City of Tallahassee
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2602 Jackson Bluff Road, Tallahassee, Florida 32304, (850) 891-4YOU (4968), talgov.com

May 25, 2004

Ms. Blanca S. Bayó, Director
Division of the Commission Clerk
and Administrative Services
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

undocketed

Subject: Addendum to the City of Tallahassee's Ten-Year Site Plan

It has come to our attention that further data revision was necessary. All corresponding text, tables, charts and graphs were also modified. Enclosed is an addendum to the City of Tallahassee's 2004 Ten-Year Site Plan.

Sincerely,

Venus Childs

Venus Childs
Planning Engineer

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CITY OF TALLAHASSEE
TEN YEAR SITE PLAN FOR ELECTRICAL GENERATING FACILITIES AND ASSOCIATED TRANSMISSION LINES
2004-2013
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III. Projected Facility Requirements

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Appendix A

CHAPTER II

Forecast of Energy/Demand Requirements and Fuel Utilization

2.0 INTRODUCTION

Chapter II includes the City of Tallahassee's forecasts of (i) demand and energy requirements, (ii) energy sources and (iii) fuel requirements. This chapter explains the City's 2004 Load Forecast and the Demand Side Management plan filed with the Florida Public Service Commission (FPSC) on March 1, 1996. Based on the forecast, the energy sources and the fuel requirements have been projected.

2.1 SYSTEM DEMAND AND ENERGY REQUIREMENTS

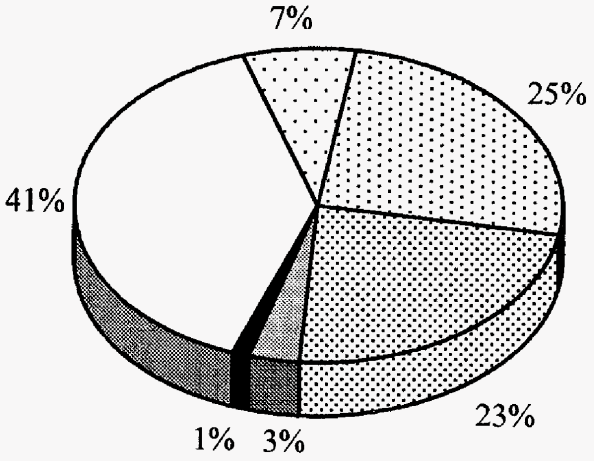
Historical and forecast energy consumption and customer information are presented in Tables 2.1, 2.2 and 2.3 (Schedules 2.1, 2.2, and 2.3). Figure B1 shows the historical and forecast trends of energy sales by customer class. Figure B2 shows the percentage of energy sales by customer class for the base year of 2004 and the horizon year of 2013. Tables 2.4 through 2.12 (Schedules 3.1.1 - 3.3.3) contain historical and forecast peak demands and net energy for load for base, high, and low values. Table 2.13 (Schedule 4) compares actual and two-year forecast peak demand and energy values by month for the 2003 - 2005 period.

2.1.1 SYSTEM LOAD AND ENERGY FORECASTS

The peak demand and energy forecasts contained in this plan are the results of the load and energy forecasting study performed by the City. The forecast is developed utilizing a methodology that the City first employed in 1980, and has updated and revised every one or two years. The methodology consists of approximately ten multi-variable linear regression models based on detailed examination of the system's historical growth, usage patterns and population statistics. Several key regression formulas utilize econometric variables.

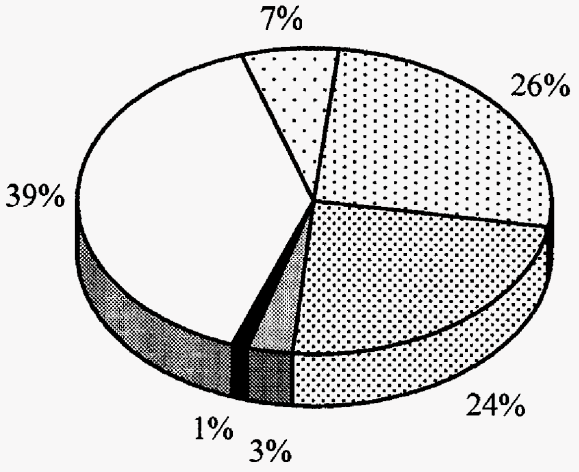
Energy Consumption By Customer Class

Calendar Year 2004



Total 2004 Sales = 2,704 GWh
Values exclude DSM impacts

Calendar Year 2013



Total 2013 Sales = 3,199 GWh
Values exclude DSM impacts

- Residential
- Large Demand
- Non Demand
- Curtail/Interrupt
- Demand
- Traffic/Street/Security Lights

