

FLORIDA PUBLIC SERVICE COMMISSION

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101 East Gaines Street  
Tallahassee, Florida 32399-0850

M E M O R A N D U M

March 18, 1993

TO : DIRECTOR OF RECORDS AND REPORTING

FROM : DIVISION OF APPEALS (RULE) *WR DES*  
DIVISION OF ELECTRIC AND GAS (FLOYD, SHINE) *RES* *JRJ*  
DIVISION OF RESEARCH AND REGULATORY REVIEW (HEWITT, *CH*  
HARLOW) *JGH*

RE : DOCKET NO. 920606-EI: PROPOSED ADOPTION OF RULE  
25-17.0021, F.A.C., GOALS FOR ELECTRIC UTILITIES, AND  
RULE 25-17.0025, F.A.C., CONSERVATION PERFORMANCE  
INCENTIVE FACTOR; PROPOSED AMENDMENT TO RULE 25-17.001,  
F.A.C., GENERAL INFORMATION, RULE 25-17.003, F.A.C.,  
ENERGY AUDITS, RELATED PROVISIONS, AND RULE 25-17.006,  
F.A.C., ELECTRIC UTILITY SYSTEM CONSERVATION END USE  
DATA; AND PROPOSED REPEAL OF RULE 25-17.005, F.A.C.,  
EVALUATION OF ELECTRIC UTILITY CONSERVATION EFFORTS, AND  
RULE 25-17.007, F.A.C., NORMALIZATION OF ELECTRIC UTILITY  
LOAD DATA.

AGENDA: March 30, 1993 - CONTROVERSIAL AGENDA - PARTIES MAY NOT  
PARTICIPATE

PANEL: FULL COMMISSION

CRITICAL DATES: NONE

SPECIAL INSTRUCTIONS: I:\PSC\APP\WP\920606.RCM

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CASE BACKGROUND

In 1980, the legislature enacted Sections 366.80 - 366.85 and 403.519, Florida Statutes, known as the Florida Energy Efficiency Act (FEECA). FEECA initially directed the Commission to set conservation goals and approve or disapprove conservation programs submitted by all 57 electric utilities and the larger natural gas utilities. The statute does not authorize the Commission to modify proposed programs or to impose its own conservation programs on utilities unless a utility has not implemented its approved programs and is not substantially in compliance with the provisions of its approved plans.

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FPSC-RECORDS/REPORTING

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In late 1980, the Commission adopted Rule 25-17.001, General Information; Rule 25-17.002, Goals for Electric Utilities; and Rule 25-17.003, Energy Audits; Related Provisions. Rule 25-17.002 set numeric goals for reducing each utility's peak demand growth rate to 72.5% of its customer number growth rate, and for reducing each utility's KWH energy consumption growth rate to 75% of its customer number growth rate by 1989.

In 1989, the Commission repealed Rule 25-17.002, Goals for Electric Utilities, and amended Rule 25-17.001, General Information. The Commission retained the general, non-numeric goals set in Rule 25-17.001. Also in 1989, the FEECA statute was amended to include additional language encouraging cogeneration, and to limit its application to electric utilities with annual retail sales of more than 500 gigawatt-hours.

On June 24, 1992, staff held a workshop to consider possible amendments to the Commission's conservation rules. At the workshop, staff distributed draft copies of suggested new changes. The workshop was well-attended, and many attendees submitted post-workshop comments and suggestions.

On September 24, 1992, staff recommended adoption of two new rules (25-17.0021, Goals for Electric Utilities and 25-17.0025, Conservation Performance Incentive Factor) and recommended amendments to three rules (25-17.001, General Information; 25-17.003, Energy Audits, Related Provisions; and 25-17.006, Electric Utility System Conservation End Use Data). Staff also recommended the repeal of two rules (25-17.005, Evaluation of Electric Utility Load Conservation Efforts; and Normalization of Electric Utility Load Data). On October 6, 1992, the Commission voted to propose the rules as recommended by staff, and set the matter for hearing. The rules were formally proposed by notice published in the Florida Administrative Weekly on October 23, 1992.

The hearing was held before Commissioners Deason, Lauredo and Clark on December 17 and 18, 1992, and on January 20, 1993. Commissioners Beard and Johnson were also present on January 20. The following parties participated in the hearing: Florida Power & Light Company ("FPL"), Gulf Power Company ("Gulf"), Tampa Electric Company ("TECO"), Florida Power Corporation ("FPC"), Peoples Gas Company ("Peoples"), Jacksonville Electric Authority ("JEA"), Florida Electric Cooperatives Association ("FECA"), Florida Municipal Electric Association ("FMEA"), Office of the Public Counsel ("OPC"), Florida Department of Community Affairs, Florida Industrial Power Users Group ("FIPUG"), the Florida Chapter of the American Planning Association, The Project for an Energy Efficient Florida, Florida Solar Energy Industries Association,



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Florida League of Women Voters, the Legal Environmental Assistance Foundation ("LEAF"), Florida Wildlife Association, Sierra Club, Florida Consumer Action Network, League of Conservation Voters, and Dr. Tracy Lewis.

Post-hearing comments were filed by Mary Sheppard, TECO, Gulf, FPL, LEAF, FECA, Peoples, OPC, the Florida Chapter of the American Planning Association/Coalition for an Energy Efficient Florida, Citrus County Audubon Society, Indoor Environmental Technologies, and Eileen B. Arsenault.

The 1992 National Energy Policy Act sets forth federal standards relating to energy conservation and efficiency. State utility commissions must consider the federal standards and determine, after notice and hearing, whether it is appropriate to implement them. Although the subject of these rules is conservation, staff believes that the Commission cannot now use this rule proceeding to fulfill the requirement to consider the federal standards because no notice was given that they would be considered. Staff believes that the Commission should consider the standards and make the required determinations in generic dockets and in the forthcoming dockets by which these rules would be implemented.

The rules recommended for adoption are attached to this recommendation. The attached rules show both the formally proposed rules and the changes recommended by staff, with explanatory comments. The formally proposed rules consist of the existing rules, with additions underlined and ~~deletions struck through~~. The changes recommended by staff are shaded, whether they are additions or deletions.

#### ISSUE AND RECOMMENDATION SUMMARY

**ISSUE 1:** Should the Commission retain the present general non-numeric conservation goals or should it adopt Rule 17.0021, Florida Administrative Code, Goals for Electric Utilities, which includes numeric conservation goals?

**RECOMMENDATION:** The Commission should adopt the attached Rule 25-17.0021, Florida Administrative Code, Goals for Electric Utilities, which includes numeric conservation goals.

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**ISSUE 2:** Should the Commission adopt a rule that includes either the Total Resource Cost (TRC) or the Ratepayer Impact Measure (RIM) conservation cost-effectiveness tests to screen conservation programs submitted to the Commission for approval?

**RECOMMENDATION:** No. The rules should not specify a cost-effectiveness test. The Commission should make a decision on the appropriate cost-effectiveness test after it has reviewed utility-specific data that will be filed in the implementation docket for each utility if Rule 25-17.0021 is adopted.

**ISSUE 3:** Should the Commission adopt a rule that decouples utility profits from revenues?

**RECOMMENDATION:** Not at this time. The Commission should consider decoupling on a utility-specific basis in a hearing held pursuant to Section 120.57, Florida Statutes.

**ISSUE 4:** Should the Commission adopt Rule 25-17.0025, Florida Administrative Code, Conservation Performance Incentive Factor?

**RECOMMENDATION:** No. If the Commission wishes to consider incentives, it should do so on a utility-specific basis in a hearing held pursuant to Section 120.57, Florida Statutes. The Commission could make this determination in the implementation docket that will be held for each utility if Rule 25-17.0021 is adopted.

**ISSUE 5:** Should the Commission adopt the attached amendments to Rule 25-17.001, Florida Administrative Code, General Information?

**RECOMMENDATION:** Yes. The attached amendments to Rule 25-17.001, Florida Administrative Code, General Information, are consistent with the legislative intent embodied in Section 366.81, Florida Statutes.

**ISSUE 6:** Should the Commission adopt the attached amendments to Rule 25-17.006, Florida Administrative Code, Electric Utility System Conservation End Use Data?

**RECOMMENDATION:** Yes. The Commission should adopt the attached amendments to Rule 25-17.006, Florida Administrative Code, Electric Utility End Use Data.



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**ISSUE 7:** Should the Commission repeal Rule 25-17.005, Florida Administrative Code, Evaluation of Electric Utility Conservation Efforts?

**RECOMMENDATION:** Yes. The Commission should repeal Rule 25-17.005, Florida Administrative Code, Evaluation of Electric Utility Conservation Efforts, as this rule applies to the conservation goals that were repealed in 1989.

**ISSUE 8:** Should the Commission repeal Rule 25-17.007, Florida Administrative Code, Normalization of Electric Utility Load Data?

**RECOMMENDATION:** Yes. The Commission should repeal the attached Rule 25-17.007, Florida Administrative Code, Normalization of Electric Utility Load Data, as this rule applies to the conservation goals that were repealed in 1989.

