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Blanca Bayo, Director Division of Records & Reporting Public Service Commission Capital Circle Office Center 2540 Shumard Oak Boulevard Tallahassee, FL 32399-0850

Dear Ms Bayo:

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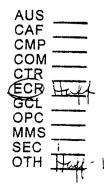
Pursuant to the Florida Statute 186.801, enclosed please find 25 copies of JEA's 2002 Ten Year Site Plan.

If you have any questions, please contact me at (904) 665-6216.

Sincerely,

pufo-Bala

Mary Guyton-Baker Capacity Planning



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# Ten Year Site Plan



# April 2002 DOCUMENT NUMBER-DATE

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# **1.0 Introduction**

The objective of JEA's Ten-Year Site Plan is to develop an environmentally sound power supply strategy, which provides reliable electric service at the lowest practical cost. This report represents the 2002 Ten Year Site Plan for JEA covering a planning period from 2002 to 2011.

# 2.0 Existing Facilities

#### 2.1 Generation

#### Electric System

JEA's electric service area covers all of Duval County and portions of Clay County and St. Johns County. JEA's service area covers approximately 900 square miles.

The generating capability of JEA's system currently consists of the Kennedy, Northside, and Brandy Branch generating stations, and joint ownership in St. Johns River Power Park and Scherer generating stations. The total net capability of JEA's generation system is 2,927 MW in the winter and 2,974 MW in the summer. Details of the existing facilities are displayed in TYSP Schedule 1.

JEA's transmission system consists of bulk power transmission facilities operating at 69 kV or higher. This includes all transmission lines and associated facilities where each transmission line ends at the substation's termination structure. JEA owns 634 circuitmiles of transmission lines at five voltage levels: 69kV, 115kV, 138kV, 230kV, and 500kV. JEA's transmission system includes a 230 kV loop surrounding JEA's service territory. The transmission system is shown in Figure 2-1. JEA is currently interconnected with Florida Power & Light (FP&L), Seminole Electric Cooperative (SECI), Florida Public Utilities (FPU) and the City of Jacksonville Beach. Interconnections with FP&L are at 230 kV to the Sampson and Duval Substations. The interconnection to SECI is at 230 kV and 138 kV to FPU.

JEA and FP&L jointly own two 500 kV transmission lines that are interconnected with Georgia Power Company. JEA, FP&L, Florida Power Corporation (FPC) and the City of Tallahassee each own transmission interconnections with Georgia Power Company. JEA's ownership entitlement over these transmission lines is 1,228 out of 3,600 MW of import capability.

JEA's system is interconnected with the 500 kV transmission lines at FPL's Duval Substation.

#### **Jointly Owned Generating Units**

The St. Johns River Power Park (SJRPP) is jointly owned by JEA (80 percent) and FP&L (20 percent). SJRPP consists of two nominal 638 MW bituminous coal fired units located north of the Northside Generating Station. Unit 1 began commercial operation in March of 1987 and Unit 2 followed in May of 1988. Both owners are entitled to 50 percent of the output of SJRPP. Since FP&L's ownership is only 20 percent, the remaining 30 percent of capacity and energy output is reflected as a firm sale. The two units have operated efficiently since commercial operation. To reduce fuel costs and increase fuel diversity, a blend of petroleum coke and coal is currently being burned in the units.

JEA and FP&L have purchased an undivided interest in Georgia Power Company's Robert W. Scherer Unit 4. Unit 4 is a coal-fired generating unit with a net output of 846 MW located in Monroe County, Georgia. JEA purchased 150 megawatts of Scherer Unit 4 in July 1991 and purchased an additional 50 megawatts on June 1, 1995. Georgia Power Company delivers the power from the unit to the jointly owned 500 kV transmission lines.

#### **Power Purchases**

#### Unit Power Sales (UPS)

Southern Company and JEA entered a unit power sales contract in which JEA purchases 200 MW of firm capacity and energy from specific Southern Company coal units through the year 2010. JEA has the unilateral option, upon three years notice, to cancel 150 MW of the UPS.

#### Enron Power Marketing, Inc.

In 1996, JEA contracted with Enron Power Marketing, Inc. ("Enron") for the purchase of 73 to 92 MW (which varied monthly) of firm capacity and energy through December 2002. In December 2001, Enron filed for protection from its creditors under Chapter 11 of the Federal Bankruptcy Code and is currently not delivering under this agreement. As such, Enron is in default of the contract. JEA will pursue legal actions for recovery of losses under this contract.

For winter 2002, TEA purchased energy on an "as-needed" basis to replace the energy that was to be delivered pursuant to the Enron purchase. JEA's reserve margin for

summer 2002 including the Enron purchase would be 382 MW or 15.5% after serving firm native load and firm sales agreements. Without the Enron purchase, JEA's reserve margin would be 290 MW or 12%. However, TEA on JEA's behalf is currently negotiating the terms and conditions of 75 MWs of replacement power to provide a 15% reserve margin for summer 2002.

#### The Energy Authority (TEA)

The Energy Authority (TEA), actively trades energy with a large number of counterparties throughout the southeastern states and is generally able to acquire capacity and energy from other market participants when any of TEA's members, including JEA, require additional resources.

TEA generally acquires the necessary short-term purchase prior to the season of need to ensure the best price and desired flexibility. TEA identifies a number of potential suppliers within Florida and Georgia. TEA has reserved firm transmission rights across the Georgia ITS to the Florida/Georgia border, therefore capacity from generating units located in Georgia should provide similar levels of reliability to capacity available within Florida. TEA, with input from JEA, selects the best offer. TEA then enters into a back to back power purchase agreement with the supplier and with the purchaser, JEA.

TEA's ability to acquire capacity and/or energy and TEA's firm transmission rights across the Georgia ITS gives JEA a degree of assurance that a plan which includes short-term unspecified purchases is viable. Over the past three years, TEA has purchased capacity and energy for JEA for five seasonal periods. Of these five seasons, approximately 65% of all the purchases were from out of state sources and approximately 35% from in state utilities.

JEA has entered into an agreement with TEA to purchase capacity to fill the 220 MW winter and 75 MW Summer 2002 needs. It is JEA's plan for TEA to fully fill all future short or long-term purchases needs.

#### Biomass Industries, Inc.

As part of JEA's Green Works initiative to supply 7.5 percent of its peak demand with renewable resources by 2015, JEA has contracted with Biomass Industries, Inc. (BII). JEA has purchased 70 MW peak and 35 MW off-peak of firm renewable energy from a

gasified biomass fueled electric generation plant proposed to be constructed by BII in South Florida. The proposed facility is to be fueled by an energy crop (bamboo and Egrass) to be grown by BII. The initial term of the purchase is for 15 years from the commercial operation date of the facility, and the parties, by mutual agreement, have the right to extend the initial term for two additional five-year periods, on terms to be agreed upon by the parties. The facility currently is scheduled to be in service in summer 2004. Under the contract, JEA will be obligated to take and pay for such energy as is produced by the facility, up to the limits stated above, at a fixed price stated in the contract (subject to periodic escalations). The facility is in the early stages of development.

#### Cogeneration

JEA has encouraged and continues to monitor opportunities for cogeneration. Cogeneration facilities reduce the demand from JEA's system and/or provide additional capacity to the system. JEA purchases power from four customer-owned qualifying facilities (QF's), as defined in the Public Utilities Regulatory Policy Act of 1978, having a total installed summer peak capacity of 17 MW and winter peak capacity of 19 MW. JEA purchases energy from these QF's on as-available (non-firm) basis.

The following JEA customers have Qualifying Facilities located within JEA's service territory.

Cogenerator Name	Unit <u>Type</u>	In-Service <u>Date</u>	Net Capability Summer	/ <sup>3</sup> – MW <u>Winter</u>
Anheiser Busch	COG <sup>1</sup>	Apr-88	8	9
Baptist Hospital	COG	Oct-82	7	8
Ring Power Landfill	SPP <sup>2</sup>	Apr-92	1	1
St Vincents Hospital	COG	Dec-91	1	<u>1</u>
			17	19

#### Notes:

- 1 Cogenerator
- 2 Small Power Producer
- 3 Net generating capability, not net generation sold to the JEA

#### **Power Sales**

JEA returned Kennedy Combustion Turbine Unit 4 (GT 4) to service from retirement status in March 1994. Concurrently, JEA is selling to SECI priority dispatch rights for one-seventh of the aggregate GT output capacity of JEA's older diesel fueled

combustion turbines, which include Kennedy Units 3, 4, and 5, and Northside Units 3, 4, 5, and 6. For planning purposes, JEA and SECI assume SECI's base committed capacity is 53 MW. Full entitlement sales began January 1, 1995 and were extended through May 21, 2004.

JEA also furnishes wholesale power to Florida Public Utilities Company (FPU) for resale in the City of Fernandina Beach in Nassau County, north of Jacksonville. JEA is contractually committed to supply FPU until 2007. Sales to FPU in 2001 totaled 453 GWh (3.67 percent of JEA's total system energy requirements).

#### 2.2 Transmission

JEA continues to monitor and upgrade the bulk power transmission system as necessary to provide reliable electric service to its customers. JEA continually reviews needs and options for increasing the capability of the transmission system. JEA has set forth the following planning criteria for the transmission system:

- Plan to limit the loading of transmission lines and auto-transformers to provide safe and reliable transmission service under normal and single contingency conditions without undue expected loss of component life.
- Plan the transmission system to withstand single contingencies without loss of customer load.
- Plan the transmission system to operate within 5 percent of nominal voltage during normal and single contingency conditions.
- Plan the transmission system so that circuit breakers can interrupt the maximum available breaker fault current.
- Meet the Florida Reliability Coordinating Council's (FRCC) operation guidelines.

## 2.3 Demand Side Management

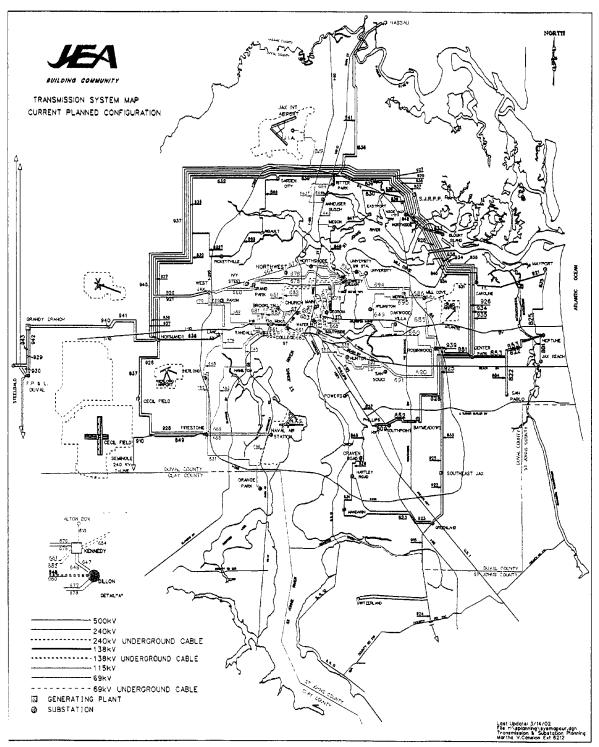
In 2000, JEA studied numerous DSM measures, evaluated the measures using the Commission approved Florida Integrated Resource Evaluator (FIRE) model and developed goals and a plan based upon these results. The Rate-Impact Measure or RIM test was used to determine the cost-effectiveness of the DSM alternatives appropriate for a municipal utility. Some investor-owned utilities in the state also use the RIM test to determine cost-effective DSM alternatives.

None of the alternatives tested were found to be cost-effective for JEA. The inability to find cost-effective DSM measures is primarily due to the low cost of new generation, high efficiency of new generation, low interest rates, low fuel price and low fuel price projections. On February 21, 2001, the PSC approved JEA's Plan for zero DSM goals for 2001-2010.

JEA agreed to continue several DSM programs, including the residential education seminars, residential energy audits, commercial educational programs, commercial energy audits, and community conservation initiatives. As promised, JEA continued these programs in 2001.

In addition, in 2001 JEA developed a solar reimbursement program to encourage the widespread application of renewable energy technology in its service territory. JEA implemented the solar reimbursement program in early 2002. Under the terms of the program, JEA reimburses customers for a portion of the installation cost of solar photovoltaic and solar hot water systems. JEA expects 50 customers to take advantage of the program in 2002 and expects demand reduction to total 3.25 MW by 2007. JEA will continue to monitor and evaluate this and other programs in order to determine the most cost-effective ways of encouraging customers to conserve energy.





#### **3.0 Fuel Price Forecast**

JEA's fuel price forecast is a major factor in the development of JEA's future resource plan. Due to JEA's fuel diversity, the forecast includes coal, natural gas, residual fuel oil, #2 fuel oil, and petroleum coke. Sensitivity cases were considered based on high and low fuel price projections.

Specific price forecasts for St John's River Power Park (SJRPP) and Scherer Unit 4 were provided by SJRPP Fuels and Georgia Power respectively. Eastern and off-shore coals are the primary fuels burned at SJRPP. In addition, the SJRPP forecast is based on a 16 percent blend of petroleum coke and includes limestone and #2 fuel oil components. Western coal is burned in Scherer Unit 4.

The fuel price forecast for JEA's natural gas supply takes into account commodity and transportation components. For natural gas, the transportation portion is based on JEA's purchase of 40,000 mmBtu/day of firm transportation on the Florida Gas Transmission Company (FGT) system under rate schedule FTS-1 and 14,000 mmBtu/day under rate schedule FTS-2. The FTS-2 transport capacity begins with the completion of FGT's Phase V expansion, expected to be completed by April 2002. This expansion includes the looping of approximately 15 miles of FGT's Jacksonville Lateral beginning at Brooker, Florida. This looping was necessary to effectively support the new gas-fired combustion turbine units at the Brandy Branch Generating Station.

In 2001, TECO Peoples Gas completed construction of the Brandy Branch Lateral, approximately 18 miles of pipeline from the Jacksonville Lateral near Lawtey, Florida to Brandy Branch. In addition to the ability to transport natural gas through the FGT system, JEA receives 20,000 mmBtu/day of delivered gas volumes from El Paso Municipal (EPM). The EPM volume will increase to 61,000 mmBtu/day in June 2004, coinciding with the completion of JEA's combined cycle conversion at Brandy Branch. The EPM volumes are currently supplied via the FGT system.

A blend of residual fuel oil and natural gas is burned in Northside Unit 3. The price forecast for residual fuel oil is based on the allowable sulfur level of 1.8 percent. Forecasts are also provided for high and low sulfur #2 fuel oil. The 1970's-vintage combustion turbine units at Kennedy and Northside Generating Stations are permitted to burn high sulfur #2 fuel oil. The new combustion turbine units at Brandy Branch and Kennedy are permitted to burn low sulfur #2 fuel oil as a backup to natural gas. For

operational reasons, all Kennedy combustion turbine units currently burn low sulfur #2 fuel oil.

As discussed in Section 6.2, JEA is in the process of completing the repowering of Northside Units 1 and 2. These units will run primarily on petroleum coke. Limestone is blended with the petroleum coke for  $SO_2$  removal. The price forecast for petroleum coke includes the limestone component and is based on a conservative estimate of the long term petroleum coke market.

## 4.0 Load and Energy Forecast

JEA's load and electrical characteristics have many similarities to other Peninsular Florida utilities. JEA's calendar year 2001 peak demand was 2,666 MW, occurring in January. The net energy for load (NEL) for 2001 was 12,322 GWH. Summer peak demand has increased at an compound annual rate of 3.1%, winter peak demand 4.4% and net energy for load 3.4% over the period from 1991 through 2001.

The 2001 forecasts of electric power demand, energy consumption, and number of customers were prepared by JEA. These forecasts are based on trend analyses of historical electric load data for the JEA system. While impacts of retail wheeling and other results of deregulation on the loads served by JEA have not been explicitly forecasted, the high and low energy growth forecasts provide a range to bracket potential effects.

The electric power demand forecast is based on a trend analysis of historical data weather-normalized to typical ambient temperatures. Schedule 3 and 4 provides a summary of the basecase peak and energy forecasts for the Ten-Year Site Plan.

The energy consumption forecast represents a trend analysis of historical data for the aggregate customer base. Sales to ultimate customers by rate class were derived by multiplying the annual growth rate predicted for NEL to the actual 2001 sales for each rate class. Historical and forecast load factors were compared to check the reasonableness of the independently developed demand and energy forecasts. A detailed explanation of how the Load and Energy forecast is developed is included as Appendix A.

## **5.0 Facility Requirements**

#### 5.1 Unit Retirements and Shutdowns

The following JEA oil/gas steam units reached the end of their useful lifetime and were retired in the past year.

<u>Unit</u>	Commercial Operation Date	Change in Status	Date Retired
Southside Unit 4	1958	Retirement	October 31, 2001
Southside Unit 5	1964	Retirement	October 31, 2001

When retired, the units were in service for over 35 years. Retirement of these units allowed JEA the opportunity to replace the capacity with newer more efficient technology that will have lower emissions.

#### **5.2 Combustion Turbines**

JEA contracted with General Electric for the supply of four frame 7FA combustion turbines. One unit was installed at the Kennedy Generating Station, and began commercial operation in June 2000. The three additional units were installed on property owned by JEA at the Brandy Branch site near Baldwin, FL. The construction of the Brandy Branch units began in late 1999 with the completion of the first two units in May 2001 and the third unit in October 2001. Each simple cycle combustion turbine operates primarily on natural gas with #2 distillate used as a backup fuel. The summer/winter output of each combustion turbine is 149,000/185,000 kW, respectively, operating on natural gas and 159,000/191,000 kW, respectively, operating on #2 distillate.

Each new combustion turbine utilizes a dry low NOx combustion system to regulate the distribution of fuel delivered to a multi-nozzle, total premix combustor arrangement. The fuel flow distribution is calculated to maintain unit load and fuel split for optimal turbine emissions. In addition, when operating on #2 distillate, demineralized water is injected into the combustion chamber to reduce the firing temperature, which reduces the formation of NOx. The ratio of the flowrate of demineralized water to #2 distillate is approximately equal. The NOx emissions when operating on natural gas and #2 distillate will be controlled to 10.5 and 42 ppm, respectively.

#### 5.3 Northside Units 1 and 2

On May 21, 1997, JEA approved a plan to move forward with the repowering of Northside Units 1 and 2. The project involves the installation of new circulating fluidized bed (CFB) boilers, burning petroleum coke and coal. The project has been identified as a Clean Coal Project by the Department of Energy, which will contribute \$73.07 million to the repowering of Northside Unit 2. During the first two years of operation, Unit 2 will burn coal and petroleum coke. Various coals and various coal / petroleum coke blends will be demonstrated over the two-year period.

The repowering project will include the following items:

- 2 265 net MW CFB boilers
- Limestone unloading, storage and reclaim system
- Fuel unloading, storage, and reclaim system
- Ash handling and storage system
- Baghouses
- Chimney
- Polishing scrubbers
- By-product storage area
- Refurbishment of existing Balance of Plant equipment

The repowering project will result in a plant wide (steam units) 10 percent reduction of  $NO_x$ ,  $SO_2$ , and particulate emissions and a 10 percent reduction in groundwater use, while providing 265 MW of additional electric supply capacity.

Construction began on Northside Unit 2 on July 27, 1999. The unit generated the first megawatts on February 19, 2002. To date, the unit has sustained load of approximately 150 MW and is scheduled to be at full load by early May.

Upon achieving full-load operation, a 30 day reliability test is scheduled to commence in May and be completed in June. During the 30 day reliability test the unit will be dispatchable at Bulk Power Operations' request and will maintain a minimum 96% availability. The only requirement of the reliability test is that the unit must stay on line. Because of the high availability of Northside 2 beginning with the 30 day reliability test, JEA has included Northside Unit 2 capacity for the full summer peak period.

Unit 1 will undergo its 30 day reliability test during the months of June and July. Over the course of the summer months, JEA is anticipating unit 1 to generate significant amounts of energy. However, JEA is not including Northside Unit 1's capacity until Winter 2003.

# 5.4 Brandy Branch Combined Cycle Conversion

On February 28, 2001, the Florida Public Service Commission issued an Order Granting Petition For Determination of Need for the Brandy Branch Combined Cycle Conversion. On March 12, 2002, JEA's site certification was approved. JEA is awaiting the governor's signature and DEP to issue the permits for construction.

JEA is converting two of the Brandy Branch simple cycle units into a combined cycle unit. The Brandy Branch Plant was designed with future expansion in mind, namely adding the steam turbine unit to the site. This expansion will occur in the northwest quadrant of the current plant, adjacent to the existing combustion turbines.

The conversion is accomplished by adding two heat recovery steam generators (HRSGs) to two of the three existing combustion turbines, one steam turbine generator, and balance of plant equipment. One HRSG will be added to each of the two combustion turbines and the two HRSGs will share the steam turbine generator. This conversion will create a one-block 2 x 1 combined cycle and is currently scheduled for commercial operation June 2004. The ISO rating of the steam turbine addition is assumed to be 173 MW. The total capacity of the Brandy Branch power plant, including the remaining simple cycle unit and the combined cycle unit after the conversion, will be 683 MW.

# **5.5 Future Resource Needs**

Based on the peak demand and energy forecasts, existing supply resources and contracts, and transmission considerations, JEA has evaluated future supply capacity needs for the electric system. Table 5-1 displays the likely need for capacity when assuming the base case load forecast for JEA's system for a ten-year period beginning in 2002.