City Of Tallahassee

Schedule 3.3.3
History and Forecast of Annual Net Energy for Load
Low Forecast
(GWh)

(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Year		Total Sales	Residential Conservation [2]*	Comm./Ind Conservation [2]	Retail Sales [1]	Wholesale	Utility Use & Losses	Net Energy for Load [1]	Load Factor % [1]
1994	0	2,016	0	0	2,016		134	2,150	57
1995	0	2,150	0	0	2,150		142	2,292	53
1996	0	2,221	0	0	2,221		147	2,368	54
1997	0	2,186	0	0	2,186		132	2,318	54
1998	0	2,349	0	0	2,349		128	2,477	53
1999	0	2,358	0	0	2,358		139	2,497	54
2000	0	2,441	0	0	2,441		154	2,595	54
2001	0	2,431	0	0	2,431		125	2,556	56
2002	0	2,588	0	0	2,588		153	2,741	54
2003	0	2,613	10	0	2,603		153	2,756	57
2004		2,552	6	1	2,545		169	2,714	53
2005		2,626	12	3	2,611		173	2,784	54
2006		2,689	18	5	2,666		177	2,843	53
2007		2,748	18	5	2,725		181	2,906	54
2008		2,799	18	5	2,776		184	2,960	54
2009		2,848	18	5	2,825		187	3,012	54
2010		2,898	18	5	2,875		191	3,066	54
2011		2,947	18	5	2,924		194	3,118	55
2012		2,996	18	5	2,973		197	3,170	55
2013		3,045	18	5	3,022		200	3,222	55

[1] Values include DSM Impacts.

[2] Reduction estimated at customer meter. Previous year DSM is actual at peak.

City Of Tallahassee

2004 Electric System Load Forecast

Key Explanatory Variables

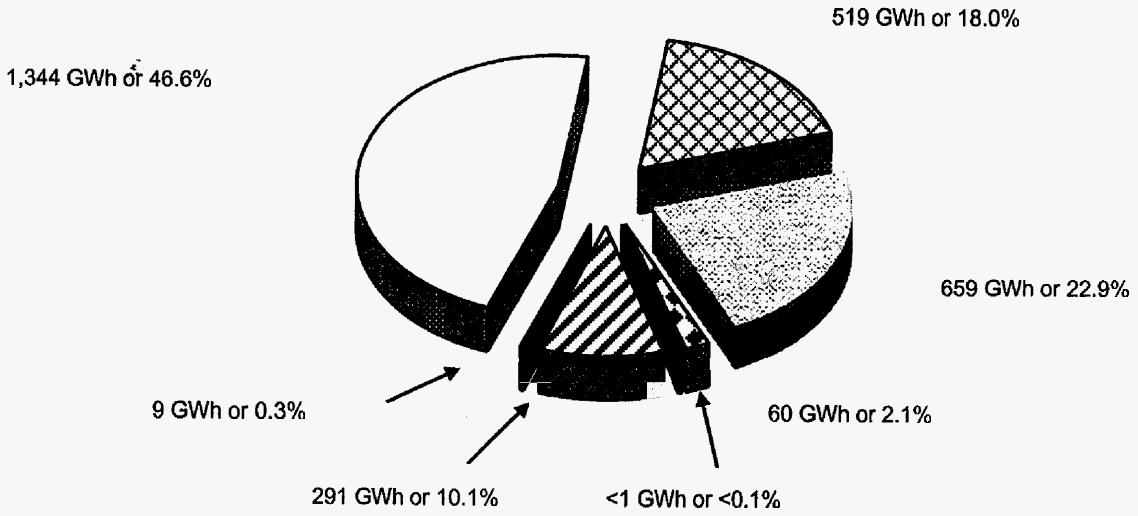
Model Name	Leon County Population	Residential Customers	Total Customers	Cooling Degree Days	Heating Degree Days	Tallahassee Per Capita Taxable Sales	Price of Electricity	State of Florida Population	Minimum Winter Peak day Temp.	Maximum Summer Peak day Temp.	Appliance Saturation	R Squared [1]
Residential Customers	X											0.989
Residential Consumption		X		X	X	X	X				X	0.921
Florida State University Consumption				X			X	X				0.930
State Capitol Consumption				X			X	X				0.892
Florida A & M University Consumption				X				X				0.926
Street Lighting Consumption	X											0.961
General Service Non-Demand Customers		X										0.958
General Service Demand Customers		X										0.927
General Service Non-Demand Consumption	X			X	X	X	X					0.961
General Service Demand Consumption	X			X	X							0.990
General Service Large Demand Consumption	X			X	X							0.974
Summer Peak Demand			X							X	X	0.982
Winter Peak demand									X		X	0.965