#### **SUMMARY OF THE PARTIES' POSITIONS**

**FP&L:** A policy decision should be made on the issues before rulemaking. Numerical goals are unnecessary. If numerical goals are set they should be overall KW and KWH goals as referenced in FEECA rather than program specific goals. Goal setting should be done in conjunction with the utility's Integrated Resource Planning process. Strongly endorses the RIM test to evaluate both supply and demand side resources. Incentives are not needed and will increase the cost of conservation measures but not the resulting benefits. Decoupling is an unnecessary and counterproductive "solution" in search of a nonexistent "problem." The detailed reporting requirements are too cumbersome and are managerial interference.

**FPC:** Conservation goals should be total annual KW and KWH target/goals as opposed to individual program goals. DSM expenditures should be as profitable to the utility as investments in traditional supply side resources. The Commission should adopt incentives which treat DSM expenditures as rate based items earning the last authorized rate of return on equity adjusted upward or downward based on actual performance relative to the target set by the Commission. Measurement and validation of DSM programs is necessary for goal setting process. Scheduled to file a decoupling proposal within 90 days of the final rate case order.

**TECO:** Conservation goals should be total annual KW and KWH reduction goals as opposed to individual program goals. The company has some doubts as to the advisability of instituting a conservation incentive. The company submits an incentive proposal where DSM equipment and its associated installation labor and non-recurring incentives will be capitalized and receive the utility's authorized mid-point rate of return on rate base. Do not change the cost-effectiveness rule; advocates RIM if a change is made. Opposes decoupling. End use study should be done every fifth year to coincide with the census year.

**GULF:** The proposed rules should not be adopted because the goal setting process would inhibit opportunities for increased conservation due to the high level of detail that inhibits flexibility and introduces substantial measurement costs. If goals are established each utility shall provide an assessment of the annual KW and KWH savings reasonably achievable based on the utility's applicable planning effort. RIM should be used to screen DSM programs. Incentives are inappropriate, but if needed, the Company proposes a shared savings approach based on a sliding scale. Decoupling should be rejected.

**FMEA:** The municipality's elected commission sets the utility's rates and should determine the specific DSM cost-effectiveness test, not the Public Service Commission. Each utility is entitled to an individual hearing if the Commission intends to adopt a goal that exceeds the utility's assessment of cost-effective savings. Delete the list of end use categories when setting goals. Municipals should be allowed to report cost-effectiveness of DSM programs based on formulas which take into account their different tax, debt and capital structure. Delete the measurement program because it is overly burdensome and expensive. Incentives and decoupling do not apply.

**FECA:** The coops request that no changes to the conservation rules be made unless and until the existing programs of the utilities are fully evaluated, it is determined that the results of those efforts are inadequate, and then only if legislative authority is granted to the Commission. In the alternative, delete the list of end use categories if the Commission decides to establish numeric goals. Delete the End Use Rule 25-17.006 as the cost of collecting the information



outweighs the benefits. Incentives and decoupling do not apply.

OPC: Supports the goals rule. Incentives are not appropriate. FEECA is clear in requiring the Commission to direct utilities to adopt goals and implement programs which increase energy efficiency and conservation. The Commission should require utilities to abide by the clear directive of the Legislature or suffer regulatory sanctions. It is important that engineering estimates of KW and KWH savings are verified by adopting a methodology that balances both the cost and accuracy of the evaluation.

FIPUG: Do not place equal emphasis on reducing energy and demand. Utilities should reduce energy sales only when utility revenue requirements are reduced while not increasing rates at any cost. Use the Utility Cost Test to select the least cost resource mix. Use RIM to determine if DSM programs should be implemented. Reject incentives as they will increase or place upward pressure on rates, and reject decoupling.

PEOPLES'S GAS: Add end-use category entitled "Natural Gas Substitutes for Electricity".

LEAF: Advocates procedural rules to set enforceable numerical goals and a comprehensive analysis of rate & bill impacts; prohibit utility use of the RIM test to screen programs; adopt the TRC test. Commission should not adopt goals that would impose an unreasonable rate impact on any customer group. Supports incentives for energy saving programs which provide up to an additional 1% return on common equity. Proposes either decoupling utility earnings from electricity sales or provide for lost revenue adjustments.

#### DISCUSSION OF ISSUES

ISSUE 1: Should the Commission retain the present general non-numeric conservation goals or should it adopt Rule 17.0021, Goals for Electric Utilities, which includes numeric conservation goals?

RECOMMENDATION: The Commission should adopt the attached Rule 25-17.0021, Florida Administrative Code, Goals for Electric Utilities, which includes numeric conservation goals.

**STAFF ANALYSIS:** In reviewing its conservation rules, the Commission should be guided by the legislature's declaration of findings and intent in Section 366.81, Florida Statutes:

The Legislature finds and declares that it is critical to utilize the most efficient and cost-effective energy conservation systems in order to protect the health, prosperity, and general welfare of the state and its citizens. Reduction in, and control of, the growth rates of electric consumption and of weather-sensitive peak demand are of particular importance. ...The Legislature further finds and declares that ss. 366-80 - 366.85 and 403.519 are to be liberally construed in order to meet the complex problems of reducing and controlling the growth rates of electric consumption and reducing the growth rates of weather-sensitive peak demand; increasing the overall efficiency and cost-effectiveness of electricity and natural gas production and use; encouraging further development of cogeneration facilities; and conserving expensive resources, particularly petroleum fuels.

Section 366.82, Florida Statutes, directs the Commission to adopt conservation goals:

(2) The commission shall adopt appropriate goals for increasing the efficiency of energy consumption and increasing the development of cogeneration, specifically including goals designed to increase the conservation of expensive resources, such as petroleum fuels, to reduce and control the growth rates of electric consumption, and to reduce the growth rates of weather-sensitive peak demand.

Staff believes that the proposed conservation goals rules should be judged against the statutory standards. That is, the Commission should determine whether the proposed rules meet the statutory criteria. The Commission should adopt rules that aid in the following:

- \* reducing and controlling the growth rates of electric consumption
- \* reducing the growth rates of weather-sensitive peak demand
- \* increasing the conservation of expensive resources such as petroleum fuels
- \* increasing the efficiency of energy consumption



- \* increasing the development of cogeneration, solar and renewable energy sources

Staff believes that numeric goals will better enable the Commission to meet its statutory responsibility than do the present non-numeric goals. Numeric goals will allow the Commission to monitor and measure utility conservation achievements. The proposed rules will require subsequent implementation proceedings for each utility to establish specific numeric demand and energy goals to replace the general non-numeric goals currently in existence.

Staff recommends certain changes to the proposed rule, which are shown in the attachment. Under the recommended rule, the Commission would set four overall KW and KWH goals for each utility: a KW and KWH goal for the residential class, and a KW and KWH for the commercial/industrial customer classes. The KW goals may also be further differentiated into seasonal summer and winter goals. These four overall goals would be based on a detailed analysis of the conservation reasonably achievable in each of the major end-use categories listed in the rule (i.e., building envelope, cooling, heating, appliance efficiency, etc.) within the residential and commercial/industrial rate class groups. Goals would be set for each year of a ten-year planning horizon, and each utility would be required to file a detailed report of its conservation achievements at the end of each year. If a utility failed to meet its goals in any year or consistently for a period of years, a compliance docket would be opened to investigate whether the Commission should require the utility to adopt new programs or modify existing programs to meet its goals. An overall review of whether the goals should be changed would take place at least once every five years.

If the recommended rule is adopted, staff plans to obtain data for each FEECA covered utility in subsequent implementation dockets to determine whether the rate impacts of a portfolio of conservation programs that fail the RIM test is sufficiently large to warrant adopting the RIM test as a test of cost-effectiveness conservation programs. The Commission could choose to adopt RIM for investor-owned utilities and allow municipals and coops to make their own determinations of cost-effectiveness. The Commission does not control municipal and coop rate levels (as opposed to rate structure) and therefore may wish to allow their governing bodies to implement conservation programs that will raise electric rates. Whatever cost effectiveness test is adopted for each utility, the Commission should use the same test when evaluating demand-side management programs for that utility in power plant need

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determination proceedings held pursuant to Section 403.519, Florida Statutes.

Several utilities think that the rule requires too much detailed information to be provided in the goal setting proceeding and in the annual reporting of achievements. Staff believes that the level of detail required by the rule is necessary to set goals and to properly monitor the progress of each utility's plan, as well as for the Commission's annual report to the Legislature.

**ISSUE 2:** Should the Commission adopt a rule that includes either the Total Resource Cost (TRC) or the Ratepayer Impact Measure (RIM) conservation cost-effectiveness tests to screen conservation programs submitted to the Commission for approval?

**RECOMMENDATION:** No. The rules should not specify a cost-effectiveness test. The Commission should make a decision on the appropriate cost-effectiveness test after it has reviewed utility-specific data that will be filed in the implementation docket for each utility if Rule 25-17.0021 is adopted.