#### **Facility Requirements**

	Installed	Firm Ca	pacity		Available	Firm Peak	Reserve	Margin	Capacity Require
Year	Capacity MW	import MW	Export MW	QF MW	Capacity MW	Demand MW	Before Mai	ntenance Percent	For 15% Reserve MW
2002	2,981	282	435	0	2.828	2,461	367	15%	2
2003	3,246	207	435	0	3.018	2,544	475	19%	0
2004	3,431	277	435	0	3.273	2,627	646	25%	0
2005	3.431	277	383	0	3,326	2,712	613	23%	0
2006	3,431	277	383	0	3,326	2,799	526	19%	0
2007	3,431	277	383	0	3,326	2,887	438	15%	0
2008	3,431	277	383	0	3,326	2,977	348	12%	98
2009	3,431	277	383	0	3,326	3,069	257	8%	203
2010	3,431	70	383	0	3,119	3,162	(43)	-1%	517
2011	3,431	70	383	0	3,119	3,257	(138)	-4%	627
	Installed Capacity	Firm Ca	Export	QF	Available Capacity	Firm Peak Demand	Reserve Before Ma		Capacity Requir For 15% Reserve
Year	MW	MW	MW	мw	MW	MW	MW T	Percent	MW
2002	2,928	427	445	0	2,910	2,596	314	12%	75
2003	3,458	207	445	0	3,220	2,684	536	20%	0
0001	3,076	207	445	0	2,838	2,774	64	2%	352
2004	3,648	277	383	0	3,543	2,865	677	24%	0
2004	3,648	277	383	_0	3,543	2,958	584	20%	0
	3,040 ]	077	383	0	3,543	3,052	490	16%	0
2005	3,648	277			0.540	3,149	394	13%	78
2005 2006		277	383	0	3,543	0,140			
2005 2006 2007	3,648	277 277		0	3,543	3,247	296	9%	191
2005 2006 2007 2008	3,648 3,648	277	383				296 196	<u>9%</u> 6%	<u>191</u> 306

#### 5.6 Resource Plan

The analysis of JEA's electric system to determine the current plan included a review of existing electric supply resources, forecasts of customer energy requirements and peak demands, forecasts of fuel prices and availability, and an analysis of alternatives for resources to meet future capacity and energy needs.

Forecasts of system peak demand growth and energy consumption were utilized for the resource plan. A range of demand growth and energy consumption was reviewed, with the base case peak demand indicating a need for additional capacity to meet system reserve requirements beginning in the year 2008. This need encompasses the inclusion of existing supply resources, transmission system considerations, the Northside Units 1 and 2 CFB repowerings, the Biomass Industries purchase and the Brandy Branch Combined Cycle conversion.

Capacity alternatives were modeled using EPRI's Electric Generation Expansion Analysis System (EGEAS), an optimal generation expansion model, to determine the least-cost expansion plan. The least-cost plan was based on the total present worth costs over a twenty year planning horizon. Several sensitivity analyses were performed to determine the impact on the least-cost plan.

In addition to cost considerations, environmental and land use considerations were factored into the resource plans. This ensured that the least-cost plans selected were socially and environmentally responsible and demonstrated JEA's total commitment to the community.

Based on modeling of the JEA system, forecast of demand and energy, forecast of fuel prices and availability, and environmental considerations, Table 5-2 presents the least-cost expansion plan which meets strategic goals. The expansion plan demonstrates strength with small variance in supply alternatives over the numerous sensitivities.

	Table 5-2   Reference Plan								
Year	Season	Expansion Plan							
2002	Winter	Purchase 220 MW							
	Summer	Northside 2 CFB Repowering							
Summer Purchase 75 MW									
2003	Winter	Northside 1 CFB Repowering							
2004	Winter	Purchase 350 MW							
	Summer	Convert 2 Brandy Branch CTs to Combined Cycle (186 Additional MWs)							
	Summer	Purchase 70 MW Biomass Industries							
2005									
2006									
2007									
2008	Winter	Build 1-323 MW Greenfield Combined Cycle							
2009									
2010	Winter	Build 1-250 MW Greenfield CFB							
2011	Summer	Build 1-174 MW Greenfield GT							

# 6.0 Project Status

## 6.1 Brandy Branch Combustion Turbines And Combined Cycle Conversion

#### Site Description

JEA's Brandy Branch Generating Station consists of three gas/oil fired simple cycle combustion turbine electric generating units. These combustion turbines are GE PG7241 (FA) units with a nominal rating of 173 MW ISO each. The combustion turbines are dual fuel capable and will be operated with natural gas as the primary fuel and distillate oil as the backup fuel. These units were delivered to the Brandy Branch site in late 1999 and early 2000. Construction began in late 1999. The construction of the Brandy Branch units began in late 1999 with the completion of the first two units in May 2001 and the third unit in October 2001. The Brandy Branch site is shown on Figure 6-1.

#### Water Supply

Service and fire water for use at the generating station is normally supplied from onsite wells. Potable water, construction water, and a backup supply for service water will be provided from the City of Baldwin.

The service water will be demineralized using rental filtration and demineralizer equipment to provide high quality water for NO<sub>x</sub> water injection.

#### Land Use

The plant site near the City of Baldwin. Baldwin is west of Jacksonville on Highway 301 a short distance north of Interstate 10. The plant site is a short distance north of Highway 90 east of Baldwin. The generation area will consist of the plant buildings, structures, and equipment required for the power plant.

#### **Environmental Features**

The combustion turbines selected for this project are state-of-the-art machines capable of firing natural gas and distillate oil.

#### Emissions

The combustion turbines utilize a dry low  $NO_x$  combustion system to regulate the distribution of fuel delivered to a multi-nozzle, total premix combustion arrangement.

# JEA 2002 Ten Year Site Plan

The fuel flow distribution is calculated to maintain unit load and fuel split for optimal combustion turbine emissions. In addition, when operating on distillate oil, demineralized water is injected into the combustion chamber to reduce the firing temperature, which reduces the formation of  $NO_x$ . The ratio of the flow rate of demineralized water to No. 2 oil is approximately equal. Selective catalytic reduction (SCR) will be utilized to reduce  $NO_x$  emissions for the combined cycle configuration.

#### **Fuel Storage**

Natural gas will be the primary fuel for the Brandy Branch plant, with No. 2 oil as a backup fuel. Natural gas will be delivered to the site by a pipeline. JEA currently purchases natural gas transportation from Florida Gas Transmission Company (FGT) under FTS-1. FGT operates the 16-inch Jacksonville Lateral through the Brandy Branch area. No. 2 oil will be delivered by truck and stored in the No. 2 oil tank. It is estimated that sufficient distillate oil will be stored on-site for 48 hours of fired operation for each combustion turbine located at Brandy Branch.

#### Noise

Various sound reduction methods are being utilized for this project. The combustion turbine manufacturer has guaranteed noise limits of 85dBA for near field and 65 dBA for far field.

#### **Certification Status**

The installation of simple cycle combustion turbines is not regulated by the Power Plant Siting Act. Individual permits will be obtained for these projects in accordance with regulations.

# 6.2 Northside Units 1 and 2 Repowering

#### Site Description

The Northside Unit 1 and 2 repowering is under construction at the existing Northside Generating Station located at 4377 Hecksher Drive in Jacksonville, Florida, just south of the St. Johns River Power Park. The Northside Generating Station consists of three steam turbine and four combustion turbine units. The steam generator (boiler) for Northside Unit 2 was dismantled 1994/95. The Northside site consists of 754 total acres, of which 204 acres are currently in use. Figure 6-2 presents the Northside site.

#### Water Supply

JEA has committed to reduce the 1996 groundwater usage rate of 630,000 gallons per day (gpd) by at least 10 percent as part of the Northside Unit 1 and 2 repowering project. The water conservation measures implemented in the last five years at the Northside facility have reduced demands on the Floridan aquifer at the site by nearly 50 percent from previous levels. To achieve the 10 percent reduction from the baseline 1996 usage levels, which has been established as one of JEA's community commitments, the repowered facility will implement reuse and recycling as well as other water conservation measures to meet the daily groundwater usage level of 570,000 gpd.

#### Land Use

The Northside Generating Station is an existing site located in an industrial area on the north side of Duval County. It is surrounded by heavy industrial (IH), light industrial (IL), and industrial business park (IBP) zonings to the west and north and is bordered by the St. Johns River Power Park on the north. The Blount Island industrial port is located to the south. The St. Johns River and several of its tributaries border the Northside Generating Station and ancillary facilities to the west, south and east.

#### **Environmental Features**

The circulating fluidized bed (CFB) units to be utilized for this project have inherently low emissions. A polishing scrubber will also be utilized to meet JEA's community commitment to reduce  $SO_x$  10 percent from 1994/1995 baseline levels for the Northside steam units. The CFB units produce low nitrogen oxides (NO<sub>x</sub>) due to relatively low combustion temperatures (approx. 1650°F). In addition, selective non-catalytic reduction (SNCR) will be used to further reduce NO<sub>x</sub> emissions in order to fulfill JEA's community commitment to reduce NO<sub>x</sub> emissions by 10 percent from 1994/1995 levels for the steam units at Northside. Particulates will be controlled by fabric filters.

#### Emissions

The permitted emission rates for these units were determined by a Best Available Control Technology requirements (BACT) analysis. In addition, JEA has a community commitment to reduce annual emissions of  $SO_x$ ,  $NO_x$ , and particulate matter (PM) by 10 percent for the steam units at Northside from the historical 1994/95 baseline. The community commitment was voluntarily included as a permit specific condition.

#### Fuel Storage

Coal and petroleum coke fuels for the repowered facility will utilize on-site covered storage. BACT for control of fugitive particulate emissions will be utilized and additional controls such as paving of existing dirt roads and planting of additional vegetation will be considered.

#### Noise

Because this is an existing site, noise levels are not expected to increase significantly due to the repowering project.

#### **Certification Status**

Since the Northside Units 1 and 2 repowering project will not increase output of the steam turbines, the project is not required to be licensed under the Power Plant Siting Act.

# 6.3 Other Environmental Considerations

#### **Environmental Programs**

JEA participates in the American Public Power Association's (APPA) nationwide Tree Power program. In addition, 400,000 trees have been planted through the JEA Future Tree and Free Tree programs.

JEA also participates in the Department of Energy (DOE) voluntary  $CO_2$  reporting program. Projects receiving  $CO_2$  reduction credits annually include the above mentioned programs as well as gas conversion projects at all three existing stations, landfill-gas utilization projects, free residential and non-residential energy audits, free new home construction workshops, heat rate improvements, and power factor improvements.

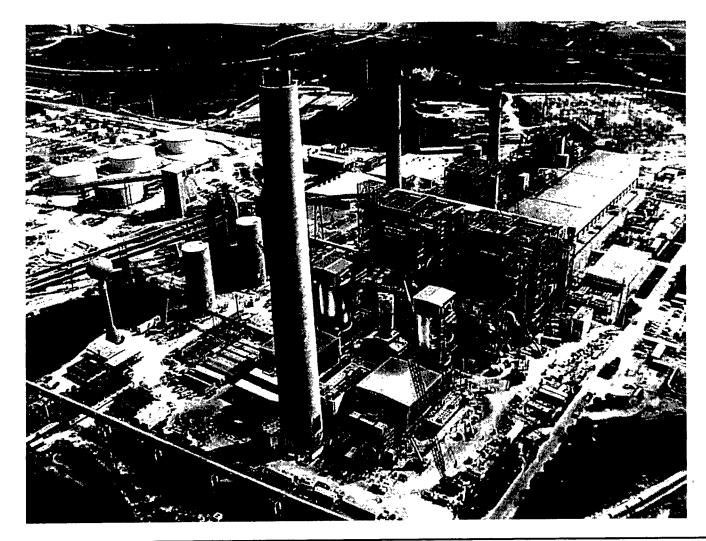
JEA.

Figure 6-1 The Brandy Branch Site



JEA.

# Figure 6-2 Northside Site



# 7.0 Glossary

#### 7.1 List of Abbreviations

#### Type of Generation Units

- CC Combined Cycle
- CT Combined Cycle Combustion Turbine Portion
- CW Combined Cycle Steam Turbine Portion, Waste Heat Boiler (only)
- GT Combustion Turbine
- FC Fluidized Bed Combustion
- IC Internal Combustion
- ST Steam Turbine, Boiler, Non-Nuclear

#### **Status of Generation Units**

FC	Existing generator planned for conversion to another fuel
	or energy source

- M Generating unit put in deactivated shutdown status
- P Planned, not under construction
- RT Existing generator scheduled to be retired
- RP Proposed for repowering or life extension
- TS Construction complete, not yet in commercial operation
- U Under construction, less than 50% complete
- V Under construction, more than 50% complete

#### **Types of Fuel**

- BIT Bituminous Coal
- FO2 No. 2 Fuel Oil
- FO6 No. 6 Fuel Oil
- MTE Methane
- NG Natural Gas
- SUB Sub-bituminous Coal
- PC Petroleum Coke

#### **Fuel Transportation Methods**

- PL Pipeline
- RR Railroad
- TK Truck
- WA Water

Appendix A

# Appendix A

# Load and Energy Forecast



#### Forecasting Methods, Assumptions, and Data Sources

#### Introduction

JEA's 2002 Ten Year Site Plan (TYSP) is based on the results of JEA's 2001 Energy Production and Peak Demand Forecast. JEA's Energy Production Forecast is presented in TYSP forms 2.1, 2.2, 3.0, and 4.0. JEA's Peak Demand forecast is presented in TYSP forms 3.0 and 4.0. The following table summarizes the results of the forecast on a weather-normalized basis.

[	Net Energy	for Load	Winter Pea	k Demand	Summer Peak Demand		
Years	∆GWH	CAGR	ΔMW	CAGR	ΔMW	CAGR	
Last 15	333	3.5%	79	4.0%	63	3.2%	
Last 10	354	3.4%	88	4.1%	68	3.2%	
Last 5	344	3.1%	91	3.8%	71	3.1%	
Next 5	471	3.6%	92	3.2%	92	3.4%	
Next 10	472	3.3%	98	3.2%	95	3.3%	
Next 15	489	3.2%	103	3.1%	99	3.1%	
Next 20	512	3.1%	110	3.1%	104	3.1%	

#### 2002 Forecast Growth Rates

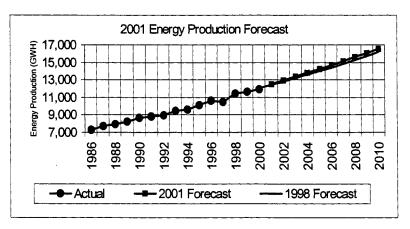
#### **Forecast Assumptions and Methodology**

#### Energy Production, Sales, and Number of Customers (Forms 3.0 and 4.0)

The energy forecast represents a trend analysis of JEA's historical energy production excluding production for off-system sales. This is commonly referred to as Net Energy for Load, or NEL. For the purpose of calculating NEL, JEA assumes a loss factor of 3%

for off-system sales. Monthly NEL projections are proportional to the historical average share of annual NEL for each month.

The methodology for the trend analysis of historical energy production splits the difference between a constant growth of 410 GWH per year and a constant growth rate of 3.4% per



year, starting with a base of 11,944 GWH in fiscal year 2000. The forecast for fiscal year 2001 was adjusted for first quarter actual data. This methodology results in a



forecast of energy production that grows at an increasing number of GWH per year but grows at a decreasing growth rate (percentage) each year.

JEA uses an average loss rate of approximately 4% to convert its forecast of total energy production to total sales. Total sales represents the amount of electricity used by customers as measured at their meter. Sales are allocated to individual customer classes according to their historical share of the total. The number of customers is assumed to increase at a rate of 2% per year.

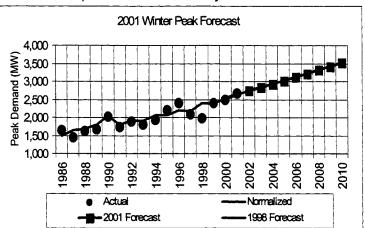
#### Winter and Summer Peak Demands and Non-Firm Load (Forms 3.0 and 4.0)

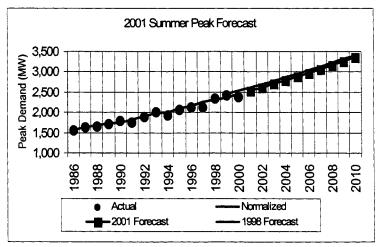
The winter and summer peak demand forecasts represents trend analyses of JEA's

weather-normalized historical seasonal peak demands. The weather normalization methodology is presented in the next section. Monthly peak demand projections are proportional to the historical average share of seasonal peak demand for each month.

The methodology for the trend analysis of weather-normalized historical winter peak demands splits the difference between a constant growth of 91 MW per year and a constant growth rate of 3.4% per year, starting with a base of 2,655 MW in 2001. The summer methodology splits the difference between a constant growth of 84 MW per year and a constant growth rate of 3.4% per year, starting with a base of 2,450 MW in 2000. This methodology results in forecasts of peak demand

that grow at an increasing number of MW per year but grow at a decreasing growth rate (percentage) each year.





JEA adjusts historical peak demands to account for the amount of load that was not served to certain non-firm customers as a result of voluntary cutbacks by these customers during high load periods. The non-firm customers included in the analysis



#### Load and Energy Forecast

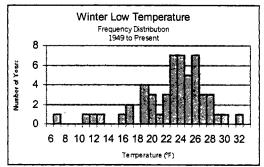
were those customers who elected the rate option that offers a lower rate during most hours of the year, but a higher rate during high load periods. JEA's analysis of their load patterns shows that although these customers voluntarily reduced their load in response to high price signals during the first 18 months of the program, they are no longer doing so. Total non-firm load is assumed to grow at 3% per year over the forecast horizon.

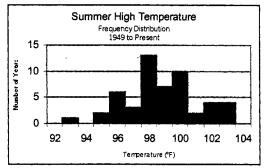
#### Weather Normalization of Seasonal Peak Demands

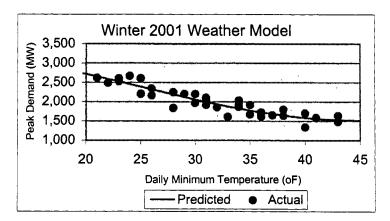
JEA normalizes its winter peak demand to a daily low temperature of 23°F and its

summer peak demand to a daily high temperature of 98°F. These are based on more than 50 years of historical weather data for Jacksonville.

The normalization procedure is a seasonal model that relates daily peak demand to daily minimum temperature in the winter and daily peak demand to daily maximum temperature in the summer. The difference between the model's value at the temperature that actually occurred on the peak day and the model's value at typical temperature is the weather adjustment.









#### Forecast Accuracy

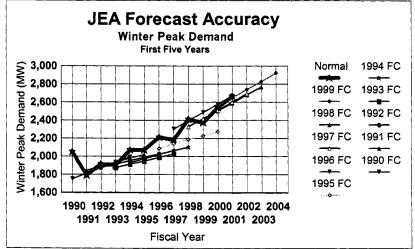
JEA tracks two indicators of forecast accuracy. The first shows forecast accuracy in the first year of the forecast and the other shows forecast accuracy in the first five years of the forecast. Both indicators compare forecasted NEL to historical NEL for the energy model and weather-normalized historical peak demand to forecasted peak demand for the peak demand models. The following chart demonstrates the first-year accuracy of last 10 JEA forecasts.

Forecast	Total NEL - First 12 Months			Winter Peak Demand			Forecast	Summer F	Peak Der	nand
Year	Forecasted	Actual	Error	Forecasted	Normal	Error	Year	Forecasted	Normal	Error
1990	8,592	8,649	-0.7%	1,753	2,052	-14.6%	1990	1,746	1,756	-0.6%
1991	9,034	8,789	2.8%	1,846	1,790	3.1%	1991	1,850	1,835	0.8%
1992	9,212	8,979	2.6%	1,876	1,916	-2.1%	1992	1,876	1,905	-1.5%
1993	8,989	9,452	-4.9%	1,880	1,905	-1.3%	1993	1,880	1,979	-5.0%
1994	9,515	9,619	-1.1%	1,930	2,073	-6.9%	1994	1,990	1,997	-0.4%
1995	9,961	10,540	-5.5%	2,087	2,211	-5.6%	1995	2,047	2,112	-3.1%
1996	10,492	10,433	0.6%	2,307	2,187	5.5%	1996	2,138	2,162	-1.1%
1997	10,954	10,731	2.1%	2,335	2,411	-3.2%	1997	2,226	2,253	-1.2%
1998	11,436	11,542	-0.9%	2,420	2,373	2.0%	1998	2,318	2,319	0.0%
1999	11,747	11,782	-0.3%	2,566	2,544	0.9%	1999	2,395	2,365	1.3%

#### **First-Year Forecast Accuracy**

As the chart indicates, first-year forecast accuracy has improved significantly since JEA began using the current trend analysis in 1996. In addition, the last two forecasts have been very accurate.

The five-year accuracy of the forecasts produced by the current trend analysis has also improved. The chart to the right illustrates this point. It compares the first five values from each of the last 10 forecasts with the weathernormalized winter peak demands since 1990. As the chart indicates. five-vear forecast accuracy has improved significantly since JEA began



using the current trend analysis in 1996. Based on the results of both the one-year and five-year accuracy indicators, JEA is confident that the 2001 forecast that was developed using its trending method fully meets its capacity planning needs.

