

Lakeland Electric

Ten-Year Site Plan 2026-2035

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Florida Public Service Commission



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1.0 Introduction [SECTION 1]

This report contains the 2026 Lakeland Electric (LE) Ten-Year Site Plan (TYSP) pursuant to Florida Statutes and as adopted by Order No. PSC-97-1373-FOF-EU on October 30, 1997. The TYSP outlines a comprehensive strategy for Lakeland Electric (LE) to deliver affordable, dependable, and sustainable energy to its customers, thereby catalyzing economic growth in Lakeland over the coming decade. TYSPs are non-binding in Florida, but they do provide state, regional, and local agencies a notice of proposed power plants and transmission facilities in near future.

The TYSP 2026 is divided into the following eight sections:

- Section 1: Introduction
- Section 2: General Description of the Utility
- Section 3: Forecast of Electric Demand and Energy
- Section 4: Energy Conservation & DER Management Programs
- Section 5: Load Forecasting Methods and Procedures
- Section 6: Forecast of New Capacity Requirements
- Section 7: Environmental and Land Use Information
- Section 8 Ten-Year Site Plan Schedules

The contents of each section are summarized in the remainder of this section.

1.1 General Description of the Utility [SECTION 2]

Section 2 of the TYSP discusses a historical overview of Lakeland Electric's system, along with a description of the existing power generation and transmission facilities. This section includes tables which show the source of the utility's current 839 MW of net winter generating capacity and 778 MW of net summer generating capacity (as of the end of year 2025). To increase grid reliability and energy supply, LE added 120 MW of gas based modular Reciprocating Internal Combustion Engines (RICE) in January 2025. Lakeland plans to add 74.8 MW of solar energy in 2027, bringing the total installed solar in the Lakeland System to approximately 89 MW.

1.2 Forecast of Electric Demand and Energy [SECTION 3]

Section 3 of the TYSP provides a summary of Lakeland’s electric load and energy forecast methodology. LE uses statistical and mathematical models that link electricity usage to several key input parameters such as region’s economic activity, population growth, demographic data, and energy efficiency characteristics on existing and future electrical appliances. Forecasts included in this section are on population, customer classes, energy sales, net energy requirement, and system peak demand in an hourly basis in its service territory. In addition, sensitivity cases on high and low load growth scenarios are developed on energy sales to customers, system net energy and peak load requirements for LE’s customers.

1.3 Energy Conservation & DER Management Programs [SECTION 4]

Section 4 provides the description of the existing energy conservation and management programs as adopted by Lakeland Electric. Additional details regarding Lakeland Electric's energy conservation and management programs are on file with the Florida Public Service Commission (FPSC).

Lakeland Electric’s existing energy conservation and management programs include the following programs which promote cost-effective measures for both electric demand and energy savings, especially during peak hours:

- Residential Programs:
 - Insulation rebate
 - Energy Savings Kits
 - HVAC Maintenance Incentive
 - Heat Pump Rebates
 - On-Line Energy Audit and
 - Energy Star Appliance Rebate

Section 4 also contains discussions on Lakeland Electric’s roof-top solar programs. While these types of programs are not traditionally thought of as Demand Side Management (DSM), they have the same effect of conserving energy normally generated by fossil fuels as DSM programs do by virtue of their avoidance of fossil fuels with the use

of renewable energy. Lakeland Electric has capacity to generate 14.4 MW of power from utility-scale solar, enough to supply power for more than 7,000 households during a sunny day in the summer. Lakeland Electric is determined to continuously increase the solar power for its customers by expanding both utility-scale solar and roof top solar.

1.4 Load Forecasting Methods and Procedures [SECTION 5]

Forecasting long-term electric load and energy is the first step in planning future generation. Based on future energy requirements, Lakeland Electric coordinates and manages its existing resources to meet the future energy requirements at the lowest cost possible for its customers.

Section 5 summarizes the Integrated Resource Planning process utilized by Lakeland Electric and explains Lakeland Electric's participation in the Florida Municipal Power Pool (FMPP). There are two other utilities which are the members of FMPP including Lakeland Electric. In FMPP, each member operates its power plants sharing the reserves and using the lowest cost of energy to balance the combined load by means of exchange of energy among the members.

While Section 3 discusses the forecast, methods used for the TYSP, Section 5 outlines the economic and fuel assumptions applied to planning capacity and energy in the future.

1.5 Forecast of New Capacity Requirements [SECTION 6]

Section 6 describes the process Lakeland Electric uses to evaluate additional capacity to serve Lakeland Electric's customers in future. This section concludes by reaffirming Lakeland Electric's commitment to maintaining Reserve Margins of at least 15% above both summer and winter peak demands throughout the current ten-year planning period, in compliance with the Florida Reliability Coordinating Council's (FRCC) minimum reserve margin criteria for the FRCC Region.

1.6 Environmental and Land Use Information [SECTION 7]

Section 7 addresses environmental and land use issues related to Lakeland Electric's recently added 120 MW new Reciprocating Internal Combustion Engines (RICE) at Lakeland Electric's McIntosh Power Plant (see Table 7-1). This section summarizes different control strategies adopted to comply with various environmental emissions standards for existing major generating units. Also analyzed are the issues related to land use and air/operating permits for existing/newly installed generating units in the McIntosh and Larsen Power Plant sites.

1.7 Ten-Year Site Plan Schedules [SECTION 8]

Section 8 presents the schedules of new generation and any retirements including any power purchase necessary to meet reliability required by the Florida Public Service Commission (FPSC) for the TYSP.

Tables 8-1 and 8-1a summarize the detailed information on existing generating units owned by Lakeland Electric. Tables 8-2 through 8-5 provide information by customer class. Tables 8-2 through 8-8 provide demand and energy history and forecasts. Table 8-9 provides a history and forecast of fuel requirements by fuel type. Tables 8-10 and 8-11 provide a history and forecast of energy produced by fuel type. Tables 8-12 and 8-13 provide comparisons of Lakeland Electric resources to Lakeland Electric demand. These tables suggest that Lakeland Electric plans for a minimum of 15% Reserve Margin. However, LE may need to procure additional capacity to meet 15% reserve margin if actual load exceeds the forecast at certain times (i.e., Feb 2026). Table 8-14 provides information related to Lakeland Electric's planned new generating units and any changes/modifications on existing units. Tables 8-15 and 16 present the specifications of proposed new generating units and transmission lines within Lakeland's territory, aimed at meeting the impending increase in electricity demand.

2.0 General Description of the Utility

2.1 City of Lakeland: Historical Background

2.1.1 Generation

The City of Lakeland was incorporated on January 1, 1885, when 27 citizens approved and signed the city charter. Shortly thereafter, the original plant was built by Lakeland Light and Power Company at the corner of Cedar Street and Massachusetts Avenue. This plant had an original capacity of 50 kW. On May 26, 1891, plant manager Harry Sloan energized the system, lighting Lakeland with electricity for the first time using five arc lamps. Incandescent lights were first introduced in 1903.

Public power in Lakeland was established in 1904, when foresighted citizens and municipal officials purchased the small private 50 kW electric light plant from owner Bruce Neff for \$7,500. The need for an expansion led to the construction of a new power plant on the north side of Lake Mirror in 1916. The initial capacity of the Lake Mirror Power Plant was 500 kW. The plant was expanded three times. The first expansion occurred in 1922 with the addition of 2,500 kW; in 1925, 5,000 kW additional capacity was added, followed by another 5,000 kW in 1938. With the final expansion, the removal of the initial 500 kW unit was required to make room for the addition of the 5,000-kW generating unit, resulting in a total peak plant capacity of 12,500 kW.

As the community continued to grow, the need for a new power plant emerged and the Charles Larsen Memorial Power Plant was constructed on the south-east shore of Lake Parker in 1949. The initial capacity of the Larsen Plant Steam was Unit No. 4 (20,000 kW) and it was completed in 1950. The first addition to the Larsen Plant was Steam Unit No. 5 (1956) which had a capacity of 25,000 kW. In 1959, Steam Unit No. 6 was added and increased the plant capacity by another 25,000 kW. Three gas turbines, each with a nominal rating of 11,250 kW, were installed as peaking units in 1962. In 1966, a third steam unit capacity addition was made to the Larsen Plant. This was Steam Unit No.7 having a nominal 44,000 kW capacity and an estimated cost of \$9.6 million. This brought the total Larsen Plant nameplate capacity up to a nominal 147,750 kW.

In the meantime, the Lake Mirror Plant, with its old and obsolete equipment, became relatively inefficient and hence was no longer in active use. It was kept in cold standby and then retired in 1971.

As the city continued to grow during the late 1960's, the demand for power and energy grew at a rapid rate, making evident the need for a new power plant site. A site was purchased on the north side of Lake Parker and construction commenced during 1970. Initially, two diesel units with a peaking capacity of a nominal rating 2,500 kW each were placed into commercial operation in 1970.

Steam Unit No. 1, with a nominal rating of 90 MW, was put into commercial operation in February 1971, for a total cost of \$15.22 million. In June of 1976, Steam Unit No. 2 was placed into commercial operation, with a nominal rated capacity of 115 MW and at a cost of \$25.77 million. This addition increased the total capacity of the Lakeland system to approximately 360 MW. At this time, the new plant site on the north shore of Lake Parker was renamed the C. D. McIntosh, Jr. Power Plant in recognition of the former Electric and Water Department Director.

On January 2, 1979, construction was started on McIntosh Unit No. 3, a nominal 334 MW coal fired steam generating unit which became commercial on September 1, 1982. The unit was designed to use low sulfur oil as an alternate fuel, but this feature was later decommissioned. McIntosh Unit No. 3 was later modified so that its nominal gross output was increased to 365 MW. The unit used a minimal amount of natural gas for flame stabilization during startups. The plant utilized sewage effluent for cooling tower makeup water. This unit was jointly owned with the Orlando Utilities Commission (OUC) which has a 40 percent undivided interest in the unit. McIntosh Unit No. 3 was retired on April 4, 2021 and has since been demolished.

Larsen Unit No. 8, a natural gas fired combined cycle unit has a nameplate generating capacity of 131.5 MW at present. Larsen Unit No. 8 began its simple cycle operation in July 1992, and combined cycle operation in November of that year. A fogger system was re-commissioned during the Fall of 2022, which provides an additional 3 MW of Summer Capacity. A new Peak Fire controls system was also implemented and commissioned during the Fall of 2022, which added 2 MW of year-round capacity.

In 1994, Lakeland made the decision to retire the first unit at the Larsen Plant, Steam Unit No. 4. This unit, put in service in 1950 with a capacity of 20 MW, had reached the end of its economic life. In March of 1997, Lakeland retired Larsen Unit No. 6, a 25 MW oil fired unit that was also nearing the end of its economic life. In October 2004, Lakeland retired Larsen Unit 7, an oil-fired steam unit.

