] The high efficiency heat pump is the most efficient HVAC system available having three units of energy transfer for every unit of energy input. [Tr. 35, 180] The Good Cents Conversion Program promotes a high-efficiency heat pump. [Tr. 22,35] Mr. McCormick testified, and Gulf agrees that the average SEER for heat pumps is greater than the average SEER of central air conditioners installed in today's market. [Tr. 102] Gulf's program therefore promotes the superior and more efficient technology. FEECA advocates promoting higher efficiency systems. [Section 366.81, Florida Statutes] The older, less-efficient technology will naturally be less attractive to consumers and will suffer a competitive disadvantage. [Tr. 73-74] The same is true with regard to other less efficient electric HVAC products such as electric strip heat. [Tr.74] Competition is increased in favor of a heat pump over strip heat as a result of the higher efficiency of the heat pump. These are natural competitive effects of more efficient technology over less efficient technology. The natural competitive effects of this program are lawful and do not violate any Florida statute or Federal law. These natural competitive sideeffects should not be used to stifle a cost-effective program that provides significant benefits to Gulf's ratepayers. To do so would ignore the mandates of FEECA.

**ISSUE 5:** Is Gulf Power Company's proposed Good Cents Conversion Program consistent with the Florida Energy Efficiency and Conservation Act?

#### \*SUMMARY OF GULF'S POSITION:

Yes. The Good Cents Conversion Program meets the requirements of FEECA because the program would result in a reduction in annual kWh consumption and a reduction in Gulf Power's annual peak demand which occurs in the summer. In addition, the weather-sensitive peak demand for natural gas, which occurs in the winter in Northwest Florida, would also experience a reduction.

## Discussion:

The Florida Energy Efficiency and Conservation Act (FEECA) is unambiguous in that it mandates that the Florida Public Service Commission (Commission) require utilities under its authority to utilize the most efficient and cost-effective energy conservation systems in Florida. [Section 366.81, Florida Statutes] To that end, the Legislature emphasized the reduction and control of the growth rates of electric consumption and of weather-sensitive peak demand. [Section 366.81, Florida Statutes] The Commission has approved several load management programs for ECCR cost recovery that reduce peak demand with no reduction in annual energy consumption. [Tr. 166] Thus, Commission policy is to require that one of these goals of FEECA be met, not both in every conservation program. To require both the reduction and control of the growth rates of electric consumption and of weather-sensitive peak demand would severely constrain the Commission's ability in administering FEECA to obtain the most efficient and cost-effective energy conservation systems. Utility programs that promote the use of highly efficient systems are encouraged by the Legislature and are therefore to be encouraged by the Commission. [Section 366.81, Florida Statutes] Likewise, the Legislature directs the Commission to liberally construe FEECA and to seek to increase the overall efficiency and costeffectiveness of electricity and natural gas production and use. [Section 366.81, Florida Statutes]

No preference is granted to gas over electricity. The Legislature tasks the Commission with increasing the overall efficiency of both electricity and gas use.

Both FEECA and the Commission's rules implementing it, Rule 25-17.001 through Rule 25-17.016, contemplate that a specific utility's weather-sensitive peak demand is to be used in determining whether the peak demand reduction goal of FEECA is met for that utility's conservation program. The Commission has not and should not utilize a statewide peak demand as a measure for meeting FEECA. Moreover, no evidence in the record supports doing so. The fact is that Florida's utilities do not all experience peak demand during the same season or time of year. Gulf Power experiences its weather-sensitive peak demand during the summer. [Tr. 26-27, 178] It is this peak demand that is of concern with regard to Gulf Power. The Good Cents Conversion Program conservatively achieves for each program participant a reduction of 1.9 kilowatts at the meter in Gulf's annual weather-sensitive peak demand. [Tr. 22] This program will not cause Gulf's winter peak demand to increase to a point at which it exceeds its summer peak demand. [Tr. 183] In addition to meeting FEECA's goal of a reduction in weather-sensitive peak demand, the goal of a reduction in the growth rates of electric consumption is also achieved through the Good Cents Conversion Program. Gulf expects to see a reduction of 1,030 kilowatthours per program participant in annual energy consumption. [Tr. 22] Finally, a reduction in natural gas weather-sensitive peak demand and consumption in Northwest Florida will result from the Good Cents Conversion Program. [Tr. 22] The record is clear that at least three goals of FEECA are met through the Good Cents Conversion Program.

The mandate of FEECA is clear with regard to the Commission and the utilities being

required to promote the use of higher efficiency equipment. [Section 366.81, Florida Statutes] The Good Cents Conversion Program promotes the use of a high-efficient heat pump as a replacement for less efficient HVAC equipment. [Tr. 22] This program assumes that a central air-conditioning unit having a SEER of 7 and a central gas furnace with an AFUE of 68% is being replaced with a heat pump having a SEER of at least 11 and a HSPF of 7.4. [Tr. 24] The high-efficiency heat pump is the most efficient HVAC systems available having three units of energy transfer for every unit of energy input. [Tr. 35, 180-81] The Good Cents Conversion program promotes a high-efficiency heat pump. [Tr. 22,35] The evidence in this record shows that the average SEER for heat pumps is greater than the average SEER of central air conditioners installed in today's market. [Tr. 102] Gulf's program therefore promotes the superior and more efficient technology. For heating loads in Northwest Florida, a heat pump will have a higher average heating efficiency than the national average, while a furnace will have a lower actual realized furnace efficiency. [Tr. 159]