#### **Data Sources**

JEA obtains most of its data from internal sources. These sources include the Energy Management System for hourly load data, financial reports for monthly off-system sales and total energy generated and purchased, the MV-90 metering and translation system



for hourly non-firm customer loads, and the billing system for customer class sales totals and number of customers. The National Oceanographic and Atmospheric Administration provides JEA's weather data.

#### Energy Production Forecast

JEA used the following data to produce its forecast of energy production.

	Г	kWh	Intercha	inge	Production	ſ	kWh	intercha	inge	Production
		Generated	Sales	Losses	For Sales		Generated	Sales	Losses	For Sales
Year	Q	& Purchased	kWh	(3%)	kWh	Year Q	& Purchased	kWh	(3%)	kWh
1980	1	1,448,746,250	45,475,000	1,364,250	1,401,907,000	1985 1	1,621,098,898	1,573,000	47,190	1,619,478,708
1980	2	1,414,608,320	10,307,000	309,210	1,403,992,110	1985 2	1,724,547,544	8,837,000	265,110	1,715,445,434
1980	3	1,909,253,948	36,300,000	1,089,000	1,871,864,948	1985 3	2,020,770,702	53,778,000	1,613,340	1,965,379,362
1980	4	1,393,032,674	22,919,000	687,570	1,369,426,104	1985 4	1,710,076,471	15,950,000	478,500	1,693,647,971
1981	1	1,453,707,112	23,166,000	694,980	1,429,846,132	1986 1	1,618,535,709	2,977,000	89,310	1,615,469,399
1981	2	1,570,512,032	80,612,000	2,418,360	1,487,481,672	1986 2	1,780,697,254	5,697,000	170,910	1,774,829,344
1981	3	1,810,397,496	45,901,000	1,377,030	1,763,119,466	1986 3	2,245,444,468	11,464,000	343,920	2,233,636,548
1981	4	1,456,272,041	52,597,951	1,577,939	1,402,096,151	1986 4	1,725,351,649	12,958,000	388,740	1,712,004,909
1982	1	1,417,373,658	48,107,260	1,443,218	1,367,823,180	1987 1	1,768,906,087	28,573,000	857,190	1,739,475,897
1982	2	1,619,162,568	100,482,364	3,014,471	1,515,665,733	1987 2	1,952,907,347	65,366,000	1,960,980	1,885,580,367
1982	3	1,811,489,722	20,339,432	610,183	1,790,540,107	1987 3	2,416,812,010	45,135,000	1,354,050	2,370,322,960
1982	-4	1,398,941,445	1,676,537	50,296	1,397,214,612	1987 4	1,763,532,241	34,168,000	1,025,040	1,728,339,201
1983	1	1,484,208,872	(475,670)	(14,270)	1,484,698,812	1988 1	1,934,258,068	3,821,000	114,630	1,930,322,438
1983	2	1,479,413,370	6,577,370	197,321	1,472,638,679	1988 2	1,930,664,259	44,058,000	1,321,740	1,885,284,519
1983	3	1,950,641,578	16,327,578	489,827	1,933,824,173	1988 3	2,610,031,553	212,972,000	6,389,160	2,390,670,393
1983	4	1,460,251,000	4,066,000	121,980	1,456,063,020	1988 4	1,897,425,651	46,941,000	1,408,230	1,849,076,421
1984	1	1,524,846,284	2,954,000	88,620	1,521,803,664	1989 1	1,949,557,756	126,045,000	3,781,350	1,819,731,406
1984	2	1,567,335,989	161,000	4,830	1,567,170,159	1989 2	2,228,557,771	143,254,000	4,297,620	2,081,006,151
1984	3	1,848,601,759	334,000	10,020	1,848,257,739	1989 3	2,548,387,124	82,697,000	2,480,910	2,463,209,214
1984	4	1,515,931,592	143,000	4,290	1,515,784,302	1989 4	2,136,076,250	44,204,000	1,326,120	2,090,546,130

#### Energy Data

	- (	kWh Interchange		Production		kWh	Interch	ange	Production	
		Generated	Sales	Losses	For Sales		Generated	Sales	Losses	For Sales
Year		& Purchased	kWh	(3%)	kWh	Year Q	& Purchased	kWh	(3%)	kWh
1990	1	1,836,709,941	49,225,000	1,476,750	1,786,008,191	1996 1	2,552,210,682	52,569,000	1,577,070	2,498,064,612
1990	2	2,259,651,793	89,477,000	2,684,310	2,167,490,483	1996 2	2,665,523,990	74,777,000	2,243,310	2,588,503,680
1990	3	2,777,607,278	178,194,000	5,345,820	2,594,067,458	1996 3	3,112,452,020	62,494,800	1,874,844	3,048,082,376
1990	4	2,117,997,263	133,642,000	4,009,260	1,980,346,003	1996 4	2,396,929,382	24,900,000	747,000	2,371,282,382
1991	1	1,976,926,842	52,085,000	1,562,550	1,923,279,292	1997 1	2,407,180,492	26,016,000	780,480	2,380,384,012
1991	2	2,426,343,035	148,090,000	4,442,700	2,273,810,335	1997 2	2,599,082,445	32,359,000	970,770	2,565,752,675
1991	3	2,655,317,742	54,178,000	1,625,340	2,599,514,402	1997 3	3,279,181,420	109,961,000	3,298,830	3,165,921,590
1991	4	2,095,626,893	65,365,000	1,960,950	2,028,300,943	1997 4	2,610,435,516	62,044,000	1,861,320	2,546,530,196
1992	1	2,098,801,347	40,364,000	1,210,920	2,057,226,427	1998 1	2,468,195,018	21,967,000	659,010	2,445,569,008
1992	2	2,255,781,420	58,000,000	1,740,000	2,196,041,420	1998 2	3,156,280,268	113,968,000	3,419,040	3,038,893,228
1992	3	2,757,111,613	64,937,000	1,948,110	2,690,226,503	1998 3	3,564,901,841	200,482,000	6,014,460	3,358,405,381
1992	4	2,102,964,980	23,186,000	695,580	2,079,083,400	1998 4	2,691,420,432	74,432,000	2,232,960	2,614,755,472
1993	1	2,152,830,904	33,691,000	1,010,730	2,118,129,174	1999 1	2,694,951,187	120,740,000	3,622,200	2,570,588,987
1993	2	2,363,924,675	39,433,000	1,182,990	2,323,308,685	1999 2	3,130,988,587	193,178,000	5,795,340	2,932,015,247
1993	3	3,026,930,856	98,658,000	2,959,740	2,925,313,116	1999 3	3,696,885,085	143,924,000	4,317,720	3,548,643,365
1993	4	2,287,311,897	50,097,000	1,502,910	2,235,711,987	1999 4	2,729,120,394	12,032,000	360,960	2,716,727,434
1994	1	2,217,864,654	21,352,000	640,560	2,195,872,094	2000 1	2,715,191,386	18,401,000	552,030	2,696,238,356
1994	2	2,519,733,341	102,762,000	3,082,860	2,413,888,481	2000 2	3,096,331,467	78,883,000	2,366,490	3,015,081,977
1994	3	2,802,727,752	34,009,000	1,020,270	2,767,698,482	2000 3	3,585,141,801	67,194,000	2,015,820	3,515,931,981
1994	4	2,305,898,385	81,410,000	2,442,300	2,222,046,085	2000 4	2,975,041,240	11,722,000	351,660	2,962,967,580
1995	1	2,323,123,544	19,597,000	587,910	2,302,938,634					
1995		2,633,827,850	71,404,000	2,142,120	2,560,281,730					
1995		3,123,978,522	124,303,000 [	3,729,090	2,995,946,432					
1995	4	2,525,836,423	65,383,000	1,961,490	2,458,491,933					

# Energy Data (continued)

#### Peak Demand Forecast

JEA used the following data to produce its forecast of seasonal peak demand.

# Winter Peak Demand Data

DATE	Hr	MW	MinT	Ι	DATE	Hr J	MW	MinT	ļ	DATE	Hr	MW	MinT	ļ	DATE	Hr	MW	MinT
11/16/79	8	830	35	ſ	3/4/80	7	1,110	24		2/26/81	9	709	47		2/23/82	7	863	35
11/30/79	8	950	28		3/5/80	9	778	42		3/13/81	7	763	39		2/24/82	8	785	43
12/4/79	9	963	34		11/7/80	8	783	41		3/17/81	8	792	32		3/2/82	8	913	38
12/5/79	9	898	34	ļ	12/1/80	8	845	36		3/18/81	8	731	48		3/3/82	8	824	39
12/18/79	- 8	976	33	ł	12/4/80	8	834	43		3/20/81	9	797	37		3/8/82	7	922	34
12/19/79	- 8	955	32		12/5/80	8	737	45		3/24/81	8	825	40		3/9/82	8	916	36
12/20/79	- 9	922	34	1	12/8/80	8	798	42		3/25/81	8	777	42		3/10/82	8	766	46
12/27/79	10	813	34	1	12/12/80	8	877	36		3/26/81	8	776	41		3/11/82	9	778	47
12/28/79	10	839	38		12/15/80	9	837	38		3/27/81	9	691	45		3/26/82	11	690	45
1/2/80	9	955	34		12/17/80	8	901	39		11/16/81	8	786	42		12/14/82	8	985	35
1/3/80	- 8	988	30		12/18/80	9	949	31		11/18/81	8	809	37		12/20/82	10	925	33
1/7/80	8	998	29	1	12/19/80	9	931	33		11/19/81	8	798	39		12/21/82	9	915	33
1/8/80	8	848	44		12/29/80	10	954	45		11/23/81	8	923	32		12/22/82	9	984	28
1/14/80	9	922	46		12/30/80	9	868	40		11/24/81	8	822	38		12/23/82	9	879	35
1/15/80	8	839	42		12/31/80	9	865	40		11/25/81	9	815	33		1/7/83	10	931	33
1/16/80	8	819	42		1/2/81	10	1,051	32		11/26/81	10	712	38		1/13/83	8	1,159	26
1/17/80	- 8	785	48		1/6/81	9	1,076	30		12/4/81	8	859	39		1/14/83	9	1,150	26
1/21/80	8	822	38		1/8/81	9	1,062	26		12/7/81	8	886	34		1/17/83	8	1,150	25
1/24/80	8	952	31		1/9/81	9	1,043	30		12/8/81	8	870	41		1/20/83	10	887	44
1/25/80	9	848	41		1/13/81	8	1,260	13		12/11/81	8	1,135	23		1/24/83	8	997	34
1/29/80	- 8	869	37	i	1/14/81	8	1,174	28		12/16/81	8	940	35	i	1/25/83	8	1,009	35
1/30/80	8	817	39		1/15/81	8	894	41		12/17/81	8	1,040	30		1/26/83	8	1,058	32
2/4/80	7	1,085	25		1/16/81	10	928	35		12/21/81	9	1,109	22		1/28/83	9	938	39
2/6/80	8	942	33	1	1/19/81	8	1,068	25		12/22/81	9	864	40		1/31/83	9	807	45
2/7/80	7	1,019	31	1	1/23/81	8	990	39		1/5/82	9	923	36		2/1/83	8	797	46
2/8/80	8	1,012	31	1	1/26/81	8	939	30		1/6/82	8	935	36		2/4/83	8	1,049	31
2/11/80	- 8	918	35		1/27/81	9	899	37		1/12/82	8	1,291	17		2/8/83	8	1,075	27
2/12/80	8	941	35		1/29/81	8	957	30		1/13/82	7	931	41		2/9/83	8	1,107	28
2/14/80	7	805	45		1/30/81	8	1,006	28		1/15/82	8	1,189	27		2/10/83	8	919	37
2/15/80	8	782	47		2/4/81	8	1,089	23		1/18/82	8	1,004	30		2/14/83	10	1,038	37
2/19/80	8	824	43		2/5/81	8	1,051	27		1/19/82	8	868	43		2/15/83	8	1,017	34
2/20/80	8	815	41		2/6/81	11	972	33		1/25/82	8	976	32		2/17/83	8	807	47
2/27/80	8	1,018	29		2/9/81	9	867	31		1/27/82	8	1,167	30		2/18/83	8	891	40
2/28/80	8	848	38		2/10/81	7	777	39		1/28/82	8	1,037	34		2/24/83	8	796	43
3/3/80	8	1,143	23		2/25/81	9	810	35		1/29/82	8	886	40		2/25/83	9	742	46

# Load and Energy Forecast

-					<b>5</b>									DATE 1	174.1	TATAT	14.71		
⊢	DATE 3/2/83	Hr 8	MW 829	MinT 43	DATE 1/25		Hr 8	MW 978	MinT 43		DATE 2/2/87	Hr 8	MW 913	MinT 49	ŀ	DATE 12/21/88	Hr 8	MW 1,033	MinT 48
	3/11/83	8	999	35	1/28		8	1,004	38		2/3/87	8	985	47		12/22/88	8	976	48
	3/14/83	8	872	37	1/30		8	1,092	31		2/9/87	8	1,197	32		1/5/89	8	1,340	32
	3/22/83	8	861	36	2/5	5/85	8	913	47		2/10/87	8	1,368	29	1	1/17/89	-8	1,041	40
	3/23/83	8	907	34		3/85	8	1,098	29		2/11/87	8	1,333	30		1/18/89	8	1,106	40
	3/25/83	8	909	36	2/1*		8	965	41		2/12/87	8	1,153	40		1/19/89	8	1,124	37
	3/29/83 3/30/83	8 8	803 833	38 38	2/13		8 8	1,258	31		2/13/87	8	981 1,032	43 47		1/20/89 1/23/89	8 8	974 1,198	49 44
	11/14/83	9	821	40	2/14 2/15		8	1,226 1,042	30, 31		2/18/87 2/19/87	8	1.084	47		1/23/89	8	1,198	40
	11/17/83	8	901	33	2/18	- 1	8	951	35		2/24/87	8	1,035	45		1/25/89	8	1,191	36
	11/18/83	8	948	32	2/19		8	956	43		2/27/87	8	963	49		1/26/89	8	1,055	45
1	11/22/83	- 8	785	43	2/2*	1/85	8	886	49		3/3/87	8	1,042	40		2/9/89	8	1,170	35
	11/30/83	9	836	36	2/22		8	860	47		3/4/87	8	938	40		2/10/89	8	1,404	29
	12/1/83	8	862	40	3/18		8	910	37		3/5/87	8		37		2/13/89	8	1,155	37
	12/2/83 12/8/83	8 8	795 957	46 32	3/19		7 8	1,061 937	32 38		3/6/87	8 8	1,000 1,156	47 35		2/24/89 3/10/89	7 8	1,657 1,421	27 35
	12/9/83	8	989	33	11/0		7	937 896	44		3/13/87 3/16/87	8		46		11/17/89	8	1,214	37
	12/14/83	8	833	47	11/		8	848	46		11/12/87	8	1,121	33		11/20/89	8	1,204	38
	12/16/83	8	947	38		4/85	8	947	42		11/13/87	8		31		11/22/89	8	990	47
	12/22/83	9	867	43	12/9	9/85	8	890	44		11/23/87	8		45		11/24/89	9	1,036	37
	12/26/83	10	1,205	13	12/10		8	1,205	30		12/1/87	8		39		11/30/89	8	1,201	35
	12/27/83	9	1,072	24	12/1		8	1,162	32		12/2/87	8		34		12/1/89	8	1,278	35
	1/2/84 1/3/84	10 8	977 1,047	33 30	12/10		8 8	1,121	36		12/3/87	8		33 49	-	12/4/89 12/5/89	8 8	1,536 1,430	27 33
	1/4/84	8	1,047	30	12/2		9	1,143	34 34		12/7/87 12/17/87	8		49 29		12/5/89	8	1,430	38
	1/5/84	7	1,012	33	12/2		10	1,411	20		12/18/87	8		28		12/7/89	8	1,089	47
	1/6/84	8	1,036	34	12/2		9	1,298	27		12/23/87	9		43		12/11/89	8	1,419	33
	1/9/84	8	1,005	34	12/3	0/85	9	1,097	32		12/30/87	9		31		12/12/89	8	1,289	38
	1/23/84	9	979	45	12/3		9	1,156	29		1/26/88	7		31		12/14/89	8	1,543	29
	1/30/84	8	935	37	1	5/86	8	1,204	30		1/27/88	7		26		12/15/89	8	1,553	
1	2/1/84 2/2/84	8 8	1,123	30 31	ſ	3/86 4/86	8 8	1,097 1,253	35 29		1/28/88 1/29/88	87				12/21/89 12/26/89	10 9	1,308	
1	2/3/84	8	861	45		5/86	8	1,125	36	l	2/8/88	7				12/27/89	9	1,567	29
	2/6/84	9	1,039	31		6/86	8	1,027	42	1	2/9/88	1		39		12/28/89	9	1,242	
	2/7/84	7	1,233	26	1/1	7/86	8	910	47		2/10/88	7	1,205	38		12/29/89	9	1,342	35
	2/8/84	8	1,154	25		0/86	9	971	40	{	2/16/88	7				1/2/90	8	1,319	
	2/9/84	8	1,069	33		1/86	8	1,080	37		2/17/88	8				1/4/90	8	1,072	
	2/10/84 2/15/84	8 8	909 829	38	1	2/86	8 8	1,056 900	38 48		2/22/88					1/10/90 1/11/90	8		
	2/15/84	8	816	42 46	1	3/86 8/86	8	1,640	40		2/23/88	)		1		1/12/90	8	1	1
	2/17/84	ē	828	46		9/86	8	1,367	29		2/25/88					1/15/90	9	1	1
	2/29/84	7	1,115	34	1	1/86	8	1,175	1		2/26/88	7	1,259			1/16/90	8		
	3/1/84	7	1,149	29		3/86	8	943			2/29/88					1/17/90	8		
	3/2/84	8	1,136	31		4/86	8	875			3/2/88			1		1/19/90	8		
	3/8/84	8 8	952	37		2/86	8	1,054			3/7/88					1/23/90	8		
	3/9/84 3/12/84	8	883 833	40 40		3/86 4/86	8 8	1,166			3/8/88 3/11/88	1 -				1/24/90	8		
	3/22/84	8	756	43		4/86	8	837			3/15/88					2/6/90	8		1
	3/30/84	9	765	41		6/86	8	1,045		•	3/16/88	1		1	1	2/12/90	1	1 1	1
	11/9/84	8	845	46	3/	3/86	8	1,035	40		3/17/88	8	1,290	32	1	2/13/90		1,151	40
1	11/13/84	8	977	34		5/86		1,010			3/18/88					2/26/90		1 1	
	11/14/84	8	1,033		1	6/86	8	1,086	1		3/21/88	1		•		2/27/90	-		
	11/15/84 11/16/84	8 8	929 830			7/86 4/86		1,040 990			11/8/88 11/24/88					2/28/90		1 1 1	
	11/23/84	10	954			4/86	•	1.040			11/29/88		4			3/5/90			
	11/29/84	8	976			5/86		1,041			12/2/88					3/9/90			
	11/30/84	8	1,066	31	12/1	9/86	8	931	47	ι.	12/5/88	7	1,131	38		3/21/90			
	12/7/84	8	1,226			2/86		1,015			12/6/88					3/22/90			
	12/10/84	8	1,004			0/86		1,033			12/8/88					3/23/90			
	12/13/84 1/7/85	8 8	868 1,102			1/86 2/87	1 1	985 1,101			12/13/88					11/19/90 11/20/90			1
	1/8/85	0 8	974			2/67 5/87	8	1,132			12/14/86					11/21/90			
	1/9/85	8	1,063			6/87	8	1,145			12/19/86					11/30/90		1 1	
	1/10/85	8	887	40	1,	7/87	8	1,107	40		12/20/88	3 6	3 1,344	4 31		12/5/90	η ε	1,40	29
	1/11/85	8	851			8/87	8	1,004			12/31/87					12/6/90			
ł	1/14/85	8	1,079			9/87	8	1,022			1/5/88	1	3 1,34			12/7/90			
	1/15/85 1/16/85	8 8	1,111			2/87					1/6/88		B 1,400 B 1,300	1		12/10/90			
	1/17/85	8	1,201 880			3/87 4/87					1/8/88		B 1,304 B 1,324			12/11/90			
	1/21/85	8	1,586			3/87					1/12/88		8 1,48			12/13/90			
	1/22/85	8	1,558			7/87					1/13/88		8 1,26			12/14/90			
	1/23/85	8	1,346			8/87					1/15/88		B 1,37:			12/26/90			
L	1/24/85	8	1,286	25	1/2	9/87	8	1,260	32	2	1/22/88	<u></u>	8 1,15	4 39	1	1/10/9*	1 8	3, 1,14	1 48