In 1999, the construction of McIntosh Unit No. 5, a simple cycle, natural gas fired combustion turbine was completed, having a summer nominal capacity of 225 MW. The unit was released for commercial operation in May 2001. Beginning in September 2001, the unit underwent conversion to a combined cycle unit through the addition of a nominal 120 MW steam turbine generator. Construction was completed in spring 2002 with the unit being declared commercial in May 2002. The resulting combined cycle gross capacity of the unit is 345 MW summer and 360 MW winter. In December of 2020, Unit No. 5 went through a major outage to install “NextGen Hardware” that increased the capacity of the combined cycle to 339 MW (net 332 MW) in summer and 385 MW (net 378 MW) in winter. Addition of Steam Power Augmentation (SPAG) increased the capacity to 349 MW (net 342 MW) in summer and 395 MW (net 388 MW) in winter. The final capacity was made achievable to 359 MW in summer and 405 MW in winter with SPAG and Flex Fire combined.

During the summer of 2001, Lakeland took its first step into the world of distributed generation with the groundbreaking of its Winston Peaking Station. The Winston Peaking Station consists of 20 quick start reciprocating internal combustion engines (RICE), each driving a 2.5 MW electric generator. This provides Lakeland with 50 MW of peaking capacity that can be started and put online at full load in ten minutes. The Station went in commercial operation in December 2001.

McIntosh Gas Turbine No. 2 at the McIntosh Plant was online on June 22, 2020. This unit has gross ratings of 125 (120) MW in winter (summer). McIntosh Unit No. 3 (a coal unit) was retired from its operations on April 4, 2021. This unit had been in operation since 1982. The decision to retire this unit was made possible due to significant savings realized on fuel and operation cost compared to energy from natural gas-based generation. While ensuring that LE’s capability grows and changes with time to supply low cost and environmentally friendly electricity to its customers, LE built six (6) new small modular reciprocating internal combustion engines (RICE) in McIntosh power plant. Each unit is now capable of producing 20 MWs in less

than 12 minutes for a total of 120 MWs in total. This enhanced flexibility of these units will help to firm up the energy variability of solar units being planned in Lakeland's territory in near future. Engines 4-6 were made available in December 2024 and remaining three were made commercially available in January 2025. LE plans to install additional 74.8 MW solar capacity in 2027.

2.1.2 Transmission

The first phase of the Lakeland 69 kV transmission system became operational in 1961 with a step-down transformer at the Lake Mirror Plant to feed the 4 kV bus, nine 4 kV feeders, and a new substation in the southwest section of the town with two step-down transformers feeding four 12 kV feeders.

In 1966, a 69 kV line was completed from the Northwest substation to the Southwest substation, completing the loop around the town. At the same time, the old tie to Bartow was reinsulated for a 69 kV line and went into operation, feeding a new step-down substation in Highland City with four 12 kV feeders. In addition, a 69 kV line was completed from Larsen Plant around the Southeast section of the town to the Southwest substation. By 1972, 20 sections of 69 kV lines, feeding a total of nine step-down substations, with a total of 41 distribution feeders, were completed and placed in service. By the fall of 1996, all the original 4 kV equipment and feeders had been replaced and/or upgraded to 12 kV service. By 1998, 29 sections of 69 kV lines were in service feeding 20 distribution substations.

As the Lakeland system continued to grow, the need for additional and larger transmission facilities grew as well. In 1981, Lakeland's first 230 kV facilities went into service to accommodate Lakeland's McIntosh Unit No. 3 and to tie Lakeland into the State transmission grid at the 230 kV level. A 230 kV line was built from McIntosh Plant to Lakeland's West substation. A 230/69 kV autotransformer was installed at each of those substations to tie the 69 kV and 230 kV transmission systems together. In 1988, a second 230 kV line was constructed from the McIntosh Plant to Lakeland's Eaton Park substation along with a 230/69 kV autotransformer at Eaton Park. That line was the next phase of the long-range goal to electrically circle the Lakeland service territory with 230 kV transmission to serve as the primary backbone of the system.

In 1999, Lakeland added a generation unit to its McIntosh Power Plant that resulted in a new 230/69/12 kV substation being built and energized in March of that year. The Tenoroc

substation replaced the switching station called North McIntosh. In addition to Tenoroc, another new 230/69/12 kV substation was built. The substation, Interstate, went into operation in June of 1999 and is connected by what was the McIntosh West 230 kV line. This station was built to address concerns on load growth in the areas adjacent to the I-4 corridor which were causing problems at both the 69 kV and distribution levels in this area.

In 2001, Lakeland began its next phase of its 230 kV transmission system with the construction of the Crews Lake 230/69 kV substation. The substation was completed and placed in service in 2001. This project includes two 230 kV ties and one 69 kV tie with Tampa Electric Company (TEC), a 150MVA 230/69 kV autotransformer and a 230 kV line from Lakeland's Eaton Park 230 kV substation to the Crews Lake substation.

Early transmission interconnections with other systems including a 69 kV tie line at Larsen Plant with TEC, were established in mid-1960s. A second tie with TEC was later established at Lakeland's Highland City substation. A 115 kV tie was established in the 1970s with Progress Energy of Florida (PEF), now Duke Energy Florida (DEF) and Lakeland's West substation and was subsequently upgraded and replaced with the current two 230 kV lines to PEF in 1981. At the same time, Lakeland was interconnected with the OUC at Lakeland's McIntosh Power Plant. In August 1987, the 69 kV TEC tie at Larsen Power Plant was taken out of service and a new 69 kV TEC tie was put in service connecting Lakeland's Orangedale substation to TEC's Polk City substation.

In mid-1994, a new 69 kV line was energized connecting Larsen Plant to the Ridge Generating Station (Ridge), an independent power producer. Lakeland had a 30-year firm power-wheeling contract with Ridge to wheel up to 40 MW of their power to DEF. In early 1996, a new substation, East, was installed in the Larsen Plant to the Ridge 69 kV transmission line. However, as of January 31, 2019, Ridge Generating Station was permanently shut down. As a result, the 69 kV East to Ridge tie line was no longer in use. Later in 1996, the third tie line to TEC was built from East to TEC's Gapway substation. As mentioned above, in August of 2001, Lakeland completed two 230 kV ties and one 69 kV tie with TEC at Lakeland's Crews Lake substation. The multiple 230 kV interconnection configuration of Lakeland is also tied into the bulk transmission grid and provides access to the 500 kV transmission network via DEF, providing greater reliability.

At present, Lakeland has a total of about 135 miles of 69 kV and 28 miles of 230 kV transmission lines in service along with six 150 MVA 230/69 kV autotransformers. In 2020, Lakeland added a 150 MVA 69/13.8 kV auto transformer to connect the recently installed McIntosh Gas Turbine No. 2 into the Distribution System. In February 2022, Lakeland completed building the new 69/12.47 kV Bridgewater substation to accommodate the rising electric demand in the northeastern part of the service area. In September 2024, the Opal Fuels 69/4.16kV substation, located near the previous Ridge Generation plant, was put into service to serve the new Opal Fuels customer. The East to Ridge 69 kV transmission line was extended to serve the new Opal Fuels 69/4.16kV substation. The East to Opal Fuels 69 kV line and the Opal Fuels 69/4.16kV substation were energized in September 2024.

To accommodate the rising electric demand in the southwest part of the service area, Lakeland built a new 69/12.47 kV substation on Hamilton Rd. The new 69/12.47kV Hamilton substation is served by the Hamilton-Dranefield 69 kV line and was energized in June 2025. Hamilton substation is planned to have an additional 69 kV transmission line connected to TEC's JD Page Substation, which is expected to be in service in summer 2027. Lakeland has installed six McIntosh Reciprocating Energy Project (MREP) units (each of 20 MW) at McIntosh Power Plant site. This MREP plant is linked to the grid via a new MREP-Tenoroc 69 kV line, which became operational in January 2025.

When Lakeland Electric adds Edge Solar, a 74.8 MW solar generation project in 2027, the project will interconnect with Lakeland Electric's 69 kV transmission system via a tap on the existing Bridgewater–Orangedale 69 kV transmission line. To maintain system reliability and accommodate projected load growth in the northwest portion of the service territory, LE is planning to add a new 69 kV interconnection with Tampa Electric Company (TEC), along with the construction of a new substation. The proposed 69 kV tie line will extend from TEC's Varrea Substation to Lakeland Electric's Sutton Substation and is anticipated to be placed in service by summer 2028.

Additionally, Lakeland Electric plans to construct the new Indian Lake 69/12.47 kV Substation, to be located on West Socrum Loop Road in the northwest portion of its service territory. The Indian Lake Substation will be served by the proposed Indian Lake–Galloway 69 kV transmission line and is expected to be placed in service by winter 2029.

2.2 General Description: Lakeland Electric

2.2.1 Existing Generating Units

This section provides additional details on Lakeland Electric's existing generating plants. Lakeland Electric's existing generating units are located at two different plant sites: Charles Larsen Memorial (Larsen) and C.D. McIntosh Jr. (McIntosh). Both plant sites are located at Lake Parker in Polk County, Florida. The two plants have multiple units with different technologies and fuel types. Table 2-1 provides technical and other general characteristics of all Lakeland Electric generating units.

The Larsen plant site is located on the south-east shore of Lake Parker in Lakeland. The site has three units. Larsen Unit 8 (CC) has a net winter (summer) capacity of 124 MW (114 MW). The Unit's combustion turbine has a net winter (summer) rating of 95 MW (85 MW).

Larsen Units 2 and 3, General Electric combustion turbines, have a combined net winter (summer) rating of 27 MW (19 MW). The units burn natural gas as the primary fuel with diesel as the backup. These two units are temporarily out of service for major maintenance.

Historically, Larsen Unit No. 5 consisted of a boiler for steam generation and steam turbine generator to convert the steam to electrical power. When the boiler began to show signs of degradation beyond economical repair, a gas turbine with a heat recovery steam generator, Larsen Unit No. 8, was added to the facility. This allowed the gas turbine (Larsen Unit No. 8) to generate electricity and the waste heat from the gas turbine to repower the former Larsen Unit No. 5 steam turbine in a combined cycle configuration.

The McIntosh site, located in the City of Lakeland along the northeastern shore of Lake Parker, spans 513 acres. Electricity generated by the McIntosh units is stepped up in voltage by generator step-up transformers to 69 kV and 230 kV for transmission via the power grid. The site currently comprises eleven (11) units in commercial operation, with a total net winter (summer) rating of 840 MW (777 MW), as shown in Table 2-2. McIntosh Gas Turbine 1 consists of a General Electric combustion turbine with a net winter (summer) output rating of 19 MW (17 MW). Whereas Gas Turbine No. 2 has a total net winter (summer) capacity of 124.5 MW (129.5 MW) and was installed in the summer of 2020.

McIntosh Unit No. 3, a 342 MW net pulverized coal-fired steam unit, was owned 60% by Lakeland Electric and 40% by the OUC. The unit was retired on April 4, 2021. Decommissioning

of Unit 3, along with the previously retired Units 1 and 2 at the McIntosh Plant, was completed in 2024, and the units have been removed from the site. Two small internal combustion engines, each with a net output of 2.5 MW, remain at the McIntosh site and will continue to operate.

