

ORIGINAL



CITY HALL  
300 S. ADAMS ST.  
TALLAHASSEE, FL  
32301-1731  
850/891-0010  
TDD 1-800/955-8771

SCOTT MADDOX  
Mayor  
JOHN PAUL BAILEY  
Mayor Pro Tem

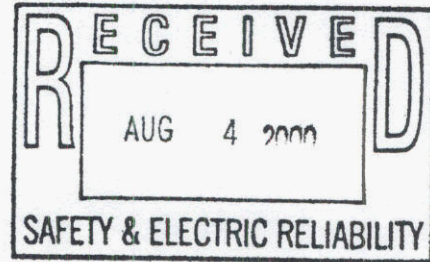
CHARLES E. BILLINGS  
Commissioner  
DEBBIE LIGHTSEY  
Commissioner  
STEVE MEISBURG  
Commissioner

ANITA R. FAVORS  
City Manager  
ROBERT B. INZER  
City Treasurer-Clerk

JAMES R. ENGLISH  
City Attorney  
RICARDO FERNANDEZ  
City Auditor

August 2, 2000

Mr. Michael S. Haff  
Engineer IV  
Bureau of Electric Reliability/Conservation  
Florida Public Service Commission  
Capital Circle Office Center  
2540 Shumard Oak Boulevard  
Tallahassee, Florida 32399-0850



000000-PV

Dear Mr. Haff:

In response to your letter of June 8, 2000, the City of Tallahassee is pleased to provide the following information to supplement that included in our 2000 Ten-Year Site Plan filing.

If you have any questions regarding the information provided in response to your request, please do not hesitate to contact me by phone at (850) 891-3130 or by e-mail at [clarkp@mail.ci.tlh.fl.us](mailto:clarkp@mail.ci.tlh.fl.us).

Sincerely,

Paul D. Clark, II  
Chief Planning Engineer  
System Reliability & Transmission Services  
City of Tallahassee, Electric Operations  
400 East Van Buren Street  
Tallahassee, Florida 32301  
Phone: (850) 891-3130  
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- APP \_\_\_\_\_
- CAF \_\_\_\_\_
- CMP \_\_\_\_\_
- COM \_\_\_\_\_
- CTR \_\_\_\_\_
- ECR \_\_\_\_\_
- LEG \_\_\_\_\_
- OPC \_\_\_\_\_
- PAI \_\_\_\_\_
- RGO \_\_\_\_\_
- SEC   I   \_\_\_\_\_
- SER \_\_\_\_\_
- OTH \_\_\_\_\_

DOCUMENT NUMBER-DATE

10063 AUG 17 8

FPSC-RECORDS/REPORTING

## **City of Tallahassee**

### **SUPPLEMENTAL DATA REQUEST / 2000 TEN-YEAR SITE PLANS**

**This request is being made pursuant to the Commission's authority under Section 366.05 (7), Florida Statutes.**

#### **General**

- 1. Provide all data requested on the attached forms. If any of the requested data is already included in Tallahassee's ten-year Site Plan, state so on the appropriate form.**

Please see attached forms. Data provided includes:

- a. Historical and forecast banded fuel price
- b. Historical and forecast purchase power price
- c. Historical and forecast existing generating unit operating performance
- d. Financial assumptions
- e. Historical and forecast heating and cooling degree days
- f. Historical and forecast retail price of electricity
- g. Historical monthly peaks and date of occurrence

#### **Planning**

- 2. Identify and discuss any firm power purchases that Tallahassee expects to make from other utilities over the planning horizon. If an unidentified or unconfirmed future power purchase is part of Tallahassee's generation expansion plan, explain the nature of that purchase.**

The cumulative additional supply capacity required to maintain the City of Tallahassee's (City) current 17% planning reserve margin criterion is reflected in the "Resource Additions" column of the generation expansion plan provided in Table 3.4 of the City's Ten-Year Site Plan filing. The City has not yet identified the nature of that additional supply capacity.

