

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Request for Approval of)	DOCKET NO. 900114-EG
Energy Conservation Plan by)	ORDER NO. 23551
City of Lakeland.)	ISSUED: 10-02-90
_____)		

The following Commissioners participated in the disposition of this matter:

MICHAEL McK. WILSON, Chairman
 THOMAS M. BEARD
 BETTY EASLEY
 FRANK S. MESSERSMITH

NOTICE OF PROPOSED AGENCY ACTION
ORDER APPROVING CITY OF LAKE LAND'S CONSERVATION PLAN

BY THE COMMISSION:

NOTICE is hereby given by the Florida Public Service Commission that the action discussed herein is preliminary in nature and will become final unless a person whose interests are adversely affected files a petition for a formal proceeding, pursuant to Rule 25-22.029, Florida Administrative Code.

CASE BACKGROUND

During the 1989 regular session, the Legislature of the State of Florida amended Section 366.82, Florida Statutes, requiring this Commission to adopt goals for increasing the efficiency of energy consumption and increasing the development of cogeneration. Section 366.82, Florida Statutes also directed the Commission to require affected electric and natural gas utilities to submit updated energy conservation programs. On November 14, 1989 the Commission issued Order No. 22186, adopting the goals stated in Rule 25-17.001, Florida Administrative Code, and required the affected utilities to submit new and revised plans and programs to meet the goals within 90 days of the issuance of the Order. Also in the Order, the Commission stated that the conservation programs will be judged by the following criteria:

DOCUMENT NUMBER-DATE

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PSC-RECORDS/REPORTING

ORDER NO. 23551
DOCKET NO. 900114-EG
PAGE 2

1. Does each component program advance the policy objectives set forth in Rule 25-17.001 and the FEECA statute?
2. Is each component program directly monitorable and yield measurable results?
3. Is each component program cost effective? (The Commission stated that municipal and cooperative utilities were free to implement non-cost effective programs if they so desired).

The utilities were directed to file programs in four areas: (1) demand side management programs; (2) natural gas programs where cost effective; (3) residential energy audits; and (4) a program for attracting qualifying facilities (cogeneration) into its service area.

Subsequently the Commission deleted that part of Order No. 22176 requiring the electric utilities promotion of gas programs.

Conservation Plan

We agree with our Staff's recommendation that Lakeland's conservation programs listed below should be approved:

Existing Programs:

1. Load Management Program:

Lakeland has been using direct load control of electric water heaters since 1981. Lakeland plans to expand this program to include control of space heating and to use radio control rather than a power-line carrier. Lakeland estimates that 34,750 customers will participate and that the energy savings per customer will be 1,683.2 kWh and the demand savings will be 2.2 kW.

2. Low Interest Loan Program:

Lakeland is participating in the low interest load program underwritten by the Florida Public Service Commission. They expect 4,500 participants in the program and they anticipate a load reduction of 0.87 kW per customer and an energy reduction of 844.0 kWh per customer.

ORDER NO. 23551
DOCKET NO. 900114-EG
PAGE 3

3. Thermal Energy Storage Program:

This program is designed to move large blocks of commercial cooling demand to off-peak hours. Lakeland will assist commercial customers in evaluating the cost effectiveness of installing thermal energy storage systems and they will calculate anticipated system paybacks for the customers. Lakeland expects 102 customers to participate in the program with an expected demand reduction of 50.56 kW per customer. Because this is a load shifting program, no energy savings is anticipated.

4. Voltage Reduction:

Lakeland will exercise voltage reduction capabilities to reduce winter peak demands. A voltage reduction of 5% results in a demand reduction of 5% of the winter peak. This program has no cost per customer and is expected to reduce the peak demand by 27,970 kW and save 279,700 kWh of energy.

5. High Pressure Sodium Outdoor Lighting Program:

Under this program, Lakeland has replaced all of the mercury vapor street lights within the city limits with high pressure sodium street lights. As private area lights are replaced, they are converted to high pressure sodium. Lakeland expects 962 customers to participate resulting in a demand reduction of 0.09 kW per customer and an energy savings of 376 kWh per customer.

6. Municipal Program:

Lakeland has had a conservation program for its own buildings since October, 1988. This program involves the replacement of heating and air conditioning systems; the installation of new energy management systems; the replacement of lighting systems; the provision of technical advice on energy-related repairs; and design review of new construction and renovations. The projects planned for 1990 are expected to save 40,000 kWh of energy, which is equivalent to a \$40,000 annual savings.

7. Residential Energy Audits:

Lakeland offers energy audits to all residential customers. Lakeland cannot quantify the demand or energy

ORDER NO. 23551
DOCKET NO. 900114-EG
PAGE 4

savings as a result of this program because they do not know what actions the customer will take as a result of the audit.

8. Commercial Energy Audits:

Lakeland offers a commercial energy audit program which will be expanded to include the analysis of high efficiency lighting and thermal storage. As in the residential energy audits, Lakeland cannot quantify the demand or energy savings of this program.

9. Public Awareness Program:

Lakeland primarily uses radio and television to promote energy conservation. They also have a mobile display unit, use bill inserts and provide speakers to increase the public's knowledge on conservation.