**STAFF ANALYSIS:** The FEECA statutes require that conservation programs be "cost-effective", but do not define the term. At the rule hearing, there was a great deal of discussion about the appropriate test to use in determining whether conservation programs are cost-effective. In the three days of hearings, very little was discussed about the technical detail of the proposed rules. Instead, the underlying philosophy of the Total Resource Cost (TRC) versus the Rate Impact Measure (RIM) tests of cost-effectiveness dominated the discussion.

For cost recovery purposes, the Commission presently reviews conservation programs by both the TRC and the RIM tests, but has not adopted either test for purposes of determining whether a particular program should be included in a utility's conservation plan. By statute, the Commission can only prescribe goals and approve or disapprove conservation programs submitted by utilities, while utilities control the programs included in their plans. Thus, utilities decide how to screen programs for cost-effectiveness. Utilities advocate the RIM test because programs that pass the RIM test will not cause rates to increase. That is, both participants and non-participants will experience the same rates whether or not the program was in effect. With few exceptions, utilities submit only programs that pass the RIM test. Utilities seldom submit programs that fail the RIM test but pass the TRC test.



The argument for the RIM test is that if the general body of ratepayers must pay for utility conservation programs, then they should receive the resulting lower electric rates. All customers benefit from utility conservation programs that pass the RIM test. However, the argument for the TRC test is that programs that fail the RIM test but pass the TRC test will decrease consumption, which will in turn decrease average customer bills, although rates will increase. The RIM test focuses on rates while the TRC test focuses on customer bills.<sup>1</sup>

TRC advocates argue that utilities in California and New England have TRC-screened programs that are purported to benefit everyone. They believe that decoupling utility profits from revenues and providing stockholder incentives for conservation will lead to aggressive conservation programs with high market penetration, which will result in lower electric bills for all customers. (The rate would be higher but bills of participating customers would be lower.) However, staff does not recommend adoption of the TRC test based on this argument. Market penetration is a subset of rate class, and the rate class penetrations of the California and New England utilities through 1992 are quite low. (See FPL's witness J. Landon exhibit No. 16). Further, even if future rate class penetrations are projected for these utilities, the results are not large enough to support the argument that most customers' bills will be lower.

During the hearing, there was general agreement among the parties that implementation of conservation programs that fail the RIM test but pass the TRC test would cause an increase in electric rates (from what they would be if only the RIM test were used to screen programs). There was no agreement on the amount by which the rates would increase.

Staff refers to this middle ground between the TRC and RIM tests as the "soft RIM" test: programs that pass the TRC test and fail the RIM test, but result in a minimal rate increase. Programs passing the "soft RIM" test would cause both rates and the bills of nonparticipants to increase, but the increase would be small.

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<sup>1</sup>An example of rates increasing while bills decrease is shown below:

Before conservation program: 8 c/KWH x 1000 KWH = \$80

After conservation program: 10 c/KWH x 700 KWH = \$70

Of course, whether the bill is reduced depends on how much consumption is reduced. Even with reduced consumption, the customer's bill could increase:

After conservation program: 10 c/KWH x 900 KWH = \$90

At present, the Commission has no data indicating how much more conservation could be achieved, how many new power plants could be avoided, how much energy could be saved, or how rates and bills would increase with programs that pass either the TRC or "soft RIM" tests. Staff believes that the Commission should not adopt a cost-effectiveness test before it gathers this data. Instead, the Commission should adopt the attached rule, which does not include a cost-effectiveness test. The appropriate cost-effectiveness test should be resolved on a case-by-case basis in the subsequent rule implementation dockets that will be opened for each FEECA utility.

In the implementation dockets, the Commission could review the rate and bill effects of proposed programs. In those dockets, staff plans to request data showing the rate and bill effects of three portfolios of programs: those that pass the RIM test; those that pass both the RIM and TRC tests; and those that pass the TRC test but barely fail the RIM test. The Commission would then have the opportunity to review real numbers for each utility, and could then determine whether RIM, TRC, or "soft RIM" is the appropriate cost-effectiveness test for each utility. It may be that the rate effects caused by TRC-screened programs will be small for some utilities and that the programs could avoid new power plants over time. On the other hand, building a new plant could result in lower rates than TRC- or "soft RIM"-screened programs for other utilities due to timing differences.<sup>2</sup>

If the Commission wishes to adopt a cost-effectiveness test at this time, staff believes that the RIM test is most appropriate. However, staff believes that the attached rule should be adopted and the TRC/RIM/"soft RIM" issue should be resolved on a case-by-case basis until the Commission has gained experience with the application of the tests. LEAF recommends a rule procedure by which the Commission would revisit the rate-versus-bill issue periodically. Staff agrees that the issue should be periodically

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<sup>2</sup>In power plant need determination proceedings held pursuant to Section 403.519, Florida Statutes, the Commission must consider the conservation measures taken by or reasonably available to the applicant or its members which might mitigate the need for the proposed plant. On paper, more conservation programs could theoretically avoid many new power plants. However, the Commission must consider whether the theoretical conservation is reasonably achievable and if so, whether the rate effect is acceptable. Thus, the Commission also must confront the TRC-versus-RIM issue in the context of need determination proceedings.



reviewed, but believes that the Commission should experiment with the procedure instead of adopting it by rule at this time.

The Commission may eventually determine that the rate impact of conservation programs that fail the RIM test is in all cases unacceptable compared to the rate impact of building new power plants, in which case it may elect to adopt the RIM test.

**ISSUE 3:** Should the Commission adopt a rule that decouples utility profits from revenues?

**RECOMMENDATION:** Not at this time. The Commission should consider decoupling on a utility-specific basis in a hearing held pursuant to Section 120.57, Florida Statutes.

**STAFF ANALYSIS:** FEECA does not address the concept of decoupling utility profits from revenues. Advocates for decoupling correctly contend that the ratemaking process results in a disincentive for utilities to engage in conservation. Once electric rates are set in a rate case, utilities have an incentive to sell as much electricity as possible to maximize profit. Any reduction in KWH (or KW) sales between rate cases results in lower profits.

Several state public utility commissions have decoupled revenues from profits. Maine and Washington have adopted the "revenue per customer" decoupling method. With this method, revenue requirements are established in a rate case. Once established, revenue requirements are divided by the number of customers to determine a base rate revenue per customer amount. In Maine, this figure is approximately \$600 per customer per year. Utility revenues are then annually true-up so that the utility receives the same amount of revenue per customer each year, no matter how much KWH or KW sales it "loses" due to conservation. Overcollections are refunded and undercollections are recovered through surcharges in the following year. The utility has neither a regulatory disincentive nor an incentive to engage in conservation.

The ramifications of decoupling are profound. In addition to insulating utility profits from conservation, profits are also insulated from changes in the economy, weather variations, and outage variations, such as the outages due to Hurricane Andrew. Additionally, just as decoupling removes a disincentive for conservation, it also removes the profit incentive for efficiency.

There are various methods of decoupling. California has adopted a decoupling mechanism called ERAM/ARAM that seems to

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guarantee utility profits. All decoupling programs have one result in common: utility profits are unrelated to conservation and other events affecting revenues.

Staff believes utilities have sufficient incentive to engage in conservation programs that pass the RIM test. Conservation programs that pass the RIM test lower electric rates and bills for non-participants as well as participants. Lower rates help utilities compete with other utilities for territory, with natural gas distribution companies, and with on-site generation, including cogenerators who use all generated electricity on site. Unless the Commission wishes to adopt either the TRC or a "soft RIM" screening test, which will cause rates to increase by some unknown amount, decoupling is not needed.

**ISSUE 4:** Should the Commission adopt Rule 25-17.0025, Florida Administrative Code, Conservation Performance Incentive Factor?

**RECOMMENDATION:** No. If the Commission wishes to consider incentives, it should do so on a utility-specific basis in a hearing held pursuant to Section 120.57, Florida Statutes. The Commission could make this determination in the implementation docket that will be held for each utility if Rule 25-17.0021 is adopted.

**STAFF ANALYSIS:** FEECA neither requires nor prohibits utility stockholder incentives. However, staff does not believe that across-the-board conservation incentives are necessary at this time unless the Commission adopts either the TRC or a "soft RIM" conservation program screening test. Utility profits should not be affected by conservation programs that pass the RIM cost-effectiveness test, and staff believes that the Commission should review utility progress toward numeric conservation goals to determine if incentives would improve conservation efforts.

**ISSUE 5:** Should the Commission adopt the attached amendments to Rule 25-17.001, Florida Administrative Code, General Information?

**RECOMMENDATION:** Yes. The attached amendments to Rule 25-17.001, Florida Administrative Code, General Information are consistent with the legislative intent embodied in Section 366.81, Florida Statutes.

**STAFF ANALYSIS:** Staff recommends that the Commission adopt clarifying changes to this rule, as shown in the attachment. The rule applies to electric utilities, so the reference to natural gas



utilities should be deleted. Conservation requirements for natural gas utilities will be addressed in another rule proceeding. The revised rule places equal emphasis on cost-effectively reducing the growth rate of KW and KWH, consistent with the requirements of Section 366.81, Florida Statutes. FEECA encourages the use of solar energy, renewable energy sources, highly efficient systems, cogeneration, and load control systems. Staff's recommended rule is consistent with this FEECA language.