As stated in its Ten-Year Site Plan, the City expects that "peak season/multi-year purchases and/or generation capacity enhancements/additions will be made as necessary to compensate for capacity shortfalls

currently projected for 2001 and 2004-2009 to maintain at least a 17% reserve margin.”

The City has to date performed only preliminary analyses of its alternatives for its next resource addition. As of the time of this filing a scope document is being prepared for a comprehensive evaluation of the City’s future resource expansion alternatives to be performed by a consultant.

**3. Tallahassee currently forecasts reserve margin shortfalls for each year from 2004 through 2009. Provide details of any peak-season power purchases that Tallahassee might make from other utilities or generation suppliers.**

In its Ten-Year Site Plan, the City states that the “shortfalls in the summers of 2004 and 2005 may be met with peak season purchases from other systems. The larger, long-term needs, increased by the planned retirements of Purdom Combustion Turbine Units #1 and #2 in 2008 and 2009, respectively, are expected to require more significant supply resource acquisitions such as multi-year power purchases and/or new plant construction.”

As stated in its response to item #2 above, the City has not yet identified the nature of the additional supply capacity needed to maintain its planning reserve margin over the planning horizon. The City intends to conduct, with the assistance of a consultant(s), a comprehensive resource planning study to identify alternatives that are consistent with the objectives of the City’s Energy Policy.

Careful consideration must be given to the nature of the City’s interconnections with other utilities and subsequent import limitations when contemplating purchase power options to meet future needs. This consideration will certainly affect the total amount of purchase capacity that will be deemed prudent from a reliability perspective.

The purchase power price forecast included as an attachment to this filing reflects the capacity, transmission, O&M and fuel costs anticipated for possible future purchases. Any purchase made at the forecast price is assumed to require a minimum annual capacity factor of 20%. The information used to develop the purchase power price forecast was obtained by means of an informal survey of the wholesale power market.

## **Environmental**

- 4. Identify and discuss all proposed or reasonably expected State and Federal environmental regulations or legislation that impacted Tallahassee's generation expansion plan.**

As discussed above, no formal evaluation of the City's next resource addition has been conducted as of the date of this filing. However, during the course of the City's supply resource planning process a comprehensive impact evaluation of all existing, proposed and/or reasonably expected State and Federal environmental regulations and/or legislation will be performed. Consideration of and adherence to any and all pertinent environmental issues, regulations and/or legislation is a fundamental aspect of the City's resource planning process.

## **Load Forecasting**

- 5. Provide, on a system-wide basis, historical annual heating degree day (HDD) data for the period 1990-1999 and forecasted annual HDD data for the period 2000-2009.**

Please see attached form.

- 6. Provide, on a system-wide basis, historical annual cooling degree day (CDD) data for the period 1990-1999 and forecasted annual CDD data for the period 2000-2009.**

Please see attached form.

- 7. Provide, on a system-wide basis, the historical annual average real retail price of electricity in Tallahassee's service territory for the period 1990-1999. Also, provide the forecasted annual average real retail price of electricity in Tallahassee's service territory for the period 2000-2009. Indicate the type of price deflator used to calculate the historical prices and forecasted real retail prices.**

Please see attached form.

8. **Provide the following data to support Schedule 4 of Tallahassee's Ten-Year Site Plan: the 12 monthly peak demands for the years 1997, 1998, 1999; and the date on which these monthly peaks occurred.**

Please see attached form.

