

ORIGINAL



Building Community

**BEFORE THE  
FLORIDA PUBLIC SERVICE COMMISSION**

**DOCKET NO. 990720-EG**

**ADOPTION OF NUMERIC CONSERVATION GOALS**

**NOVEMBER 15, 1999**

**TESTIMONY & EXHIBITS OF:**

**JAMES H. ADAMS**

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2 JEA

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6

7 **Q Please state your name and address.**

8 A My name is James H. Adams. My business address is 21 West Church Street, T-  
9 7, Jacksonville, Florida 32202-3139.

10

11 **Q By whom are you employed and in what capacity?**

12 A I am employed by JEA as a Technical Services Consultant in the Business Clients  
13 Section of the Customer service division.

14

15 **Q Please describe your responsibilities in that position.**

16 A As a Technical Services Consultant in the Customer Services Division, I am  
17 responsible for managing the Continuing Education programs and other activities  
18 related to the Demand Side Management goals. In addition, I support the Key  
19 Account Managers in providing energy audits and other technical services for  
20 commercial and industrial customers. I also provide technical assistance to  
21 Economic Development, New Technologies and the residential auditors.

22

23 **Q Please state your professional experience and educational background.**

24 A I received a Bachelors of Science degree in Mechanical Engineering from the  
25 Virginia Tech, Blacksburg, Virginia, and a Master of Business Administration

1 (MBA) from the University of Tennessee-Knoxville. I am a licensed Professional  
2 Engineer and have a certified class A Air Conditioning contractors license, both  
3 in the State of Florida.

4  
5 I joined the HVAC industry in 1970 and have been involved in many facets –  
6 marketing, wholesaling, design, construction, maintenance, and consulting. I  
7 spent 8 years as an air conditioning contractor, specializing in commercial  
8 buildings and institutional structures, designed and installed by my firm. I am  
9 professionally affiliated with the American Society of Heating Refrigerating and  
10 Air Conditioning Engineers (ASHRAE) and the Northeast Florida Builders  
11 Association (NEFBA).

12  
13 **Q Please describe the overall process leading to the determination of the**  
14 **proposed numeric conservation goals for JEA?**

15 A Six major steps were taken to determine the proposed numeric conservation goals  
16 for JEA. First, DSM measures with the highest potential of being cost-effective  
17 were chosen. Second, the avoided cost must be established. Third, the selected  
18 measures were analyzed against the avoided costs in cost-effective analyses.  
19 Fourth, results of the analyses are analyzed. Fifth, the proposed numeric goals  
20 were set based on the results of the analyses. Sixth, program implementation  
21 processes were developed for the programs that JEA proposes.

22  
23 **Q What is the purpose of your testimony in this proceeding?**

24 A The purpose of my testimony is to address steps four, five, and six. In my  
25 testimony, I will discuss the results of the cost-effectiveness analysis, the numeric

1 goals proposed by JEA and the implementation of the demand side programs. I  
2 will also discuss existing programs at JEA and programs that have been  
3 discontinued. Potential future programs will be also discussed.

4  
5 **Q Were Sections of the JEA's 2000 Demand Side Management Plan (Exhibit**  
6 **JEA-1) prepared by you or under your direct supervision?**

7 A Yes. JEA's 2000 Demand-Side Management Plan was prepared by Black &  
8 Veatch under my direct supervision.

9  
10 **Q Are you adopting any of the Sections of JEA's 2000 Demand Side**  
11 **Management Plan as part of your testimony?**

12 A Yes, I am adopting Section 6.0.

13  
14 **Q Are there any corrections to this Section?**

15 A No.

16  
17 **Q Have you prepared any exhibits?**

18 A Yes. I have prepared Exhibit JHA-1 which is incorporated as part of my  
19 testimony.

20  
21 **Q Please describe how the results of the cost-effectiveness evaluation for the**  
22 **DSM measures were analyzed.**

23 A In general, JEA uses the Rate Impact Test as its primary criterion for determining  
24 cost-effectiveness for DSM programs. In other words, JEA will not implement  
25 DSM programs that cause rates to increase unless there are significant other

1 considerations such as customer education.

2

3 The Rate Impact Test is a measure of the expected impact on customer rates  
4 resulting from a DSM program. The test statistic is the ratio of the utility's  
5 benefits (avoided supply costs and increased revenues) compared to the utility's  
6 costs (program costs, incentives paid, increased supply costs and revenue losses).  
7 A value of less than one indicates an upward pressure on rate levels as a result of  
8 the DSM program.

9

10 **Q Please describe the results of the cost-effectiveness evaluation.**

11 A Eight residential and three commercial measures were analyzed for cost-  
12 effectiveness. None of the measures passed the Rate Impact Test.