**ISSUE 6:** Should the Commission adopt the attached amendments to Rule 25-17.006, Florida Administrative Code, Electric Utility System Conservation End Use Data?

**RECOMMENDATION:** Yes. The Commission should adopt the attached amendments to Rule 25-17.006, Florida Administrative Code, Electric Utility End Use Data.

**STAFF ANALYSIS:** Staff recommends that the rule be amended to require utilities to calculate and report statewide aggregates of end use data. The data will allow the Commission to provide full and complete statewide information to the Legislature and other interested persons. The requirement that utilities provide a forecast of residential appliance stock should be deleted because the information was not used by staff or the utilities.

**ISSUE 7:** Should the Commission repeal Rule 25-17.005, Florida Administrative Code, Evaluation of Electric Utility Conservation Efforts?

**RECOMMENDATION:** Yes. The Commission should repeal Rule 25-17.005, Florida Administrative Code, Evaluation of Electric Utility Conservation Efforts, as this rule applies to the conservation goals that were repealed in 1989.

**STAFF ANALYSIS:** Rule 25-17.005, The Evaluation of Electric Utility Conservation Efforts, is no longer applicable since it refers to the old KW and KWH goals which expired and were repealed in 1989. The FEECA status report information has been deleted from this rule and included in the reporting requirements of the proposed conservation goals rule, Rule 25-17.0021, Florida Administrative Code.

**ISSUE 8:** Should the Commission repeal Rule 25-17.007, Florida Administrative Code, Normalization of Electric Utility Load Data?

**RECOMMENDATION:** Yes. The Commission should repeal the attached Rule 25-17.007, Florida Administrative Code, Normalization of

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Electric Utility Load Data, as this rule applies to the conservation goals that were repealed in 1989.

**STAFF ANALYSIS:** Rule 25-17.007, The Normalization of Electric Utility Load Data, is no longer applicable since it refers to the old KW and KWH goals which expired and were repealed in 1989. This methodology does not apply to the proposed conservation goals rule.



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25-17.001	General Information
<u>25-17.0021</u>	<u>Goals for Electric Utilities</u>
	(New)
<u>25-17.0025</u>	<u>Conservation Performance</u>
	<u>Incentive Factor (New)</u>
25-17.003	Energy Audits, Related
	Provisions
25-17.005	Evaluation of Electric
	Utility Conservation Efforts
25-17.006	Electric Utility System
	Conservation End Use Data
25-17.007	Normalization of Electric
	Utility Load Data

25-17.001 General Information.

(1) The terms system and electric utility, as used in this Rule, shall be synonymous and have the same definition as "electric utility" as defined in section 366.82(1), F.S.

(2) The Florida Energy Efficiency and Conservation Act requires increasing the efficiency of the electric and ~~natural gas~~ systems of Florida, ~~increase~~ increasing the conservation of expensive resources, such as petroleum fuels, and the end use of these sources of energy by reducing ~~reducing the growth rate of~~ weather sensitive peak demand, ~~oil consumption and reducing and controlling the growth rate of~~ kilowatt hour consumption to the extent cost effective.

Revised language conforms more strictly to FEECA.

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(3) Reducing the growth rate of weather sensitive peak demand on the electric system to the extent cost effective is the first a priority. Reducing the growth rate of weather sensitive peak demand benefits not only the individual customer who reduces his demand, but also all other customers on the system, both of whom realize the immediate benefits of reducing the fuel costs of the most expensive form of generation and the longer term benefits of deferring the need for or construction of additional higher cost generating capacity.

(4) Another priority is increasing the efficiency of the end-use consumption of electricity to the extent cost-effective. The reduction of kilowatt-hour consumption particularly during peak periods resulting from increased end-use efficiency will reduce fuel costs to all customers and contribute to the deferral of additional generating capacity.

(5) In addition to specific demand-side goals, The general goals and methods for increasing the overall efficiency of the bulk electric power system and ~~natural gas~~ system of Florida are broadly stated since these methods are an ongoing part of the practice of every well-managed electric utility's programs and will shall be continued.

Agree with FPL that this language is not needed.

Clarifies that specific numeric goals apply to demand-side resources.



These methods are to:

Generating Electric Utilities

(a) Review and revise utility operating practices such as maintenance scheduling, daily and longer term unit commitment practices through the power broker system to facilitate economic dispatch on both a daily and extended basis and to reduce oil consumption increase conservation of expensive fuel resources, such as petroleum fuels, to the extent cost effective.

(b) Plan development of the bulk power system over time so that the most cost effective combination of generating units, associated facilities and other technologies is developed for meeting generation requirements.

(c) Increase the efficiency of each generating unit and associated operating practices to the extent cost effective.

All Electric Utilities

(d) Aggressively integrate nontraditional sources of power generation including cogenerators with high thermal efficiency and small power producers using renewable fuels into the various utility service areas near utility load centers to the extent cost effective and reliable.

FEECA speaks of "conserving" not "reducing" the use of expensive fuel resources.

FEECA encourages the use of highly efficient systems, cogeneration, and renewable energy sources.

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~~including planning site development to facilitate development of potential cogenerators near generating units.~~

(e) Increase the efficiency of transmission and distribution systems to the extent cost effective.

(f) Aggressively pursue research, development and demonstration projects jointly with others as well as individual projects in individual service areas. In this context, the Commission anticipates that an aggressive research program would include both technological research, research on load behavior and related problems and market-related research.

(6)(4) The Commission shall continuously review the relationship between demand and energy, both present and anticipated. In making its determinations of need pursuant to the Florida Electrical Power Plant Siting Act, the Commission shall take these relationships into account so that sufficient capacity will be authorized to meet anticipated needs. These goals represent a starting point for establishing demand-side management ~~energy conservation~~ programs for all electric utilities. While ~~There there~~ is no absolute assurance that these goals will be fully achieved within the expected time frames, ~~although~~ the best efforts by the electric utilities to achieve them shall ~~will~~ be required. In any proceeding for determining whether new



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capacity is needed, the length and nature of experience under the goals will be considered. The goals will not be used exclusively because the Commission recognizes that they may not be achieved and that the estimates on which they are based may prove to be incorrect. To increase the accuracy of these estimates the Commission anticipates that intensive and extensive research will be required, including both technological research and studies of the market penetration potentials of various demand-side management conservation measures and their effectiveness in reducing the growth rate of weather sensitive peak KW demand and reducing and controlling the growth rate of KWH consumption as well as studies of consumer behavior.

(7)(5) Rules 25-17.001 through 25-17.005 shall not be construed ~~or applied~~ to restrict growth in the supply of electric power or natural gas necessary to support economic development by industrial or commercial enterprises. Rather, these rules should be construed so as to meet growth in the most cost effective and efficient manner. enhance job-producing economic growth by lowering energy costs from what they otherwise would be if these goals are not achieved.

Specific Authority:  
366.82(1)-(4), F.S. 366.05(1),

Changes made to more strictly follow FEECA language.

Staff's initially proposed language has been stricken and the original language has been inserted once again.

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Law Implemented: 366.82(1)-(4), F.S.  
History: New 12/2/80, formerly 25-17.01,  
Amended 12/30/82, \_\_\_\_.

25-17.0021 Goals for Electric Utilities.

(1) The Commission shall establish numerical goals for each affected electric utility, as defined by s. 366.82(1), F.S., to reduce the growth rates of weather-sensitive peak demand, to reduce and control the growth rates of electric consumption, and to increase the conservation of expensive resources, such as petroleum fuels. Overall Residential KW and KWH goals and overall Commercial/Industrial KW and KWH goals shall be set by the Commission for each year over a ten-year period. The goals shall be based on an estimate of the total cost effective kilowatt and kilowatt-hour savings reasonably achievable through demand-side management in each utility's service area over a ten-year period.

(2) The Commission shall set goals for each utility at least once every ~~ten~~ five years. The Commission on its own motion or petition by a substantially affected person or a utility may initiate a proceeding to review and, if appropriate, modify the goals. All modifications of the approved goals, plans and programs shall only be on a prospective basis.

The proposed rule contains changes from the current non-numeric goals stated in 25-17.001 to numeric goals for the residential, and commercial/industrial customer classes.

Goals will be set for each year over the utility's 10 year planning period to coincide with the time period contained in the 10 year site plans which identifies supply side resources.

FEECA requires the Commission to review the conservation goals at least every 5 years.



(3) In a proceeding to establish or modify goals, each utility shall propose numerical goals for the ten year period and provide ten year projections, based upon the utility's most recent planning process, of the total, cost-effective, winter and summer peak demand (KW) and annual energy (KWH) savings reasonably achievable in the residential and commercial/industrial classes through demand-side management. Each utility's projection shall reflect consideration of overlapping measures, rebound effects, free riders, interactions with building codes and appliance efficiency standards, and the utility's latest monitoring and evaluation of conservation programs and measures. Each utility's projections shall be based upon an assessment of, at a minimum, the following market segments and major end-use categories.

