



# Public Service Commission

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## -M-E-M-O-R-A-N-D-U-M-

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**DATE:** 09/10/98

**TO:** DIRECTOR, DIVISION OF RECORDS AND REPORTING (BAY)

**FROM:** DIVISION OF ELECTRIC AND GAS (GING HAFF) *DD*  
DIVISION OF LEGAL SERVICES (JAYEL) *RUE*

**RE:** DOCKET NO. 971462-EG - PETITION BY GULF POWER COMPANY FOR APPROVAL OF RATE SCHEDULE RESIDENTIAL SERVICE VARIABLE PRICING (RSVP) AND ASSOCIATED CUSTOMER AGREEMENT.

**AGENDA:** 09/22/98 - REGULAR AGENDA - TARIFF FILING - INTERESTED PERSONS MAY PARTICIPATE

**CRITICAL DATES:** TARIFF SUSPENDED BY ORDER NO. PSC-98-0028-PCO-EG EIGHT MONTH TIME PERIOD WAIVED BY COMPANY TWELVE MONTH PERIOD EXPIRES 11/06/98

**SPECIAL INSTRUCTIONS:** NONE

**FILE NAME AND LOCATION:** S:\PSC\EAG\WP\971462.RCM

### CASE BACKGROUND

Gulf Power Company's (Gulf) Advanced Energy Management Program was previously approved by this Commission as part of the Company's Demand-Side Management Plan with Order No. PSC-95-0691-FOF-EG issued June 9, 1995. On November 6, 1997, Gulf filed a petition for approval of the program on a permanent basis and the associated rate schedule RSVP and customer agreement.

**ISSUE 1:** Should the Commission approve Gulf's petition for approval of the Advanced Energy Management (AEM) program on a permanent basis and the associated rate schedule Residential Service Variable Pricing (RSVP) and customer agreement?

**RECOMMENDATION:** Yes. The Commission should approve Gulf's petition for approval of the AEM program on a permanent basis and the

associated rate schedule RSVP and customer agreement. Because the AEM program is cost-effective and the RSVP rate schedule and customer agreement are reasonable, Staff recommends approval.

**STAFF ANALYSIS:** With Advanced Energy Management, the customer can set major appliances, such as the water heater, air conditioning, heating, and pool pump to be automatically curtailed as prices increase. The curtailment signal is sent through the house wiring relays controlling each appliance. The customer can also modify energy usage to respond to rates established for set periods of time during the day to avoid higher cost periods. The current rates and pricing periods are as follows:

|                          |                  |
|--------------------------|------------------|
| Low Cost Hours (P1)      | 1.268 cents/KWH  |
| Medium Cost Hours (P2)   | 2.406 cents/KWH  |
| High Cost Hours (P3)     | 6.501 cents/KWH  |
| Critical Cost Hours (P4) | 26.851 cents/KWH |

Pricing Periods:

|                      | <u>P1</u>      | <u>P2</u>                        | <u>P3</u>      |
|----------------------|----------------|----------------------------------|----------------|
| <u>May - October</u> |                |                                  |                |
| Weekdays             | 11 P.M.-6 A.M. | 6 A.M.-11 A.M.                   | 11 A.M.-8 P.M. |
| Weekends             | 11 P.M.-6 A.M. | 6 A.M.-11 P.M.                   | - - - - -      |
| <u>Nov. - April</u>  |                |                                  |                |
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| Weekends             | 11 P.M.-6 A.M. | 6 A.M.-11 P.M.                   | - - - - -      |

The pricing period (P4) is for critical cost periods only. These periods are expected to occur only 1% of the time, and the customer would be notified at least one-half hour prior to the start of price level (P4).

Gulf's petition contains four modifications to the rates charged in the previously approved RSVP rate schedule under the pilot program. The first modification is the addition of the "Program Participation Charge". This charge is intended to capture the cost of the energy management equipment installed at participating customers homes. The \$4.53 per month charge is based on original equipment costs and the estimated useful life of the equipment. The second modification increases the (P3) rate from 6.501 cents/KWH to 7.134 cents/KWH. The increase of .633 cents/KWH is intended to capture additional equipment costs associated with larger users not captured in the "Program Participation Charge".