# Winter Peak Demand Data (Continued)



#### Load and Energy Forecast

			١	Nint	e	r Peak	De	ema	nd D	)a	ita (Co	nti	nue	d)					
Г	DATE	Hr	MW	MinT	ſ	DATE	Hr	MW	MinT		DATE	Hr	MW	MinT	Г	DATE	Hr	MW	MinT
	1/14/91	8	1,482	31	1	12/15/92	8	1,261	45		3/18/94	8	1,249	41	ľ	1/26/96	8	1,432	38
	1/15/91	8	1,157	44		1/15/93	8	1,214	45		11/24/94	10	1,175	37		1/29/96	8	1,455	42
ł	1/17/91	8	1,163	41		1/18/93	9	1,247	42		11/25/94	9	1,002,	45	1	1/30/96	8	1,327	46
1	1/18/91	8	1,329	36		1/19/93	8	1,265	44		12/14/94	8 9	1,327	47		2/5/96 2/6/ <del>9</del> 6	8 8	2,401	19 25
	1/21/91 1/22/91	9 8	1,172 1,403	43 32	- 1	1/27/93 1/28/93	8 8	1,626 1,672	37 32		12/19/94 12/20/94	9	1,444 1,353	38 41		2/6/96	8	2,153 2,025	25.
	1/23/91	8	1,530	31	- 1	1/29/93	8	1,349	40		12/20/94	9	1,290	43		2/8/96	8	1,675	35
	2/1/91	8	1,175	45		2/1/93	8	1,361	45		12/28/94	9	1,332	41		2/13/96	8	1,773	29
	2/11/91	8	1,182	42		2/3/93	8	1,556	32		12/29/94	9	1,333	41		2/14/96	8	1,668	36
	2/12/91	8	1,261	37		2/4/93	8	1,324	42	1	1/5/95	8	1,709	34	-1	2/19/96	8	1,491	37
	2/18/91	8	1,145	43	ł	2/9/93	8	1,333	41		1/6/95	8	1,576	37		3/4/96	8	1,428	38
1	2/27/91	8	1,250	36	- [	2/15/93	8	1,317	38		1/9/95	8	1,696	35		3/5/96	8	1,242	45
	2/28/91	8	1,110	46		2/18/93	8	1,406	37		1/10/95	8	1,413	43		3/11/96	8	1,816	37
	3/5/91 3/11/91	8 8	1,284	40 35		2/19/93 2/23/93	8 8	1,768	26		1/11/95	8 8	1,383	43 47		3/12/96 3/13/96	8 8	1,697	34 32
1	3/12/91	8	1,344 1,264	39	- 1	2/23/93	8	1,399 1,466	40 36		1/12/95 1/17/95	8	1,282 1,455	42		3/14/96	8	1,739 1,515	38
	3/20/91	8	1,058	43		2/25/93	ĕ	1,379	38		1/18/95	8	1,431	42		3/15/96	8	1,298	43
	11/5/91	8	1,279	39		2/26/93	8	1,099	46		1/20/95	8	1,438	39		3/20/96	8	1,445	40
	11/6/91	8	1,134	46		3/1/93	8	1,475	36		1/23/95	8	1,438	38		3/21/96	8	1,669	37
1	11/7/91	8	1,068	43		3/2/93	8	1,388	38		1/24/95	8	1,755	33		3/22/96	8	1,552	35
1	11/8/91	8	1,218	39		3/5/93	8	1,190	46		1/25/95	8	1,814	29		11/8/96	11	1,278	47
	11/11/91	8	1,261	39		3/8/93	8	1,178	47		1/26/95	8	1,635	35		11/11/96	9	1,354	37
	11/12/91	8	1,355	36	Ì	3/12/93	8	1,040	48		1/27/95	8	1,544	37		11/12/96	8	1,522	36
	11/13/91 11/14/91	8 8	1,276 1,206	38 40		3/15/93 3/16/93	8 8	1,791 1,382	27 38		1/31/95 2/1/95	8 8	1,761	32 30		11/13/96 11/14/96	8	1,319 1,258	44 47
ļ	11/25/91	8	1,438	30		11/1/93	8	1,537	33		2/1/95	8	1,755	40		11/27/96	8	1,407	40
	11/26/91	8	1,525	29		11/2/93	7	1,425	35		2/6/95	8	1,784	30		11/28/96	10	1,209	41
	11/27/91	8	1,226	43		11/8/93	8	1,237	45		2/7/95	8	1,727	32		12/3/96	8	1,377	37
	11/28/91	11	934	43		11/11/93	8	1,234	42		2/9/95	8	2,190	20		12/4/96	8	1,381	38
	12/5/91	8	1,497	30		11/12/93	8	1,157	48		2/10/95	8	1,614	39		12/9/96	8	· ·	34
	12/6/91	8	1,292	40		11/29/93	8	1,363	38		2/13/95	8	1,379	45		12/10/96	8	· ·	30
	12/16/91	8	1,439	31		11/30/93	8	1,453	36		2/14/95	8	1,329	46		12/11/96	8	1,429	
	12/17/91 12/18/91	8 8	1,563 1,462	29 33		12/6/93 12/7/93	8 8	1,217	44 40		2/21/95 2/22/95	8	1,367 1,544	39 34		12/12/96 12/16/96	8 8		48 37
	12/10/91	9	1,462	40		12/7/93	8	1,292	39		2/22/95	8	1,585	34		12/20/96	°		
	12/23/91	9	1,117	44		12/9/93	8	1,362	41		2/24/95	ı s	1,240	49		12/23/96	8		
	12/31/91	8	1,223	40		12/10/93	8	1,166	48		3/3/95	8	1,332	44		1/10/97	8		Ŧ 1
	1/6/92	8	1,165	46		12/13/93	8	1,611	31		3/9/95	8	1,333	40		1/13/97	8	1,722	
	1/7/92	8	1,369	34		12/14/93	8	1,206	43		3/10/95	8	1,438	35		1/14/97	8		
	1/8/92	8	1,327	37		12/16/93	8	1,461	40		11/9/95	8	1,347	36	l	1/15/97	8		
1	1/15/92	8	1,513	33		12/17/93	8	1,467	37		11/10/95	8				1/17/97	8		
	1/16/92	8 8	1,589 1,883	28 24		12/20/93 12/22/93	8 10	1,391	39 35		11/13/95 11/15/95		1,421	39 33		1/20/97 1/21/97	8	· ·	
	1/17/92 1/20/92	9	1,560	33		12/23/93	11	1,456 1,497	38		11/16/95		1,584 1,620	1 1		1/22/97	8		
	1/21/92	8	1,710	29		12/27/93	9	1,685	31		11/17/95		1,301	43		1/23/97	8		1 1
1	1/22/92	8	1,560	32		12/28/93	8	1,447	37		11/20/95					1/27/97	8		
	1/24/92	8	1,219	36		12/29/93	9	1,239	44		11/22/95	8	1,429	36		1/31/97	8	1,512	42
	1/27/92	8	1,223	32		12/31/93	9	1,530			11/23/95		1,369			2/3/97		1	
1	2/3/92	8	1,407	38.		1/5/94	8	1,678			11/24/95		1,096			2/7/97	8		
	2/4/92	8	1,423	36		1/6/94	8	1,799			11/27/95					2/11/97	8		
I	2/7/92 2/11/92	8 8	1,358 1,273	43 48		1/7/94 1/10/94	8 8	1,376 1,479			12/1/95					2/12/97 2/13/97	8		
	2/12/92	8	1,268			1/11/94	8	1,343			12/11/95					2/17/97	1	1 .	1
	2/13/92	8	1,113			1/14/94	8				12/12/95		1			2/18/97			
	2/14/92	8	1,159	47		1/17/94	9	1,359			12/13/95			, ,		2/19/97	· [ ε	1,291	45
	2/21/92	8	1,179			1/19/94	8	1,911			12/21/95	8				3/7/97			
	2/28/92	8	1,248			1/20/94	8	1,805			12/22/95					11/5/97			
	3/2/92	8	1,077	46		1/21/94	8	1,788			12/26/95					11/10/97		1	
	3/12/92	8	1,288	41		1/24/94	8 8	1,496			12/27/95					11/17/97			
	3/13/92 3/17/92	8 8	1,194 1,441	46 31		1/25/94 1/26/94	8	1,391 1,237			12/28/95		•			11/18/97 11/20/97		1	
	3/24/92	8	1,084	45		2/1/94	8	1,547			1/4/96			1		11/25/97			
	3/26/92	8	1,043	49		2/2/94	8				1/5/96					11/26/97			
	3/27/92	8	1,030			2/3/94	8				1/8/96					11/27/97			1
1	11/17/92	8	1,251	40		2/4/94	8	1,678	32		1/9/96		2,276	5 23		12/2/97			
	11/30/92	8	1,520	33		2/8/94	8				1/10/96					12/8/97		3 1,840	
	12/2/92	8	1,442			2/15/94	8				1/11/96					12/16/97			
	12/3/92	8	1,444			2/25/94	8				1/15/96					12/17/9			
	12/4/92 12/7/92	8 8	1,451 1,180	36 47		3/3/94 3/4/94	8				1/16/96					12/18/97 12/19/97		3 1,694 3 1,629	
	12/9/92	8	1,426			3/11/94	8				1/22/96					12/19/91		9 1,74	
	12/11/92	8	1,306			3/15/94	8				1/24/96			1		12/31/9		1,55	
1	12/14/92	8	1,428			3/17/94	8				1/25/96					1/2/9		8 1,61	

# Winter Peak Demand Data (Continued)

# JEA 2002 Ten Year Site Plan

Load and Energy Forecast

٤	ien tea				Loa	3 8	and Ene	rgy	FOR	cast									
				Win	It	er Pea	k [	Dem	and	D	Data (C	on	tinu	ed)					
	DATE	Hr	MW	MinT		DATE	Hr	MW	MinT		DATE	Hr	MW	MinT	- 1	DATE	Hr	MW	MinT
	1/12/98	8	1,596	39		1/6/99	8	2,420	22		12/15/99	8	1,581	37	1	11/22/00	8	2,201	25
	1/20/98	8	1,689	34		1/7/99	8	2,184	27		12/17/99	8	1,709	37		11/23/00	9	1,837	28
	1/21/98	8	1,445	42		1/8/99	8	1,653	38		12/27/99	9	1,731	33		11/24/00	8	1,344	40
	1/26/98	8	1,609	40		1/11/99	8	2,047	29	1	12/28/99	9	1,624	34	- 1	11/27/00	8	1,587	41
	1/28/98	8	1,541	44	1	1/12/99	8	1,916	32		12/29/99	8	1,714	35		11/28/00	8	1,721	· 36
	1/29/98	8	1,617	38		1/13/99	8	1,576	41		12/30/99	8	1,818	32		11/30/00	8	1,651	37
	1/30/98	8	1,524	41		1/20/99	8	1,408	43		12/31/99	9	1,388	42		12/1/00	8	1,866	34
	2/5/98	8	1,733	40		1/25/99	8	1,466	41		1/6/00	8	1,443	40		12/4/00	- 8	2,033	34
	2/6/98	8	1,741	37		1/26/99	8	1,504	43		1/12/00	8	1,492	41		12/5/00	8	2,108	31
	2/9/98	8	1,588	40		2/5/99	8	1,325	46		1/13/00	8	1,499	43		12/6/00	8	2,247	28
	2/10/98	8	1,685	36		2/15/99	8	1,818	29		1/18/00	8	1,376	47		12/7/00	8	2,024	31
	2/11/98	8	1,425	45		2/16/99	8	1,588	39		1/21/00	8	1,935	30		12/8/00	8	1,796	38
	2/12/98	8	1,287	46		2/22/99	8	1,921	31		1/25/00	8	2,151	32		12/18/00	8	2,164	26
	2/13/98	8	1,479	40		2/23/99	8	2,048	30		1/26/00	8	2,328	26		12/20/00	9	2,614	21
	2/19/98	8	1,297	46		2/24/99	8	1,607	39		1/27/00	8	2,483	24		12/21/00	9	2,527	23
	2/24/98	8	1,494	47		2/25/99	8	1,791	33		1/28/00	8	2,037	30		12/22/00	9	1,920	31
	2/25/98	8	1,403	44		2/26/99	8	1,425	47		1/31/00	8	1,837	36		12/26/00	9	1,672	35
	2/26/98	8	1,352	47		3/1/99	8	1,472	42	1	2/1/00	8	2,141	31		12/27/00	9	1,638	38
	3/3/98	8	1,505	39		3/2/99	8	1,413	40		2/2/00	8	1,806	35		12/29/00	10	1,917	35
1	3/4/98	8	1,726	34		3/4/99	8	1,667	35		2/3/00	8	1,950	32		1/2/01	8	2,486	22
	3/5/98	8	1,511	41		3/5/99	8	1,794	32		2/4/00	8	1,865	36		1/3/01	8	2,666	24
Ì	3/10/98	- 8	1,554	39		3/9/99	7	1,382	44		2/7/00	8	2,083	31		1/4/01	8	2,602	23
	3/11/98	8	1,820	32		3/11/99	8	1,471	41		2/8/00	8				1/5/01	8	2,604	25
	3/12/98	8	1,868	33		3/12/99	8	1,333	42		2/9/00	8	1,590			1/8/01	8	1,634	43
	3/13/98	7	1,938	32		3/16/99	7	1,823	33		2/10/00	8	1,798			1/10/01	8	2,582	23
1	3/16/98	8	1,311	45		3/17/99	8	1,457	41		2/11/00		1,596	43		1/11/01	7	2,200	30
	3/23/98	8	1,424	41		3/23/99	8	1,401	39		2/16/00	8	1,564	39		1/12/01	8	1,514	47
	3/24/98	8	1,392	43		11/4/99	8	1,677	34		2/21/00	9	.,	35		1/15/01	9	1,488	43
	3/25/98	8	1,229	46		11/5/99	7	1,364	48		2/22/00	8	.,	39		1/16/01	8	1,488	47
	11/6/98	8	1,301	45		11/16/99	8	1,409	41		2/23/00			42		1/22/01	8	2,056	31
	12/16/98	8	1,743	36		11/17/99	8	1,481	40		2/25/00		1,327	48		1/23/01	7	1,933	34
	12/17/98	8	1,684	36		11/18/99	8	1,386	46		2/29/00		.,	45		1/24/01	8	2,202	29
-	12/18/98	8	1,757	29		11/29/99	8	1,445	43		3/13/00	8		35		1/25/01	8	1,969	30
	12/28/98	10	1,335	49		12/2/99	8	2,091	26		3/14/00					1/26/01	8	2,345	
	12/31/98	8	1,829	30		12/3/99	7	1,798			11/15/00					1/29/01	8	1,703	40
	1/4/99	8	1, <del>9</del> 85	30		12/7/99	8	1,641	35		11/16/00								
1	1/5/99	8	2,230	23		12/8/99	7	1,491	42		11/21/00	8	1,860	32					
						0						<u> </u>							

12/8/99 7 1,491 42 11/21/00 8 1,860 32 Summer Peak Demand Data

Date	Hr	MW	MaxT	MW3pm	MW5pm	Date	Hr	MW	MaxT	MW3pm	MW5pm	Date	Hr	<b>M</b> W	MaxT	MW3pm	MW5pm
6/2/80	18	907	88	837	897	8/21/80	17	1,261	97	1,152	1,261	7/9/81	18	1,134	95	1,083	1,121
6/3/80	17	993	92	883	993	8/25/80	17	991	88	951	991	7/10/81	18	1,153	96	1,105	1,137
6/4/80		1,121	96	1,012	1,050	8/27/80	19	1,059	88	1,023	1,054	7/13/81	16	1,218	101	1,180	1,210
6/9/80		893	84	829	893	8/28/80	17	1,120	90	1,021	1,120	7/14/81	19	1,285	102	1,240	1,281
6/11/80		1,013	91	895	933	8/29/80	18	1,068	90	1,025	1,063	7/15/81	18	1,306	102	1,247	1,275
6/13/80	17	901	85	842	901	9/1/80	21	930	91	881	898	7/23/81	17	1,150	95	1,120	1,150
6/16/80	19	1,129	94	986	1,089	9/2/80	16	1,085	92	1,030	1,073	7/24/81	18	1,149	95	1,105	1,140
6/17/80	18	1,147	95	1,078	1,112	9/5/80	17	1,119	90	1,098	1,119	7/27/81	17	1,217	95	1,167	1,217
6/18/80	18	1,115	95	1,073	1,093	9/9/80	18	1,133	90	1,059	1,078	7/28/81	17	1,173	96	1,153	1,173
6/24/80		1,052	91	944	1,052	9/10/80	19	1,101	90	1,009	1,031	7/29/81	17	1,236	95	1,205	1,236
6/25/80		854	89	799	838	9/11/80	18	1,085	89	1,058	1,081	7/31/81	18	1,102	89	1,052	1,095
6/27/80	18	978	91	942	963	9/12/80	17	1,055	89	912	1,055	8/3/81	18	1,115	92	1,055	1,107
6/30/80	17	1,104	93	1,065	1,104	9/15/80	19	1,198	96	1,040	1,141	8/4/81	19	1,027	90	988	1,019
7/1/80	19	1,186	93	1,044	1,107	9/16/80	17	1,165	95	1,112	1,165	8/5/81	18	1,144	94	1,099	1,129
7/4/80		1,044	94	892	947	9/18/80	16	1,101	90	989	1,013	8/6/81	18	1,228	95	1,142	1,205
7/7/80		1,163	94	1,038	1,151	9/19/80	16	1,133	92	1,044	1,087	8/10/81	18	1,198	94	1,152	1,195
7/9/80	17	1,208	95	1,162	1,208	9/22/80	18	1,188	91	1,140	1,164	8/11/81	17	1,120	92	1,100	1,120
7/10/80	17	1,277	99	1,189	1,277	9/23/80	18	1,203	92	1,055	1,114	8/14/81	17	1,081	89	1,061	1,081
7/11/80	18	1,260	100	1,230	1,250	9/24/80	17	1,162	91	1,091	1,162	8/17/81	18	1,169	92	1,130	1,163
7/16/80		1,200	92	1,175	1,200	9/25/80	17	1,131	92	1,059	1,131	8/19/81	17	1,031	87	884	1,031
7/17/80	17	1,142	92	1,100	1,142	9/26/80	19	1,145	93	1,086	1,133	8/21/81	17	876	82	846	876
7/21/80	18	1,243	91	1,116	1,170	9/29/80	16	996	88	975	992	8/24/81	18	941	83	851	930
7/22/80	18	1,131	91	1,043	1,091	9/30/80	17	1,083	90	979	1,083	8/25/81	17	1,020	87	969	1,020
7/23/80	17	1,171	94	1,077	1,171	6/1/81	17	1,078	96	1,029	1,078	8/26/81	18	1,004	87	953	999
7/28/80	17	1,213	95	1,115	1,213	6/2/81	17	1,092	92	1,058	1,092	8/31/81	19	973	85	942	970
7/30/80	17	1,167	95	1,100	1,167	6/9/81	19	1,181	98	1,128	1,155	9/1/81	18	1,077	89	1,027	1,070
7/31/80	18	1,243	96	1,135	1,156	6/10/81	17	1,114	94	1,077	1,114	9/2/81	17	1,079		1,043	1,079
8/1/80	18	1,226	97	1,138	1,195	6/16/81	19	1,259	102	1,220	1,244	9/3/81	18	1,089	89	1,003	
8/4/80	18	1,242	96	1,153	1,221	6/17/81	17	1,263	99	1,167	1,263	9/4/81	18	970	88	942	969
8/5/80	18	1,273	94	1,182	1,202	6/18/81	17	1,256	99	1,183	1,256	9/7/81	21	828	87	725	759
8/6/80	16	1,224	92	1,171	1,194	6/19/81	17	1,201	95	1,114	1,201	9/8/81		989		909	929
8/7/80	18	1,195	92	1,143	1,189	6/22/81	18	1,213	97	1,082	1,171	9/9/81	18	1,073		977	1,067
8/8/80	17	1,232	93	1,141	1,232	6/24/81	17	1,235	95	1,155	1,235	9/11/81		1,027	89	992	1,027
8/11/80	18	1,215	94	1,113	1,149	6/29/81	18	988	89	912	962	9/14/81		1,066		996	1,046
8/12/80	18	1,200	94	1,126	1,163	6/30/81	18	1,013	90	932	1,007	9/15/81	17	1,144	93	1,048	1,144
8/14/80	21	952	89	903	935	7/1/81	18	840	84	810	830	9/16/81	19	934	86	832	909
8/15/80	19	1,152	94	1,122	1,140	7/2/81	18	978	90	918	970	9/18/81	17	762		735	762
8/19/80	18	1,183	92	1,142	1,165	7/3/81	18	990	94	918	977	9/22/81		774		589	
8/20/80	17	1,292	99	1,220	1,292	7/7/81	19	1,225	100	1,157	1,208	9/23/81	18	969	92	897	957