Residential Market Segment:  
(Existing Homes and New Construction should be separately evaluated)  
Major End-Use Category

1. Building-Envelope Efficiencies
2. Cooling and Heating Efficiencies
3. Water Heating Systems
4. Appliance Efficiencies
5. Peakload Shaving

The Commission will hold an implementation proceeding to establish or modify the numerical goals, forecasted over a 10 year period.

Utilities are to file projections of KW and KWH savings for each end-use category over a 10 year time period with annual KW and KWH savings reasonably achievable in each end-use category.

Utilities are encouraged to take interactive effects into account and incorporate a monitoring and evaluation plan for their conservation programs.

Each utility will project annual KW and KWH savings in each market segment by end-use category. New home construction will be evaluated separately from existing dwellings.

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- 6. Solar Energy and Renewable Energy Sources
- 7. Renewable/Natural gas substitutes for electricity
- 8. Other

Commercial/Industrial Market Segment:  
(Existing Facilities and New construction should be separately evaluated)

Major End-Use Category

- 1. Building Envelope Efficiencies
- 2. HVAC Systems
- 3. Lighting Efficiencies
- 4. Appliance Efficiencies
- 5. Power Equipment/Motor Efficiency
- 6. Peak Load Shaving
- 7. Water Heating
- 8. Refrigeration Equipment
- 9. Freezing Equipment
- 10. Solar Energy and Renewable Energy Sources
- 11. Renewable/Natural Gas substitutes for electricity
- 12. High Thermal Efficient Self Service Cogeneration
- 13. Other

~~an assessment of the cost effective annual kilowatt and kilowatt hour savings reasonably achievable in its service territory through demand side management in~~

This section has been replaced with individual end-use categories for both residential and commercial/industrial customer segments as shown on the prior page.



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~~each of but not limited to the following categories for a period of ten years:~~

- ~~1. Building Envelope Efficiency~~
- ~~2. Lighting Efficiency~~
- ~~3. Heating Equipment Efficiency~~
- ~~4. Air Conditioning Equipment Efficiency~~
- ~~5. Appliance Efficiency~~
- ~~6. Power Equipment/Motor Efficiency~~
- ~~7. Peak Load Shaving~~
- ~~8. Water Heating~~
- ~~9. Refrigeration Equipment~~
- ~~10. Freezing Equipment~~
- ~~11. Solar Energy~~
- ~~12. Energy Substitutes for Electricity~~
- ~~13. High Thermal Efficient Self Service Cogeneration~~
- ~~14. Other.~~

~~The assessment provided by the utility shall be based on the utility's most recent applicable planning process and shall describe the interactive effects, including overlapping effects, rebound effects, free riders, and interactions with appliance efficiency standards.~~

~~(4) Within 90 days of a final order establishing or modifying goals, or such longer period as approved by the Commission, each utility shall submit for Commission approval a demand side management plan designed to meet the utility's approved goals. goals referred to in Section (1) of this rule which shall include demand-side~~

FEECA directs the Commission to require each utility to develop plans and programs to meet the overall goals within its service area following the adoption of goals. Utilities are to file DSM plans within 90 days of the final order establishing or modifying the goals. The Commission, if needed, may grant a filing extension on a case by case basis.

The reporting requirements are necessary for staff to report the results of the

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~~management programs aimed at providing energy conservation and demand reductions.~~  
The following information shall be submitted for each program in the plan for a ten-year projected horizon period:

1. the program name;
2. the program start date;
3. a statement of the policies and procedures detailing the operation and administration of the program;
4. the total number of customers or appropriate unit of measure in each class of customer (i.e. residential, commercial, industrial, etc.) for each year in the planning horizon;
5. the total number of eligible customers or appropriate unit of measure in each class of customers (i.e., residential, commercial, industrial, etc.) for each year in the planning horizon;
6. an estimate of the annual number of customers or appropriate unit of measure in each class projected to participate in the program, including a description of how the estimate was derived;
7. the cumulative penetration levels of the program by year calculated as the percentage of projected cumulative participating customers or appropriate unit of measure by year to the total customers eligible to participate in the program;
8. estimates on an appropriate unit of measure basis of the per customer and

conservation programs and goals to the Legislature, in addition to monitoring the utility's progress in meeting its KW and KWH goals.



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program total annual KWH reduction, winter KW reduction, and summer KW reduction, both at the customer meter and the generation level, attributable to the program. A summary of all assumptions used in the estimates will be included;

9. a methodology for measuring actual kilowatt and kilowatt-hour savings achieved from each program, including a description of research design, instrumentation, use of control groups, and other details sufficient to ensure that results are valid;

10. an estimate of the cost-effectiveness of the program using the cost-effectiveness tests required pursuant to Rule 25-17.008.

The Commission shall compare the projected cumulative kilowatt and kilowatt-hour savings associated with each utility's proposed demand side management plan to the goals established for each utility. If the Commission finds that a utility's conservation plan has not or will not meet its goals, the Commission may require the utility to modify its proposed programs or adopt additional programs and submit its plan for approval.

(5) Each utility shall submit an annual report no later than March 1 September 30 of each year summarizing its demand side management plan containing 6

This portion of the proposed rule is consistent with the following FEECA language contained in Section 366.82: "After the programs and plans to meet those goals are completed, the commission shall determine what further goals, programs, or plans are warranted and, if so, shall adopt them".

FEECA legislation requires the Commission to obtain periodic reports from each utility and provide the Legislature and the Governor with an annual report by March 1 of the goals it has adopted and the progress toward meeting those goals. The 6 month actual and 6 month projected data will be used for the initial report to the Legislature by March

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months actual achieved and 6 months projected and the total actual achieved results for its approved demand side management plan, in the preceding calendar year, for the items described in items 1 through 14 listed below. On March 31, each utility shall submit an updated annual report containing 12 months actual achieved results for the preceding calendar year. The report shall contain, at a minimum, a comparison of the achieved KW and KWH reductions with the established Residential and Commercial/Industrial goals a summation of the utility's demand and energy savings resulting from the approved demand side management plan, and the following information for each approved program:

1. the name of the utility;
2. the name of the program and program start date;
3. the calendar year the report covers;
4. total number of customers or appropriate unit of measure by customer class for each year of the planning horizon;
5. total number of customers or appropriate unit of measure eligible to participate in the program for each year of the planning horizon;
6. total number of customers or appropriate unit of measure projected to participate in the program for each year of the planning horizon;

1. The 12 month actual data will provide the Commission with calendar year data when responding to additional requests from the Legislature and other interested parties.

This section contains the annual report comparing each utility's actual KW and KWH accomplishments with the goals set by the Commission.



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7. the potential cumulative penetration level of the program to date calculated as the percentage of projected participating customers to date to the total eligible customers in the class;
8. the actual number of program participants and current cumulative number of program participants;
9. the actual cumulative penetration level of the program calculated as the percentage of actual cumulative participating customers to the number of eligible customers in the class;
10. a comparison of the actual cumulative penetration level of the program to the potential cumulative penetration level of the program;
11. a justification for variances larger than 15% for the annual goals established by the Commission; between the potential cumulative penetration level and the actual cumulative penetration level achieved;
12. using on-going measurement and evaluation results the annual KWH reduction, the winter KW reduction, and the summer KW reduction, both at the meter and the generation level, per installation and program total, based on the utility's approved measurement/evaluation plan;
13. the per installation cost and the total program cost of the utility;

Clarifies that % variances apply to annual goals.

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14. a levelized allocation of the life-cycle present worth net benefits for each year of the planning horizon attributable to demand savings;

15. a levelized allocation of life-cycle present worth net benefits for each year of the planning horizon attributable to energy savings.

14. the net benefits for measures installed during the reporting period, annualized over the life of the program, as calculated by the following formula:

$$\text{annual benefits} = B_{\text{npv}} \times \{d/[1-(1+d)^{-n}]\}$$

where

$B_{\text{npv}}$  = cumulative present value of the net benefits over the life of the program for measures installed during the reporting period

$d$  = discount rate (utility's after tax cost of capital)

$n$  = life of the program

Specific Authority: 366.05(1),  
366.82(1)-(4), F.S.  
Law Implemented: 366.82(1)-(4), F.S.  
History: New

This formula will provide a standardized way for all utilities to report annual savings in dollars.

Staff recommends deletion of the CPIF rule at this time. Staff further recommends the Commission consider stockholder incentives on a utility specific-basis in a hearing. The utilities may request approval of



25-17.0025. Conservation Performance Incentive Factor.

(1) The purpose of the Conservation Performance Incentive Factor (CPIF) is to provide a financial incentive to investor owned utilities in the form of monetary rewards and penalties to aggressively pursue their approved demand side management programs. The Conservation Performance Incentive Factor shall be calculated in each Conservation Cost Recovery hearing.

(2) The Commission shall determine which programs of each utility will be eligible for inclusion in this incentive provision. In making this determination the Commission shall consider the demand and energy savings of the programs and other relevant factors.