McIntosh Unit No. 5, a Siemens 501G combined cycle unit, was initially built and operated as a simple cycle combustion turbine that was placed into commercial operation in May 2001. The unit was taken out of service for conversion to combined cycle starting in mid-September 2001 and was returned to commercial service in May 2002 as a combined cycle unit with a net winter (summer) rating of 354 MW (338 MW). The unit is equipped with Selective Catalytic Reduction (SCR) for NO_x control. In December of 2020, Unit 5 underwent through a major outage, with Siemens' Next Gen Hardware, that increased the capacity of the combined cycle to 339 MW (net 332 MW) in summer and 385 MW (net 378 MW) in winter; the capacity with Steam Power Augmentation (SPAG) to 349 MW (net 342 MW) in summer and 395 MW (net 388 MW) in winter; and capacity with SPAG and Flex Fire to 359 MW (net 352 MW) in summer and 405 MW (net 398 MW) in winter.

Lakeland Electric constructed 50 MW peaking units adjacent to its Winston Substation in 2001. The purpose of the peaking plant is to provide additional quick start generation capability for Lakeland's changing system demand and during the times of high demand assuring extra reliability in Lakeland's System operation. The Winston plant consists of twenty (20) cylinder RICE engines producing 2.5 MW of generation each. Altogether, the 20 diesel engines provide 50 MW of installed Capacity. The units are currently fueled by #2 fuel oil but have the capability to burn a mix of 5% by #2 oil and 95% natural gas. Lakeland Electric currently does not have natural gas service to the site.

The plant has remote start/run capability for extreme emergencies at times when the plant is unmanned. The station does not use open cooling towers. This results in minimal water or wastewater requirements.

The engines are equipped with hospital grade noise suppression equipment on the exhausts. Emission control is achieved by Selective Catalytic Reduction (SCR) using 19% aqueous ammonia. The SCR system will allow the plant to operate within the Minor New Source levels permitted by the Florida Department of Environmental Protection (FDEP).

Power generated at Winston Peaking Station goes directly into Winston Substation at 12.47 kV distribution level and has sufficient capacity to serve the substation loads. Winston

Substation serves several of Lakeland Electric's largest and most critical accounts. Should Winston Substation lose all three 69 kV circuits, the Winston Peaking units can be online to serve load within ten minutes. In addition to increasing the substation's reliability, this arrangement allows Lakeland to delay the installation of a third 69 kV to 12.47kV transformer by several years and contributes to lowering loads on Lakeland's transmission system.

2.2.2 Planned Unit Retirements

As an enhanced fleet modernization effort, Lakeland Electric will evaluate the performance of existing units and examine how LE can meet future power demand in a more reliable and cost-effective way. This may require retiring some additional older and less-efficient gas or oil units in the future.

2.2.3 Planned Unit Additions

Lakeland Electric recently added six (MAN18V51/60G 20 MW each, 120 MW total) RICE engines which were made commercial in January 2025. These units are expected to maintain the resource adequacy and flexibility in Lakeland Electric System. Additionally, plans are underway to expand LE's solar infrastructure. As such, LE continues to conduct feasibility studies on integrating solar with battery storage and microgrid solutions to best meet the future energy needs of its customers.

2.2.4 Power Purchase Agreements (PPAs)

Lakeland Electric has secured long-term (20-25 year) PPAs with various solar private solar developers within its service territory. There are five different solar farms ranging from small installed capacity of 250 kW in Lakeland Center to 3.15 MW near the airport. The total installed capacity of about 14.4 MW is available to Lakeland customers as of now. When energy is available during the daytime, Lakeland Electric obtains about 50% of the firm capacity from these solar farms during summer. Lakeland Electric has entered a long-term PPA with Edge Solar LLC, a subsidiary of Williams Corp., for a 74.8 MW solar facility expected to commence commercial operations by March 2027. Construction has officially been started following the

completion of transmission interconnection studies to ensure seamless integration with the existing grid.

In addition to solar PPAs, LE has a firm PPA with OUC for up to 100 MW during the summer and 50 MW during the winter in 2026. This agreement ensures that LE maintains a 15% minimum capacity reserve, meeting the reliability standards set by the Florida Reliability Coordinating Council (FRCC) and the Florida Public Service Commission. With a combination of existing and planned PPAs, along with LE's current and future resources, the utility is projected to have sufficient capacity to meet reserve margin requirements through 2035 (see Table 6.2).

2.3 Service Area

Lakeland Electric's electric service area is shown on Figure 2-1 and is entirely located in Polk County. Lakeland Electric serves approximately 246 square miles, with approximately 174 square miles outside of Lakeland's city limits.

Figure 2.1: Lakeland Electric Service Area Map

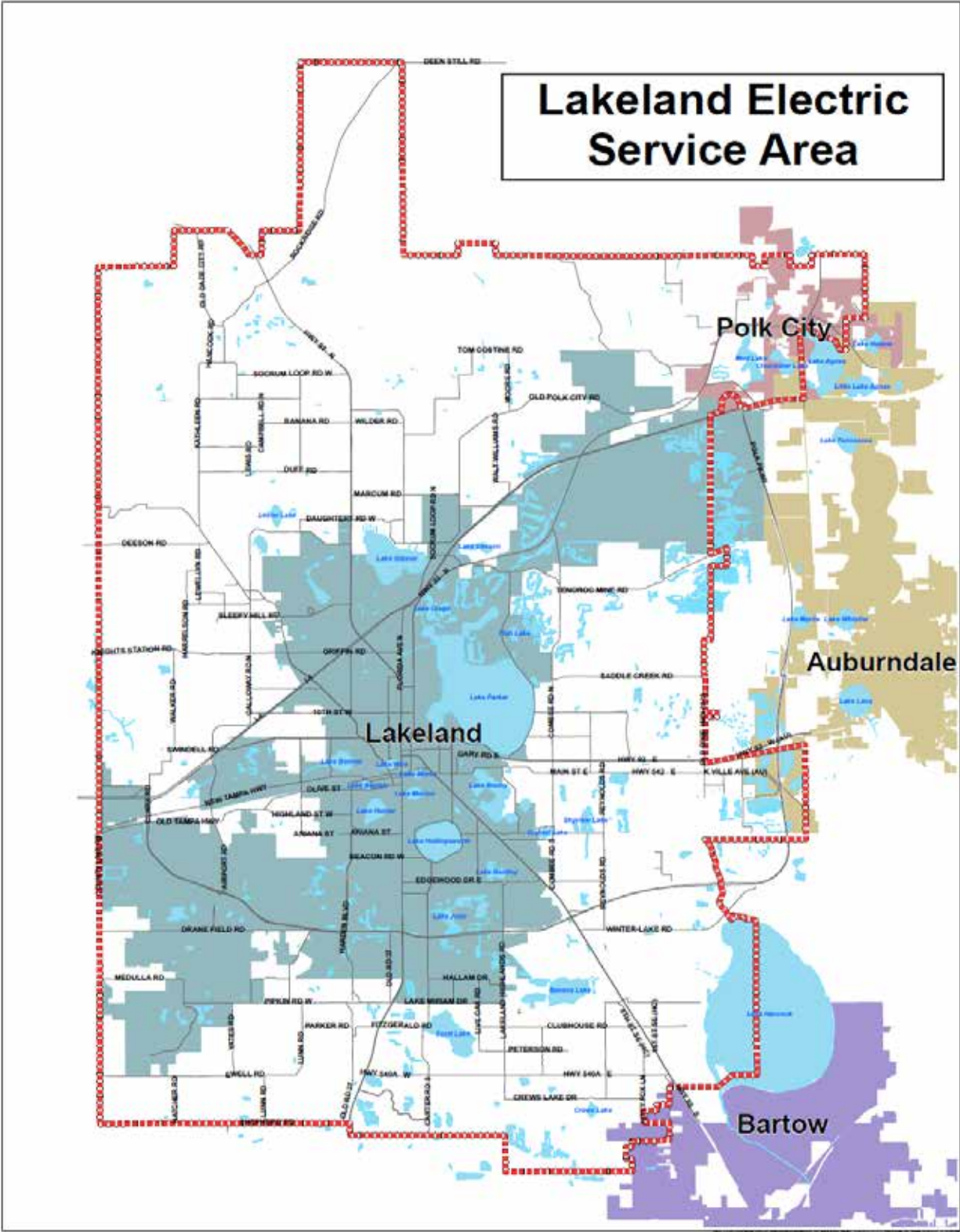


Table 2.1: Existing Generation Facilities

Table 2-1 Lakeland Electric Existing Generating Facilities													
				Fuel ⁴		Fuel Transport ⁵						Net Capability ²	
Plant Name	Unit No.	Location	Unit Type ³	Pri	Alt	Pri	Alt	Alt Fuel Days Use ¹	Commercial In-Service Month/Year	Expected Retirement Month/Year	Gen. Max. Nameplate kW	Summer MW	Winter MW
Charles Larsen Memorial	GT2*	16-17/28S/24E	GT	NG	DFO	PL	TK	NA	11/62	Unknown	11,250	10.0	14.0
	GT3*		GT	NG	DFO	PL	TK	NA	12/62	Unknown	11,250	9.0	13.0
	8		CA	WH	NA	NA	NA	NA	04/56	Unknown	30,000	29.7	29.7
	8		CT	NG	DFO	PL	TK	11	07/92	Unknown	101,520	84.7	94.7
Plant Total												114.4	124.4
¹ Alt Fuel Use days is based on 20% capacity factor for CC; ² Net Normal, * on Long term scheduled maintenance - not included in available capacity													
² Net Normal													
Source: Lakeland Energy Supply Unit Rating Group													
³ Unit Type				⁴ Fuel Type					⁵ Fuel Transportation Method				
CA Combined Cycle Steam Part				DFO Distillate Fuel Oil					PL Pipeline				
CT Combined Cycle Combustion Turbine				WH Waste Heat					TK Truck				
GT Combustion Gas Turbine				NG Natural Gas									
ST Steam Turbine				NA Not Applicable									

Table 2.2: Existing Generation Facilities

Table 2-2 Lakeland Electric Existing Generating Facilities													
				Fuel ⁴		Fuel Transport ⁵						Net Capability	
Plant Name	Unit No.	Location	Unit Type ³	Pri	Alt	Pri	Alt	Alt Fuel Days Use ²	Commercial In-Service Month/Year	Expected Retirement Month/Year	Gen. Max. Nameplate kW	Summer MW	Winter MW
Winston Peaking Station	1-20	21/28S/23E	IC	DFO	NA	TK	NA	NR	12/01	Unknown	2,500 each	50.0	50.0
Plant Total												50.0	50.0
C.D. McIntosh, Jr.	D1	4-5/28S/24E	IC	DFO	NA	TK	NA	NA	01/70	Unknown	2,600	2.5	2.5
	D2		IC	DFO	NA	TK	NA	NA	01/70	Unknown	2,600	2.5	2.5
	GT1		GT	NG	DFO	PL	TK	37	05/73	Unknown	26,640	18.0	18.0
	GT2		GT	NG	DFO	PL	TK	79	06/20	Unknown	130,050	119.5	124.5
	5		CT	NG	NA	PL	NA	NA	05/01	Unknown	292,950	234.0	280.0
	5		CA	WH	NA	NA	NA	NA	05/02	Unknown	135,000	118.0	118.0
	MREP 1-3		IC	NG	NA	PL	NA	NA	01/25	Unknown	60,800	59.5	59.5
	MREP 4-6		IC	NG	NA	PL	NA	NA	12/24	Unknown	60,800	59.5	59.5
Plant Total												614	665
System Total												778	839
² Lakeland does not maintain records of the number of days that alternate fuel is used.													
³ Unit Type				⁴ Fuel Type					⁵ Fuel Transportation Method				
CA Combined Cycle Steam Part				DFO Distillate Fuel Oil					PL Pipeline				
CT Combined Cycle Combustion Turbine				WH Waste Heat					TK Truck				
GT Combustion Gas Turbine				NG Natural Gas					ST Steam Turbine				
IC Internal Combustion				NA Not Applicable									
MREP McIntosh Reciprocating Energy Project				NA Not Applicable									

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3.0 Forecast of Electric Demand and Energy

Lakeland Electric (LE) prepares a comprehensive short-term (1-year) electric load and energy forecast annually for budgeting and operational studies. Additionally, a long-term (10-year) forecast is developed each year to support the Utility's strategic planning efforts, including LE's Ten-Year Site Plan (TYSP).