Some large use customers may need two units installed in their homes and presumably would use more power and thus make a greater contribution to equipment costs. The third modification is a reinstallation charge of \$114. Energy Management Equipment will be installed at the customer's residence upon the customer's initial request at no charge to the customer. If the same customer requests service at the same residence under the RSVP rate schedule after returning to Residential Service (RS) Rate Schedule they will be charged \$114 for re-installation costs. The fourth modification includes a \$109 charge for removal of the equipment if a customer elects to return to the RS rate after participating in the program for a second time. These charges are intended to cover re-installation/re-removal costs and prevent customers from gaming the system.

All other rates are the same as those included in the original pilot study approved in Order No. PSC-95-0691-FOF-EG issued June 9, 1995. These rates are designed to be revenue-neutral which takes into account an hour-by-hour analysis of the residential load shape. If the customer does not react to any of the price signals, they should pay the same rate they would on the otherwise applicable RS Rate Schedule. The Low and Medium Cost Hours each represent approximately 40% of usage, the High Cost Hours represent approximately 20% of usage, and the Critical Cost Hourly rate is intended to account for only 1%, or 87 hours per year. When these Critical Cost periods occur the 1% will in most cases displace the High Cost Hour period. The rates proposed by Gulf appear to be reasonable and based upon supporting data. The Associated Customer Agreement also appears standard and reasonable.

Gulf's AEM Program is a demand-side management program eligible for cost recovery through the Energy Conservation Cost Recovery (ECCR) Clause. To be eligible for ECCR cost recovery, the program must be a cost-effective alternative to the addition of new supply-side resources. Gulf's AEM Program, as proposed, has a benefit-cost ratio of 1.036 under the Rate Impact Measure (RIM) test. While the program is technically cost-effective at this time, a small decrease in Gulf's avoided capacity cost would likely render the AEM program non cost-effective. However, Gulf's avoided cost is extremely low at \$232/kW, and this value is not likely to decrease much below current levels.

Gulf analyzed the program's benefits and costs over a lengthy 30-year time period. This long of a period is unusual given that the avoided capacity cost is based on a capacity purchase from a combustion turbine unit which typically has a 20-year economic life. On a discounted, cumulative present worth basis, Gulf's own

analysis shows that the AEM program's costs are forecasted to outweigh its benefits for 22 years. On a nominal basis, AEM program costs are greater than benefits for 11 years.

It should be noted that the AEM program is expected to contribute nearly all of the demand and energy savings toward Gulf's Commission-approved Residential DSM Goals. Gulf would surely fail to meet these goals without the demand savings from the AEM program. Further, approval of a marginally cost-effective program is not final. The Commission is scheduled to reset Gulf's DSM goals next year, and another review of Gulf's DSM programs will occur soon after that time.

In summary, the AEM program is marginally cost-effective over the 30-year review period. On both a nominal and a cumulative present worth basis, it is forecasted that the program's benefits will not surpass its costs for a long period of time. However, the Commission will have the opportunity to review the AEM program after DSM goals are reset next year. Therefore, staff recommends that the Commission grant Gulf's petition for approval of the AEM program on a permanent basis, along with the RSVP Rate Schedule and associated Customer Agreement.

**ISSUE 2:** Should this docket be closed?

**RECOMMENDATION:** Yes. If no substantially affected person files a protest within 21 days from the issuance of the order, this docket should be closed. If a protest is filed within 21 days from the issuance of the order, the tariff should remain in effect, with any increase held subject to refund, pending resolution of the protest.

**STAFF ANALYSIS:** If no substantially affected person files a protest within 21 days from the issuance of the order, this docket should be closed. If a protest is filed within 21 days from the issuance of the order, the tariff should remain in effect, with any increase held subject to refund, pending resolution of the protest.

Date 1 / 1 / 19

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**Item Presented**

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\_\_\_\_\_ Notice of \_\_\_\_\_ For (Date) \_\_\_\_\_ In Docket No. \_\_\_\_\_

\_\_\_\_\_ Other \_\_\_\_\_

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