(3) CPIF rewards shall be recovered by the utility through the Energy Conservation Cost Recovery (ECCR) clause and flow directly to the stockholders. CPIF penalties shall be a credit to conservation expenses recovered by the utility through the ECCR clause. The Commission shall establish a target level for the incremental number of new installations for each program eligible for an incentive. The targeted level established for each program shall take into account the reasonably achievable market penetration potential and the level of disincentives that may be inherent in the program, such as lost revenues and adverse

incentives in the rule implementation dockets or in another hearing if appropriate.

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impacts on rates. The Commission shall also establish the net dollar benefit per installation for each program eligible for an incentive. A reward or penalty based on 20% of net savings shall be calculated for each program based on a comparison of actual installations relative to targeted installations.

(4) The Conservation Performance Incentive Factor shall be calculated mathematically as follows:

Let  $T_i$  = the target number of incremental installations for program  $i$  for the period.

$A_i$  = the actual number of incremental installations for program  $i$  for the period.

$B_i$  = the net dollar benefit per installation for program  $i$  for the period.

Also, let

$R_i$  = sum of  $(A_i - T_i) \times B_i \times 20\%$   
for all programs where  $A_i > T_i$

$R_i = 0$ , otherwise.

$P_i$  = sum of  $(T_i - A_i) \times B_i \times 20\%$   
for all programs where  $T_i > A_i$

$P_i = 0$ , otherwise.

The total net reward is calculated as follows:

NET REWARD = sum of  $(R_i - P_i)$  for  
 $i = 1$  to  $n$

where  $n$  is the total number of programs eligible for an incentive.



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~~Specific Authority: 366.05(1),~~  
~~366.82(1)-(4), F.S.~~  
~~Law Implemented: 366.82(1)-(4), F.S.~~  
~~History: New~~

25-17.003 Energy Audits; Related Provisions.

(1) Purpose: This rule specifies the minimum requirements for performing energy audits by each utility subject to the requirements of this rule.

(2) Applicability: This rule applies to each utility as defined in s. 366.82(1), F.S.

(3) Definitions:

(a) "Alternative (Walk-Through) Audit" means an energy audit as defined in Chapter 25-17.51(8), F.A.C.

(b) "Commercial Audit" means an energy analysis of a commercial building and its associated energy systems to determine its energy efficiency and to identify for the customer those cost effective measures which may improve its energy efficiency.

(c) "Energy Conservation Audit" means an energy audit as defined in Chapter 25-17.51(6), F.A.C.

(d) "Industrial Audit" means an energy analysis of an industrial facility and its associated energy systems to determine its energy efficiency and to identify for the customer those cost effective measures which may improve its energy efficiency.

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(4) Each utility shall notify its residential, commercial, and industrial customers of the availability of energy audits at least once every six months. Notification of audit availability, at a minimum, must be made by use of notices in billing statements or other means that involves direct notification to the customer. The announcement of the Residential Conservation Audits as required in Chapter 25-17.53(3)(c) can count as one of the biannual notifications for the residential customers.

(5) For each customer requesting either an Energy Conservation Audit or an Alternative Audit, each utility shall provide the requested audit to the customer in accordance with the provisions of Chapter 25-17.51 through 25-17.65, F.A.C.

(6) For each customer requesting either a Commercial Audit or an Industrial Audit, each utility shall provide or arrange to provide the requested audit to the customer within 120 days of the date the customer makes the request. The utility may recover the actual expenses incurred by providing audits from those commercial or industrial customers requesting such audits.

~~(7) In lieu of the performance of energy audits as stated above, each utility may perform energy audits as follows:~~

~~By January 1, 1982, the overall annual rate for energy audits shall be 150,000, by~~

Energy audit penetrations rates are addressed in the new conservation goals section 25-17.0021(5).



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January 1, 1984, the overall rate shall be 250,000. Each electric utility shall determine the portion of these goals applicable to it by January 1, 1982, by multiplying the number of residential customers on its system who consumed over 9,000 KWH during 1979 by 142,012 and dividing the result by the total number of such customers in the state, and by January 1, 1984 use the same formula but multiply by 236,672.

Specific Authority: 366.05(1), 350.127(2), F.S.

Law Implemented: 366.82(5), F.S.

History: New 12/2/80, formerly 25-17.03, Amended 12/30/82, 11/24/86, \_\_\_\_\_.

25-17.005 Evaluation of Electric Utility Conservation Efforts.

(1) This rule defines terminology, establishes reporting requirements and describes the method used to determine whether an electric utility has met its conservation goals; and it establishes reporting requirements to enable the Commission to monitor the implementation and cost-effectiveness of utilities' conservation programs.

(2) The methods in this rule apply to all electric utilities as defined in 366.82, F.S.

(3) The following definitions apply:

Rule 25-17.005 should be repealed because it refers to the old rule (25-17.002) on KW and KWH goals which was repealed in 1989. This methodology is no longer applicable under the new proposal.

(a) ~~"Test Year"~~ means the twelve month period beginning January 1 for Net Energy for Load, and beginning November 1 for Winter System Peak and Summer System Peak.

(b) ~~"Base Period"~~ means the 1980 calendar year for comparison with the Net Energy for Load test year and the period November 1, 1979 through October 31, 1980 for the comparison with the test year for Winter System Peak and Summer System Peak.

(c) ~~"Winter System Peak"~~ means the highest one hour system demand occurring between November 1 and the following March 31 during cold weather conditions.

(d) ~~"Summer System Peak"~~ means the highest one hour system demand occurring between April 1 and the following October 31 during warm weather conditions.

(e) ~~"Net Energy for Load"~~ means net system generation plus energy received from Class I and Class II systems minus energy delivered to Class I and Class II Systems for the calendar year.

(f) ~~"Adjusted Winter System Peak"~~ means ~~Winter System Peak~~ minus non-jurisdictional point of delivery demand, interruptible demand, demand subject to load control, and minus any other adjustments specified in Rule 25-17.002(3).

(g) ~~"Adjusted Summer System Peak"~~ means ~~Summer System Peak~~ minus non-jurisdictional point of delivery demand, interruptible demand, demand subject to load



control, and minus any other adjustments specified in Rule 25-17.002(3).

(h) ~~"Adjusted Net Energy for Load"~~ means Net Energy for Load minus output to non-jurisdictional customers (sales may be used if actual output data are not available) minus other adjustments specified in Rule 25-17.002(3).

(i) ~~"Weather Adjusted Winter System Peak"~~ means Adjusted Winter System Peak plus or minus any changes made to mathematically adjust, in accordance with Rule 25-17.007, for differences in weather conditions between the test year and the Normal Weather Year or the base period and the Normal Weather Year.

(j) ~~"Weather Adjusted Summer System Peak"~~ means Adjusted Summer System Peak plus or minus any changes made to mathematically adjust, in accordance with Rule 25-17.007, for differences in weather conditions between the test year and the Normal Weather Year or the base period and the Normal Weather Year.

(k) ~~"Weather Adjusted Net Energy for Load"~~ means Adjusted Net Energy for Load plus or minus any changes made to mathematically adjust, in accordance with Rule 25-17.007, for differences in weather conditions between the test year and the Normal Weather Year or the base period and the Normal Weather Year.

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~~(1) "Goals" mean the target levels of winter end use KW demand, summer end use KW demand, and end use KWH consumption calculated and adjusted as specified in Rule 25-17.002 and the number of energy audits calculated to be the utility's allocation under the provisions of Rule 25-17.003(1) and (2). For purposes of comparison with utility performance in the test year, goals shall be differentiated by the terms KW-Goal(Winter), KW-Goal(Summer), KWH-Goal, and Audits-Goal respectively, and shall be modified as described below:~~

~~KW-Goal(Winter) shall be calculated by applying the target growth rates calculated in Rule 25-17.002(1)(a) through (1)(d) to the 1979-1980 Weather Adjusted Winter System Peak.~~

~~KW-Goal(Summer) shall be calculated by applying the target growth rates calculated in Rule 25-17.002(1)(a) through (1)(d) to the 1980 Weather Adjusted Summer System Peak.~~

~~KWH-Goal shall be calculated by applying the target growth rates calculated in Rule 25-17.002(1)(a) through (1)(c) and 25-17.002(1)(e) to the 1980 Weather Adjusted Net Energy for Load.~~

~~Audits-Goal shall be as calculated in accordance with the provisions of Rule 25-17.003.~~

~~(m) "Audits-Actual" means the number of energy audits actually performed by the~~



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~~utility and includes Energy Conservation Audits, Customers Assisted (Mail-In) Audits, Alternative (Walk Through) Audits, Industrial Audits and Commercial Audits. Alternative Audits shall be considered as audits performed if the procedure for conducting them has been approved by the Commission, in accordance with Rule 25-17.059(1)(c).~~

~~(n) "Normal Weather Year" means expected weather conditions for a utility's service area, derived from statistical analysis of a minimum of ten consecutive years of weather data or upon the Typical Meteorological Year, as defined by the National Weather Service.~~

~~(o) "Supporting Documentation" means a narrative discussion of procedures used and assumptions made and a concise, detailed presentation of formulas used, provided in sufficient detail to allow the Commission staff, using standard statistical and mathematical procedures to replicate the results reported by the utility.~~