**Nominal, Delivered Residual Oil Prices  
Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
Year	Residual Oil (By Sulfur Content)									
	Less Than 0.7%		Escalation %	0.7 - 2.0%		Escalation %	Greater Than 2.0%		Escalation %	
	\$/BBL	c/MBTU		\$/BBL	c/MBTU		\$/BBL	c/MBTU		
history:										
1997 (1)	NA	NA	NA	20.48	325	-	NA	NA	NA	
1998 (1)	NA	NA	NA	20.39	324	-0.4%	NA	NA	NA	
1999 (1)	NA	NA	NA	20.25	321	-0.7%	NA	NA	NA	
forecast:										
2000 (2)	NA	NA	NA	20.89	332	3.2%	NA	NA	NA	
2001	NA	NA	NA	28.35	450	35.7%	NA	NA	NA	
2002	NA	NA	NA	28.35	450	0.0%	NA	NA	NA	
2003	NA	NA	NA	28.35	450	0.0%	NA	NA	NA	
2004	NA	NA	NA	28.35	450	0.0%	NA	NA	NA	
2005	NA	NA	NA	28.35	450	0.0%	NA	NA	NA	
2006	NA	NA	NA	28.35	450	0.0%	NA	NA	NA	
2007	NA	NA	NA	29.05	461	2.5%	NA	NA	NA	
2008	NA	NA	NA	29.77	473	2.5%	NA	NA	NA	
2009	NA	NA	NA	30.51	484	2.5%	NA	NA	NA	

ASSUMPTIONS: heat content - 6.3 MMBtu/BBL, ash content - Not Available

(1) Actual average fiscal year cost of oil burned.

(2) Actual average fiscal year-to-date cost of oil burned through June 2000.

**Nominal, Delivered Residual Oil Prices  
High Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
Year	Residual Oil (By Sulfur Content)									
	Less Than 0.7%		Escalation	0.7 - 2.0%		Escalation	Greater Than 2.0%		Escalation	
	\$/BBL	c/MBTU	%	\$/BBL	c/MBTU	%	\$/BBL	c/MBTU	%	
history:										
1997 (1)	NA	NA	NA	20.48	325	-	NA	NA	NA	
1998 (1)	NA	NA	NA	20.39	324	-0.4%	NA	NA	NA	
1999 (1)	NA	NA	NA	20.25	321	-0.7%	NA	NA	NA	
forecast:										
2000 (2)	NA	NA	NA	20.89	332	3.2%	NA	NA	NA	
2001	NA	NA	NA	28.35	450	35.7%	NA	NA	NA	
2002	NA	NA	NA	28.35	450	0.0%	NA	NA	NA	
2003	NA	NA	NA	28.35	450	0.0%	NA	NA	NA	
2004	NA	NA	NA	28.35	450	0.0%	NA	NA	NA	
2005	NA	NA	NA	28.35	450	0.0%	NA	NA	NA	
2006	NA	NA	NA	28.35	450	0.0%	NA	NA	NA	
2007	NA	NA	NA	29.34	466	3.5%	NA	NA	NA	
2008	NA	NA	NA	30.36	482	3.5%	NA	NA	NA	
2009	NA	NA	NA	31.41	499	3.5%	NA	NA	NA	

ASSUMPTIONS: heat content - 6.3 MMBtu/BBL, ash content - Not Available

(1) Actual average fiscal year cost of oil burned.

(2) Actual average fiscal year-to-date cost of oil burned through June 2000.

**Nominal, Delivered Residual Oil Prices  
Low Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Residual Oil (By Sulfur Content)								
	Less Than 0.7%		Escalation %	0.7 - 2.0%		Escalation %	Greater Than 2.0%		Escalation %
	\$/BBL	c/MBTU		\$/BBL	c/MBTU		\$/BBL	c/MBTU	
history:									
1997 (1)	NA	NA	NA	20.48	325	-	NA	NA	NA
1998 (1)	NA	NA	NA	20.39	324	-0.4%	NA	NA	NA
1999 (1)	NA	NA	NA	20.25	321	-0.7%	NA	NA	NA
forecast:									
2000 (2)	NA	NA	NA	20.89	332	3.2%	NA	NA	NA
2001	NA	NA	NA	28.35	450	35.7%	NA	NA	NA
2002	NA	NA	NA	28.35	450	0.0%	NA	NA	NA
2003	NA	NA	NA	28.35	450	0.0%	NA	NA	NA
2004	NA	NA	NA	28.35	450	0.0%	NA	NA	NA
2005	NA	NA	NA	28.35	450	0.0%	NA	NA	NA
2006	NA	NA	NA	28.35	450	0.0%	NA	NA	NA
2007	NA	NA	NA	28.77	457	1.5%	NA	NA	NA
2008	NA	NA	NA	29.19	463	1.5%	NA	NA	NA
2009	NA	NA	NA	29.63	470	1.5%	NA	NA	NA

ASSUMPTIONS: heat content - 6.3 MMBtu/BBL, ash content - Not Available

(1) Actual average fiscal year cost of oil burned.

