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Susan D. Cranmer Assistant Secretary and Assistant Treasurer

the southern electric system

May 17, 1996

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:

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Enclosed are an original and fifteen copies of Gulf Power Company's comments requested at the April 22, 1996 workshop on meter testing issues. If you have any questions, please give me a call at (904) 444-6231 or Lynn Schulte at (904) 484-5750.

Sincerely,

Swan D. Cranmer

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GULF POWER COMPANY COMMENTS REGARDING THE APRIL 22, 1996 WORKSHOP METER TESTING ISSUES

INTRODUCTION

Gulf Power appreciates the opportunity to actively participate in the shaping of changes to the electric metering rules in the Florida Administrative Code. Gulf Power has always tried to ensure meter accuracy because of it's importance to both the customer and our company. In addition, Gulf Power understands the importance of addressing meter equipment accuracy in the most cost effective way. The FPSC along with the Florida investor owned utilities have an opportunity to modernize the metering rules to reflect changes in metering technologies and to incorporate industry standard rules as recommended in the latest revision of ANSI C12.1-1995. Adopting the meter testing standards established by the latest revision of ANSI C12.1 will not only ensure the continuation of the emphasis on meter equipment accuracy, but will also allow the utilities to reduce their cost of meter equipment testing.

Gulf Power is willing to submit, for administrative review, its procedures for the testing of new and in-service meters and instrument transformers. This would enable the Commission to ensure that Gulf Power has adequate procedures in place. Gulf Power believes that the plan submitted should be in accordance with the requirements set forth by ANSI C12.1-1995.

OPPORTUNITIES

The benefits of the changes recommended by the utilities are economic in nature, both to our customers and our companies, and are as follows:

Sample Testing

Sample testing should be allowed for all types of metering equipment including new and in-service equipment in accordance with ANSI C12.1-1995. The utilities believe that sample testing provides better information about the overall accuracy of the entire meter population than does 100% testing and in many cases, may actually reduce the amount of testing required. It also allows the utility to detect accuracy degradation trends in metering equipment before they become catastrophic.

The metering rules should simply state that the sampling plan must be in accordance with ANSI C12.1, which specifies the use of Military Standard 414 for random sample testing. This military standard is used worldwide and has been the basis for statistical sampling for 40 years. Gulf Power does not believe that it is necessary for the Florida utilities to prove the validity of this statistical sampling plan, but should only be required to properly apply the plan and interpret the results obtained from it's use.

Periodic Testing

Periodic testing schedules should be in accordance with the schedules specified by ANSI C12.1. These schedules define maximum recommended frequencies of meter testing to ensure accuracy of meters over time, but do not preclude the utilities from testing more frequently if deemed necessary. As stated at the workshop, the testing of our larger customers is performed on an annual basis at our discretion and is based on a business decision.

Manufacturer's Test Data

The utility's use of manufacturer's test data for acceptance of new meters or instrument transformers in lieu of the utility having to perform acceptance tests on new metering equipment is strongly supported by Gulf Power. All meter manufactures today have the capability of providing test results to the utilities for every product sold. These meter equipment manufacturers are required to comply with all of the ANSI C12.1 rules that the Florida utilities have recommended to be incorporated into the Commission's metering rules. These vendors understand that producing and selling meters or instrument transformers with poor performance would result in a

significant loss to their future business. Meters and instrument transformers manufactured today are mature products and provide excellent service, a high degree of accuracy, and typically have a product performance warranty. It needs to be emphasized that the testing of new meters or instrument transformers by the utility does not necessarily reflect how those meters will perform over time once they've been installed at the customer's premise.

Testing Of Watthour Standards

The testing of laboratory and portable watthour standards should be in accordance with the ANSI C12.1-1995 requirements. This industry standard simply states that these standards should be tested on an annual basis and Gulf Power believes that increasing the frequency of the testing of these standards is unnecessary and costly. The watthour standards used today are all solid state devices with no moving parts. Like other electronic devices, watthour standards are very accurate and stable over time. When failures of these devices do occur, they are always inherently obvious.

ANSI C12.1-1995 states that the laboratory watthour standards must be sent to the NIST or an independent laboratory for testing. In an effort to reduce our costs while maintaining the highest degree of accuracy with traceability of our standards to NIST, Gulf Power would appreciate the opportunity to work with the FPSC to establish the definition of an "approved independent testing laboratory." Gulf Power, being one of the five members of the Southern Company, would like to reduce our individual standards testing costs by sharing these costs with our sister companies in lieu of having each of our transfer standards individually tested by NIST.

Streamlining the present metering rules

The present rules are overly detailed, outdated, and difficult to interpret in many cases. Gulf Power believes that it is not prudent for the rules to contain all of the "how to" details, but would recommend that the rules simply refer to ANSI C12.1-1995 for those details. This conceptual change would ensure that both customers and utilities would benefit by allowing much more flexibility to respond to changes in our rapidly evolving equipment and environment.

Acceptance testing

Gulf Power's acceptance testing for the last six months shows that the meters received from the manufactures fall well within the allowed percentage variance of the Florida Public Service Commission Rules of two percent. Gulf Power checked 448 meters out of which 0 were found to be out of variance. All meters fell within +/- 0.6% of 100% accurate.