Energy Sales and customer forecasts of monthly data are prepared by rate classification. Separate forecast models are developed for inside and outside the City of Lakeland corporate limits for the Residential, Commercial, Industrial and other (municipal departments and outdoor lighting) rate classifications. Monthly forecasts are summarized annually using fiscal period ending September 30th for the short-term budget forecast and by calendar year for long-term studies and reporting.

Lakeland Electric uses MetrixND, an advanced statistical forecasting software tool, developed by Itron, to assist with the development of LE's number of customers, energy and demand forecasts. Lakeland Electric uses MetrixLT, another Itron software tool, which integrates with MetrixND to develop the long-term system hourly load forecast.

The modeling techniques used to generate the forecasts include multiple regression, study of historical relationships and growth rates, trend analysis, and exponential smoothing. Lakeland Electric utilizes Itron's Statistically Adjusted End-Use (SAE) econometric modeling approach for the residential and commercial sectors. The SAE approach is designed to capture the impact of changing end-use saturation and efficiency trends, by building type, as well as economic conditions on long-term residential and commercial energy sales and demand.

Many variables are evaluated for the development of the forecasts. The variables that have proven to be significant and are included in the forecasts are weather, gross regional product, disposable personal income per household, persons per household, number of households, local population, electricity price, building type, appliance saturation and efficiency. Binary variables are used to explain outliers in historical billing discrepancies, trend shifts, monthly seasonality, rate migration between classes and other issues that could affect the accuracy of forecast models.

Weather variables

Heating and cooling degree days are weather variables that attempt to explain a customer's usage behavior as influenced by either hot or cold weather. Heating Degree Days (HDD) occur when the average daily temperature is less than Lakeland Electric's established base temperature of 65 degrees Fahrenheit. Cooling Degree Days (CDD) occur when the average daily temperature is greater than 65 degrees. The formulas used to determine the number of degree days are:

$$HDD = \text{Base Temperature (65)} - \text{Average Daily Temperature}$$

$$CDD = \text{Average Daily Temperature} - \text{Base Temperature (65)}$$

These HDD and CDD variables are used in the forecasting process to correlate electric consumption with weather. The HDD and CDD variables are weighted to capture the impacts of weather on revenue from monthly billed consumption.

Lakeland Electric uses weather data from its own weather stations, which are strategically placed throughout the electric service territory to provide the best estimate of overall temperature for the Lakeland Electric service area.

The most recent 20 years of historical normal weather is used as an input into the sales forecast models.

Normal peak-producing weather is also developed using historical 20-years weather. A weighted average of temperatures on both the day of historical monthly peak and day prior to peak is used to create the HDD and CDD variables.

Economic and demographic variables

The economic and demographic projections used in the forecasts are purchased from Moody's Analytics.

Price variables

A real price forecast by month and rate class is created based on Lakeland Electric historical price data, projections from the Lakeland Electric Rates and Fuel teams, the U.S. Energy Information Administration (EIA) Annual Energy Outlook (AEO) forecasted price of electricity, historical and projected Net Energy for Load, and the projected Consumer Price Index. The 12-month moving average of projected real price of electricity is the price variable used in the sales and demand SAE models.

Structural Indices

The end-use saturation and efficiency indices used in the models are purchased from Itron. Itron's Energy Forecasting Group (EFG) offers end-use data services and forecasting support. EFG's projections are based on data derived from the EIA's AEO forecast for the South Atlantic Census Division. Itron is also contracted to further calibrate the indices based on Lakeland Electric's service area using average square feet by building type for the Commercial Sector and average use by dwelling type for the Residential Sector.

Lakeland Electric reviews the forecasts for reasonableness, compares projections to historical patterns, and modifies the results as needed using informed judgment.

Historical monthly data is available and is analyzed for the 20-year period. Careful evaluation of the data and model statistics is performed; this often results in most models being developed using less than a 10-year estimation period.

Lakeland Electric currently does not have any specific energy savings goals through Demand Side Management (DSM) programs; therefore, Lakeland Electric does not assume any deductions in peak load for the forecast period.

3.1 Service Territory Population Forecast

Electric Service Territory Population Estimate

Lakeland Electric's service area encompasses approximately 246 square miles, approximately 174 square miles of which are outside the City of Lakeland's corporate limits. The estimated electric service territory population for Lakeland Electric in 2025 was 318,926.

Population Forecast

Lakeland Electric's service territory population is projected to increase at an estimated 1.18% average annual growth rate (AAGR) for years 2026-2035.

Polk County's population (Lakeland / Winter Haven MSA) is expected to grow at 1.29% AAGR for the same 10-year period. Historically, Polk County's population has grown faster than LE's service territory population.

PEV Forecast

Lakeland Electric included Plug-In Electric Vehicles (PEV) loads in the demand and energy forecast for the current planning period. We used a load profile provided by Iron consultants (and verified with our known EV customer hourly loads) that assumed no incentives for charging. We estimated the number of electric vehicles in our service area based on Department of Motor Vehicles (DMV) data for Polk County and made projections based on historical trends and expected saturation rates for Electric Vehicles. The EV forecast was added to the total sales forecast. We scaled the hourly EV load profile to estimate the projected impact at time of peak demand.

3.2 Accounts Forecast

Lakeland Electric forecasts the number of monthly electric accounts for the following categories and subcategories:

- Residential, Inside and Outside City Limits
- Commercial, Inside and Outside City Limits
- Industrial, Inside and Outside City Limits
- Other, Inside and Outside City Limits

3.2.1 Residential Accounts

A regression model is used to develop the Residential account forecast using monthly customer data. Total Residential accounts are projected as a function of number of households in the Lakeland / Winter Haven Metropolitan Statistical Area (MSA). Binary variables are used to explain outliers in historical billing data and to account for seasonality.

3.2.2 Commercial Accounts

Commercial accounts consist of the General Service (GS), General Service Business Demand (GSBD) and General Service Demand (GSD) rate classes.

Due in large part to energy efficiency, Lakeland Electric is experiencing a long-term trend of General Service Large Demand (GSLD) customers migrating to Commercial

rate classes. For this reason, a regression model combining both Commercial and GSLD rate classes is being used. The number of Commercial and GSLD accounts is projected as a function of the moving average of projected residential accounts.

A ratio of the Commercial and GSLD rate classes is then applied to generate the Commercial and GSLD account forecasts.

3.2.3 Industrial Accounts

Industrial accounts consist of General Service Large Demand (GSLD), Interruptible (INT) and Extra-Large Demand Customer (ELDC) rate classes.

The GSLD rate class consists of customers with a billing demand greater than 500 kW, at least three times, over the past 12 months. As noted in section 3.2.2, the GSLD account forecast is a ratio of the combined Commercial and GSLD account forecast.

The INT rate class consists of customers with a billing demand greater than 1000 kW, at least three times, over the past 12 months.

The ELDC rate class consists of customers with a billing demand greater than 5000 kW at least three times over the past 12 months.

Projections for INT and ELDC accounts are modeled independently of MetrixND. Special consideration is given to account for new major commercial and industrial development projects that may impact future demand and energy requirements.

3.2.4 Other Accounts

The Other account category consists of Municipal, Electric and Water Department accounts within the City of Lakeland, as well as private area lighting and roadway lighting.

Historical data for these classes is inconsistent and difficult to model. Therefore, account projections for this category are based on time trends and historical growth rates. Lakeland Electric also takes into consideration any future projects and potential developments. These forecasts are developed outside of MetrixND.

3.2.5 Total Accounts Forecast

The Total Account Forecast for Lakeland Electric is the sum of all the individual forecasts mentioned above.

3.3 Energy Sales Forecast

Lakeland Electric's Energy Sales Forecast is the sum of the following forecasts:

- Residential, Inside and Outside City Limits
- Commercial, Inside and Outside City Limits
- Industrial, Inside and Outside City Limits
- Other, Inside and Outside City Limits
- Street and Highway Lightings

3.3.1 Residential Energy Sales Forecast

The Residential energy sales forecast is developed using the Statistically Adjusted End-Use (SAE) econometric modeling approach.

The residential sales models are estimated with historical monthly energy sales data. They are average use models based on the following equation:

$$AvgUse_{y,m} = b_0 + b_1 XCool_{y,m} + b_2 XHeat_{y,m} + b_3 XOther_{y,m} + \varepsilon_{y,m}$$

Where $XCool_{y,m}$, $XHeat_{y,m}$ and $XOther_{y,m}$ are explanatory variables constructed from weather data, end use equipment efficiency and saturation trends, economic and demographic data, dwelling type (single family, multi family or mobile home) and square footage.

For example, $XCool$ incorporates cooling equipment saturation levels, cooling equipment efficiency, thermal efficiency, thermal integrity and square footage by dwelling type, household income, persons per household, price of electricity and CDDs.

This cooling variable is represented by the product of an end use equipment index and a monthly usage multiplier.

That is,

$$XCool_{y,m} = CoolIndex_y \times CoolUse_{y,m}$$

Where

- $XCool_{y,m}$ is the estimated cooling energy use in year (y) and month (m)
 $CoolIndex_y$ is the annual index of cooling equipment
 $CoolUse_{y,m}$ is the monthly usage multiplier

The $CoolIndex_{y,m}$ is calculated as follows:

$$CoolIndex_y = Structural Index_y \cdot \alpha_{Type} \cdot \frac{Saturation_y^{Type} / Efficiency_y^{Type}}{Saturation_Y^{Type} / Efficiency_Y^{Type}}$$

Where

The *Structural Index* is constructed by combining the EIA's building shell efficiency index trends with surface area estimates, indexed to the base year value:

$$StructuralIndex_y = \frac{BuildingShellEfficiencyIndex_y \times SurfaceArea_y}{BuildingShellEfficiencyIndex_Y \times SurfaceArea_Y}$$

Type is the cooling equipment type (Room Air Conditioning, Central Air Conditioning, Air Source Heat Pump, Ground Source Heat pump). Currently, the base year *Y* in the EFG residential end use energy projections is 2015.