10. Time-of-Day Rates:

Time-of day rates are available to Lakeland's customers. Currently, there is limited interest in this program; however, Lakeland hopes that emerging technologies will make this program an effective means of reducing energy consumption.

11. Cogeneration Promotion:

Because Lakeland has a small number of industrial customers whose manufacturing operation is conducive to cogeneration, Lakeland's representatives keep in close contact with these customers. Lakeland has developed standby and back-up rates so that Lakeland can begin negotiations for the purchase of capacity and energy at any time. We agree with Staff's recommendation that Lakeland be required to file with the Commission as soon as possible a standard offer contract. In that way, cogenerators that are considering locating in Lakeland's service territory will know what Lakeland's avoided cost is. We find that Lakeland's compliance with this filing requirement will not cause an underburden.

New Programs:

12. Commercial Lighting Program

Lakeland will provide information to commercial customers on the availability and potential savings associated with the

ORDER NO. 23551
DOCKET NO. 900114-EG
PAGE 5

installation of high efficiency fluorescent lighting in conjunction with their current Commercial Audit Program. They expect 962 participants resulting in an anticipated demand reduction of 1.45 kW per customer and an energy reduction of 7,725 kWh per customer.

13. Demand Side Management Plan:

This plan is designed to actively market and track the performance of all utility conservation efforts using a review of historical data and market research.

Studies:

14. Direct Expansion Ground Source Heat Pump Study:

Lakeland has completed a study of the demand and energy savings associated with direct expansion ground source heat pump technology. Lakeland is now evaluating the cost effectiveness of retrofitting the technology on existing homes.

15. Whole House Demand Controller Study:

Lakeland has completed an evaluation of the capabilities of whole house demand controllers. Lakeland found that this technology does not compare favorably with other alternatives presently available.

16. Infiltration Study:

Lakeland is investigating the detrimental effects return air leaks have on energy usage in residential housing. This study should be completed in November, 1990. Based on its findings, Lakeland plans to provide informational brochures, informational seminars for builders and possible building code recommendations.

17. Electric Vehicle Study:

Lakeland will begin investigating the cost effectiveness of using electric vehicles to perform some fleet assignments in the coming year.

ORDER NO. 23551
DOCKET NO. 900114-EG
PAGE 6

Oil Consumption Reduction Programs:

18. Coal Generation at McIntosh Unit 3:

Lakeland intends to reduce oil consumption by burning coal at McIntosh Unit 3.

19. Refuse Generation at McIntosh Unit 3:

Lakeland also reduces oil consumption by burning over 140 tons of refuse every day.

In consideration of the foregoing, it is

ORDERED by the Florida Public Service Commission that the City of Lakeland's conservation plan as described in the body of this Order is approved. It is further

ORDERED that Lakeland, or its designee file a standard offer contract for the purchase of capacity and energy from qualified facilities. It is further

ORDERED that if a protest is filed within 20 days of the date of this Order it will be resolved by the appropriate Commission panel pursuant to Rule 25-22.006(3)(d), Florida Administrative Code.

By ORDER of the Florida Public Service Commission,
this 2nd day of OCTOBER, 1990.



STEVE TRIBBLE, Director
Division of Records and Reporting

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ORDER NO. 23551
DOCKET NO. 900114-EG
PAGE 7

NOTICE OF FURTHER PROCEEDINGS OR JUDICIAL REVIEW

The Florida Public Service Commission is required by Section 120.59(4), Florida Statutes, to notify parties of any administrative hearing or judicial review of Commission orders that is available under Sections 120.57 or 120.68, Florida Statutes, as well as the procedures and time limits that apply. This notice should not be construed to mean all requests for an administrative hearing or judicial review will be granted or result in the relief sought.

The action proposed herein is preliminary in nature and will not become effective or final, except as provided by Rule 25-22.029, Florida Administrative Code. Any person whose substantial interests are affected by the action proposed by this order may file a petition for a formal proceeding, as provided by Rule 25-22.029(4), Florida Administrative Code, in the form provided by Rule 25-22.036(7)(a) and (f), Florida Administrative Code. This petition must be received by the Director, Division of Records and Reporting at his office at 101 East Gaines Street, Tallahassee, Florida 32399-0870, by the close of business on October 23, 1990.

In the absence of such a petition, this order shall become effective on the day subsequent to the above date as provided by Rule 25-22.029(6), Florida Administrative Code, and as reflected in a subsequent order.

Any objection or protest filed in this docket before the issuance date of this order is considered abandoned unless it satisfies the foregoing conditions and is renewed within the specified protest period.

If this order becomes final and effective on the date described above, any party adversely affected may request judicial review by the Florida Supreme Court in the case of an electric, gas or telephone utility or by the First District Court of Appeal in the case of a water or sewer utility by filing a notice of appeal with the Director, Division of Records and Reporting and filing a copy of the notice of appeal and the filing fee with the appropriate court. This filing must be completed within thirty (30) days of the effective date of this order, pursuant to Rule 9.110, Florida Rules of Appellate Procedure. The notice of appeal must be in the form specified in Rule 9.900(a), Florida Rules of Appellate Procedure.