Load and Energy Forecast

				Sumr	ner P	eak C	)ei	man	d D	ata (C	ontini	ue	ed)					
Date	Hr	MW	MaxT	MW3pm	MW5pm	Date	Hr	MW	MaxT	MW3pm	MW5pm	F	Date	Hr	MW	MaxT	MW3pm	MW5pm
9/25/81 9/28/81	17 17	805 933	84 90	790 908	805 933	7/20/83 7/21/83	18 19	1,350 1,375	96 95	1,291 1,259	1,317 1,300		9/17/84 9/18/84	13 17	842 815	72 76	809 797	839 815
9/29/81 9/30/81	18 17	960 960	89 89	910 926	945 960	7/22/83	18 17	1,334 1,174	98 88	1,294 1,155	1,331 1,174		9/20/84 9/21/84	18 17	925 958	81 84	875 923	904 958
6/1/82	18	924	88	869	889	8/1/83	18	1,273	90	1,184	1,241		9/24/84	17	1,017	-84	991	1,017
6/2/82 6/7/82	17 18	1,087 1,134	91 91	1,035 1,044	1,087	8/3/83 8/4/83	17 14	1,219 1,147	90 88	1,177 1,044	1,219 1,061		9/25/84 9/26/84	17 18	1,038 1,074	84 85	969 1,011	1,038 1,057
6/8/82	18	1,190	95	1,078	1,128	8/5/83	18	1,195	89	1,164	1,193		6/3/85	19. 17	1,455	100	1,416	1,452 1,479
6/9/82 6/10/82	19 17	1,228 1,237	99 97	1,160 1,209	1,177 1,237	8/9/83 8/10/83	17 18	1,278 1,291	94 93	1,232 1,246	1,278 1,278		6/4/85 6/6/85	17	1,479 1,442	100 9 <del>9</del>	1,402 1,330	1,442
6/14/82 6/15/82	18 17	1,111 1,186	93 94	1,047 1,103	1,087 1,186	8/15/83 8/16/83	18 17	1,100	87 87	1,050 1,090	1,094 1,125		6/7/85 6/11/85	17 17	1,395 1,375	99 96	1,336 1,331	1,395 1,375
6/16/82	17	1,192	95	1,159	1,192	8/17/83	17	1,198	89	1,114	1,198		6/17/85	18	1,204	90	1,083	1,178
6/18/82 6/21/82	19 18	837 1,225	83 95	809 1,113	829 1,171	8/18/83 8/19/83	17 18	1,227	91 94	1,187 1,195	1,227 1,263		6/18/85 6/19/85	18 17	1,357 1,323	91 93	1,255	1,335 1,323
6/29/82	18	1,189	96	1,095	1,182	8/23/83	17	1,361	95	1,284	1,361		6/21/85	17	1,090	84	1,048	1,090
7/1/82	18 16	1,217 1,183	97 91	1,156 1,139	1,209 1,165	8/24/83 8/25/83	18 17	1,343 1,257	94 90	1,286 1,233	1,342 1,257		6/24/85 6/26/85	18 18	1,214 1,228	89 90	1,149 1,161	1,209 1,210
7/5/82 7/6/82	18 18	1,130 1,114	97 90	1,019 1,077	1,061 1,095	8/26/83 8/31/83	17 18	1,255 1,292	91 93	1,219 1,237	1,255 1,280		7/1/85 7/2/85	18 17	1,092 1,177	87 91	1,035 1,158	1,085 1,177
7/9/82	17	1,124	92	1,069	1,124	9/5/83	18	1,166	93	1,089	1,157		7/3/85	17	1,213	89	1,194	1,213
7/12/82	17 17	1,136 1,191	93 93	1,102	1,136 1,191	9/6/83 9/7/83	17 18	1,340 1,323	93 93	1,257	1,340 1,290		7/4/85, 7/8/85	18 18	1,080 1,299	92 91	970	1,048 1,290
7/14/82	18	1,160	92	1,117	1,137	9/9/83	17	1,271	92	1,226	1,271		7/9/85	18	1,343	93	1,265	1,333
7/15/82 7/16/82	17 17	1,180 1,029	91 88	1,163 989	1,180 1,029	9/14/83 9/15/83	18 18	1,003 976	83 82	933 907	992 953		7/10/85 7/16/85	18 18	1,394 1,241	95 89	1,321 1,167	1,348 1,220
7/20/82	13 18	969 1,166	89 92	890 1,079	908 1,121	9/22/83 6/1/84	18 17	819 774	77 80	758 749	794 774		7/18/85 7/19/85	17 16	1,198 1,182	88 89	1,138	1,198 1,176
7/28/82	18	1,212	91	1,090	1,157	6/4/84	18	1,201	94	1,057	1,144		7/23/85	18	1,273	89	1,209	1,269
7/29/82	18 17	1,155 1,179	91 95	1,104 1,119	1,150 1,179	6/5/84 6/6/84	19 17	1,203 1,189	92 88	1,114	1,165 1,189		7/25/85 7/26/85	18 19	1,117	85 87	981 1,048	1,064 1,095
8/2/82	18	1,037	91 02	997	1,027	6/7/84	18	1,100	85	1,023	1,081		7/30/85	18 17	1,222	92 89	1,154	1,213 1,192
8/3/82 8/4/82	19 18	1,157 1,160	92 91	1,079 1,068	1,098 1,115	6/8/84 6/11/84	16 18	1,098 1,038	86 85	1,003 955	1,061 1,027		8/2/85 8/5/85	18	1,192 1,193	90	1,138 1,138	1,188
8/5/82 8/10/82	17 17	1,160 1,137	91 92	1,098 1,088	1,160. 1,137	6/12/84 6/14/84	18 19	1,121 1,031	86 87	1,024 993	1,069 1,019		8/9/85 8/13/85	18 18	1,144 1,240	88 91	1,081	1,136 1,226
8/11/82	18	1,196	92	1,092	1,120	6/15/84	16	1,105	87	1,053	1,090		8/15/85	18	1,208	90	1,145	1,198
8/12/82 8/17/82	18 17	1,230 1,116	95 89	1,128	1,186 1,116	6/18/84 6/19/84	19 18	1,197 1,234	90 93	1,127	1,154 1,224		8/16/85 8/21/85	18 17	1,278 1,223	93 90	1,239	1,276 1,223
8/19/82 8/20/82	17 16	970 1,084	84 91	948 1,038	970 1,068	6/22/84	19 17	1,110	85	1,012	1,068 1,173		8/26/85 8/28/85	18 18	1,355	93 89	1,261	1,338 1,218
8/24/82	20	1,215	95	1,138	1,188	6/25/84 6/26/84	17	1,173 1,182	91 88	1,087 1,143	1,173		9/2/85	21	1,024	89	1,154 927	987
8/25/82 8/27/82	17 16	1,238 1,216	95 93	1,219 1,152	1,238 1,179	6/28/84 7/3/84	19 16	1,109 1,104	88 88	1,064	1,091 1,064		9/3/85 9/5/85	17 17	1,279	90 90	1,195 1,133	
8/30/82	18	1,131	89	1,036	1,083	7/4/84	18	1,022	89	890	967		9/6/85	16	1,132	90	1,114	1,129
8/31/82 9/1/82	17 18	1,121	88 90	1,018 1,034	1,121 1,102	7/5/84	17 17	1,204 1,184	90 90	1,136	1,204 1,184		9/9/85 9/10/85	17 19	1,351 1,319	93 93	1,240	
9/2/82 9/3/82	18 17	1,121 1,176	92 96	1,061	1,101 1,176	7/9/84 7/10/84	17 16	1,226	91 90	1,206	1,226 1,210		9/12/85 9/13/85	17	1,078 1,023		1,057	1,078 1,023
9/6/82	17	842	87	1,124 822	842	7/11/84	17	1,261	92	1,209	1,261		9/16/85	20	860	77	830	855
9/7/82	16 17	1,001	88 90	981 1,061	1,001) 1,114	7/12/84	18 18	1,293 1,257	93 92	1,228	1,290 1,228		9/18/85 9/19/85	17 18	937 1,007	86 86	915	
9/14/82	18	1,092	89	1,051	1,071	7/17/84	17	1,282	91	1,205	1,282		9/20/85	17	932	84	916	932
9/15/82 9/16/82	17 17	1,025 1,127	90 91	993 1,068	1,025 1,127	7/20/84	16 19	952 1,151	82 86	929			9/23/85 9/24/85	18 18	1,144		1,081 1,136	
9/20/82 9/22/82		1,135 851	92 83	1,073 817	1,121 851	7/24/84 7/25/84	19 17	1,231 1,252	88 89	1,090			9/25/85 9/26/85				1,143	
9/28/82	18	1,032	85	994	1,031	7/26/84	18	1,177	91	1,146	1,161		9/27/85	17	1,135	84	1,100	1,135
9/29/82 9/30/82	17 17	1,034 1,024	84 78	984 998	1,034 1,024	7/27/84	16 19	1,249 1,231	90 89	1,107		ł	9/30/85 6/3/86		953 1,230		936 1,177	
6/1/83 6/2/83		1,018 987	88 82	962 932	1,018 987	8/3/84 8/7/84		1,184	89 93	1,142			6/4/86 6/5/86		1,174 1,229		1,146 1,181	1,170
6/3/83	18	1,046	87	991	1,038	8/8/84	18	1,299 1,335	94	1,252	1,321		6/6/86	18	1,223	90	1,142	1,208
6/8/83 6/9/83	18 17	816 953	74 83	788 886	803 953	8/9/84		1,295 1,320	92 93	1,236 1,254			6/9/86 6/11/86		1,429		1,385	
6/14/83	17	1,003	83	956	1,003	8/14/84	16	1,315	93	1,243	1,301		6/16/86	17	1,302	2 92	1,261	1,302
6/15/83 6/16/83	18	968 1,045	87 85	883 985	942 1,038	8/15/84 8/16/84		1,244 1,306	93 94	1,199 1,264			6/18/86 6/23/86		1,257 1,277		1,197	1,274
6/17/83 6/20/83		1,059 1,056		988 1,006	1,034 1,040	8/17/84 8/22/84	17	1,315 941	94 79	1,266 894	1,315		6/24/86 6/25/86	18			1,277 1,363	
6/21/83	13	900	79	857	881	8/23/84	19	900	82	779	826		6/27/86	17	1,405	5 94	1,358	1,405
6/24/83 6/28/83		983 1,153	85 89	936 1,106	961 1,153	8/24/84 8/27/84				1,078			7/1/86 7/4/86				1,160	
6/29/83 7/5/83	17	1,148 1.196	91	1,100	1,148 1,190	8/28/84	19	1,081		1,018	1,047		7/7/86	18	1,386	5 90	1,32	2 1,374
7/6/83	18	1,209	92 89	1,155 1,046	1,144	8/29/84 8/30/84	18	1,194	90	1,014 1,108	1,154		7/8/86 7/9/86	18	1,525	97	1,42	1,516
7/7/83		1,197 1,246	91 92	1,180 1,146	1,197 1,230	8/31/84 9/3/84				1,143			7/10/86		1 .			
7/12/83	18	1,227	92	1,154	1,225	9/5/84	21	939	79	894	915		7/16/86	5 17	1,523	3 97	1,46	5 1,523
7/13/83 7/14/83	17	1,263 1,285		1,162 1,227	1,238 1,285	9/10/84 9/11/84	18			832			7/17/86				1,34	1,398
7/15/83 7/18/83	17	1,119 1,381	95	1,085 1,327	1,119 1,376	9/12/84 9/13/84	l 19	1,198	89	1,093 1,151	1,154		7/21/86 7/28/86	18	1,430	93 93		4 1,419
7/19/83		1,311	98	1,327	1,311	9/13/84				1,15			7/29/86					



Load and Energy Forecast

									inan				_						
Date 7/30/86	Hr 18	MW 1,553	MaxT 97	MW3pm 1,474	MW5pm 1,545	Da	te 5/87	Hr 17	MW	MaxT 86	MW3pm 1,075	MW5pm		Date 7/12/80	Hr 17	MW	MaxT 97	MW3pm	MW5pm 1,714
7/31/86	16	1,534	99	1,514	1,530		8/87	17	1,147 1,273	88	1,075	1,147 1,273		7/12/89 7/18/89	19	1,714	88	1,671. 1,237	1,288
8/7/86	18	1,414	94	1,330	1,409	9/2	9/87	18	1,292	87	1,229	1,267	·	7/19/89	13	1,401	90	1,307	1,350
8/14/86	18 17	1,196	88 93	1,152	1,193		0/87	18	1,118	80	1.049	1.097		7/24/89	18	1,510	89	1,448	1,498
8/18/86 8/19/86	17	1,415 1,343	90	1,350 1,304	1,415 1,343		1/88 2/88	18 18	1,291 1,383	87 96	1,204 1,275	1,274 1,373		7/25/89 7/26/89	18 17	1,594 1,448	90 88	1,527 1,429	1,593 1,448
8/21/86	16	1,313	92	1,273	1,311		3/88	17	1,405	95	1,343	1,405		7/27/89	18	1,550	92	1,481	1,548
8/22/86	17	1,325	91	1,301	1,325		8/88	18	1,356	89	1,258	1,340		7/28/89	17	1,623	94	1,545	1,623
8/25/86 8/26/86	17 18	1,485 1,429	92 92	1,428 1,391	1,485 1,426		9/88 3/88	18 18	1,352 1,115	89 83	1,229 1,071	1,335 1,104		8/1/89 8/3/89	17 16	1,680 1,597	95 95	1,621 1,565	1,680 1,596
8/27/86	17	1,503	94	1,409	1,503		4/88	17	1,200	84	1,164	1,200		8/4/89	17	1,576	93	1,526	1,576
9/1/86	18	1,106	86	1,053	1,096		5/88	18	1,184	84	1,128	1,175		8/10/89	17	1,290	83	1,254	1,290
9/2/86 9/3/86	17 17	1,293 1,306	89 89	1,255 1,244	1,293 1,306		6/88 7/88	18 17	1,263 1,346	86 92	1,189 1,289	1,249 1,346		8/11/89 8/15/89	17 18	1,315 1,496	86) 91	1,269 1,404	1,315 1,488
9/4/86	17	1,369	89	1,312	1,369		0/88	17	1,301	86	1,266	1,301		8/16/89	17	1,540	92	1,483	1,540
9/8/86	18	1,247	86	1,201	1,218		1/88	17	1,344	89	1,302	1,344		8/17/89	18	1,597	93	1,533	1,590
9/10/86 9/11/86	18 17	1,041 1,308	85 92	997 1,225	1,021 1,308		2/88 3/88	17 17	1,480 1,522	97 97	1,401 1,470	1,480 1,522		8/21/89 8/23/89	18 17	1,528 1,669	91 94	1,505 1,584	1,526 1,669
9/15/86	18	1,335	88	1,259	1,331		4/88	18	1,572	99	1,518	1,558		8/24/89	16	1,647	96	1,605	1,643
9/16/86	18 17	1,354	89	1,286	1,349		7/88	18	1,555	96	1,482	1,551		8/28/89	17	1,505	90	1,456	1,505
9/17/86 9/18/86	18	1,257 1,168	86 84	1,229 1,120	1,257 1,165		8/88 9/88	18 18	1,207 1,469	85 89	1,170 1,400	1,187 1,465		8/29/89 8/30/89	17 18	1,593 1,639	92 94	1,512	1,593 1,637
9/19/86	17	1,205	86	1,160	1,205		0/88	17	1,519	94	1,485	1,519		9/1/89	17	1,522	93	1,479	1,522
9/23/86	18	1,295	91	1,227	1,289		4/88	17	1,122	87	1,106	1,122		9/5/89	18	1,444	89	1,343	1,435
9/24/86 9/25/86	18 17	1,369 1,365	93 93	1,290 1,307	1,361 1,365		6/88 7/88	17 17	1,271 1,262	86 86	1,218 1,246	1,271 1,262		9/6/89 9/8/89	17 17	1,430	90 89	1,379 1,394	1,430 1,424
9/26/86	17	1,302	92	1,230	1,302	7	8/88	17	1,351	87	1,295	1,351		9/11/89	18	1,482	89	1,403	1,479
9/29/86	18 18	1,336	89 90	1,284	1,316		2/88	18	1,486	95	1,446	1,472		9/12/89	17	1,472	89	1,402	1,472
6/1/87 6/2/87	18	1,329 1,387	90	1,234 1,301	1,312 1,346		5/88 9/88	17 18	1,553 1,474	98 93	1,536	1,553 1,473		9/13/89 9/15/89	18 17	1,332	88 94	1,264 1,466	1,325 1,522
6/3/87	18	1,423	95	1,343	1,417	7/2	0/88	17	1,551	92	1,514	1,551		9/19/89	16	1,303	85	1,267	1,301
6/5/87	18 18	1,252	88 86	1,176	1,240		5/88		1,487	94	1,381	1,487		9/20/89	17	1,355	87	1,282	1,355
6/8/87 6/9/87	18	1,252 1,300	89	1,185 1,220	1,248 1,293		26/88 27/88	17 17	1,460 1,499	93 94	1,381 1,447	1,460 1,499		9/21/89 9/25/89	16 20	1,238 1,176	83 80	1,220	1,238 1,155
6/10/87	17	1,376	95	1,310	1,376	7/2	8/88	17	1,513	94	1,474	1,513		9/26/89	17	1,387	89	1,290	1,387
6/11/87 6/12/87	17 17	1,345	94 95	1,317 1,354	1,345		29/88		1,487	93	1,452	1,474		9/28/89	20	1,193	79.	1,112	1,170
6/15/87	18	1,389	94	1,312	1,406 1,380		/1/88 /2/88		1,546 1,488	95 95	1,451	1,546 1,488		9/29/89 6/1/90	17 17	1,369 1,416	87 86	1,319 1,369	1,369 1,416
6/16/87	17	1,414	93	1,366	1,414	8	/9/88	17	1,491	92	1,369	1,491		6/5/90	17	1,387	90	1,326	1,387
6/24/87 6/29/87	17 17	1, <b>414</b> 1, <b>39</b> 7	93 91	1,380 1,345	1,414 1,397		0/88 1/88		1,510	93 90	1,475	1,510		6/6/90	18	1,503	90	1,456	1,487 1,550
7/1/87	17	1,449	90	1,419	1,449		2/88		1,466 1,453	90	1,424	1,466 1,453		6/8/90 6/12/90	16 17	1,556 1,449	94 89	1,514	1,449
7/6/87	17	1,456	95	1,432	1,456	8/	5/88	18	1,390	90	1,354	1,389		6/13/90	17	1,409	86	1,360	1,409
7/7/87 7/8/87	17 17	1,503 1,491	95 95	1,463 1,465	1,503 1,491		7/88 8/88		1,523 1,554	92 94	1,452 1,516	1,523 1,554		6/14/90 6/15/90	18 17	1,497 1,577	92 96	1,393 1,523	1,481 1,577
7/13/87	18	1,605	99	1,552	1,593		9/88			94	1,565	1,584		6/18/90	17	1,556	90	1,525	1,556
7/16/87	17	1,432	93	1,369	1,432	8/2	2/88	18	1,655	96	1,615	1,651		6/19/90	17	1,693	99	1,619	1,693
7/17/87 7/21/87	17 18	1,385 1,483	89 90	1,350 1,400	1,385 1,472		24/88 29/88		1,627 1,533	94 92	1,560	1,627 1,533		6/20/90 6/21/90	17 17	1,789 1,768	100 99	1,747	1,789 1,768
7/22/87	18	1,462	93	1,400	1,456		31/88		1,469	90	1,430	1,469		6/25/90	17	1,536	94	1,498	
7/23/87	17	1,555	99	1,492	1,555		/1/88			88	1,130	1,181		6/27/90	17	1,473	90	1,442	1,473
7/24/87 7/27/87	17 18	1,513 1,543	92 95	1,480 1,473	1,513 1,538		/5/88 /6/88		1,046 1,144	82 79	957 1,117	998	1	6/28/90 6/29/90	18 17	1,528 1,605	92 97	1,504	1,521 1,605
7/28/87	18	1,585	96	1,505	1,563		/8/88			75	975			7/3/90	18	1,261	84	1,106	
7/29/87	16	1,523	94	1,465	1,500		/9/88		1,406	91	1,381	1,406		7/4/90	18	1,414	94	1,358	
8/3/87 8/6/87	17 17	1,504 1,591	94 98	1,440 1,528	1,504 1,591		12/88 13/88		1,479 1,420	89 86	1,455			7/5/90 7/6/90	18 17	1,677 1,695	95 97	1,593 1,630	
8/7/87	17	1,628	98	1,572	1,628		4/88		1,491	89	1,425			7/9/90		1,734	96	1,671	
8/10/87 8/11/87	17 17	1,615 1,583	99 96	1,590 1,548	1,615 1,583		20/88 21/88		1,500 1,544	94 94	1,436			7/11/90		1,749		1,686	
8/13/87	13	1,186	86	1,126	1,159		22/88			94	1,499			7/16/90 7/17/90		1,571 1,574	92 89	1,495	
8/17/87	18	1,531	94	1,462	1,524	9/:	23/88	16	1,426	92	1,404	1,425		7/19/90	17	1,638	91	1,580	1,638
8/18/87 8/19/87	18 17	1,588 1,588	95 95	1,514 1,548	1,585 1,588		27/88 28/88			82 86	1,211			7/20/90 7/26/90		1,451 1,523	89 89	1,378	
8/20/87	18	1,462	95	1,383	1,438	9/	29/88	17		86	1,302	1,356		7/27/90		1,551	91	1,502	
8/21/87	18	1,430	90	1,402	1,425	9/	30/88	16		85	1,229	1,252		7/30/90	18	1,680	94	1,601	
8/24/87 8/25/87	17 18	1,596 1,580	99 95	1,547 1,499	1,596 1,561		/1/89 /2/89			94 97	1,430			7/31/90 8/1/90		1,728 1,775	98 97	1,691 1,724	
8/28/87	17	1,552	96	1,489	1,552	] e	/7/89	17	1,384	90	1,336			8/3/90		1,594	90	1,567	
9/3/87	21	1,093	82	1,034	1,059	1 6	/8/89	17		80	1,092	2 1,152		8/13/90	17	1,577	92	1,546	1,577
9/4/87 9/7/87	17 18	1,117 1,268	82 91	1,070 1,174	1,117 1,257		12/89 13/89			95 95	1,551			8/16/90 8/20/90		1,652 1,710		1,576	
9/8/87	18	1,424	92	1,382	1,408	6/	14/89	18	1,645	96	1,568	1,644		8/21/90	17	1,737	96	1,664	1,737
9/9/87 9/10/87	18	1,498	92	1,403	1,492		15/89			96	1,595	5 1,627	1	8/23/90	18	1,571	92	1,496	1,561
9/10/87 9/14/87	18 18	1,504 1,489	94 93	1,417	1,500 1,480		16/89 22/89			94 89	1,513 1,374			8/24/90 8/28/90		1,593 1,677	94 95	1,554	
9/15/87	17	1,421	91	1,377	1,421	6/	26/89	17	1,512	91	1,464	1,512		8/29/90	17	1,760	99	1,729	1,760
9/16/87	17	1,405	92	1,372	1,405		27/89			92	1,510			8/30/90		1,665	97	1,635	
9/17/87 9/18/87	18 17	1,462 1,468	93 93	1,410 1,414	1,459 1,468		28/89 7/3/89			95 94	1,562			8/31/90 9/3/90		1,533 1,419		1,489	
9/21/87	18	1,358	88	1,280	1,340	1 7	/5/89	17	1,567	93	1,523	1,567	'	9/4/90	17	1,516	91	1,476	5 1,516
9/22/87 9/23/87	18 17	1,161 1,106	87 84	1,082 1,057	1,145 1,106		76/89 77/89			92 93	1,458 1,448			9/5/90				1,274	
9/23/87	18	1,106	84 85	1,057	1,106		11/85			93 96	1,448			9/6/90 9/7/90			89 95	1,399 1,487	
						<u> </u>					1,74				1 11			11	1,010