(2) Actual average fiscal year-to-date cost of oil burned through June 2000.



**Nominal, Delivered Distillate Oil and Natural Gas Prices  
Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Year	Distillate Oil			Natural Gas		
	\$/BBL	c/MBTU	Escalation %	c/MBTU	\$/MCF	Escalation %
history:						
1997 (1)	22.42	387	-	310	3.23	-
1998 (2)	22.41	386	0.0%	300	3.12	-3.5%
1999 (2)	22.41	386	0.0%	305	3.17	1.8%
forecast:						
2000 (3)	24.58	424	9.7%	356	3.70	16.7%
2001	31.32	540	27.4%	349	3.63	-2.1%
2002	31.32	540	0.0%	332	3.45	-4.8%
2003	31.32	540	0.0%	296	3.08	-10.7%
2004	31.32	540	0.0%	307	3.19	3.5%
2005	31.32	540	0.0%	313	3.25	1.9%
2006	31.32	540	0.0%	320	3.33	2.4%
2007	32.10	553	2.5%	329	3.42	2.8%
2008	32.89	567	2.5%	339	3.53	3.2%
2009	33.71	581	2.5%	349	3.63	3.0%

ASSUMPTIONS FOR DISTILLATE OIL: heat content - 5.8 MMBtu/BBL; ash content, sulfur content - Not Available

- (1) Actual average fiscal year cost of distillate and gas burned.
- (2) Actual average fiscal year inventory cost of distillate; actual average fiscal year cost of gas burned.
- (3) Actual average fiscal year-to-date cost of distillate and gas burned as of June 2000.

**Nominal, Delivered Distillate Oil and Natural Gas Prices  
High Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Year	Distillate Oil			Natural Gas		
	\$/BBL	c/MBTU	Escalation %	c/MBTU	\$/MCF	Escalation %
history:						
1997 (1)	22.42	387	-	310	3.23	-
1998 (2)	22.41	386	0.0%	300	3.12	-3.5%
1999 (2)	22.41	386	0.0%	305	3.17	1.8%
forecast:						
2000 (3)	24.58	424	9.7%	356	3.70	16.7%
2001	31.32	540	27.4%	349	3.63	-2.1%
2002	31.32	540	0.0%	335	3.49	-3.8%
2003	31.32	540	0.0%	303	3.15	-9.7%
2004	31.32	540	0.0%	316	3.29	4.5%
2005	31.32	540	0.0%	326	3.39	2.9%
2006	31.32	540	0.0%	337	3.50	3.4%
2007	32.42	559	3.5%	350	3.64	3.8%
2008	33.55	578	3.5%	364	3.79	4.2%
2009	34.73	599	3.5%	378	3.94	4.0%

ASSUMPTIONS FOR DISTILLATE OIL: heat content - 5.8 MMBtu/BBL; ash content, sulfur content - Not Available

- (1) Actual average fiscal year cost of distillate and gas burned.
- (2) Actual average fiscal year inventory cost of distillate; actual average fiscal year cost of gas burned.
- (3) Actual average fiscal year-to-date cost of distillate and gas burned as of June 2000.

