FLORIDA PUBLIC SERVICE COMMISSION
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M E M O R A N D U M

February 4, 1999

TO: DIRECTOR, DIVISION OF RECORDS AND REPORTING (BAYO)

FROM: DIVISION OF ELECTRIC & GAS (HAFF, HARLOW, S. BROWN, LOWERY)
DIVISION OF LEGAL SERVICES (COLLINS)

RE: DOCKET NO. 981591-EG, PETITION FOR AUTHORITY TO IMPLEMENT GOOD CENTS CONVERSION PROGRAM BY GULF POWER COMPANY

AGENDA: 02/16/99 - REGULAR AGENDA - PROPOSED AGENCY ACTION - INTERESTED PERSONS MAY PARTICIPATE

CRITICAL DATES: NONE

SPECIAL INSTRUCTIONS: S:\PSC\EAG\WP\981591.RCM

CASE BACKGROUND

The Florida Energy Efficiency and Conservation Act (FEECA), Sections 366.80 - 366.85, Florida Statutes, requires the Commission to adopt goals to reduce and control the growth rates of electric consumption and weather-sensitive peak demand. In Docket No. 930551-EG, the Commission set numeric demand-side management (DSM) goals for Gulf Power Company (Gulf) (Order No. PSC-94-1313-FOF-EG, issued October 25, 1994). Gulf's DSM Plan, designed to meet these goals, was approved by the Commission in Docket No. 941172-EG (Order No. PSC-95-0691-FOF-EI, issued June 9, 1995).

On November 10, 1998, Gulf petitioned the Commission for approval of its proposed Good Cents Conversion Program (Program). Gulf's petition requests approval to recover Program expenses through the Energy Conservation Cost Recovery (ECCR) clause. The Program offers participating customers a one-time $200 rebate, as well as a $50 rebate for qualifying heating/cooling contractors, to install high-efficiency electric heat pump systems as a replacement for existing air conditioning units and natural gas, fuel oil, or propane heating systems. All heat pumps installed under the Program must have a minimum Seasonal Energy Efficiency Rating (SEER) of 11.0.

All residential customers in Gulf's service territory whose homes have an existing combustion furnace fueled by natural gas, fuel oil, or propane are eligible to participate in the Program. Customers whose homes have existing electric strip heat or heat pumps are not eligible to participate. Gulf plans to target, for program participation, customers with existing equipment that is 10 to 15 years old with an average SEER of 7.0. Gulf will require that an on-site energy audit be performed on the residence prior to payment of applicable rebates.

DISCUSSION OF ISSUES

ISSUE 1: Should the Commission approve Gulf Power Company's petition for approval of its new Good Cents Conversion Program, including approval for cost recovery through the Energy Conservation Cost Recovery Clause?

RECOMMENDATION: No. Staff recommends that the Commission deny cost recovery through the ECCR Clause because the Program increases winter peak demand and encourages customers to switch from natural gas heating to electric heating. However, because the Program reduces summer peak demand and annual energy consumption, staff recommends that Gulf be allowed to recover Program expenses through base rates.

STAFF ANALYSIS: Staff has two concerns with Gulf's proposed Program: (1) it is expected to increase winter peak demand; and (2) it does not represent energy conservation, but, rather, electricity competing with natural gas.

Winter Peak Demand Increase

Any DSM program that requires the replacement of non-electric heating equipment with an electric heat pump, no matter how efficient the new unit, will still increase winter peak demand. Gulf's Program pays rebates only for the replacement of natural gas, fuel oil, or propane heating systems. Customer participation in the Program is expected to increase Gulf's system winter peak demand by a total of 22 MW, or 4.4 kW per participant.

It should be noted that for Gulf's system in particular, and Southern Company's system in general, peak demand occurs in the summer season. For this reason, Gulf believes that any DSM program that reduces summer peak demand will also reduce the need for future generating unit additions. Gulf estimates that the Program will decrease total summer peak demand by 9.5 MW (1.9 kW per participant) and total annual energy consumption by 5150 MWh (1,030 kWh per participant). These estimates are based on Gulf's assumption that customers will be replacing an existing 7.0 SEER air conditioner with an 11.0 SEER heat pump. Based on Gulf's responses to staff discovery, energy savings from energy-efficient air conditioning during summer months are expected to more than offset increased energy consumption during winter months.

Gulf's demand and energy assumptions are based on the belief that a $200 customer rebate will entice customers to replace functioning, though inefficient, equipment. However, residential customers are not likely to replace existing equipment unless it fails. New equipment must meet a minimum SEER of 10.0 as required by Florida's building code. Therefore, in reality, Gulf's Program will capture only the demand and energy savings associated with upgrading from 10.0 SEER to 11.0 SEER. Based on this realistic assumption, Gulf estimates that the Program will decrease total summer peak demand by 1.5 MW (0.3 kW per participant). Total annual energy consumption under this scenario, however, is estimated to <u>increase</u> by 6950 MWh (1,390 kWh per participant). There would be no change in the forecasted winter peak demand increase under this scenario because it, like Gulf's base case assumptions, require the replacement of a natural gas heating system with an electric heat pump.

Natural Gas Competition

Generally, electric utility conservation programs serve to reduce weather-sensitive peak electrical demand. Unlike electric utilities, however, gas utilities spend money on programs that often promote increased gas consumption. The Commission has historically approved these types of gas conservation programs because they deferred or eliminated the need for future power plant construction or reduced Florida's reliance on petroleum fuels. While gas conservation programs are now approved based upon passage of a gas ratepayer impact measure, these gas programs still serve to reduce electricity consumption and/or peak demand.

Gulf's Program is forecasted to increase winter peak demand. The irony of the Program is that gas customers located in Gulf's service territory have to pay two ECCR factors for conflicting purposes: one to Gulf for a DSM program that decreases gas load; and, one to the gas utility for programs designed to increase gas load. Such conflicts arise when there exists an electric program that serves to replace existing gas-fired equipment. In large part, Gulf's Program is not energy conservation but, rather, electricity competing with natural gas. Staff believes that the use of conservation programs as a competitive tool was not intended by the Florida Energy Efficiency and Conservation Act (FEECA) or the Commission.

There is precedent for allowing utilities to recover expenses for certain DSM programs through base rates. In Gulf's last rate case, the Commission allowed Gulf to recover expenses for the Good Cents New Home Program and the Good Cents Improved Home Program through base rates (Order No. 23573, issued October 3, 1990). This action was taken after the Commission had previously denied cost recovery for these programs through the ECCR clause.

In summary, while Gulf's Good Cents Conversion Program is expected to increase peak demand during the winter season, it is expected to reduce peak demand and energy consumption during the summer season when Gulf's electric system peaks for the year. For this reason staff recommends that Gulf's Program may have merit. However, because the Program promotes natural gas replacement with electricity, staff recommends that Gulf be required to recover costs through base rates rather than through the ECCR clause.

ISSUE 2: Should this docket be closed?

RECOMMENDATION: Yes.

STAFF ANALYSIS: If no person whose substantial interests are affected by the Commission's proposed agency action files a protest within twenty-one days of the issuance of the order, Docket No. 981591-EG should be closed.