Load and Energy Forecast

													-					1017-17
Date 9/10/90	Hr 18	MW 1,645	MaxT 94	MW3pm 1,588	MW5pm 1,637	Date 7/1/92	Hr 17	MW 1,644	MaxT 93	MW3pm 1,618	MW5pm 1,644	ł	Date 8/13/93	Hr 17	<u>MW</u> 1,797	MaxT 94	MW3pm 1,724	MW5pm 1,797
9/11/90	17	1,628	93	1,570	1,628	7/2/92	17	1,730	94	1,658	1,730		8/16/93	17	1,786	90	1,730	1,786
9/12/90	17	1,609	91	1,564	1,609	7/3/92	18	1,652	94	1,569	1,645	<u>ا</u>	8/17/93	17	1,793	91	1,731	1,793
9/13/90 9/14/90	17 18	1,624 1,566	92 95	1,565 1,490	1,624 1,564	7/6/92 7/7/92	18 17	1,807 1,834	95 97	1,727 1,802	1,794 1,834		8/18/93 8/20/93	17 17	1,920 1,861	97 94	1,853 1,813	1,920 1,861
9/17/90	17	1,579	93	1,515	1,579	7/9/92	17	1,882	97	1,844	1,882		8/23/93	17	1,822	92	1,789	1,822
9/18/90	17	1,430	89	1,405	1,430	7/10/92	17	1,855	98	1,786	1,855		8/24/93	18	1,803	89	1,744	1,795
9/19/90 9/20/90	18 17	1,473 1,521	89 94	1,387 1,431	1,463 1,521	7/13/92 7/14/92	17 17	1,816 1,740	96 94	1,734 1,693	1,816 1,740		8/25/93 8/27/93	18 18	1,769 1,488	90 88	1,722 1,377	1,766) 1,462
9/21/90	17	1,609	97	1,519	1,609	7/20/92	18	1,715	91	1,633	1,714		8/30/93	18	1,729	88	1,655	1,728
9/24/90	17	1,092	80	1,047	1,092	7/21/92	18	1,633	92	1,571	1,602		8/31/93	18	1,742	89	1,673	1,735
9/25/90	18 18	1,169 1,319	86 89	1,094 1,229	1,168 1,312	7/22/92 7/23/92	16 17	1,732 1,791	93 94	1,687 1,721	1,715 1,791		9/3/93 9/6/93	17 16	1,806 1,551	92 94	1,768 1,525	1,806 1,546
9/27/90	17	1,415	89	1,339	1,415	7/24/92	17	1,712	94	1,668	1,712		9/7/93	17	1,574	89	1,453	1,574
6/3/91	18	1,615	92	1,505	1,599	7/27/92	17	1,848	96	1,787	1,848		9/8/93	18	1,510	86	1,379	1,475
6/4/91 6/6/91	17	1,705 1,091	96 80	1,646 1,061	1,705 1,086	7/29/92 7/31/92	17 17	1,805 1,704	95 95	1,785 1,640	1,805 1,704		9/10/93 9/13/93	17 17	1,644 1,675	90 87	1,624 1,630	1,644, 1,675,
6/10/91	18	1,358	83	1,284	1,349	8/5/92	17	1,717	93	1,640	1,717		9/14/93	17	1,694	89	1,674	1,694
6/11/91	17	1,437	87	1,366	1,437	8/6/92	18		92	1,542	1,578		9/15/93	18	1,734	91	1,693	1,727
6/12/91 6/13/91	18 18	1,479 1,572	91 91	1,400 1,492	1,471 1,565	8/7/92 8/10/92	17 17	1,692 1,769	93 97	1,645 1,693	1,692 1,769		9/16/93 9/17/93	18 16	1,724 1,745	92 90	1,635 1,723	1,716 1,745
6/20/91	16	1,632	95	1,580	1,626	8/11/92	18	1,741	94	1,695	1,735		9/21/93	17	1,759	92	1,679	1,759
6/21/91	17	1,661	94	1,604	1,661	8/12/92	16		94	1,667	1,686		9/22/93	17	1,729	92	1,640	1,729
6/26/91 6/27/91	18 18	1,474 1,584	87 91	1,380 1,549	1,458 1,580	8/19/92 8/20/92	17 18	1,648 1,658	91 91	1,567 1,577	1,648 1,648		9/23/93 9/24/93	17 17	1,657 1,663	91 92	1,598 1,590	1,657 1,663
7/1/91	18	1,607	91	1,558	1,603	8/21/92	17	1,649	92	1,603	1,649		9/27/93	17	1,543	89	1,458	1,543
7/2/91	17	1,695	96	1,625	1,695	8/25/92	18	1,638	90	1,570	1,634		9/28/93	17	1,395	82	1,344	1,395
7/3/91 7/4/91	17 17	1,682 1,502	94 94	1,660	1,682 1,502	8/26/92 8/27/92	18 18		91 92	1,602 1,618	1,683 1,723		9/29/93 9/30/93	18 18	1,254 1,159	83 79	1,184 1,107	1,248 1,155
7/8/91	17	1,714	96	1,653	1,714	8/28/92			86	1,356	1,417		6/1/94	18	1,688	90	1,567	1,687
7/10/91	18	1,565	90	1,378	1,558	9/1/92		1,652	90	1,598	1,652		6/2/94	17	1,570	90	1,510	1,570
7/11/91 7/12/91	18 19	1,388 1,299	89 88	1,171	1,344 1,234	9/3/92 9/7/92	17 17	1,578 1,467	90 91	1,537 1,420	1,578 1,467		6/8/94 6/9/94	16 18	1,581 1,770	91 93	1,543 1,718	1,573 1,758
7/15/91	17	1,666	94	1,613	1,666	9/9/92	18		86	1,367	1,410		6/10/94	17	1,715	92	1,643	1,715
7/16/91	17	1,642	93	1,581	1,642	9/10/92	21	1,178	79	1,111	1,139		6/14/94	17	1,773	95	1,727	1,773
7/22/91 7/24/91	17 17	1,711 1,756	98 95	1,660 1,685	1,711 1,756	9/11/92 9/14/92	17 18		89 85	1,393	1,486 1,338		6/17/94 6/20/94	18 17	1,416 1,731	84 89	1,257 1,657	1,395 1,731
7/25/91	17	1,665	93	1,644	1,665	9/15/92		1,258	82	1,178	1,208		6/22/94	17	1,813	92	1,753	1,813
7/29/91	16	1,681	95	1,639	1,665	9/16/92			87	1,466	1,528	1	6/24/94	17	1,770	92	1,711	1,770
8/1/91 8/2/91	17 17	1,458 1,582	88 92	1,415 1,524	1,458 1,582	9/17/92 9/18/92			88 90	1,544	1,578 1,565		6/27/94 6/28/94	18 17	1,808 1,885	91 94	1,716 1,785	1,793 1,885
8/6/91	17	1,697	95	1,641	1,697	9/21/92	17	1,653	94	1,603	1,653		6/29/94	17	1,895	94	1,821	1,895
8/7/91	18	1,735	95	1,687	1,722	9/22/92			94	1,646		l	6/30/94	17	1,826	92	1,755	1,826
8/9/91	17 18	1,677 1,534	96 91	1,628 1,460	1,677 1,527	9/23/92 9/28/92			92 85	1,624 1,254	1,695 1,309	1	7/1/94 7/4/94	17 16	1,686 1,419	92 89	1,632	1,686 1,419
8/16/91	17	1,519	89	1,489	1,519	6/1/93	17	1,570	89	1,494	1,570		7/5/94	17	1,732	92	1,661	1,732
8/20/91	17	1,630	93 92	1,551	1,630	6/2/93 6/3/93			91 93	1,558			7/8/94	17 17	1,753	90 95	1,655 1,805	1,753 1,849
8/21/91 8/22/91	18 17	1,645 1,553	92 89	1,553	1,643 1,553	6/4/93			92	1,594	1,692 1,678		7/11/94 7/12/94	17	1,849 1,852	95	1,805	1,852
8/23/91	17	1,539	89	1,492	1,539	6/7/93	18	1,859	100	1,801	1,850		7/13/94	17	1,848	93	1,756	1,848
8/26/91	17 18	1,659 1,432	93 88	1,584 1,350	1,659 1,424	6/8/93 6/9/93			99 96	1,815			7/14/94 7/15/94	18 17	1,815 1,843	94 93	1,729 1,776	1,814 1,843
8/28/91	18	1,602	92	1,539	1,594	6/10/93			99	1,850			7/18/94	17	1,918		1,855	1,918
8/29/91	18	1,551	89	1,431	1,530	6/11/93	17	1,879	99	1,849	1,879		7/19/94	16	1,883	95	1,855	1,875
9/2/91 9/3/91	21 17	1,215 1,366	86 86	1,131	1,182 1,366	6/15/93 6/16/93			88 87	1,602 1,639			7/28/94	13	1,436 1,815		1,383 1,764	1,409 1,815
9/4/91	18	1,523	89	1,462	1,515	6/17/93			87	1,576			8/2/94		1,871		1,808	
9/5/91		1,560		1,495	1,550	6/18/93	17	1,567		1,526	1,567		8/3/94	17	1,860	90	1,789	1,860
9/6/91 9/9/91	17 18	1,554 1,527	92 91	1,524	1,554 1,524	6/21/93				1,677			8/4/94 8/5/94			91 93	1,808 1,810	
9/10/91	18	1,492	89	1,396	1,486	6/25/93	17	1,524	89	1,473	1,524		8/8/94	17	1,556	86	1,504	1,556
9/11/91	17	1,564	90 94	1,498		6/30/93				1,694			8/9/94				1,487	
9/12/91 9/13/91	17 17	1,637	94	1,573 1,573		7/5/93				1,656			8/10/94				1,652	
9/16/91	18	1,654	96	1,589	1,649	7/9/93	17	1,838	95	1,813	1,838		8/19/94	16	1,740	91	1,722	1,737
9/17/91 9/18/91	17 18	1,587 1,505	95 94	1,505 1,342		7/12/93				1,737			8/23/94 8/24/94				1,499	
9/19/91		1,654	94	1,342	1,643	7/15/93				1,774			8/24/94				1,621	
9/23/91	18	1,434	85	1,353	1,432	7/16/93	17	1,872	95	1,825	5 1,872		8/26/94	17	1,664	86	1,602	1,664
9/24/91 9/25/91		1,558 1,213	90 88	1,466		7/19/93				1,870 1,850			8/29/94 8/30/94				1,695 1,758	
9/26/91		1,213		1,144		7/20/93				1,850			8/30/94				1,750	
9/27/91	17	1,143	83	1,121	1,143	7/27/93	8 17	1,818	94	1,746	5 1,818	3	9/1/94	18	1,868	93 93	1,775	1,850
9/30/91 6/2/92		1,148 1,522	83 87	1,115		7/28/93				1,865			9/2/94				1,798	
6/4/92		1,522	91	1,437		7/30/93				1,942			9/5/94		1,607	90	1,250	
6/5/92	13	1,464	89	1,370	1,405	8/2/93	18	3 1,914	96	1,854	1,911	1	9/7/94	17	1,686	91	1,621	1,686
6/10/92 6/11/92		1,721 1,707	92 92	1,588		8/4/93 8/5/93				1,818			9/12/94				1,494	
6/16/92		1,607	90	1,576		8/6/93				1,840			9/13/94				1,468	
6/17/92	18	1,539		1,507	1,534	8/9/93			92	1,792	2 1,839		9/15/94	17	1,690	87	1,611	1,690
6/18/92 6/25/92		1,549 1,677		1,490		8/10/93 8/11/93				1,697			9/19/94 9/21/94					
6/26/92		1,628		1,530		8/12/93							9/22/94			7 83		



Date	Hr	MW	MaxT	MW3pm	MW5pm	Date	Hr	MW T	MaxT	MW3pm	MW5pm	Date	Hr	MW	MaxT	MW3pm	MW5pm
9/23/94	17	1,455	84	1,419	1,455	7/3/96	16	1,973	94	1,944	1,962	8/22/97	17	1,890	88	1,827	1,890
9/26/94 9/27/94	18 17	1,518 1,466	86 84	1,387 1,410	1,502 1,466	7/8/96	17 19	1,852 1,612	93 85	1,797 1,445	1,852 1,557	8/25/97	18 18	1,691 1,759	85 85	1,641 1,671	1,685 1,748
9/28/94	17	1,506	87	1,453	1,506	7/10/96	17	1,929	92	1,876	1,929	8/27/97	18	1,657	84	1,592	1,636
9/29/94	17	1,623	91	1,541	1,623	7/11/96	16	1,752	88	1,711	1,750	8/28/97		1,947	92	1,828	1,936
9/30/94	17 17	1,559	86 94	1,512	1,559	7/15/96	18	1,987	93	1,941	1,973	8/29/97	17	2,007	93 89	1,952	2,007
6/1/95 6/5/95	18	1,810 1,585	94 86	1,759	1,810 1,581	7/16/96	18 17	1,835 1,933	89 90	1,741 1,862	1,819 1,933	9/1/97 9/2/97		1,692 1,814	89	1,648 1,751	1,680 1,814
6/6/95	18	1,796	93	1,673	1,780	7/18/96	18	1,953	91	1,869	1,946	9/3/97			91	1,814	1,911
6/7/95	18	1,887	93	1,789	1,877	7/19/96	17	1,994	93	1,931	1,994	9/5/97		1,610	81	1,566	1,610
6/8/95	18 17	1,918 1,979	95 100	1,838 1,940	1,910 1,979	7/22/96	18 17	2,033 2,063	92 94	1,953 2,024	2,020 2,063	9/8/97 9/9/97		1,764 1,816	86. 89	1,674 1,718	1,764 1,815
6/13/95	17	1,573	86	1,510	1,573	7/25/96	16	1,987	94	1,948	1,970	9/11/97	18	1,864	91	1,832	1,858
6/14/95	17	1,510	86	1,456	1,510	7/26/96	17	1,932	89	1,864	1,932	9/12/97			90	1,834	1,886
6/15/95 6/19/95	17 17	1,561 1,594	85 87	1,450 1,493	1,561 1,594	7/29/96	17 17	2,023 2,014	94 92	1,939 1,954	2,023 2,014	9/15/97		1,905 1,921	88 90	1,831 1,866	1,902 1,921
6/20/95	17	1,621	89	1,529	1,621	7/31/96	17	2,016	92	1,952	2,016	9/17/97		1,931	88	1,857	1,931
6/21/95	16	1,616	88	1,588	1,615	8/2/96	17	1,628	85	1,564	1,628	9/18/97		1,911	90	1,852	1,911
6/22/95 6/23/95	18 17	1,664 1,823	87 93	1,568 1,760	1,653 1,823	8/5/96 8/8/96	17 18	1,948 1,803	91 87	1,882 1,764	1,948 1,800	9/19/97		1,917 1,840	90 87	1,872 1,746	1,917 1,833
6/28/95	16	1,841	95	1,801	1,817	8/9/96	17	1,861	89	1,797	1,861	9/23/97			87	1,733	1,827
7/4/95	17	1,695	96	1,626	1,695	8/15/96	17	1,724	90	1,638	1,724	9/24/97	17		91	1,866	1,959
7/5/95 7/6/95	17 17	1,928	97 95	1,862 1,860	1,928	8/16/96	17 17	1,767 1,884	87 88	1,727	1,767 1,884	9/29/97			87 88	1,668	1,750
7/11/95	17	1,923 1,873	96	1,800	1,923 1,873	8/19/96 8/20/96	17	1,808	88	1,847 1,752	1,808	9/30/97 6/1/98			95	1,656 2,012	1,748 2,145
7/12/95	18	1,877	92	1,794	1,840	8/21/96	18	1,734	87	1,694	1,723	6/2/98	18	2,301	98	2,210	2,277
7/13/95 7/14/95	17 17	1,886 1,858	92 94	1,833 1,811	1,886 1,858	8/22/96 8/23/96	17 17	1,838 1,810	87 87	1,766 1,743	1,838 1,810	6/3/98			98 97	2,164 2,199	2,277 2,269
7/17/95	17	1,858	94 85	1,811	1,858	8/23/96 8/26/96	17	1,810	87 86	1,743	1,643	6/4/98			97 98	2,199	2,269
7/18/95	18	1,760	88	1,592	1,751	8/27/96	18	1,886	90	1,777	1,869	6/8/98	3 18	1,788	83	1,708	1,784
7/19/95	17	1,901	93 98	1,814	1,901	8/28/96	17	1,945	90	1,846	1,945	6/9/98			88 95	1,818	1,888
7/20/95 7/24/95	17 17	1,978 2,034	96	1,924 1,972	1,978 2,034	8/29/96 9/3/96	17 18	1,820 1,835	86 90	1,738 1,746	1,820 1,825	6/10/98			95 97	2,015 2,129	2,106 2,207
7/26/95	17	1,893	93	1,811	1,893	9/4/96	17	1,798	89	1,718	1,798	6/12/98			99	2,150	2,226
7/28/95	18	1,728	89	1,691	1,719	9/5/96	18	1,788	88	1,611	1,761	6/15/98			101	2,205	2,262
8/1/95 8/2/95	17 17	1,790 1,586	88 84	1,759 1,507	1,790 1,586	9/6/96 9/11/96	16 17	1,888 1,642	90 87	1,851 1,578	1,884 1,642	6/16/9/ 6/17/9/			100 99	2,169 2,212	2,253 2,256
8/3/95	18	1,668	88	1,534	1,632	9/12/96	18	1,763	88	1,682	1,762	6/18/9			100	2,267	2,299
8/4/95	17	1,856	89	1,811	1,856	9/13/96	17	1,781	90	1,757	1,781	6/19/9			103	2,237	2,257
8/7/95 8/9/95	17 17	1,989 1,747	94 86	1,928 1,701	1,989 1,747	9/17/96 9/18/96	18 17	1,687 1,800	88 87	1,547 1,735	1,643 1,800	6/22/9			97 99	2,192 2,179	2,231 2,220
8/10/95	18	1,739	88	1,680	1,730	9/20/96	17	1,507	82	1,461	1,507	6/24/9	8 18	2,248	97	2,117	2,226
8/11/95	16	1,847	92	1,814	1,843	9/23/96	18	1,580	87	1,447	1,566	6/26/9			90	1,970	2,047
8/14/95 8/16/95	18 17	2,067 2,001	96 93	2,015	2,066 2,001	9/24/96 9/25/96	18 18	1,632 1,644	87 86	1,508 1,555	1,627 1,642	6/29/9 6/30/9			100 99	2,276 2,225	2,319 2,301
8/17/95	17	2,038	94	1,991	2,038	9/26/96	17	1,698	86	1,617	1,698	7/1/9		1 ·	99	2,279	2,328
8/21/95	18	1,689	86	1,603	1,680	9/27/96	17	1,678	87	1,651	1,678	7/2/9			98	2,229	2,262
8/22/95 8/23/95	18 17	1,659 1,783	87 87	1,562 1,732	1,645 1,783	9/30/96 6/2/97	17 17	1,593 1,620	84 84	1,568 1,556	1,593 1,620	7/3/9			95 90	2,010 1,971	2,063 2,056
8/25/95	18	1,460	84	1,378		6/3/97	18	1,616	84	1,557	1,614	7/8/9		2,246	96	2,173	2,238
8/28/95	17	1,937	90	1,869	1,937	6/10/97	18	1,456	79	1,397	1,442	7/9/9			97	2,258	2,310
8/29/95 8/30/95	17 17	1,543 1,735	83 86	1,497 1,704	1,543 1,735	6/11/97 6/16/97	17 18	1,553 1,854	83 88	1,526	1,553 1,844	7/10/9			94 83	2,081 1,548	2,149 1,576
8/31/95	18	1,752	86	1,701	1,740	6/18/97	14	1,809	91	1,715	1,798	7/14/9		1,720	82	1,611	1,713
9/1/95 9/4/95	17 21	1,631 1,381	86 84	1,564	1,631	6/19/97	17 18	1,886 1,730	89 87	1,817	1,886	7/17/9			88 92	1,743 2.001	1,765 2,069
9/6/95	17	1,436		1,275	1,347 1,436	6/20/97 6/23/97	17	1,891	90	1,651	1,712 1,891	7/20/9				1,732	2,009
9/8/95	17	1,610	85	1,551	1,610	6/25/97	18	1,970	89	1,886	1,968	7/23/9	8 17	2,169	94	2,088	2,169
9/11/95 9/12/95		1,715 1,674		1,675 1,628		6/27/97	17	1,966 1,986	91 01	1,896	1,966 1,962	7/27/9				2,135	
9/12/95	16	1,805	86 91	1,628		7/1/97	18 18	2,030	91 94	1,863 1,934	2,021	7/29/9 7/30/9				2,106 2,123	
9/14/95	17	1,864	91	1,793	1,864	7/3/97	17	2,077	97	2,025	2,077	7/31/9	8 18	3 2,132	93	2,041	2,131
9/15/95 9/18/95	17 17	1,680 1,812	86, 88	1,607	1,680 1,812	7/8/97 7/9/97	18 17	1,961 1,991	90 90	1,872 1,927	1,948 1,991	8/3/9 8/4/9				1,722	
9/19/95	17	1,671	84	1,635	1,671	7/10/97	18	2,006	90	1,927		8/5/9				1,835	
9/20/95	18	1,565	83	1,501	1,539	7/14/97	17	1,894	89	1,817	1,894	8/10/9	8 18	1,884	90	1,773	1,841
9/21/95	18 17	1,693 1,810		1,643	1,686, 1,810	7/15/97 7/17/97	17 17	1,996 1,989	91 92	1,919		8/11/9				2,078 2,147	
9/25/95	20	1,810		1,737		7/21/97	17	2,009		1,950	2,009	8/12/9				2,147	
9/26/95	17	1,584	88	1,557	1,584	7/22/97	18	2,061	92	1,992	2,059	8/19/9	8 1	3 1,984	89	1,856	1,975
9/28/95	17	1,480	81 80	1,450		7/23/97	18	2,092	93 04	2,030		8/20/9				1,877	
6/3/96 6/4/96	18 18	1,495 1,635	80 88	1,440		7/24/97	17 18	2,091 2,131	94 93	2,033 1,938		8/24/9 8/25/9				1,944 1,972	
6/5/96	18	1,728	90	1,672	1,725	7/29/97	17	2,048	92	2,026	2,048	8/26/9	8 1	8 2,144	94	2,021	2,132
6/6/96 6/12/96	17 17	1,790 1,880	89 91	1,734		8/1/97 8/4/97	17 18	1,444 1,960		1,415 1,808		8/27/9 8/28/9					
6/17/96	17	1,754	86	1,762		8/5/97	17	2,034		1,963		9/2/9					
6/18/96	18	1,811	87	1,720	1,805	8/6/97	17	1,978	92	1,942	1,978	9/4/9	1	7 2,007	92	1,905	2,007
6/21/96 6/25/96	17 18	1,859	91 96	1,786 2,041	1,859 2,108	8/8/97 8/11/97	17 18	1,805 1,627	86 86	1,777		9/8/9					
6/25/96	19	2,114		1,413		8/11/9/ 8/12/97	16	1,627		1,564		9/10/9					
6/28/96	17	1,570	83	1,526	1,570	8/14/97	17	2,096	94	2,032	2,096	9/14/9	8 1	8 1,892	2 86	1,812	1,890
7/1/96	18 17	1,962		1,875		8/18/97 8/20/97	17 17	2,127		2,051		9/15/9					
7/2/96	17	2,008	95	1,959	2,008	0/20/9/	17	2,098	95	2,018	2,098	9/17/9	101	8 1,714	1 03	1,620	1,703