$CoolUse_{y,m}$ is defined as follows:

$$CoolUse_{y,m} = \left(\frac{CDD_{y,m}}{CDD_Y} \right) \times \left(\frac{HHSIZE_{y,m}}{HHSIZE_Y} \right)^{\alpha} \times \left(\frac{HHIncome_{y,m}}{HHIncome_Y} \right)^{\beta} \times \left(\frac{Price_{y,m}}{Price_Y} \right)^{\gamma}$$

Where

HHSIZE is average household size (persons per household)

HHIncome is average income per household

α , β , γ are the elasticities

Y is the Base Year

The *XHeat* variable is constructed in the same manner as the *XCool* variable, with cooling equipment replaced by heating equipment and CDDs replaced by HDDs. The heating equipment types used to construct the *XHeat* variable are furnace, air-source heat pump, ground-source heat pump, secondary heating and furnace fans.

The corresponding *HeatUse_{y,m}* variable is defined as follows:

$$HeatUse_{y,m} = \left(\frac{HDD_{y,m}}{HDD_Y} \right) \times \left(\frac{HHSIZE_{y,m}}{HHSIZE_Y} \right)^{\alpha} \times \left(\frac{HHIncome_{y,m}}{HHIncome_Y} \right)^{\beta} \times \left(\frac{Price_{y,m}}{Price_Y} \right)^{\gamma}$$

The *XOther* variable includes the equipment types that are not influenced by weather and constitute the base load portion of residential energy consumption. The equipment types included are electric water heating, electric cooking, refrigerator, freezer, dishwasher, electric clothes washer, electric clothes dryer, television, lighting and miscellaneous electric appliances.

The corresponding *OtherUse_{y,m}* variable is defined as follows:

$$OtherUse_{y,m} = \left(\frac{BDays_{y,m}}{30.44} \right) \times \left(\frac{HHSIZE_{y,m}}{HHSIZE_Y} \right)^{\alpha} \times \left(\frac{HHIncome_{y,m}}{HHIncome_Y} \right)^{\beta} \times \left(\frac{Price_{y,m}}{Price_Y} \right)^{\gamma}$$

Instead of a weather variable, the *OtherUse* formula contains a *BDays* variable, which represents the number of billing days in year (y) and month (m). These values are normalized by 30.44, the average number of days in a month.

The equation used to develop the total residential energy sales forecast is:

$$ResidentialSales_{y,m} = ResidentialCustomer_{y,m} \times AverageUsePerCustomer_{y,m}$$

3.3.2 Commercial Energy Sales

As mentioned in section 3.2.2, there is an increase in rate migration between the GSLD and Commercial rate classes due to energy efficiency. Therefore, a combined Commercial and GSLD energy sales model is generated. This model is developed using

the SAE modeling approach for Commercial building types using EFG projections derived from EIA data. The Commercial sales model is driven by Gross Regional Product, price of electricity, number of households, weather, commercial building type, appliance saturations and efficiencies. Binary variables are used to help explain fluctuations in historical billing data due to rate migrations, billing discrepancies, seasonality and other factors that may affect the accuracy of the forecast models.

The Commercial SAE model framework defines energy use in a year as the sum of energy used by the heating equipment, cooling equipment and other equipment. The formal model equation is:

$$USE_{y,m} = b_0 + b_1 \times XCool_{y,m} + b_2 \times XHeat_{y,m} + b_3 \times XOther_{y,m} + \varepsilon_{y,m}$$

Where $XCool_{y,m}$, $XHeat_{y,m}$ and $XOther_{y,m}$ are explanatory variables constructed from weather data, end use equipment efficiency and saturation trends, economic projections, commercial building type and square footage.

The $XCool_{y,m}$ variable is the amount of energy used by cooling systems and is defined as:

$$XCool_{y,m} = CoolIndex_y \times CoolUse_{y,m}$$

Where

$XCool_{y,m}$ is the estimated cooling energy use in year (y) and month (m)

$CoolIndex_y$ is the annual index of cooling equipment

$CoolUse_{y,m}$ is the monthly usage multiplier

The cooling equipment index depends on equipment saturation levels ($CoolShare$) normalized by operating efficiency levels ($Efficiency$):

$$CoolIndex_y = CoolSales_y \times \frac{\left(\frac{CoolShare_y}{Efficiency_y} \right)}{\left(\frac{CoolShare_Y}{Efficiency_Y} \right)}$$

Base year cooling sales are defined as:

$$CoolSales_Y = \left(\frac{kWh}{Sqft} \right)_{Cooling} \times \left(\frac{CommercialSales_Y}{\sum_e kWh/Sqft_e} \right)$$

Base-year cooling sales are the product of the average space cooling intensity value and the ratio of the total commercial sales in the base year over the sum of the end use intensity values.

The monthly Commercial *CoolUse* variable is computed as:

$$CoolUse_{y,m} = \left(\frac{CDD_{y,m}}{CDD_Y} \right) \times \left(\frac{EconVar_{y,m}}{EconVar_Y} \right)^{\alpha} \times \left(\frac{Price_{y,m}}{Price_Y} \right)^{\beta}$$

Where

EconVar is a function of Household growth and Gross Regional Product
 α, β are elasticities

The *XHeat* variable has the same structure as the *XCool* variable, with cooling equipment replaced by heating equipment, and CDDs replaced by HDDs. The corresponding monthly *HeatUse_{y,m}* variable is defined as:

$$HeatUse_{y,m} = \left(\frac{HDD_{y,m}}{HDD_Y} \right) \times \left(\frac{EconVar_{y,m}}{EconVar_Y} \right)^{\alpha} \times \left(\frac{Price_{y,m}}{Price_Y} \right)^{\beta}$$

The *XOther* variable is also similar in structure to the *XCool* variable, and replaces cooling equipment with other equipment (ventilation, electric water heating, cooking equipment, refrigeration, lighting, office equipment and miscellaneous equipment). Instead of a weather variable there is a *BDays* variable, which represents the number billing days in year (y) and month (m), normalized by 30.44 days (the average number of billing days in a month.)

The corresponding *OtherUse_{y,m}* variable is defined as:

$$OtherUse_{y,m} = \left(\frac{BDays_{y,m}}{30.44} \right) \times \left(\frac{EconVar_{y,m}}{EconVar_Y} \right)^{\alpha} \times \left(\frac{Price_{y,m}}{Price_Y} \right)^{\beta}$$

3.3.3 Industrial Energy Sales

While the GSLD demand and energy sales are forecast in combination with Commercial energy sales, the remainder of the Industrial class – the INT and ELDC rate classes - are modeled independently of the SAE methodology. Each INT and ELDC customer is evaluated individually to account for their expected future energy and demand consumption, using average historical growth rates, monthly demand and expected future changes to load based on information provided by various sources, including account managers, LE engineering, local news and informed judgement.

3.3.4 Other Sales Forecast

The Other energy sales forecast consists of sales for the City's Municipal, Electric and Water Departments, private area lighting, roadway lighting and unmetered street lighting rate classes. Models are difficult to develop for these rate classes due to the large fluctuations in the historical billing data. Therefore, the projections for this category are based on historical trends and growth rates. Special consideration is given to account for new projects and potential developments.

3.3.5 Total Sales Forecast

The results of the energy sales forecasts for all revenue classes are added together to create a total sales forecast.

Lakeland Electric currently does not have any adopted energy efficiency goals, therefore LE does not assume any deductions in peak load for the forecast period.

3.4 Net Energy for Load Forecast

A loss factor of approximately 3.4% is applied through 2035 to convert total energy sales to Net Energy for Load (NEL). The loss factor is developed using a historical average of the estimated amount of energy lost during the generation, transmission and distribution while delivering energy to the customers. The actual loss factor in 2025 was 3.7% for Lakeland Electric System.

3.5 Peak Demand Forecast

A regression model is estimated in MetrixND to forecast monthly peaks. The model is developed using Itron's SAE modeling approach to ensure that end-use appliance saturations and efficiencies that may affect peak are being accounted for. The models are driven by monthly energy coefficients and normal peak-producing weather conditions.

The winter peak forecast is developed under the assumption that its occurrence will be on a January weekday. Historical winter peaks have occurred between the months of December to March, between the hours of 7 a.m. and 9 a.m. Temperatures at time of winter peaks range from 19° F to 51° F.

The summer peak forecast is developed under the assumption that its occurrence will be on a July weekday. Historical summer peaks have occurred between the months of June to September, on weekdays, and between the hours of 3 p.m. and 6 p.m. Temperatures at time of summer peaks range from 90° F to 101° F.

We adjust our forecast to subtract out projected customer owned solar generation from total sales.

3.6 Hourly Load Forecast

Twenty-four hourly regression models are developed in MetrixND to generate the 20-year hourly load shape. Each of these models relates weather and calendar conditions (day-of-week, month, holidays, seasonal periods, etc.) to load. The uncalibrated hourly load shape is then scaled to the energy forecast and the peak forecast using MetrixLT. The result is an hourly load shape that is calibrated to the system energy and system peak forecasts produced using MetrixND.

3.7 Sensitivity Cases

3.7.1 High and Low Load Forecast Scenarios

A forecast is generated based on projections of its drivers and assumptions at the time of forecast development. This base load forecast (“50th percentile”) which is the median of simulation values based on historical weather pattern is intended to represent “most likely” load to occur.

There may be some conditions arising that may cause variation from what is expected in the base forecast. For these reasons, high and low case scenario forecasts are developed for customers, energy sales, system net energy for load and peaks. The high and low forecasts are based on variations of the primary drivers including population and economic growth. The 90th percentile forecast (“90/10”) represents the high load scenario.

Model Evaluation and Statistics

The results of the Electric Load and Energy Forecast are reviewed by an outside consultant. Itron is contracted to review all sales, customer, peak and energy forecast models for reasonableness and statistical significance. Itron also evaluates and reviews all key forecast assumptions.

Additionally, the MetrixND software is used to calculate statistical tests for determining a significant model, including Adjusted R-Squared, Durbin-Watson Statistic, F-Statistic, Probability (F-Statistic), Mean Absolute Deviation (MAD) and Mean Absolute Percentage Error (MAPE).

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4.0 Energy Conservation & DER Management Programs

Lakeland Electric is committed to promoting the efficient use of electric energy and providing cost-effective energy conservation and Distributed Energy Resources (DER) programs for its customers. Lakeland Electric is not subject to the Florida Energy Efficiency and Conservation Act (FEECA) rules but has in place several Energy Conservation & Management Programs and remains committed to utilize both supply- and demand-side options that will benefit its customers. Presented in this section are the currently active energy efficiency and solar incentive programs from Lakeland Electric.

4.1 Conservation Programs 2025

In keeping with Lakeland Electric’s plan to promote retail energy conservation programs, the utility is continuing the following activities as of December 31, 2025:

Residential

- Insulation rebate – Up to \$300 rebate for adding attic insulation to achieve R30 total. Certificate issued to residents at energy audit/visit and redeemed to Insulation Contractor. Can be homeowner installed.
- HVAC Maintenance Incentive – Up to \$100 rebate for residential customers that have A/C maintenance done.
- Heat Pump Rebate - \$300 rebate for installing a SEER 15 or higher heat pump.
- Free Energy Audit
- Energy Star Appliance Rebates

Estimated Demand and Energy Savings for FY 2026

- 2.0 MW demand reduction and over 3,500 MWhs

The same level of savings on demand and energy was in year 2025.