**Nominal, Delivered Distillate Oil and Natural Gas Prices  
Low Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Year	Distillate Oil			Natural Gas		
	\$/BBL	c/MBTU	Escalation %	c/MBTU	\$/MCF	Escalation %
history:						
1997 (1)	22.42	387	-	310	3.23	-
1998 (2)	22.41	386	0.0%	300	3.12	-3.5%
1999 (2)	22.41	386	0.0%	305	3.17	1.8%
forecast:						
2000 (3)	24.58	424	9.7%	356	3.70	16.7%
2001	31.32	540	27.4%	349	3.63	-2.1%
2002	31.32	540	0.0%	328	3.42	-5.8%
2003	31.32	540	0.0%	290	3.01	-11.7%
2004	31.32	540	0.0%	297	3.09	2.5%
2005	31.32	540	0.0%	300	3.12	0.9%
2006	31.32	540	0.0%	304	3.16	1.4%
2007	31.79	548	1.5%	310	3.22	1.8%
2008	32.27	556	1.5%	316	3.29	2.2%
2009	32.75	565	1.5%	322	3.35	2.0%

ASSUMPTIONS FOR DISTILLATE OIL: heat content - 5.8 MMBtu/BBL; ash content, sulfur content - Not Available

(1) Actual average fiscal year cost of distillate and gas burned.

(2) Actual average fiscal year inventory cost of distillate; actual average fiscal year cost of gas burned.

(3) Actual average fiscal year-to-date cost of distillate and gas burned as of June 2000.

**Nominal, Delivered Coal Prices\***  
**Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Year	<i>Low Sulfur Coal (&lt; 1.0%)</i>				<i>Medium Sulfur Coal ( 1.0 - 2.0%)</i>				<i>High Sulfur Coal (&gt; 2.0%)</i>			
	\$/Ton	c/MBTU	Escalation %	% Spot Purchase	\$/Ton	c/MBTU	Escalation %	% Spot Purchase	\$/Ton	c/MBTU	Escalation %	% Spot Purchase
history:												
1997	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
forecast:												
2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2009	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

ASSUMPTIONS: type of coal, heat content, ash content

\* A coal price forecast was not produced for the filing of the City's 2000 TYSP. Although coal is not currently, and is not expected to be, a part of the City's generation fuel mix, to assess the cost of coal-based purchase options, its forecast price will be an important inclusion in the more formal evaluations of the City's future power supply requirements.

**Nominal, Delivered Coal Prices\*  
High Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Year	Low Sulfur Coal ( < 1.0% )				Medium Sulfur Coal ( 1.0 - 2.0% )				High Sulfur Coal ( > 2.0% )			
	\$/Ton	c/MBTU	Escalation %	% Spot Purchase	\$/Ton	c/MBTU	Escalation %	% Spot Purchase	\$/Ton	c/MBTU	Escalation %	% Spot Purchase
history:												
1997	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
forecast:												
2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2009	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

ASSUMPTIONS: type of coal, heat content, ash content

\* A coal price forecast was not produced for the filing of the City's 2000 TYSP. Although coal is not currently, and is not expected to be, a part of the City's generation fuel mix, to assess the cost of coal-based purchase options, its forecast price will be an important inclusion in the more formal evaluations of the City's future power supply requirements.

**Nominal, Delivered Coal Prices\***  
**Low Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Year	Low Sulfur Coal ( < 1.0% )				Medium Sulfur Coal ( 1.0 - 2.0% )				High Sulfur Coal ( > 2.0% )			
	\$/Ton	c/MBTU	Escalation %	% Spot Purchase	\$/Ton	c/MBTU	Escalation %	% Spot Purchase	\$/Ton	c/MBTU	Escalation %	% Spot Purchase
history:												
1997	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
forecast:												
2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2009	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

ASSUMPTIONS: type of coal, heat content, ash content

\* A coal price forecast was not produced for the filing of the City's 2000 TYSP. Although coal is not currently, and is not expected to be, a part of the City's generation fuel mix, to assess the cost of coal-based purchase options, its forecast price will be an important inclusion in the more formal evaluations of the City's future power supply requirements.