13

14 **Q Please describe the development of JEA's proposed numeric goals for the  
15 years 2001 – 2010.**

16 Since none of the measures passed the Rate Impact Test, JEA's proposed numeric  
17 goals are zero for demand and energy.

18

19 The numeric goals are shown in Exhibit JHA - 1.

20

21 **Q Are these goals feasible for JEA?**

22 A Yes. JEA expects to surpass these goals.

23

24 **Q Please describe the measures tested from JEA's 1995 DSM Plan and JEA's  
25 1998 DSM Annual Report.**

1 A Eight residential measures and two commercial measures were tested. I will give  
2 a brief overview of each measure, residential measures first.

3  
4 'Constructing an Energy Efficient New Home for Professionals' is a seminar  
5 targeting engineers, architects, building inspectors, building managers and all  
6 associated professionals involved in the construction and development of new  
7 homes. The seminar focuses on energy efficiency and conservation through site  
8 selection, design, thermal and mechanical systems, construction details, energy  
9 code requirements, heating and air conditioning equipment, duct sizing and  
10 landscaping. This program is highly attended because continuing education credit  
11 is offered for seminar attendance.

12  
13 'Constructing an Energy Efficient New Home for Home Owners' is a seminar  
14 targeting homeowners. The seminar focuses on energy efficiency and  
15 conservation. This program will be continued and highly emphasized.

16  
17 'Contractors Duct Education Program' addresses the impacts of duct leakage,  
18 repair, prevention methods, and legal requirements for all new residential  
19 buildings in Florida. A commercial alternative has been developed for this course  
20 for non-residential buildings.

21  
22 'Low Income Residential Audit, Jacksonville Housing Partnership (JHP)' is a  
23 low-income audit performed by the local weatherization agency, JHP. During  
24 this audit a conservation measure is installed or performed consistent with a  
25 priority list of measures established by JEA.

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‘Low Income Residential Audit, Jacksonville Housing Authority (JHA)’ focuses on altering wasteful occupant behavior through education. JEA personnel enter dwellings supervised by the local public housing agency and perform low-income audits.

‘High Efficiency Pool Pump’ program promotes the replacement of pool pumps with high efficiency units at the time of pump failure. High efficiency pool pumps were supposed to be available to JEA customers with a ten-dollar discount. JEA was not successful in obtaining the participation of a pump distributor. Therefore, this program is not proposed in JEA’s 2000 Demand-Side Management Plan.

‘Remove Second Freezer’ and ‘Remove Second Refrigerator’ promotes the removal of additional unnecessary refrigeration and freezing appliances. The program is targeted to reduce net energy for load. This program has not been successful and is not proposed in JEA’s 2000 Demand-Side Management Plan.

‘Air Distribution Education Seminar’ promotes proper airflow through commercial buildings. Uncontrolled airflow exists when air is forced across the building envelope through building components in a manner never intended by designers. Improper airflow can cause immense building repair costs.

‘Commercial Energy Efficient Lighting’ strives to promote energy savings and power quality improvements through retrofitting. This program loans thirty

1 dollars for each fixture replaced at a low interest rate for three years. The  
2 program allows the customer to repay the loan through monthly bills. This  
3 program has not been successful and is not proposed in JEA's 2000 Demand-Side  
4 Management Plan.

5

6 **Q Did you test any additional measures.**

7 A Yes, we tested Florida Power & Light's (FPL) most cost-effective measure. The  
8 measure was found not cost-effective for JEA. We in essence screened and  
9 eliminated all measures screened by FPL.

10

11 **Q Will any of the above programs be continued or implemented.**

12 A JEA proposes to continue selected programs discussed above. The residential  
13 programs that will be continued include the educational seminars and the low-  
14 income energy audits. The commercial / industrial educational seminars and  
15 audits will also be continued. JEA is choosing to continue the programs because  
16 of their educational nature, the high level of customer participation, and the  
17 potential positive effects on the community.

18

19 **Q Does this conclude your testimony?**

20 A Yes.

21

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25



Proposed Numeric Conservation Goals						
Year	Residential Reduction			Commercial/Industrial Reduction		
	Summer kW	Winter kW	MWh	Summer kW	Winter kW	MWh
2001	0	0	0	0	0	0
2002	0	0	0	0	0	0
2003	0	0	0	0	0	0
2004	0	0	0	0	0	0
2005	0	0	0	0	0	0
2006	0	0	0	0	0	0
2007	0	0	0	0	0	0
2008	0	0	0	0	0	0
2009	0	0	0	0	0	0
2010	0	0	0	0	0	0