4.2 Solar Program Activities

Lakeland Electric considers solar residential roof-top photovoltaic (PV) system as distributed generators irrespective of their connection to the grid. Solar being available during daylight hours, it helps reduce system peak demand and day-time energy requirements, thereby avoiding the need to generate or purchase higher-cost power.

This, in turn, helps lower the average cost of electricity for LE Customers.

4.2.1 Utility Interactive Net Metered Photovoltaic Systems

As of December 2025, there were approximately 1877 PV residential customers in Lakeland Electric service territory. These PV systems have an installed capacity of 20,619 kW (DC). Lakeland Electric has permitted the interconnection of these systems under a net metering arrangement.

4.2.2 Utility Scale Solar PV Program

During November 2007, LE issued a Request for Proposal seeking an investor to purchase and install investor-owned PV systems totaling 24 MW on customer owned sites as well as City of Lakeland properties. During December 2007, a successful bidder was identified, and installation of the following PV systems began:

- Lakeland Electric's first Solar Energy Purchase Agreement (SEPA) was signed on July 21, 2009, for an investor-owned 250 kW PV system for a twenty-year commitment. The roof top system began commercial operation at the RP Funding Center on April 4, 2010.
- Phase I solar array was installed at the Lakeland Linder Airport with a SEPA that was initiated on November 9, 2010. This 2.25 MW PV system began operation on December 22, 2011, for a twenty-five-year term.
- Phase II of the Lakeland Linder Airport site is located off Hamilton Road and began shortly after Phase I. The SEPA for Phase II was initiated on December 9, 2010. Phase II is a 2.75 MW PV system that began operation on September 16, 2012, for a twenty-five-year term.
- Phase III is the most recent solar array added to the Lakeland Linder Airport site and is located off Medulla Road. Lakeland Electric entered SEPA on March 2, 2015, for 3.15 MW PV. This solar array operation began on December 21, 2016, for a twenty-five-years term.
- Lakeland entered SEPA with a solar vendor on November 25, 2013, for a 6.0 MW PV system located adjacent to the Sutton substation. The facility is commonly referred to as Bird blue or by the road intersection Bellavista/Sutton. It began generating power on July 6, 2015

- LE has signed a long-term Power Purchase Agreement (PPA) with Edge Solar LLC to begin commercial operations by March 1, 2027, for a 74.8 MW utility-scale solar project. Site preparation and construction are in progress. The interconnection study has been completed, and the Sub-station is under construction.

Lakeland Electric has a total of 14.4 MW of utility-scale solar capacity, which can generate approximately 2% of the average daytime system-wide summer load. Currently, total solar production is around 20,000 MWh annually. Additionally, net-metered solar customers generate and contribute approximately 8,000 MWh of energy back to the LE system annually.

4.2.3 Utility Solar Water Heating Program

During November 2007, LE issued a Request for proposal (RFP) for the expansion of its Residential Solar Water Heating Program. In this solicitation, Lakeland sought the services of a venture capital investor who would purchase, install, own, operate and maintain 3,000 – 10,000 solar water heaters on LE customers’ residences in return for a revenue sharing agreement. LE would provide customer service and marketing support, along with meter reading, billing and collections. During December 2007, a successful bidder was identified and notified. In August 2009, LE approved a contract with the vendor with plans to resume installations of solar water heaters. Annual projected energy savings from this project will range between 7,500 and 25,000 MWh. These solar generators will also produce Renewable Energy Credits that will contribute toward Florida’s expected mandate for renewable energy as a part of the utility’s energy portfolio.

During the summer of 2010, the “Solar for Lakeland” program began installing residential solar water heaters. Under this expanded program, the solar thermal energy was sold for the fixed monthly amount of \$34.95. All solar heating systems continued to be metered for customers’ verification of solar operation and for tracking green credits for the utility. At the end of 2017, there were 259 solar heaters installed in Lakeland residences. There are about 179 customers who left as of December 2023.

4.2.4 PHEV and Energy Storage Activities

There are presently eleven Level 2 charging stations supported by Lakeland Electric for the City of Lakeland, available to customers at different prime locations in the LE territory. Lakeland Electric is also supporting an Amazon EV fleet hub with 311 Level 2 chargers. At present Amazon is supporting 102 EV last mile delivery vans, however they are prepared for growth. Additionally, there are approximately 50 Level 2 and Level 3 chargers located within the Lakeland Electric service territory that are provided by businesses for their customers. Lakeland Electric has no plans to install additional EV chargers; however, we will continue to support other entities looking to provide EV charging.

At present, there are no definitive plans for an energy storage platform. However, Lakeland Electric has initiated the development of a strategy for distributed energy storage systems aimed at providing peak capacity and alleviating transmission and distribution congestion. Ongoing circuit-level studies are being conducted to identify optimal locations for deployment.

4.2.5 Renewable Energy Credit Trading

Lakeland Electric's Renewable Energy Credits (REC) are produced from its five solar energy purchases made through PPAs that have a combined name plate capacity of 14.4 MW.

In January of 2019, Lakeland Electric set up an account with the North American Renewable Registry to start trading its solar RECs classified as Green-e-Eligible. A REC is created for every (1) Megawatt-hour of renewable electricity generated and delivered to the utility grid.

The utility's 2026 fiscal year forecast for RECS is about 16,500 in Center for Resource Solutions (CRS) Listed RECS which can sell for \$2.00 to \$3.00 in the state of Florida and about 500 in non-CRS listed RECS which can sell for \$1.00 to \$1.50 in the state of Florida.

Lakeland Electric has two (2) solar energy PPAs that have surpassed 15 years since their Commercial Operation Date (COD), rendering them ineligible for CRS-listed

RECs, however, they remain eligible for non-CRS-listed RECs. The remaining three (3) solar energy PPAs are eligible for CRS-listed RECs.

An additional solar facility (Edge Solar) is expected to enter service under a long-term PPA in 2027. Under the terms of this agreement, Lakeland Electric will not receive REC credits from the owner and operator of Edge Solar Facility; however, its energy will be used to serve its customers.

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5.0 Forecasting Method and Procedures

This section describes Lakeland Electric's long-term Integrated Resource Planning (IRP) process in which economic and fuel parameters are the major drivers to develop a long-term plan that helps to develop a portfolio that focuses on a best forward path for Lakeland Electric. This chapter also shows Lakeland Electric's position in the economy energy purchase and sales, both within the Florida Municipal Power Pool (FMPP) and with external electric utilities. Also explained are fuel supply arrangement and fuel price projections to be used in the long-term resource planning process.

5.1 Integrated Resource Plan (IRP)

In addition to the Ten -Year Site Plan process, Lakeland Electric utilizes an IRP process for meeting up to 10 years of forecasted energy demand plus reserve capacity through a combination of supply and demand-side resources along with economy energy purchase from the Florida Municipal Power Pool (FMPP) while meeting the objectives of environmental responsibility, reliability, and affordability for its customers. The IRP evaluates the risks and uncertainties related to regulation, marketplace and technologies based on known information and assumptions.

5.2 Florida Municipal Power Pool

Lakeland Electric is a member of the FMPP with the Orlando Utilities Commission (OUC) and the Florida Municipal Power Agency (FMPA). These three utilities operate as a single Balancing Authority (BA). All FMPP generating units are jointly committed and dispatched to optimize economic energy and ensure reliability across the entire FMPP Balancing Authority (BA).

The FMPP is not a capacity pool meaning that each member must plan for and maintain sufficient capacity to meet their own individual electric demand and operating reserve obligations. Lakeland Electric, therefore, must ultimately plan to meet its own load and reserve requirements as reflected in this document. Each member participates in a day ahead market in purchases or sales activities and all units are dispatched in an economic

order. The FMPP provides an opportunity for members to purchase economy energy when available from other members.

5.3 Economic Parameters

Subsections of 5.3 present the assumed values adopted for economic parameters used in Lakeland Electric's planning process. The assumptions stated in this section are applied consistently throughout this document.

5.3.1 Inflation Rate

The general inflation rate applied is assumed to be 2.6% in 2026, 2.4% in 2027 and 2.4% thereafter based on Moody's CPI forecast as of January 2026.

5.3.2 Bond Interest Rate

Consistent with the traditional tax-exempt financing approach used by Lakeland Electric, the self-owned supply-side alternatives assume 100 percent debt financing. Lakeland's long-term tax-exempt bond interest rate is assumed to be 5.0 percent.

5.3.3 Present Worth Discount Rate

The present worth discount rate used in the analysis is set equal to Lakeland Electric's assumed bond interest rate of 5.0 percent.

5.3.4 Interest During Construction

Effective from the beginning of Fiscal Year 2026, and in accordance with Governmental Accounting Standards Board Statement No. 62 (GASB 62), Lakeland Electric has discontinued the accounting policy of capitalizing net interest costs on funds used for the construction of fixed assets.

5.3.5 Fixed Charge Rate

The fixed charge rate is the sum of the project fixed charges as a percent of the project's total initial capital cost. When the fixed charge rate is applied to the initial investment, the product equals the revenue requirements needed to offset fixed costs for a

given year. A separate fixed charge rate can be calculated and applied to each year of an economic analysis, but it is most common to use a Levelized Fixed Charge Rate that has the same present value as the year by year fixed charged rates. Included in the fixed charged rate calculation is an assumed 0.7 percent issuance fee, a 0.0 percent annual insurance cost, and there is no 6 months' debt reserve for Lakeland Electric.

5.4 Fuel Parameters

Subsections of 5.4 below outline the basic fuel assumptions and fuel delivery arrangement for Lakeland.

5.4.1 Natural Gas

Natural gas is a colorless, odorless fuel that burns cleaner than many other traditional fossil fuels. Natural gas can be used for heating, cooling, and production of electricity and other industrial uses.

Natural gas is found in the Earth's crust. Once the gas is brought to the surface, it is refined to remove impurities such as water, sand, and other gases. The natural gas is then transported through pipelines and delivered to the customer either directly from the pipeline or through a distribution company or utility.

5.4.1.1 Natural Gas Supply and Availability

Significant natural gas reserves exist, both in the United States and throughout the North American mainland and coastal regions. Natural gas reserves are mostly dependent on domestic production. Production of natural gas from the Marcellus and Haynesville areas has increased due to advanced drilling technology which has lowered cost contributing to increased supply which reduces price volatility seen in recent years. During 2025, natural gas trading averaged around \$3.89 per MMBtu as the market reacted to increased demand for LNG and cold weather events in early 2025. The five-year NYMEX Henry Hub Natural Gas forward curve is currently projected to average around \$3.73 per MMBtu.

5.4.1.2 Natural Gas Transportation

There are three transportation companies serving Peninsular Florida. Florida Gas Transmission Company (FGT), Sabal Trail Transmission, and Gulfstream Natural Gas System (GNGS). Lakeland Electric has interconnections and service agreements with GNGS and FGT to provide diversification and flexibility in gas delivery.

5.4.1.2.1 Florida Gas Transmission Company

FGT is an open access interstate pipeline company transporting natural gas for third parties through its 5,000 miles pipeline system extending from South Texas to Miami, Florida.