Notes

[1] R Squared, sometimes called the coefficient of determination, is a commonly used measure of goodness od fit of a linear model. If the observations fall on the model regression line, R Squared is 1. If there is no linear relationship between the dependent and independent variable, R Squared is 0. A reasonably good R Squared value could be anywhere from 0.6 to 1.

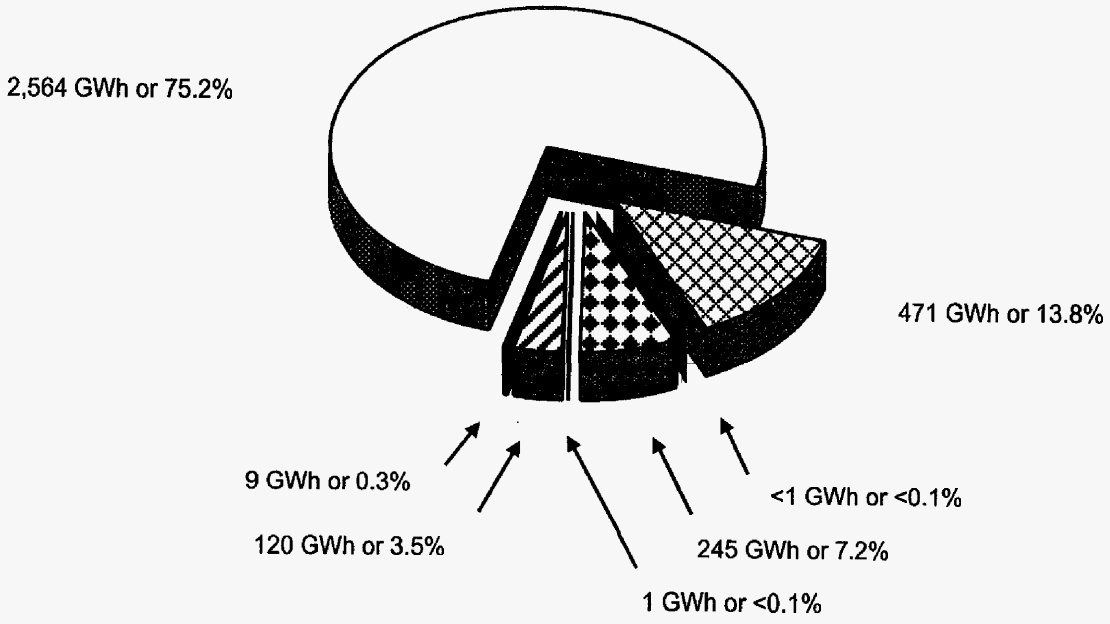
Generation By Resource/Fuel Type

Calendar Year 2004



Total 2004 NEL = 2,882 GWh

Calendar Year 2013



Total 2013 NEL = 3,410

CC - Gas | Steam - Gas | Steam - Oil | CT/Diesel - Gas | CT/Deisel - Oil | Purch | Hydro