Peoples argues that the Good Cents Conversion Program does not meet the requirements of FEECA. [Tr. 106] First, Peoples wants the Commission to ignore its prior decisions and policy regarding the application of FEECA. People argues that if a program adds to a utility's non-weather sensitive peak demand that it must fail FEECA. [Tr. 105] This is simply not the Commission's policy, nor should it be. Peoples appears to believe that any peak that occurs as a result of weather is the weather sensitive peak demand that is targeted by FEECA. [Tr. 106] Peoples offers no legal or logical support for this apparent position. The planning process of electric utilities for generation and Demand-Side Management focuses on the system peak, winter or summer. [Tr. 178] Taken to its logical conclusion, the position taken by Peoples says

that a program may never increase any peak demand. Interestingly, for all gas conservation programs that provide incentives for electric to gas conversion of heating or water heating, the winter peak demand of the gas utility is increased. Thus, all such gas programs are in violation of People's vision of FEECA.

Peoples argues that the Good Cents Conversion Program will result in an increase in annual kWh consumption and therefore cannot meet FEECA. [Tr. 106] Peoples wrongly assumes that an increase in annual kilowatt-hour consumption will occur as a result of this program. [Tr. 102, 106, 165] FEECA does not preclude recovery of a program that otherwise meets one of its goals, but also increases annual energy consumption. In fact, the Commission has approved many direct load control programs that result in reductions to weather sensitive peak demand while increasing annual energy consumption. These programs further FEECA's goals and the Commission has recognized them as conservation programs eligible for cost recovery. [Tr. 166] The Commission has encouraged the use of off-peak thermal storage systems which result in reductions to peak demand as well as a net increase in annual energy consumption. [Tr. 166-67] Interpreting FEECA in the rigid, constrictive manner that Peoples advocates would defeat the intent and stated purpose of FEECA in that it would contradict the Commission's earlier decisions and would severely limit the level of conservation in Florida.

In the end, Peoples does not raise any reasonable argument in support for holding that the Good Cents Conversion Program contradicts or violates FEECA. Assuming that Peoples is right that annual energy consumption is increased and that the winter peak demand experienced by Gulf increases, the program still meets the goal of FEECA that calls for the reduction of weather sensitive peak demand which occurs in the summer for Gulf. Meeting every part of FEECA is

not required by statute, nor by Commission policy and precedent. Meeting all of the aims of FEECA is a high burden on conservation programs which would result in significant

conservation being forgone.

**ISSUE 6:** Should the Commission approve Gulf Power Company's proposed Good Cents

Conversion Program, including approval for cost recovery through the Energy

Conservation Cost Recovery (ECCR) Clause?

\*SUMMARY OF GULF'S POSITION:

Yes.

Discussion:

The Good Cents Conversion Program is consistent with and furthers the goals of the Florida Energy Efficiency and Conservation Act and is cost-effective under the Commission's approved methodology for determining cost-effectiveness. See discussion at Issues 1 - 5.

**ISSUE 7:** Should the docket be closed?

\*SUMMARY OF GULF'S POSITION:

Yes.

# **CONCLUSION**

Gulf seeks the approval for cost recovery purposes of the Good Cents Conversion

Program. This program is clearly a conservation program that meets the requirements of the

Florida Energy Efficiency and Conservation Act. The program promotes the installation of high

efficiency heat pumps to replace older, inefficient combustion heating equipment.

For each unit installed under this program, a reduction in Gulf's weather-sensitive peak demand (summer peak demand) of 1.9 kilowatts at the meter and an annual reduction in electrical energy consumption of 1,030 kilowatt-hours is expected to result. In addition, natural gas consumption and peak demand will also be reduced directly as a result of this program.

These results meet and further the goals of the Florida Energy Efficiency and Conservation Act (FEECA). FEECA mandates the utilization of the most efficient and cost-effective energy systems available be it electric, renewables, or gas.

This program promotes the most efficient HVAC technology, while meeting one or more of FEECA's stated goals. It is difficult if not impossible for a program to meet all of the goals FEECA seeks to achieve; however, those that meet one or more of those goals do add to conservation efforts overall. The Good Cents Conversion Program also satisfies the Commission-approved methodology for determining cost-effectiveness for conservation programs. A result of one or greater was achieved by this program under each the Ratepayer Impact Measure (RIM) test, the Participant's test and the Total Resource Cost (TRC) test. This result is not changed even if the positions argued by Peoples regarding Gulf's cost-effectiveness analysis are adopted. The program is still cost-effective.

This program does meet one or more of the goals of FEECA, is cost-effective, and

promotes high efficiency equipment. The Good Cents Conversion Program meets the requirements for cost recovery through the ECCR and said recovery should be approved by this Commission.

Respectfully submitted,

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#### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for authority to implement)
Good Cents Conversion Program by
Gulf Power Company

Docket No. 981591-EG

# Certificate of Service

I HEREBY CERTIFY that a copy of the foregoing has been furnished this 8th day of November 1999 by U.S. Mail or hand delivery to the following:

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