The FGT pipeline system accesses a diversity of natural gas supply regions, including:

- Anadarko Basin (Texas, Oklahoma, and Kansas)
- Arkona Basin (Oklahoma and Arkansas)
- Texas and Louisiana Gulf Areas (Gulf of Mexico)
- Black Warrior Basin (Mississippi and Alabama)
- Louisiana – Mississippi – Alabama Salt Basin

FGT's total receipt point capacity is in excess of 3.0 billion cubic feet per day and includes connections with 12 intrastate pipelines to facilitate transfers of natural gas into its pipeline system. FGT reports a current delivery capability to Peninsular Florida of approximately 3.1 billion cubic feet per day. Lakeland Electric currently has in excess of 33,000 MMBtu/day of firm transportation with FGT for natural gas delivery to its generation facilities.

5.4.1.2.2 Florida Gas Transmission market area pipeline system

The FGT multiple pipeline system corridor enters the Florida Panhandle in northern Escambia County and runs easterly to a point in southwestern Clay County, where the pipeline corridor turns southerly to pass west of the Orlando area. The mainline corridor then turns to the southeast to a point in southern Brevard County, where it turns south generally paralleling Interstate Highway 95 to the Miami area. A major lateral line (the St. Petersburg Lateral) extends from a junction point in southern Orange County westerly to

terminate in the Tampa, St Petersburg, and Sarasota area. A major loop corridor (the West Leg Pipeline) branches from the mainline corridor in southeastern Suwannee County to run southward through western Peninsular Florida to connect to the St. Petersburg Lateral system in northeastern Hillsborough County. Each of the above major corridors include stretches of multiple pipelines (loops) to provide flow redundancy and transport capability. Numerous lateral pipelines extend from the major corridors to serve major local distribution systems and industrial/utility customers.

FGT's Phase VIII Expansion Project came into full operation April 1, 2011. It consists of approximately 483.2 miles of multi diameter pipeline in Alabama, Mississippi and Florida with approximately 365.8 miles built parallel to existing pipelines. The project added 213,600 horsepower (HP) of additional mainline compression. One new compressor station was built in Highlands County, Florida. The project provides an annual average of 820,000 MMBtu/day of additional firm transportation capacity.

5.4.1.2.3 Gulfstream pipeline

The Gulfstream pipeline is a 744-mile pipeline originating in the Mobile Bay region and crossing the Gulf of Mexico to a landfall in Manatee County (south Tampa Bay). The pipeline supplies Florida with up to 1.1 billion cubic feet of gas per day serving existing and prospective electric generation and industrial projects in southern Florida. Phase I of the pipeline is complete and ends in Polk County, Florida. The pipeline extends to Florida Power & Light's Martin Plant. Construction for the Gulfstream pipeline began in 2001 and it was placed in service in May 2002. Phase II was completed in 2005. Lakeland Electric added an additional 10,000 MMBtus/day of Gulfstream Pipeline capacity during 2017, for a total of 50,000 MMBtus/day.

5.4.1.2.4 Sabal Trail Transmission

The Sabal Trail pipeline is a 515 miles interstate pipeline originating in Central Alabama and terminating in Central Florida. The pipeline's Phase 1 facilities began commercial service July 3, 2017. The Phase 1 capacity of the pipeline is 830,000 Dth/day. Lakeland Electric is not currently a customer of Sabal Trail Transmission.

5.4.1.2.5 Transcontinental Gas Pipeline (TRANSCO)

The Transco Pipeline is a 10,000-mile interstate pipeline extending from south Texas to New York City. Lakeland Electric acquired 5,800 MMBtus/day beginning January 26, 2022, as a risk mitigation strategy to flow additional natural gas to both FGT and Gulfstream pipelines. The city entered into long-term prepaid Natural Gas baseload agreements until October 31, 2026, with an option to extend another five years.

5.4.2 Fuel Oil

5.4.2.1 Fuel Oil supply and Availability

Lakeland Electric obtains all fuel oil through spot market purchases and has no long-term contracts. This strategy provides the lowest cost for fuel oil consistent with usage, current price stabilization and on-site storage. Lakeland Electric's Fuels Section continually monitors the cost effectiveness of spot market purchasing.

5.4.2.2 Fuel Oil Transportation

Although Lakeland Electric is not a large consumer of fuel oils, a small amount is consumed during operations for backup fuel and diesel unit operations. Fuel oil is transported to Lakeland by truck. The City has a storage capacity of 43,771 barrels for No. 2 distillate. This storage capacity affords the system a 4-days reserve for No.2 distillate at normal burn rates.

5.4.3 Fuel Price Projections

This section presents the long-term price projections for natural gas and fuel oil. The fuel price forecast for solid fuel oil and natural gas is prepared by Lakeland Electric's Fuels Department. The natural gas forecast uses a blended average from a consultant forecast and the New York Mercantile Exchange (NYMEX) natural gas forward curve along with transport rate, usage, and fuel to provide a total delivered price. The oil prices use the ten-year NYMEX crude oil forward curve. The diesel oil forecast is, with respect

to the percentage of growth, based off the Energy Information Administration's Annual Energy Outlook 2025.

5.4.3.1 Natural Gas Price Forecast

The price forecast for natural gas is based on historical prices and future expectations for the market. The forecast takes into account the spot purchases of gas to meet its needs along with its risk management holdings intended to reduce price volatility. To address the historic volatility of the natural gas market, Lakeland Electric initiated a formal fuel hedging program in 2003. The Energy Authority (TEA), a company located in Jacksonville, FL, is Lakeland Electric's consultant assisting in the administration and adjustment of policies and procedures, as well as the oversight of the program.

Lakeland Electric purchases "seasonal" gas to supplement the base requirement and purchases "as needed" daily gas, known commonly as "spot gas", to round out its supply needs.

Natural gas transportation from FGT is currently supplied under two rates in FGT's tariff: FTS-1 and FTS-3. Rates in FTS-1 are based on FGT's Phase II, III, IV, V, VI and VII, expansion. Rates in FTS-3 are based on the Phase VIII expansion, which went in service April 1, 2011. Lakeland added FTS-3 capacity to increase its capacity for new generation. Lakeland diversified its capacity with 56% Gulfstream, 38% FGT and 6% Transco. Lakeland entered an agreement with FGT so they could take control of one section of pipe previously under the control of Lakeland. This change also resulted in Lakeland's Gulfstream capacity utilizing an FGT delivery point at Lakeland's facilities, meaning that all deliveries Lakeland receives are through the FGT system. The FTS usage and fuel rates for FGT, Gulfstream and Transco listed below are effective from March 2026.

	Table 5-1 Natural Gas Tariff Transportation Rates					
Rates And Schedules	Rate Schedules					
	FGT FTS-1 w/surcharges (cents/DTH)*	FGT FTS-3 w/surcharges (cents/DTH)*	FGT ITS-1	Transco FT	Gulfstream FTS-1	Gulfstream FTS-6%
Reservation Usage	51.5 5.59	72.5 3.54	74.82 0.00	9.839 1.09	55.00 0.69	70.41 0.69
Total	57.09	76.04	74.82	10.93	55.69	71.1
Fuel Charge	2.01%	2.01%	2.01%	0.32%	1.50%	1.50%
* A DTH is equivalent to 1 MMBtu or 1 MCF						

An average transportation rate of \$0.54/MMBtu will be added for purposes of projecting delivered gas prices for existing gas units in Lakeland. This average rate is realized through a current mix of FGT, Gulfstream and Transco, including consideration of Lakeland Electric's ability to relinquish its FTS, Gulfstream and Transco transportation or acquire other firm and interruptible gas transportation on the market. The delivered natural gas price is projected to be volatile during the next twelve months with expectations of reduced production output and as LNG facilities gear up for increased exports. Volatility may be a factor in prices during 2025 due to storage inventories trending lower at the end of the 2025 season and the potential for more LNG shipments. The long-term average price is forecasted to remain around \$4.76 during the next five years starting March 2026. The average price of the gas in Lakeland will be around \$5.69 /MMBtu for the year 2026.

5.4.3.2 Fuel Oil Price Forecast

Changes in production levels and methods are placing oil prices at a lower level in the world market. Lakeland adjusts its oil price forecast to reflect current market pricing and what the anticipated future price may be.

5.4.4 Fuel Forecast Sensitivities

Lakeland Electric is not conducting any specific forecasted fuel price sensitivity analysis at this moment. Lakeland baseloads larger volumes during the winter and summer seasons to mitigate fuel price risk and ensure reliability. In addition, the utility financially hedges natural gas to manage fuel price risk.

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6.0 Forecast of New Capacity Requirements

6.1 Assessment of the Need for Capacity/Energy

This section outlines Lakeland Electric's methodology for evaluating capacity requirements to ensure reliable service for its customers in the future. Assessing the need for future capacity involves considering Lakeland Electric's long-term load forecast, reserve margin requirements defined by the Florida Reliability Coordinating Council (FRCC) and FMPP, as well as the existing generation capacity of Lakeland Electric. To effectively serve customers within its territory, Lakeland Electric must maintain sufficient resources to meet peak-hour demand, including reserves, at all hours of the day throughout the year.

6.1.1 Load Forecast

The load forecast outlined in Section 3.0 serves as the basis for assessing future capacity requirements. Total electricity sales and peak hour demand forecasts for this TYSP were established considering future economic expectations and population growth. Lakeland Electric (LE) generates a range of load forecasts, including base-expected, high, and low scenarios, ensuring flexibility to accommodate various outcomes. Tables 6-1 and 6-2 provide a summary of the annual peak load forecasts for winter and summer, respectively, under the base case (reference) scenario.

6.1.2 Reserve Requirements

Prudent utility planning requires securing firm generating resources beyond the expected peak system demand to accommodate unforeseen demand fluctuations and supply variability. This additional capacity (i.e., reserve) should be large enough to cover the loss of any unit in the system and be able to respond adequately to cover the moment-to-moment change in system load. Total reserves should be sufficient to cover uncertainties such as planned outage, transmission system interruptions due to maintenance or weather events, and load forecasting errors. Several methods are used to estimate the appropriate level of

reserve capacity, a commonly applied approach is the reserve margin method, which is calculated as follows:

$$\frac{\text{System net capacity} - \text{System net peak demand}}{\text{System net peak demand}}$$

Lakeland Electric looked at probabilistic approaches to determine its reliability needs in the past. The study has looked at reliability indices such as Loss of Load Probability (LOLP) and Expected Unserved Energy (EUE). Lakeland Electric has found that due to the strength of its transmission system, and interconnection with neighboring utilities, operation within FMPP, LOLP and EUE values were so small in the past that reserve margin-based reliability measures would be sufficient at this time. Moreover, FRCC performs LOLP analysis every two years, and the reliability standards are adequate to operate the entire FRCC system reliably.

6.1.3 Existing Energy Supply

Availability factor on Generating Units is reviewed annually and is found to be within industry standards for the types of units that Lakeland Electric has in its generation fleet, indicating adequate and prudent maintenance is taking place.