**Nominal, Delivered Nuclear Fuel and Firm Purchases**

(1)	(2)	(3)	(4)	(5)
Year	Nuclear (1)		Firm Purchases(2)	
	c/MBTU	Escalation %	\$/MWh	Escalation %
history:				
1997	NA	NA	36.64	-
1998	NA	NA	41.12	12.2%
1999	NA	NA	38.49	-6.4%
forecast:				
2000	NA	NA	96.78	151.5%
2001	NA	NA	89.68	-7.3%
2002	NA	NA	89.34	-0.4%
2003	NA	NA	92.45	3.5%
2004	NA	NA	92.84	0.4%
2005	NA	NA	93.81	1.0%
2006	NA	NA	94.92	1.2%
2007	NA	NA	97.46	2.7%
2008	NA	NA	100.17	2.8%
2009	NA	NA	103.06	2.9%

- (1) A nuclear fuel price forecast was not produced for the filing of the City's 2000 TYSP.
- (2) Historical values reflect weighted average cost of actual firm purchases from Southern and Entergy. Forecast values reflect anticipated capacity, transmission, O&M and fuel costs associated with any peak season firm purchases the City may consider in the future.

**Existing Generating Unit Operating Performance**

(1) Plant Name	(2) Unit No.	(3) Planned Outage Factor (POF)		(4) Forced Outage Factor (FOF)		(5) Equivalent Availability Factor (EAF)		(6) Average Net Operating Heat Rate (ANOHR)	
		Historical	Projected	Historical	Projected	Historical	Projected	Historical	Projected
Hopkins	1	0.07	0.07	0.01	0.01	0.92	0.92	11,250	11,250
	2	0.14	0.14	0.00	0.00	0.86	0.86	10,201	10,201
	GT-1	0.14	0.14	0.01	0.01	0.85	0.85	15,991	15,991
	GT-2	0.01	0.01	0.02	0.02	0.97	0.97	14,903	14,903
Purdom	7	0.08	0.08	0.02	0.02	0.90	0.90	12,199	12,199
	GT-1	0.00	0.00	0.00	0.00	1.00	1.00	21,272	21,272
	GT-2	0.02	0.02	0.00	0.00	0.98	0.98	20,797	20,797

NOTE: Historical - average of past three years  
 Projected - average of next ten years



**Financial Assumptions  
Base Case**

AFUDC RATE 7.25 %

CAPITALIZATION RATIOS:

DEBT	<u>26.17%</u>	%	
PREFERRED	<u>N/A</u>	%	(1)
EQUITY	<u>57.72%</u>	%	
	<u>87.22%</u>		

RATE OF RETURN

DEBT	<u>10.76%</u>	%	
PREFERRED	<u>N/A</u>	%	(1)
EQUITY	<u>2.82%</u>	%	
	<u>4.26%</u>		

INCOME TAX RATE:

STATE	<u>N/A</u>	%	(2)
FEDERAL	<u>N/A</u>	%	(2)
EFFECTIVE	<u>N/A</u>	%	(2)

OTHER TAX RATE:

	<u>7.00%</u>	%
	<u>6.00%</u>	

DISCOUNT RATE: 7.25 %

	TAX		
DEPRECIATION RATE:	<u>N/A</u>	%	(2)

Notes

- (1) No Preferred "Stock" in Municipal Utilities
- (2) Municipal Utilities are tax exempt

### Financial Escalation Assumptions

(1)	(2)	(3)	(4)	(5)
	General Inflation %	Plant Construction Cost %	Fixed O&M Cost %	Variable O&M Cost %
<u>Year</u>	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>
2000	3.5	3.5	3.5	3.5
2001	3.5	3.5	3.5	3.5
2002	3.5	3.5	3.5	3.5
2003	3.5	3.5	3.5	3.5
2004	3.5	3.5	3.5	3.5
2005	3.5	3.5	3.5	3.5
2006	3.5	3.5	3.5	3.5
2007	3.5	3.5	3.5	3.5
2008	3.5	3.5	3.5	3.5
2009	3.5	3.5	3.5	3.5