Date	Hr	MW	MaxT	MW3pm	MW5pm	Date	Hr	MW	MaxT	MW3pm	MW5pm	Date	Hr	MW	MaxT	MW3pm	MW5pm
9/22/98	16	1,970	91	1,896	1,950	8/18/99	17	2,338	95	2,258	2,338	7/18/00		2,283	98	2,252	2,277
9/23/98	17	1,860	87	1,842	1,860	8/19/99	17	2,262	94	2,206	2,262	7/19/00	18	2,364	101	2,267	2,319
9/25/98	17	1,765	84	1,736	1,765	8/23/99	17	2,184	89	2,106	2,184	7/21/00	17	2,285	99	2,211	2,280
9/28/98	17	1,918	89]	1,871	1,918	8/24/99	17	2,207	91	2,108	2,207	7/24/00		1,780	84	1,622	1,718
9/30/98	20	1,518	80	1,465	1,499	8/26/99	18	2,204	92	2,149	2,186	7/25/00		2,063	89	1,941	2,063
6/1/99	18	1,854	86	1,765	1,850	8/27/99	16	2,249	94	2,209	2,244	7/26/00		2,114	88	2,028	2,114
6/2/99	18	1,903	87	1,747	1,874	8/30/99	18	2,195	93	2,135	2,185	7/27/00		2,093	88	2,036	2,078
6/3/99	16	1,989	92	1,963	1,984	8/31/99	17	1,991	85	1,930	1,991	7/31/00		2,171	92	2,112	2,169
6/4/99	17	2,147	94	2,013	2,147	9/1/99	17	1,956	87	1,871	1,956	8/1/00		2,201	91	2,111	2,201
6/8/99 6/9/99	17 18	1,965	87	1,890 1,852	1,965 1,895	9/2/99		1,998	90	1,856	1,970	8/2/00		2,249	92	2,196	2,249
6/11/99	17	1,941	87 85	1,852	1,895	9/3/99 9/7/99		2,127	93	2,009	2,126	8/7/00 8/8/00		2,241	92 93	2,187	2,235
6/14/99	17	2,114	90	2,024	2,114	9/9/99		2,172 2,089	93 90	2,120 2,023	2,172 2.089	8/9/00		2,246 2,241	93	2,199 2,124	2,245 2,198
6/15/99	17	2,099	91	1,996	2,099	9/10/99	17	2,069	88	1,941	2,089	8/10/00		2,241	94	2,124	2,198
6/18/99	17	1,716	82	1,686	1,716	9/13/99	17	1,854	85	1,813	1.854	8/11/00		2,202	95	2,224	2,202
6/21/99	18	1,819	83	1,724	1,798	9/15/99		1,141	78	840	905	8/14/00		2,195	93	2,128	2,193
6/22/99	17	1,971	85	1,928	1,971	9/16/99	18	1,884	90	1.746	1,876	8/15/00		2,099	92	2,063	2,087
6/23/99	17	1,967	84	1,885	1,967	9/17/99	17	1,900	86	1,852	1,900	8/16/00		2,209	91	2,112	2,188
6/24/99	17	1,862	85	1,774	1,862	9/21/99	18	1,733	84	1,629	1,728	8/17/00		2,245	94	2,142	2,245
6/30/99	17	2,017	90	1,741	2,017	9/23/99	21	1,465	78	1,377	1,445	8/18/00		2,256	96	2,226	2,256
7/2/99	17	1,946	86	1,874	1,946	9/24/99	18	1,697	83	1,622	1,696	8/22/00	18	2,007	88	1,909	1,993
7/5/99	18	1,898	89	1,787	1,874	9/28/99	17	1,916	89	1,899	1,916	8/23/00	18	2,184	88	2,073	2,182
7/6/99	17	2,153	92	2,084	2,153	9/29/99	17	2,048	89	1,968	2,048	8/24/00		2,204	91	2,116	2,204
7/8/99	17	2,185	94	2,121	2,185	9/30/99	17	1,622	79	1,553	1,622	8/28/00		2,267	94	2,180	2,267
7/12/99	17	2,210	93	2,135	2,210	6/1/00		2,011	88	1,857	2,002	8/29/00		2,060	88	2,007	2,060
7/13/99	17	2,166	91	2,093	2,166	6/2/00		2,108	93	2,048	2,108	8/30/00		1,921	87	1,807	1,882
7/15/99	17	2,079	88 90	2,022	2,079	6/6/00		1,997	90	1,939	1,994	8/31/00		2,078	88	2,013	2,078
7/16/99	17 18	2,073 2,015	89	2,005 1,891	2,073 2,000	6/7/00 6/8/00		1,795 1,894	81. 85	1,751 1,826	1,794 1,894	9/1/00		1,975	88 90	1,920 1,904	1,975
7/20/99	17	2,253	94	2,162	2,000	6/9/00		1,865	85	1,812	1,865	9/6/00		1,961 1,611	79	1,904	1,961 1,567
7/21/99	17	2,233	95	2,210	2,261	6/12/00		2.002	89	1,938	1,999	9/7/00		1.698	81	1,515	1,587
7/22/99	17	2,299	95	2,191	2,274	6/13/00		2,168	93	2,102	2,168	9/11/00		1,995	86	1,920	1,995
7/23/99	17	2,294	95	2,222	2,264	6/16/00		2,108	92	2,063	2,083	9/12/00		1,954	87	1,830	1,915
7/26/99	18	2,305	95	2,188	2,294	6/19/00		2.214	94	2,118	2,191	9/13/00		2.093	90	2.006	2,083
7/27/99	17	2,376	99	2,288	2,344	6/22/00	17	1,896	89	1,773	1,896	9/14/00	16	2,136	91	2,089	2,133
7/28/99	17	2,394	98	2,326	2,368	6/26/00	17	1,829	89	1,689	1,829	9/15/00	17	2,106	91	2,032	2,106
7/29/99	18	2,353	97	2,284	2,324	6/28/00		1,901	88	1,835	1,881	9/19/00	21	1,640	81	1,548	1,593
7/30/99	17	2,376	99	2,338	2,376	7/3/00		1,892	87	1,855	1,891	9/20/00		1,760	87	1,638	1,760
8/3/99	17	2,165	91	2,110	2,165	7/4/00		1,855	89	1,796	1,847	9/25/00		2,178	91	2,102	2,178
8/4/99	19	1,763	85	1,676	1,741	7/5/00	17	2,191	96	2,171	2,191	9/26/00		1,862	81	1,793	1,862
8/5/99	18	2,110	88	2,035	2,089	7/10/00	18	2,185	95	2,119	2,167	9/28/00	17	1,665	80	1,626	1,665
8/6/99	17	2,226	92 88	2,180	2,226	7/11/00	18	2,337	98	2,270	2,336		1		]		
8/9/99	18 17	2,034	88 94	1,889 2,127	2,016	7/12/00		2,112	87	1,963	2,054		1	l	J		
8/11/99 8/17/99	17	2,222	94	2,127	2,222 2,234	7/13/00		2,305 2,357	95 98	2,216	2,298 2,357		1		] [		
0/1//08		2,2.04	52	2,200	2,204		<u> </u>	2,337		4,229	2,337		<u> </u>		·	L	

### Non-Firm Customer Load Data

The average of the top 10 peak days per season (excluding the highest and lowest values) in FY 2000 are the base-line coincident peak demand estimates for non-firm customer load.

#### System Winter Peak Days

Fiscal				Effect of Peaking	Adjusted
Year	Date	Hour	Peak	Prices	Peak
1999	1/6/99	8	2,403	17	2,420
2000	1/27/00	8	2,478	5	2,483

Co	oincident P	eak Demar	nd
I/C Load	EOPP	Adj Load	Typical
81	17	98	
137	5	142	141

#### System Summer Peak Days

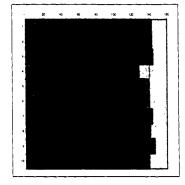
Fiscal				Effect of Peaking	Adjusted
Year	Date	Hour	Peak	Prices	Peak
1998	7/1/98	18	2,338	3	2,341
1999	8/2/99	16	2,427	0	2,427
2000	7/20/00	14	2,380	0	2,380

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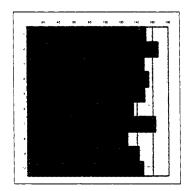
C	oincident P	eak Demar	nd
I/C Load	EOPP	Adj Load	Typical
94	3	97	
130	0	130	
151	0	151	149

#### FY 2000 Top 10 Peak Days Per Season

		System				
Date	Peak Hr	Peak	I/C L	.oad	EOPP	Adj Load
1/27/00	8	2,478		137	5	142
1/26/00	8	2,295		110	33	143
1/25/00	8	2,151		144	0	144
2/1/00	8	2,141		128	0	128
2/7/00	8	2,083		139	0	139
12/2/99	8	2,052		101	39	140
1/28/00	8	2,034		140	3	143
1/24/00	21	1,965		141	0	141
2/3/00	8	1,950		146	0	146
1/21/00	8	1,935		139	0	139
		A	d Lowest	141		



		System				
Date	Peak Hr	Peak		I/C Load	EOPP	Adj Load
7/20/00	14	2,380		151	0	151
7/17/00	17	2,357		167	0	167
7/11/00	18	2,337		149	0	149
7/19/00	18	2,321		111	43	154
7/13/00	18	2,305		149	0	149
8/11/00	17	2,304		132	3	135
7/6/00	15	2,289		163	0	163
7/7/00	15	2,283		127	0	127
8/10/00	17	2,282		142	0	142
7/21/00	17	2,280		142	5	147
		Averaç	e w/o High	est and Lo	west	149



# Appendix B

# **Ten-Year Site Plan**

# Schedules



### **Ten-Year Site Plan Schedules**

The following Appendix presents the schedules required by the Florida Public Service Commission to be included as part of the Ten-Year Site Plan.

						S	chec	tule 1						
						Existing G	ener	ating Facil	ities					
						As of J	lanu	ary 1, 2002						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(13)	(14)		(15
								Commercial		Gen Max				
Plant	Unit			Fuel Type		Fuel Transport		In-Service		Nameplate				
Name	Number	Location	Туре	Primary	Alt.	Primary	Alt.	Mo/Yr	Mo/Yr	kW	Summer	Winter	Ownership	Statu
Kennedy										372,400	<u>312</u>	379		
	3-5		GT	FO2		WA	TK	7/1973	(b)	168,600	153	188		
	7	12-031	GT	NG	FO2	PL	WA	6/2000	<u> </u>	203,800	159	191	Utility	
Northside										<u>1,158,700</u>	982	<u>751</u>		
	1	12-031	ST	PC	BIT	WA	RR	11/1966	(b)	297,500			Utility	(a)
	2	12-031	ST	PC	BIT	WA	RR	3/1972	(b)	297,500	265		Utility	(a)
	3	12-031	ST	NG	FO6	PL	WA		(b)	563,700	505	505	Utility	
	3-6	12-031	GT	FO2		WA	TK	1/1975	(b)	248,400	212	246	Utility	<b> </b>
Brandy Branch										<u>611,400</u>	<u>476</u>	<u>574</u>		
	1		GT	NG	FO2	PL	TK	5/2001	(b)	203,800	159	191	Utility	
	2		СТ	NG	FO2	PL	TK	5/2001	(b)	203,800	159	191	Utility	
	3		СТ	NG	FO2	PL	TK	10/2000	(b)	203,800	159	191	Utility	L
Girvin Landfill	1-4	12-301	IC	NG	<b></b>	PL		6/1997	(b)	3	3	3	Utility	<u> </u>
				L	· · ···					4 250 200	1 002	1 020		T
St. Johns River	Power Pa					····	T			1,359,200	1,002	1,020		
	1	12-301	ST	BIT/PC		RR	WA	3/1987	3/2027	679,600	501	510	Joint	(c)
	2	12-301	ST	BIT/PC		RR	WA	5/1988	5/2028	679,600	501	510	Joint	(c)
Scherer	4	13-207	ST	SUB	BIT	RR	RR	2/1989	2/2029	846,000	200	200	Joint	(d)
JEA System To	otal				<u> </u>					1	2,974	2,927		
NOTE: (a) Unit current (b) Life extensi (c) Net capabili	tly being re ion will cor ity reflects	tinue to b the JEA's	e an e 80%	ownership (	of Pow	ation for future of er Park. Namep ownership in Si	olate is	s original nam	eplate of the	e unit.				

(d) Nameplate and net capability reflects the JEA's 23.64% ownership in Scherer 4.

				Sche	dule 2.1		<u> </u>	<u></u>		
e.	History And Forecast of Energy Consumption									
	and Number of Customers By Class									
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
	Rual and Residential				Commercial			Industrial		
Calendar				GWH	Average No.	Average kWh/	GWH	Average No.	Average kWh/	
Year	Sales	of Customers	Customer	Sales	of Customers	Customer	Sales_	of Customers	Customer	
1991	3,602	262,376	13,730	874	28,995	30,133	3,590	2,477	1,449,326	
1992	3,696	266,219	13,883	873	29,144	29,945	3,660	2,596	1,409,926	
1993	3,830	270,818	14,143	862	29,378	29,327	3,889	2,670	1,456,427	
1994	3,909	278,682	14,027	897	29,571	30,324	4,048	2,731	1,482,265	
1995	4,137	283,551	14,589	937	29,972	31,269	4,174	2,742	1,522,385	
1996	4,391	288,947	15,195	937	30,162	31,079	4,353	2,975	1,463,160	
1997	4,165	295,916	14,075	949	30,709	30,903	4,526	3,025	1,496,198	
1998	4,643	301,883	15,380	1,035	31,297	33,070	4,835	3,094	1,562,702	
1999	4,529	305,917	14,805	1,036	31,873	32,504	5,130	3,203	1,601,623	
2000	4,701	312,103	15,062	1,079	32,351	33,353	5,205	3,309	1,572,983	
2001	4,884	319,532	15,284	1,104	32,990	33,476	5,411	3,450	1,568,311	
2002	5,070	325,728	15,564	1,146	33,065	34,670	5,616	3,537	1,588,068	
2003	5,233	332,276	15,748	1,183	33,502	35,320	5,797	3,652	1,587,592	
2004	5,399	338,957	15,929	1,221	33,945	35,967	5,982	3,770	1,586,475	
2005	5,569	345,772	16,106	1,259	34,394	36,613	6,170	3,893	1,584,759	
2006	5,742	352,724	16,278	1,298	34,849	37,257	6,361	4,020	1,582,485	
2007	5,918	359,816	16,447	1,338	35,310	37,900	6,556	4,150	1,579,692	
2008	6,098	367,050	16,613	1,379	35,777	38,542	6,756	4,285	1,576,415	
2009	6,281	374,430	16,776	1,420	36,250	39,183	6,959	4,425	1,572,690	
2010	6,469	381,958	16,935	1,463	36,729	39,824	7,166	4,569	1,568,550	
2011	6,660	389,637	17,092	1,506	37,215	40,466	7,378	4,717	1,564,026	

	- <u></u>		S	Schedule 2	.2					
	History And Forecast of Energy Consumption									
	and Number of Customers By Class									
	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)		
	Street & Highway	Other Sales to	Total Sales to	Sales For	Utility Use &	Net Energy	Other			
Calendar	Lighting		Ultimate Customers	Resale	Losses	For Load	Customers	Total No.of		
Year	GWH	GWH	GWH	GWH	GWH	GWH	(Average No.)	Customers		
1991	58	0	8,124	224	487	8,835	12	293,860		
1992	59	0	8,288		431	9,028		297,973		
1993	61	0	8,642		628	9,609		302,883		
1994	63	0	8,917	304	388	9,609	19	311,003		
1995	72	0	9,320		667	10,326		316,286		
1996	70	0	9,751	363	401	10,515	21	322,105		
1997	71	0	9,711	383	571	10,665	22	329,672		
1998	77	0	10,590	438	442	11,470	21	336,295		
1999	86	0	10,781	454	547	11,782	19	341,012		
2000	120	0	11,105	482	603	12,190	19	347,782		
2001	109	0	11,508	453	361	12,322	22	355,994		
2002	114	0	11,946	508	566	13,019	22	362,351		
2003	117	0	12,331	530	584	13,445	22	369,452		
2004	121	0	12,723	553	603	13,879	22	376,695		
2005	125	0	13,122	576	622	14,320	22	384,081		
2006	129	0	13,530	598	642	14,770	22	391,614		
2007	133	0	13,945	621	662	15,228	22	399,298		
2008	137	0	14,369	644	682	15,695	22	407,134		
2009	141	0	14,801	666	703	16,170	22	415,126		
2010	145	0	15,243	689	724	16,655	22	423,278		
2011	149	0	15,693	712	745	17,150	22	431,592		

		<u> </u>				S	chedul	e 3			· · · · · · · · · · · · · · · · · · ·			7
	History And Forecast of Seasonal Peak Demand													
	and Annual Net Energy For Load													
(1)							(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	Su	mmer Peak	Demand @	Generator - M		Ann	ual Net Energ	gy for Load		W	inter Peak I	Demand @	Generator - M	
Calendar					Net Firm				Load Factor					Net Firm
Year		Wholesale		Interruptible	Demand	Retail	Wholesale	Total	%		Wholesale		Interruptible	Demand
1991	1,709	47	1,756		1,756	8,611	224	8,835		1,661	64	1,725	0	
1992	1,825	56	1,881	0	1,881	8,719		9,028		1,812	69	1,881	0	1,881
1993	1,938	60	1,998		1,998	9,270		9,609		1,725	66	1,791	0	1,791
1994	1,865	53	1,918	0	1,918	9,305		9,609	56	1,872	70	1,942	0	1,942
1995	2,001	66	2,067	0	2,067	9,987	339	10,326	54	2,108	82	2,190	0	2,190
1996	2,050	64	2,114	0	2,114	10,151	363	10,515	50	2,313	88	2,401	0	2,401
1997	2,061	70	2,131	0	2,131	10,282		10,665		2,012	72	2,084	0	2,084
1998	2,252	86	2,338	0	2,338	11,032		11,470		1,907	68	1,975	0	1,975
1999	2,335	92	2,427	0	2,427	11,328		11,782	55	2,310	93	2,403	0	2,403
2000	2,287	93	2,380		2,380	11,708		12,190	56	2,373	105	2,478	0	2,478
2001	2,293	96	2,389	فستسرعي عريب السالحد	2,389	11,869		12,322	53	2,557	109	2,666	0	2,666
2002	2,362	100	2,461	158	2,619	12,512	508	13,019		2,484	113	2,596	150	2,746
2003	2,441	103	2,544	163	2,706	12,915	(	13,445	54	2,568	116	2,684	154	2,838
2004	2,521	107	2,627	168	2,795	13,326	553	13,879	54	2,653	121	2,774	159	2,933
2005	2,602	110	2,712		2,885	13,745		14,320	54	2,740	125	2,865	163	3,029
2006	2,685	114	2,799	178	2,977	14,172	598	14,770	54	2,829	129	2,958	168	3,126
2007	2,769	118	2,887	183	3,071	14,607	621	15,228	54	2,919	134	3,052	173	3,226
2008	2,855	122	2,977	189	3,166	15,051	644	15,695		3,010	138	3,149	179	3,327
2009	2,942	127	3,069	194	3,263	15,504	666	16,170	54	3,103	143	3,247	184	3,431
2010	3,031	131	3,162	200	3,362	15,966	689	16,655	54	3,198	148	3,346	189	3,536
2011	3,122	135	3,257	206	3,463	16,438	712	17,150	52	_3,399	153	3,551	201	3,753