~~(4) Each utility shall provide the following data to the Commission by April 30 of each year, beginning in 1985.~~

~~(a) Test year KW Goal (Summer) and KW Goal (Winter) and KWH Goal as defined in Rule 25-17.005(3).~~

~~(b) Test Year Weather Adjusted Summer System Peak, Weather Adjusted Winter System~~

~~Peak and Weather Adjusted Net Energy for Load.~~

~~(c) Current Audits Goal for the same period as the KWH test year.~~

~~(d) Audits Actual for the same period as the KWH test year. Any difference from the sum of Residential, Commercial and Industrial audits reported on the Annual FEECA Program Report shall be explained.~~

~~(5) Information provided in accordance with 25-17.005(4) above shall be used to determine whether each utility has achieved or has not achieved each of its four conservation goals.~~

~~(a) The Summer end-use KW demand goal is achieved if Weather Adjusted Summer System Peak is less than or equal to KW Goal(Summer).~~

~~(b) The Winter end-use KW demand goal is achieved if Weather Adjusted Winter System Peak is less than or equal to KW Goal(Winter).~~

~~(c) The KWH consumption goal is achieved if Weather Adjusted Net Energy for Load is less than or equal to KWH Goal.~~

~~(d) The audit goal is achieved if Audits Actual is greater than or equal to Audits Goal.~~

~~(6) Each utility shall submit a semi-annual program progress report for the first half of each calendar year and an annual program progress report for each calendar year in a format described by the~~

This section describes the current semi-annual and annual FEECA reports that are submitted by FEECA utilities. This information will now be included in rule 25-17.0021(5).



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Commission. Each report shall be due 30 days after the close of each semi-annual or annual period. A utility may submit additional information along with its report. Reports shall provide, at a minimum, the information detailed below.

(a) The FEECA Program Progress Report shall include a separate listing of each program which includes:

1. The name of the utility;
2. The period (semi-annual or annual) and calendar year the report covers;
3. The program name;
4. The program start date;
5. The assumed annual KWH savings per installation;
6. The assumed winter coincident peak KW reduction per installation;
7. The assumed summer coincident peak KW reduction per installation;
8. Current period planned, current period actual, planned program to date, program to date actual, and difference between planned and actual data on the following:
  - a. Number of audits or installations, etc.;
  - b. Annual CWH savings;
  - c. Winter MW reduction;
  - d. Summer MW reduction;
  - e. Total program cost of utility; and
  - f. Cost per audit or installation, etc.

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~~9. Any comments pertaining to the program.~~

~~10. The investor-owned electric utilities shall also report as part of the annual report the following for each of the categories listed in subsection (6)(a)8. above:~~

~~a. Value of KWH saved;~~

~~b. Value of deferred generating unit or purchased electrical power;~~

~~c. Energy benefit/cost ratio; and~~

~~d. Total benefit/cost ratio.~~

~~(b) The FEECA Program Executive Summary for all programs shall include a brief overview of utility's conservation program efforts and accomplishments during the reporting period.~~

~~(c) Any other information required by Commission order.~~

Specific Authority: 366.05(1),  
366.82(1)-(4), F.S.

Law Implemented: 366.82(1)-(4), F.S.

History: New 12/2/80, formerly 25-17.05,  
Amended 12/30/82, 6/19/84, 9/14/88,  
Repealed, \_\_\_\_.

25-17.006 Electric Utility System  
Conservation End Use Data.

(1) PURPOSE: The purpose of this rule is to provide for the periodic submission of certain conservation information and other related information to the Commission. Applications of this Rule include:

Inserts new rule reference. 25-17.002 has been repealed.



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(a) gathering information to review and revise conservation goals pursuant to Rule ~~25-17.002~~ 25-17.0021, F.A.C.;

(b) gathering information to estimate the potential kilowatt hour (KWH) and kilowatt demand (KW) savings achievable through various conservation measures and conservation technologies;

(c) to monitor the effectiveness of the Florida Model Energy Efficiency Code, developed under s. 553.900, F.S., et. seq., and modifications made thereto; and

(d) gathering information to enable the Commission to analyze conservation alternatives to mitigate the need to construct new power plants in Florida.

(2) APPLICABILITY: This rule shall apply to all electric utilities that had total sales of electric energy for purposes other than resale in excess of 500 gigawatt hours for the calendar year 1980.

(3) Residential KWH Consumption Data: Starting with the 1981 calendar year, and each year thereafter, each electric utility shall:

(a) Categorize all customers (structures) who were or had been connected to the utility system for permanent service during the calendar year by the year of first connection and by the following customer groups:

1. Residential, single family, unattached.

2. Residential, single family, attached.
3. Residential, mobile home or trailers.

Customers (structures) first connected to the system on or before December 31, 1980 shall be categorized as having a 1980 year of first connection.

(b) Using standard statistical sampling procedures, develop sample groups by customer group as specified in subsection (3)(a) above and calendar year of structure connection beginning with 1980.

(c) For each sample group developed pursuant to subsection (3)(a), compute the average annual energy consumption in units of kilowatt hours per customer. The computed value shall be statistically reliable at a 90% confidence level and a  $\pm 5\%$  relative accuracy. The average annual energy consumption shall be determined by adding the active customers for each month, dividing that sum by 12 and dividing that result into the total annual consumption for those customers. Active customers are those members of the sample group to whom bills were issued during that month.

(d) For each sample group developed pursuant to subsection (3)(a), compute the average monthly energy consumption in units of kilowatt hours per customer. The computation shall be made for each month of the calendar year. The computed values



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shall be statistically reliable at a 90% confidence level and a +/- 5% relative accuracy.

(e) Report the results of subsections (3)(c) and (3)(d), by March 1st of the following calendar year. Also, report the total number of customers at year end by each customer group specified in subsection (3)(a) connected to the utility system for permanent service during the calendar year. The utilities shall also calculate and report statewide aggregates for these data within 90 days of the due date of the individual utility reports.

(f) The requirement that customers (structures) be categorized by year of first connection to the utility system is for the purpose of approximating the year of construction.

(4) Residential Goal Setting Information:

(a) Residential Customer Survey: Starting with calendar year 1986 and every four years thereafter, each electric utility shall "collect" certain information on the appliance stock, housing characteristics, household demographic characteristics and twelve months of kilowatt hour billing history for its proportionate share of a representative sample of residential customers (structures).

1. For the purposes of obtaining the data described in subsection (4)(a), a

It is contemplated that the utilities will work through the FCG to aggregate and prepare a statewide report.

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representative sample of residential customers sufficient to yield 1,350 usable, complete observations shall be field interviewed by representatives of the utility in each of the following climatological zones.

a. Northern: Baker, Bay, Bradford, Calhoun, Clay, Columbia, Dixie, Duval, Escambia, Franklin, Gadsden, Gulf, Hamilton, Holmes, Jackson, Jefferson, Lafayette, Leon, Liberty, Madison, Nassau, Okaloosa, Santa Rosa, St. Johns, Suwannee, Taylor, Union, Wakulla, Walton, Washington.

b. Central: Alachua, Citrus, DeSoto, Flagler, Gilchrist, Hardee, Hernando, Highlands, Hillsborough, Lake, Levy, Marion, Okeechobee, Orange, Osceola, Pasco, Polk, Putnam, Seminole, Sumter, Volusia.

c. Central Coastal: Brevard, Charlotte, Collier, Glades, Hendry, Indian River, Lee, Manatee, Martin, Monroe (excluding the Florida Keys), Pinellas, Sarasota, St. Lucie.

d. Southeast: Broward, Dade, Palm Beach, and the Florida Keys.

2. For each climatological zone, each utility shall sample a proportion of the 1350 customers based on its percentage of residential customers in each of the regions.

a. By November 1st prior to the survey year each utility will provide to the Commission staff the number of its



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residential customers residing in each of the four climate zones as of June 30th prior to the survey year.

b. By January 15th of the survey year Commission staff will allocate the prescribed sample points to each utility based on the information submitted pursuant to subsection 2.a.

3. For each climatological zone, each utility shall stratify its residential customers by customer group as defined in subsection (3)(a) and draw a representative sample from each customer group proportional to that group's percentage of the total residential customers in the climatological zone.

4. The information on appliance stocks, housing characteristics, household demographic and the twelve months of KWH billing history shall be gathered using a survey instrument prescribed by the Commission by January 15th of the survey year. Nothing in this paragraph shall be construed to prohibit an electric utility from adding additional questions to its own survey it believes useful.

5. Each utility shall report the survey information and billing history on each individual respondent to the Commission on or before September 1st of the calendar year immediately following the survey year. This information shall be reported such that no individual customer's identity can be

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determined. The information reporting format shall be prescribed by the Commission prior to April 1st of the survey year. The medium for reporting the information shall be 3 and one-half inch microcomputer diskette using a FoxPro database structure ~~9-track magnetic tape~~ unless another medium is approved in writing by the Commission staff. The utilities shall also submit aggregated data on a statewide basis within 90 days of the due date of the individual utility reports.