**Loss of Load Probability, Reserve Margin,  
and Expected Unserved Energy  
Base Case Load Forecast**

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Year	Annual Isolated			Annual Assisted		
	Loss of Load Probability (Days/Yr)	Reserve Margin % (Including Firm Purch.)	Expected Unserved Energy (MWh)	Loss of Load Probability (Days/Yr)	Reserve Margin (%)	Expected Unserved Energy (MWh)
2000						
2001						
2002						
2003						
2004						
2005						
2006						
2007						
2008						
2009						

See note below

Note: The City provided its projection of Reserve Margin with and without supply resource additions in Tables 3.1 and 3.2 (Schedules 7.1 and 7.2, respectively) on pages 40 and 41 and in Table 3.4 (Generation Expansion Plan) on page 43 of our 2000 Ten Year Site Plan. The City does not utilize isolated or assisted LOLP or EUE as its criteria for making resource addition decisions.

## Historical and Projected Heating and Cooling Degree Days

<u>Year</u>	Heating Degree Days (HDD)	Cooling Degree Days (CDD)
history:		
1990	1,002	2,861
1991	1,352	2,944
1992	1,541	2,428
1993	1,542	2,644
1994	1,249	2,616
1995	1,614	2,807
1996	1,805	2,469
1997	1,408	2,474
1998	1,282	3,140
1999	1,451	2,787
forecast:		
2000	1,485	2,601
2001	1,485	2,601
2002	1,485	2,601
2003	1,485	2,601
2004	1,485	2,601
2005	1,485	2,601
2006	1,485	2,601
2007	1,485	2,601
2008	1,485	2,601
2009	1,485	2,601

### Average Real Retail Price of Electricity

<u>Year</u>	Residential Real Price of Electricity (\$/MWh)	Commercial Real Price of Electricity (\$/MWh)	System-Wide Real Price of Electricity (\$/MWh)	<u>Deflator (1)</u>
history:				
1990	55.85	53.87	55.64	1.316
1991	54.74	52.87	55.55	1.367
1992	56.69	54.06	58.25	1.409
1993	57.06	53.30	57.73	1.449
1994	52.76	47.68	51.09	1.490
1995	53.66	48.78	50.11	1.530
1996	55.24	46.92	47.51	1.574
1997	55.14	46.75	47.68	1.609
1998	52.98	45.96	44.92	1.635
1999	51.30	42.67	43.49	1.673
forecast (2):				
2000	51.30	42.67	43.49	
2001	51.30	42.67	43.49	
2002	51.30	42.67	43.49	
2003	51.30	42.67	43.49	
2004	51.30	42.67	43.49	
2005	51.30	42.67	43.49	
2006	51.30	42.67	43.49	
2007	51.30	42.67	43.49	
2008	51.30	42.67	43.49	
2009	51.30	42.67	43.49	

(1) Deflator based on CPI Index provided by the Office of the Governor (1982 Dollars).

(2) For purposes of the 2000 Load Forecast, it was assumed that the real price of electricity would remain constant. While fuel prices are projected to increase in real terms, this is projected to be offset by more efficient generation, reduced operation and maintenance costs, and effects of competition.

**Monthly Peak Demands and Date of Occurrence for 1997 - 1999**

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Calendar 1997		Calendar 1998		Calendar 1999	
Month	Peak Demand MW	Date	Peak Demand MW	Date	Peak Demand MW	Date
January	430	17-Jan	368	26-Jan	513	6-Jan
February	402	12-Feb	379	4-Feb	421	23-Feb
March	322	5-Mar	393	13-Mar	356	5-Mar
April	339	22-Apr	340	3-Apr	402	26-Apr
May	422	27-May	486	21-May	455	25-May
June	420	27-Jun	530	19-Jun	481	25-Jun
July	481	3-Jul	524	6-Jul	522	30-Jul
August	486	19-Aug	512	27-Aug	526	2-Aug
September	468	3-Sep	482	23-Sep	490	8-Sep
October	421	1-Oct	434	2-Oct	401	12-Oct
November	377	18-Nov	359	3-Nov	351	4-Nov
December	374	17-Dec	368	18-Dec	410	2-Dec