	Schedule 4										
Prev	Previous Year Actual and Two Year Forecast of Peak Demand										
	ŀ	And Net Er	nergy For L	.oad By Mo	onth						
			Base Cas	se							
(1)	(2)	(3)	(4)	(5)	(6)	(7)					
	Actual	2001	Forecas	st 2002	Forecas	st 2003					
i 🛛 🔽	Peak	Net Energy	Peak	Net Energy	Peak	Net Energy					
	Demand	For load	Demand	For load	Demand	For load					
Month	(MW)	(GWH)	(MW)	(GWH)	(MW)	(GWH)					
January	2,666	1,133	2,596	1,073	2,684	1,108					
February	1,981	834	2,343	931	2,423	961					
March	1,833	908	1,961	931	2,029	961					
April	1,915	910	1,707	905	1,764	934					
Мау	2,201	1,065	2,027	1,073	2,094	1,108					
June	2,308	1,147	2,338	1,215	2,416	1,255					
July	2,372	1,227	2,461	1,344	2,543	1,388					
August	2,389	1,276	2,401	1,357	2,481	1,402					
September	2,200	1,029	2,249	1,202	2,324	1,241					
October	1,987 957 2,145 1,014 2,216 1,047										
November	nber 1,616 879 1,895 934 1,958 965										
December	r 2,223 955 2,276 1,041 2,351 1,075										
Total		12,322		13,019		13,445					

							nedule 5 quirement	s						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Fuel Requirements	Туре	Units	Actuals 2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	20
(1)	NUCLEAR		TRILLION BTU	0	0	0	0	0	0	0	0	0	0	A
(2)	COAL		1000 TON	2,421	3,067	2,563	2,274	2,251	2,389	2,476	2,537	2,638	2,517	2,4
	RESIDUAL													
(3)		STEAM	1000 BBL	4,252	592	1,457	1,059	657	758	915	855	927	1,021	1,3
(4)		CC	1000 BBL	0	0	0	0	0	0	o	0	0	0	
(5)	1	CT/GT	1000 BBL	0	0	0	0	0	0	0	0	0	0	
(6)		TOTAL:	1000 BBL	4,252	592	1,457	1,059	657	758	915	855	927	1,021	1,3
-	DISTILLATE	<u> </u>	<u></u> }}	+									+	
(7)		STEAM	1000 BBL	0	0	0	0	0	0	0	0	0	0	
(8)		CC	1000 BBL	0	0	0	0	0	0	0]	0	0	0	
(9)		CT/GT	1000 BBL	172	91	66	127	74	97	117	48	66	78	
(10)		TOTAL:	1000 BBL	172	91	66	127	74	97	117	48	66	78	
•	NATURAL GAS	t	<u> </u>		ملىپىيەت.	l_	L.	<u>_</u>	<u>}</u>		<u>-</u>			
12)		STEAM	1000 MCF	6,093	4,739	4,364	3,654	3,345	3,550	3,789	3,859	4,008	4,108	3,7
(13)		CC	1000 MCF	0	0	0	8,831	14,759	14,835	15,024	19,229	20,240	21,618	23,3
14)		CT/GT	1000 MCF	5,192	5,762	4,566	2,487	1,276	1,573	1,611	666	980	1,161	2,0
15)	1	TOTAL:	1000 MCF	11,285	10,501	8,930	14,972	19,380	19,958	20,424	23,754	25,228	26,888	29,1
16)	PETROLEUM COKE		1000 TON	0	478	1,579	1,542	1,530	1,536	1,535	1,540	1,535	1,203	1,4
20)	OTHER (SPECIFY)		TRILLION BTU	20	13	11	11	10	10	11	11	12	5	
ن <u>ــــــــــــــــــــــــــــــــــــ</u>	NOTE:													
	1.	Coal incluc	les JEA's share of S.	JRPP and Sch	erer 4 and No	rthside Units 2	2 Coal testing							

					-	chedule (								
						y Sources			- 40					
Ļ	(1)	(2)	(3)	(4)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	Fuel	Туре	Units	Actuals 2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2
1)	Annual Firm Inter-Re	egion Intchg.	GWH	1,710	1,262	1,047	1,125	1,021	1,039	1,052	1,101	1,159	472	
2)	NUCLEAR	1	GWH	0	0	0	0	0	0	0	0	0	0	
(3)	COAL		GWH	6,375	7,714	6,228	5,599	5,538	5,815	6,094	6,234	6,442	6,153	6,
(4)	RESIDUAL	STEAM	GWH	1,308	1,025	942	683	419	485	587	545	592	653	
(5)		cc	GWH	0	0	0	0	0	0	0	0	0	0	
6)		СТ	GWH	0	0	0	0	0	0	0	0	0	0	
7)		TOTAL	GWH	1,308	1,025	942	683	419	485	587	545	592	653	
8)	DISTILLATE	STEAM	GWH	0	0	0	0	0	0	0	0	Ö	0	
9)		CC	GWH	0	0	0	0	0	0	0	0	0	0	
0)		СТ	GWH	175	20	17	38	19	28	34	10	17	21	
1)		TOTAL	GWH	175	20	17	38	19	28	34	10	17	21	
2)	ATURAL GAS	STEAM	GWH	1,875	425	384	312	268	286	314	320	334	347	
3)		lcc	GWH	0	0	0	1,313	2,198	2,213	2,240	2,653	2,783	2,948	3,
4)		СТ	GWH	372	480	404	222	112	139	144	59	86	102	_
5)		TOTAL	GWH	2,247	905	788	1,847	2,578	2,638	2,698	3,032	3,203	3,397	3,
5)	<b>IUG</b>		GWH	0	0	0	0	0	Ō	0	0	0	0	
7) F	IYDRO		GWH	0	0	_0	0	0	0	0	0	0	0	
B) F	Petroleum Coke		GWH	0	1,347	4,419	4,314	4,283	4,298	4,295	4,309	4,295	5,497	6
9)	DTHER (SPECIFY)		GWH	525	742	0	272	458	458	457	459	455	458	
n li	ET ENERGY FOR L	OAD	GWH	12,340	13,015	13,441	13,877	14,316	14,761	15,217	15,690	16,162	16,649	17

		(0)	- (0)	1 (0)		Energy Sou			(40)		(40)	(4.0)
- L	(1)	(2)	(3)	(4)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13
	Fuel	Туре	Units	Actuals 2001	2002	2003	2004	2005	2006	2007	2008	
(1)	Annual Firm Inter-		%	14%	10%	8%	8%	7%	7%	7%	7%	
	UCLEAR		%	0%	0%	0%	0%	0%	0%	0%	0%	
· ·	COAL		%	52%	59%	46%	40%	39%	39%	40%	40%	-
(4) F	RESIDUAL	STEAM	%	11%	8%	7%		3%	3%	4%		
(5)		cc	%	0%	0%	0%	0%	0%	0%	0%	0%	
(6)		ст	%	0%	0%	0%	0%	0%	0%	0%	0%	
(7)		TOTAL	%	11%	8%	7%	5%	3%	3%	4%	3%	
(8)	DISTILLATE	STEAM	%	0%	0%	0%	0%	0%	0%	0%	0%	
(9)		cc	%	0%	0%	0%	0%	0%	0%.	0%	0%	
10)		СТ	%	1%	0%	0%	0%	0%	0%	0%	0%	
1)		TOTAL	%	1%	0%	0%	0%	0%	0%	0%	0%	
· ·	ATURAL GAS	STEAM	%	15%	3%	3%	2%	2%	2%	2%	2%	
13)		cc	%	0%	0%	0%	9%	15%	15%	15%	17%	
14)		CT	%	3%	4%	3%	2%	1%	1%	1%	0%	
15)		TOTAL	%	18%	7%	6%	13%	18%	18%	18%	19%	
6)	IUG		%	0%	0%	0%	0%	0%	- 0%	0%	0%	
7) H	IYDRO		%	0%	0%	0%	0%	0%	0%	0%	0%	
8) P	etroleum Coke		%	0%	10%	33%	31%	30%	29%	28%	27%	
	THER (SPECIFY		%	4%	6%	0%	2%	3%	3%	3%	3%	
20)	IET ENERGY FOR	RLOAD	%	100%	100%	100%	100%	100%	100%	100%	100%	





		Fo	recast of C	apacity, De		chedule 7 d Scheduled	Maintenand	e at Time O	f Peak		
						Winter					
	Installed	Firm C	apacity		Available	Firm Peak	Reserve	Margin	Scheduled	Reserve	Margin
	Capacity	Import	Export	QF	Capacity	Demand	Before Mai	intenance	Maintenance	After Mair	-
Year	MW	MW	MW	MW	MW	MW	MŴ	Percent	MW	MW	Percent
2002	2,928	427	445	0	2,910	2,596	314	12%	0	314	12
2003	3,458	207	445	0	3,220	2,684	536	20%	0	536	2(
2004	3,014	560	383	0	3,191	2,774	417	15%	0	417	1
2005	3,648	277	383	0	3,543	2,865	677	24%	0	677	24
2006	3,648	277	383	0	3,543	2,958	584	20%	0	584	2
2007	3,648	277	383	0	3,543	3,052	490	16%	0	490	1
2008	4,000	277	383	0	3,895	3,149	746	24%	0	746	2
2009	4,000	277	383	0	3,895	3,247	<u> </u>	20% 24%	0	648 798	2
	4.050	077									
2010 2011	4,250 4,440	277 70	383 383	0	4,145 4,128	3,346 3,448	680	20%	0	680	
2010	4,440	70	383		4,128	3,448 Summer	680	20%	0	680	20
2010	4,440 Installed	70 Firm C	383 apacity	0	4,128 Available	3,448 <b>Summer</b> Firm Peak	680 Reserve	20% Margin	0 Scheduled	680 Reserve	20 Margin
2010 2011	4,440 Installed Capacity	70 Firm Ca Import	383 apacity Export	0 QF	4,128 Available Capacity	3,448 Summer Firm Peak Demand	680 Reserve Before Mai	20% Margin ntenançe	0 Scheduled Maintenance	680 Reserve After Mair	20 Margin htenance
2010 2011 Year	4,440 Installed Capacity MW	70 Firm Ca Import MW	383 apacity Export MW	0 QF MW	4,128 Available Capacity MW	3,448 Summer Firm Peak Demand MW	680 Reserve Before Mai MW	20% Margin ntenance Percent	0 Scheduled Maintenance MW	680 Reserve After Mair MW	2 Margin ntenance Percen
2010 2011 Year 2002	4,440 Installed Capacity MW 2,976	70 Firm Ca Import MW 282	383 apacity Export MW 430	QF MW 0	4,128 Available Capacity MW 2,828	3,448 Summer Firm Peak Demand MW 2,461	680 Reserve Before Mai	20% Margin ntenance Percent 15%	0 Scheduled Maintenance	680 Reserve After Mair MW 367	2 Margin ntenance Percen 1
2010 2011 Year	4,440 Installed Capacity MW 2,976 3,241	70 Firm Ca Import MW	383 apacity Export MW	0 QF MW	4,128 Available Capacity MW	3,448 Summer Firm Peak Demand MW	680 Reserve Before Mai MW 367	20% Margin ntenance Percent	0 Scheduled Maintenance MW 0	680 Reserve After Mair MW	2 Margin ntenance Percen
2010 2011 Year 2002 2003 2004	4,440 Installed Capacity MW 2,976 3,241 3,426	70 Firm Ca Import MW 282 207	383 apacity Export MW 430 430	0 QF MW 0 0	4,128 Available Capacity MW 2,828 3,018	3,448 Summer Firm Peak Demand MW 2,461 2,544	680 Reserve Before Mai MW 367 475	20% Margin ntenance Percent 15% 19%	0 Scheduled Maintenance MW 0 0	680 Reserve After Mair MW 367 475	2 Margin ntenance Percen 1
2010 2011 Year 2002 2003	4,440 Installed Capacity MW 2,976 3,241	70 Firm C: Import MW 282 207 277	383 apacity Export MW 430 430 430	0 QF MW 0 0 0	4,128 Available Capacity MW 2,828 3,018 3,273	3,448 Summer Firm Peak Demand MW 2,461 2,544 2,627	680 Reserve Before Mai MW 367 475 646	20% Margin ntenance Percent 15% 19% 25%	0 Scheduled Maintenance MW 0 0 0 0	680 Reserve After Mair MW 367 475 646	2 Margin ntenance Percen 1 1 2 2
2010 2011 Year 2002 2003 2004 2005	4,440 Installed Capacity MW 2,976 3,241 3,426 3,431	70 Firm C: Import MW 282 207 277 277	383 apacity Export MW 430 430 430 383	0 QF MW 0 0 0 0	4,128 Available Capacity MW 2,828 3,018 3,273 3,326	3,448 Summer Firm Peak Demand MW 2,461 2,544 2,627 2,712	680 Reserve Before Mai MW 367 475 646 613	20% Margin ntenance Percent 15% 19% 25% 23%	0 Scheduled Maintenance MW 0 0 0 0 0	680 Reserve After Mair MW 367 475 646 613	2 Margin ntenance Percen 1 1 2 2 2 1
2010 2011 Year 2002 2003 2004 2005 2006	4,440 Installed Capacity MW 2,976 3,241 3,426 3,431 3,431	70 Firm Ca Import MW 282 207 277 277 277 277	383 apacity Export MW 430 430 430 383 383	0 QF MW 0 0 0 0 0	4,128 Available Capacity MW 2,828 3,018 3,273 3,326 3,326 3,326	3,448 Summer Firm Peak Demand MW 2,461 2,544 2,627 2,712 2,799	680 Reserve Before Mai MW 367 475 646 613 526	20% Margin ntenance Percent 15% 19% 25% 23% 19%	0 Scheduled Maintenance MW 0 0 0 0 0 0 0	680 Reserve After Mair MW 367 475 646 613 526	Margin ntenance Percen 1 2
2010 2011 Year 2002 2003 2004 2005 2006 2007	4,440 Installed Capacity MW 2,976 3,241 3,426 3,431 3,431 3,431	70 Firm Ca Import MW 282 207 277 277 277 277 277	383 apacity Export MW 430 430 430 383 383 383	0 QF MW 0 0 0 0 0 0 0 0	4,128 Available Capacity MW 2,828 3,018 3,273 3,326 3,326 3,326	3,448 Summer Firm Peak Demand MW 2,461 2,544 2,627 2,712 2,799 2,887	680 Reserve Before Mai MW 367 475 646 613 526 438	20% Margin ntenance Percent 15% 25% 23% 19% 15%	0 Scheduled Maintenance MW 0 0 0 0 0 0 0 0 0	680 Reserve After Mair MW 367 475 646 613 526 438	Margin ntenance Percen 1 2 2 2 1 1
2010 2011 Year 2002 2003 2004 2005 2006 2007 2008	4,440 Installed Capacity MW 2,976 3,241 3,426 3,431 3,431 3,431 3,726	70 Firm Ca Import MW 282 207 277 277 277 277 277 277	383 apacity Export MW 430 430 430 430 383 383 383 383 383	QF MW 0 0 0 0 0 0 0 0 0 0 0	4,128 Available Capacity MW 2,828 3,018 3,273 3,326 3,326 3,326 3,326 3,621	3,448 Summer Firm Peak Demand MW 2,461 2,544 2,627 2,712 2,799 2,887 2,977	680 Reserve Before Mai MW 367 475 646 613 526 438 643	20% Margin ntenance Percent 15% 25% 23% 19% 15% 22%	0 Scheduled Maintenance MW 0 0 0 0 0 0 0 0 0 0 0 0	680 Reserve After Mair MW 367 475 646 613 526 438 643	Margin ntenance Percen 1 1 2 2 2 1 1 1 2 2 2 2 2 1 1 2 2 2 1 2

Committed Units:

1. TEA Purchase 220 MW Winter / 75 MW Summer 2002.

2. Northside Unit 1 - Outage for Fuel Conversion started Fall, 2001

3. Northside Unit 2 - Summer, 2002

4. Northside Unit 1 - Fall, 2002

		Die					dule 8.0					<u> </u>	<u></u>	
		1	-		1		T	ility Add		r	r			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
				Fuel	Туре	Fuel Tr	ansport	Construction Start	Commercial In-Service	Expected	Gen Max Nameplate	Net Cap Summer		
Plant Name	Unit	Location	Unit Type	Primary	Alternate	Primary	Alternate	Date	Date	Retirement	kW	MW	MW	Status
Northside	2	12-031	FC	PC	Coal	WA	WA	07/27/99	Summer 02		297,000	265	265	RP
Northside	1	12-031	FC	PC	Coal	WA	WA	09/15/99	Winter 03		297,000	265	265	FC
Brandy Branch	4	Brandy Branch	СС	NG	FO2	PL	тк		06/01/04			501	573	U
Combined Cycle		Greenfield	СС	NG	FO2	PL	тк		01/01/08			295	352	Р
CFB		Greenfield	FC	PC	Coal	WA	WA		06/01/10			250	250	Р
СТ		Greenfield	GT	NG	FO2	PL	тк		01/01/11		195,280	158	191	Р

	Schedule 9	
	Status Report and Specifications of Prop	posed Generating Facilities
(1)	Plant Name and Unit Number:	Northside Units 1 and 2
(2)	Net Capacity:	
(3)	Summer MW	265
(4)	Winter MW	265
(5)	Technology Type:	Circulating Fluidized Bed
(6)	Anticipated Construction Timing:	
(7)	Field Construction Start-date:	07/27/1999
(8)	Commercial In-Service date:	Summer 2002 Unit 2
		Winter 2003 Unit 1
· ·	Fuel	
(10)	-	Petroleum Coke
(11)	Alternate	Coal
(12)	Air Pollution Control Strategy:	CFB with Dry Scrubber, Bag House and SNCR
(13)	Cooling Method:	Once Through Flow
(14)	Total Site Area:	200 acres
(15)	Construction Status:	Active
(16)	Certification Status:	Not Required
(17)	Status with Federal Agencies:	Construction Permit Recieved
(18)	Projected Unit Performance Data:	
(19)	Planned Outage Factor (POF):	7.35 percent
(20)	Forced Outage Factor (FOF):	2.50 percent
(21)	Equivalent Availability Factor (EAF):	90.15 percent
(22)	Resulting Capacity Factor (%):	90.00 percent
(23)		9946 Btu/kWh
(24)	Projected Unit Financial Data:	
(25)	Book Life:	30 years
(26)		
(27)		\$1,205
(28)		Included in direct construction cost
(29)		Included in direct construction cost
(30)		7.07
(31)	Variable O&M (\$/MWh):	1.74

Schedule Status Report and Specifications of Propose Brandy Branch Combined Cy	Directly Associated Transmission Lines
(1) Point of Origin and Termination	Commerce N – Duval & Commerce N- Steelbald
(2) Number of Lines	Loop existing line through new Commerce N 230 kV Substation
(3) Right of Way	May require new ROW
(4) Line Length	5.1 Miles
(5) Voltage	230 kV
(6) Anticipated Construction Time	19 Months( ISD: May, 2004)
(7) Anticipated Capital Investment	\$1,500,000
(8) Substations	Duval, Steelbald & Commerce N 230 kV
(9) Participation with Other Utilities	FPL (at Duval Substation)

Status Report and Specifications of Propo	Schedule 10.2 Status Report and Specifications of Proposed Directly Associated Transmission Lines Northside (Center Pk-Northside)								
(1) Point of Origin and Termination	Convert Center Pk-Northside to 230 kV								
(2) Number of Lines	One (1) line								
(3) Right of Way	No new ROW Required								
(4) Line Length	11.03 Miles								
(5) Voltage	230 kV								
(6) Anticipated Construction Time	18 Months (ISD: May, 2003)								
(7) Anticipated Capital Investment	\$2,000,000								
(8) Substations	Line terminations at Center Pk and Northside Substations								
(9) Participation with Other Utilities	None								

Schedule 10.3	
Status Report and Specifications of Proposed Directly Associated Transmission Lines Northside (New Center Pk-Greenland)	
Northside (New C	enter PK-Greenland)
(1) Point of Origin and Termination	New Center Pk-Greenland 230 kV Line
(2) Number of Lines	One (1) line
(3) Right of Way	New ROW Required
(4) Line Length	19.3 Miles
(5) Voltage	230 kV
(6) Anticipated Construction Time	37 months (ISD: May, 2003)
(7) Anticipated Capital Investment	\$6,000,000
(8) Substations	Line terminations at Center Pk and Greenland Substations
(9) Participation with Other Utilities	None