6. The following guidelines shall apply to customers described in subsection (4)(a) 1. above:

a. Customers must be customers of record as of July 1st of the survey year.

b. Customers must be continuously billed for a twelve consecutive calendar month period between July 1st of the year prior to the survey year and July 31st of the survey year. The twelve calendar consecutive month period shall be the same for all survey customers.

c. Seasonal customers billed in accordance with sub-section (4)(a)6.b. may be counted toward the required number of sample customers.

7. The survey year shall be an even numbered calendar year beginning with the 1986 calendar year and every four years thereafter. The term survey year shall not

Updates the medium and data structure to be used in reporting the data.

It is contemplated that the utilities will work through the FCG to produce a statewide report.



be construed to limit completion of the survey to that even numbered calendar year.

8. The reporting year shall be an odd numbered calendar year beginning with the 1987 calendar year and every four years thereafter.

~~(b) Forecasts of Residential Appliance Stocks and Housing Characteristics: Starting with calendar year 1987 and every four years thereafter, each electric utility shall report to the Commission forecasts of the market penetration of certain appliance stocks and housing characteristics.~~

~~1. Using its best estimates, each electric utility shall report the percentage of market penetration of each appliance listed in subparagraphs 4.a. - 4.m. for each year of the forecast horizon.~~

~~2. Using its best estimates, each electric utility shall report the market penetration of each housing characteristics listed in subparagraphs 5.a. - 5.d. for each year of the forecast horizon.~~

~~3. The forecast horizon shall be at least 10 years and the use of a 20 year forecast period is encouraged.~~

~~4. Appliance stocks shall be:~~

~~a. High efficiency central air conditioners with a seasonal Energy Efficiency Rating (SEER) greater than or equal to 11.0.~~

~~b. Low efficiency central air conditioners with a SEER less than 11.00.~~

Staff proposes to repeal this portion of the rule relating to the forecast of residential appliance stock as this information was not used by staff or the utilities.

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e. ~~High efficiency heat pumps with a Coefficient Of Performance (COP) greater than or equal to 3.0 and a SEER greater than or equal to 10.0.~~

d. ~~Low efficiency heat pumps with a Coefficient Of Performance (COP) less than 3.0 and a SEER less than 10.0.~~

e. ~~Window or wall air conditioners.~~

f. ~~Central resistance space heaters.~~

g. ~~Non central resistance space heaters permanently affixed to the building structure.~~

h. ~~Non electric heating.~~

i. ~~Resistance water heaters.~~

j. ~~Heat pump water heaters.~~

k. ~~Solar water heaters.~~

l. ~~Waste heat recovery water heaters.~~

m. ~~Non electric water heating.~~

5. ~~Housing characteristics shall be:~~

a. ~~The number of residential structures having ceiling insulation R values between:~~

i. ~~R-0 and R-7~~

ii. ~~R-8 and R-15~~

iii. ~~R-16 and R-22~~

iv. ~~R-23 and greater.~~

b. ~~For each R value group listed immediately above:~~

i. ~~the average wall insulation R value~~

ii. ~~the average window area as a percentage of wall area~~



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~~iii. the average floor area of conditioned space~~

~~6. The forecasts shall be provided for each customer group identified in subparagraph (3)(a).~~

~~7. The forecasts shall be provided to the Commission on or before December 31st of the reporting year. As part of the forecasts provided, each utility shall provide a narrative report that describes the forecast methodology and it shall report all assumptions and the justification for each assumption used in the forecast. The utilities shall also provide a statewide forecast within 90 days of the due date of the individual utility reports.~~

(c) Residential Rate Class Load Data: Starting with calendar year 1987 and every two years thereafter, each investor-owned utility, subject to this rule, shall report to the Commission by June 1st of the reporting year the scaled residential class load profile, defined in (4)(c)4., according to the following procedure:

1. During any consecutive twelve (12) month period within the two calendar years immediately preceding the reporting year, each electric utility shall gather residential class load research data in accordance with Rule 25-6.0437, F.A.C.

2. Using the residential class load research data, specified in (4)(c)1., each

utility shall develop a residential class load profile using either the Mean Per Unit Methodology or the Combined Ratio Estimation Methodology to expand the hourly kw/customer load research data into a residential class load profile. This load profile shall consist of consecutive hourly demand values representative of the residential class's hourly demands during the twelve (12) month period described in (4)(c)1.

3. Each utility shall weather adjust each hourly demand value in the residential class load profile, developed in (4)(c)2. The weather adjustment shall be for differences in weather variables between the hourly weather conditions for the twelve month period described in (4)(c)1. and the corresponding average hourly weather conditions for the utility's service area derived from a statistical analysis of at least ten consecutive years of weather data or upon the Typical Meteorological Year as defined by the National Weather Service.

4. To the extent that the weather adjusted residential class profile developed in subsection (4)(c)3. coincides with the calendar year immediately preceding the reporting year, the utility shall report that load profile data. For other time periods the residential class load profile developed in subsection (4)(c)2. shall be projected and reported for the corresponding months in the calendar year immediately



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preceding the reporting year. The method for making these projections shall, in the best judgment of the reporting utility, be such as to reflect residential class load levels which would have occurred under average weather conditions as specified in subsection (4)(c)3.

5. The reporting year shall be an odd-numbered calendar year beginning with the 1987 calendar year.

Specific Authority: 366.05(1), 350.127(2), F.S.

Law Implemented: 366.05(1), 366.82(2), F.S.

History: New 6/14/82, formerly 25-17.06, Amended 2/21/85, 9/7/87, \_\_\_\_.

25-17.007 Normalization of Electric Utility Load Data.

~~(1) This rule establishes the requirement for normalizing load data so as to allow comparison of utility performance in conservation to established conservation goals, defines which electric utilities are required to file normalized data and outlines a uniform reporting format.~~

~~(2) Under this rule, all electric utilities having unadjusted retail sales in excess of 500 GWH in any calendar year shall report normalized load data. Other electric utilities may report normalized load data. Once normalized data have been filed, a utility must continue to file normalized~~

This rule should be repealed as it relates to the original conservation goals rule 25-17.002 which expired and was repealed in 1989. The methodology is on longer applicable to the new rule being proposed.

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~~data each year, unless a specific request to discontinue is approved by the Commission.~~

~~(3) The definitions in Rule 25-17.005(3) apply.~~

~~(4) Data shall be reported in a spread sheet format to be prescribed by the Commission. Separate spread sheets are to be prepared for Winter System Peak, Summer System Peak and for Net Energy for Load. Adjustments shall be shown both on an aggregate and on a per residential customer basis. The spread sheet shall include the following as a minimum:~~

~~(a) Winter System Peak, Summer System Peak, or Net Energy for Load for the base period and for the test year;~~

~~(b) Adjustments for Wholesale Customers;~~

~~(c) Adjustments for Interruptible Customers (for Winter System Peak and for Summer System Peak);~~

~~(d) Other adjustments specified by Rule 25-17.003;~~

~~(e) Firm Winter System Peak, Firm Summer System Peak, or Firm Net Energy for Load;~~

~~(f) Load Management Potential at Winter System Peak or Summer System Peak;~~

~~(g) Actual Load Management under control at Winter System Peak or Summer System Peak;~~



~~(h) Adjusted Winter System Peak, Adjusted Summer System Peak, or Adjusted Net Energy for Load;~~

~~(i) Weather adjustments resulting in increases to (h);~~

~~(j) Weather adjustments resulting in decreases from (h);~~

~~(k) Weather Adjusted Winter System Peak, Weather Adjusted Summer System Peak, or Weather Adjusted Net Energy for Load; and~~

~~(l) Supporting documentation explaining all adjustments, including a narrative explanation of each adjustment made on the spread sheet.~~

~~(5) Load data shall be normalized for the effect of changes in weather variables including at least temperature, heating degree days, and cooling degree days, or surrogates for those variables. The National Weather Service is to be the source of raw weather data, unless a specific variance is approved by the Commission staff. Calculations shall include weighting of the weather data from multiple weather reporting stations to allow for the affected proportions of the customer population.~~

~~(6) Each utility may initially use its internal normalization methods, subject to approval by Commission staff. Once approved, a method shall be used consistently from year to year unless a utility's written request to modify its methods is approved by Commission staff.~~

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~~Any such request shall provide a comparison of the three most recent years' data, and the base period data normalized using both the approved method and the proposed new method. Variances between results of the two methods must be explained and supporting documentation provided.~~

~~(7) Initially, each utility shall submit its proposed methodology including supporting documentation by June 15, 1984. Staff shall approve or reject the proposal by August 15, 1984. If rejecting the proposal, staff shall provide reasons for the rejection and shall recommend changes. Within thirty days of receiving notification of disapproval, the utility shall file an amended proposal. Staff shall have thirty days in which to approve or not approve the amended proposal. If the amended proposal is not approved, the dispute shall be submitted to the Commission for resolution.~~  
Specific Authority: 366.05(1),  
366.82(1)-(4), F.S.

Law Implemented: 366.82(1)-(4), F.S.  
History: New 6/19/84, formerly 25-17.07,  
Repeal \_\_\_\_\_.