Lakeland Electric utilizes a diverse portfolio of resources, including both owned generation and purchased power, to meet its load requirements and reserve obligations. Lakeland plans to add 74.8 MW of solar capacity to its territory to be available for generations in early 2027. LE uses PCI GenTrader, a production cost modeling and portfolio optimization platform, to manage its power generation and fuel resources, including the economy energy purchases from FMPP. Table 6-1 shows the combination of purchases and LE owned resources for existing and planned capacity requirements. In addition, LE has secured firm Power Purchases necessary to meet load and reserve obligations with the new resources installed and operational. Recently, LE added 120 MW (6 units) of RICE Engines which will avoid the existing long-term power purchase contracts from other entities. These new generating units are highly reliable, efficient, flexible, and cost effective. The high flexibility and modularity of these Reciprocating

Internal Combustion Engines (RICE) can provide a low-cost energy solution to Lakeland supporting an optimized transition to additional solar energy in its energy portfolio. These new engines can quickly ramp up and down as needed to balance the variable nature of solar resources. This will help to improve the reliability of Lakeland's System.

6.2 Seasonal Capacity and Reserve Margins

As discussed in Section 6.1.2 above, by comparing Lakeland Electric's load forecast plus reserves with firm supply, the Reserve Margins can be identified. Since electric supply and demand differ in summer and winter, planning based on seasonal reserve margin is critical. This TYSP study also considers capabilities and performance of solar resources in both summer and winter. Lakeland Electric's Reserve Margins presented in Tables 6-1 and 6-2 in both seasons are at or higher than 15% in both cases.

Tables 6-1 and 6-2 show that, based on the base winter and summer load forecasts, Lakeland Electric's Reserve Margins remain at or above 15% throughout the year. This is achieved through additional external firm power purchases, repairing existing out-of-service gas turbines, or developing new resources during the current ten-year planning period. This complies with the FRCC's minimum reserve margin criteria to meet its reliability requirements.

Table 6-1 Projected Reliability Levels - Winter / Base Case										
					System Peak Demand		Reserve Margin		Excess(Deficit) to Maintain 15% Reserve Margin	
Year	Net Generating Capacity MW	Net System Purchases MW	Net System Sales MW	Net System Capacity MW	Before Interruptible and Load Management MW	After Interruptible and Load Management MW	Before Interruptible and Load Management %	After Interruptible and Load Management %	Before Interruptible and Load Management %	After Interruptible and Load Management MW
2026/27	839	0	0	839	682	682	23%	23%	55	55
2027/28	839	0	0	839	688	688	22%	22%	48	48
2028/29	839	0	0	839	693	693	21%	21%	42	42
2029/30	839	0	0	839	698	698	20%	20%	36	36
2030/31	839	0	0	839	702	702	20%	20%	32	32
2031/32	839	0	0	839	707	707	19%	19%	26	26
2032/33	839	0	0	839	711	711	18%	18%	21	21
2033/34	839	0	0	839	715	715	17%	17%	17	17
2034/35	839	0	0	839	720	720	17%	17%	11	11
2035/36	839	0	0	839	726	726	16%	16%	4	4

Table 6-2 Projected Reliability Levels - Summer / Base Case										
					System Peak Demand		Reserve Margin		Excess(Deficit) to Maintain 15% Reserve Margin	
Year	Net Generating Capacity MW	Net System Purchases MW	Net System Sales MW	Net System Capacity MW	Before Interruptible and Load Management MW	After Interruptible and Load Management MW	Before Interruptible and Load Management %	After Interruptible and Load Management %	Before Interruptible and Load Management %	After Interruptible and Load Management MW
2026	778	107	0	885	754	754	17%	17%	18	18
2027	778	104	0	882	763	763	16%	16%	4	4
2028	778	114	0	892	772	772	16%	16%	4	4
2029	778	124	0	902	781	781	15%	15%	4	4
2030	778	134	0	912	790	790	15%	15%	3	3
2031	778	144	0	922	800	800	15%	15%	2	2
2032	778	154	0	932	808	808	15%	15%	3	3
2033	778	164	0	942	818	818	15%	15%	1	1
2034	778	174	0	952	827	827	15%	15%	1	1
2035	778	184	0	962	837	837	15%	15%	0	0

Solar resources, unlike traditional dispatchable generators, are highly variable and depend on factors such as time of day, season, and cloud conditions. Consequently, in LE's resource plan, solar firm capacity is assumed to be 50% of the installed capacity during the summer and 0% in winter, aligning with industry's best practices for planning purposes. Net system purchases include firm purchases from both thermal and solar resources.

As Lakeland Electric's needs and resource fleet evolve over time, reserve margin levels will be periodically reviewed and adjusted as necessary for each year.

6.3 Energy Resources Portfolio and Analysis

Table 6.3 summarizes the projected energy mix from different types of resources for Lakeland Electric over the next 10 years based on the Production Cost Analysis. It outlines the committed and planned resources needed to meet the future capacity and energy demands of LE customers.

This combination of resources is represented as a portfolio for Lakeland Electric under the base case assumptions and production cost analysis. The GenTrader software model provides the optimal energy generation from Lakeland units along with economic

purchase from the FMPP members when Lakeland units are economically dispatched with the other Pool members. This portfolio is decided based on optimal optimization of cost, risk, and environmental factors. As can be seen in Table 6.3, natural gas-fired resources are dominant in LE's future energy mix as more than 50% of energy is expected to come from these resources. Solar mix is still low until 2027. It is anticipated to increase up to 5.0% when new solar units are added to the portfolio. Lakeland expects to purchase certain percentage of economic energy from the FMPP members and fixed firm contract energy purchases from a bilateral agreement with the OUC even after adding new RICE engines. When LE's RICE engines and solar resources become available in 2027, LE can be a net seller or a buyer based upon relative dispatch costs of LE units compared to the other units in FMPP.

Table 6.3: Energy Resource Mix													
Energy Source	Type	Units	Calendar Year										
			2025 - Actual	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Coal		%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Distillate	Steam	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	CC	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	CT	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Total	%	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.03%	0.03%	0.00%
Natural Gas	Steam	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	CC	%	61%	69%	66%	62%	68%	70%	69%	66%	66%	66%	65%
	CT	%	7%	4%	3%	1%	3%	2%	2%	2%	2%	2%	1%
	Total	%	68.34%	72.21%	68.91%	63.67%	70.23%	72.32%	70.79%	68.94%	67.78%	67.97%	66.26%
Solar ¹		%	1%	1%	5%	6%	6%	6%	6%	6%	5%	5%	5%
Other (Specify) ²		%	31%	27%	26%	30%	24%	22%	24%	25%	27%	27%	29%
Net Energy for Load		%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

¹ Total solar from solar farms plus net metering from roof top customers. ² Other Economy Purchases

6.4 Summary - Study Results

Tables 6-1 and 6-2 present the schedules of new planned resources and anticipated future purchases in addition to the existing resources and purchases. The planned portfolio provides sufficient resource adequacy including reserves during the summer period based on existing and planned supply and demand. While Lakeland anticipates more than 5% of

installed capacity coming from solar by 2027, there is a need for additional capacity which may either come from external purchases or additional capacity from repairs from existing gas turbine units in 2027 and later. The capacity contribution from solar in meeting winter peak loads in the winter month's morning hours is assumed negligible. Table 6-3 presents the energy mix scenario for Lakeland Electric. In the meantime, the firm power purchase contract with other utilities may continue until acceptable reserve margin is attained in the future.

7.0 Environmental and Land Use Information

As discussed in Section 6, Lakeland Electric added a new 125 MW McIntosh Gas Turbine No. 2 in 2020 and retired its coal unit (219 MW – LE’s gross MW share) at Lakeland Electric’s McIntosh Power Plant site (See Figure 7.1). LE has recently replaced its retired coal unit with 120 MW RICE engines in 2025 at McIntosh Plant site (Figure 7-3 and 7-4). Lakeland has recently established a long-term Power Purchase Agreement (PPA) with Edge Solar to install a 74.8 MW utility-scale photovoltaic solar system within Lakeland’s territory (Refer to Figures 7-5 and 7-6). Construction of this project has begun, and the solar system is expected to be operational in early 2027 (see Figure 7-6).

To achieve LE’s overall mission to provide affordable energy and environmental stewardship, LE has adopted different measures to maintain the environmental footprint of the new generating units, including air emissions, water, waste, and land use impacts within the state and federal standard.

Per the Ten-Year Site Plan definitions (rule 25-22-072), “Preferred Sites” include sites where a utility has taken action to site new generation. “Preferred Site” information of the Plant site for recently installed and planned units is presented from Figures 7-1 to 7-5.

Table 7-1 summarizes different control strategies adopted to comply with various environmental emission regulations in LE’s existing major generating units. The air pollution control technologies installed at those generating units meet all the state and federal regulations for all pollutants.

The retirement of our coal burning unit in 2021 has prompted the closure of our coal combustion (CCR) residuals landfill. We have obtained State permits to close the CCR landfill. Closing the landfill will significantly limit the exposure of the materials into the environment. Closure was completed in early 2025.

The coal burning unit retirement has also significantly reduced LE’s emissions of pollutants such as carbon monoxide, sulfur dioxide, nitrogen oxides, particulate matter, hazardous air pollutants, as well as greenhouse gases.

In April 2024, EPA finalized the rules on greenhouse gas emissions from new natural gas combustion turbines as well as existing steam units. Additionally, EPA is

considering altering regulations to regulate closed CCR landfills. But with the change in Administration, the future of these rules is uncertain.

LE has installed an epoxy coating on the once through cooling water tubes at Larsen Power Plant in 2022 to help reduce the amount of copper picked up by the water and returned to the lake. Independent Laboratory testing of the cooling water has shown that the project effectively reduces copper impacts to the lake.

Table 7-1: Emission Control Strategies in Major LE Units

Table 7-1 Lakeland Electric Existing Generating Facilities Environmental Emissions and Control Strategies for Major Existing Generating Units								
Plant Name	Unit (Type)	Fuel		Air Pollutants and Control Strategies				Cooling Type
		Primary	Alt.	PM	SO ₂	NO _x	CO	
Charles Larsen Memorial	8 (CC)	NG	DFO	None	LS	LNB WI	None	OTF
C.D. McIntosh, Jr.	GT2 (GT)	NG	DFO	None	LS	WI	None	N/A
	5 (CC)	NG	N/A	None	LS	LNB SCR	OC	WCTM
	MREP 1-6 (IC)	NG	N/A	None	LS	SCR	OC	N/A
Winston	1-20 (IC)	DFO	N/A	None	LS	SCR	OC	N/A
PM Particulate matter OTF Once-through flow MREP McIntosh Reciprocating Energy Project SO ₂ Sulfur dioxide GT Gas Turbine WI Water injection NO _x Nitrogen oxides IC Internal combustion SCR Selective catalytic reduction CO Carbon monoxide NG Natural Gas N/A Not Applicable LS Low sulfur fuel WCTM Water cooling tower mechanical OC Oxidation catalyst LNB Low NOx burners CC Combined Cycle DFO Distillate Fuel oil								
Source: Lakeland Electric Environmental Staff								

Figure 7-1: C.D. McIntosh Power Plant Topographic Map

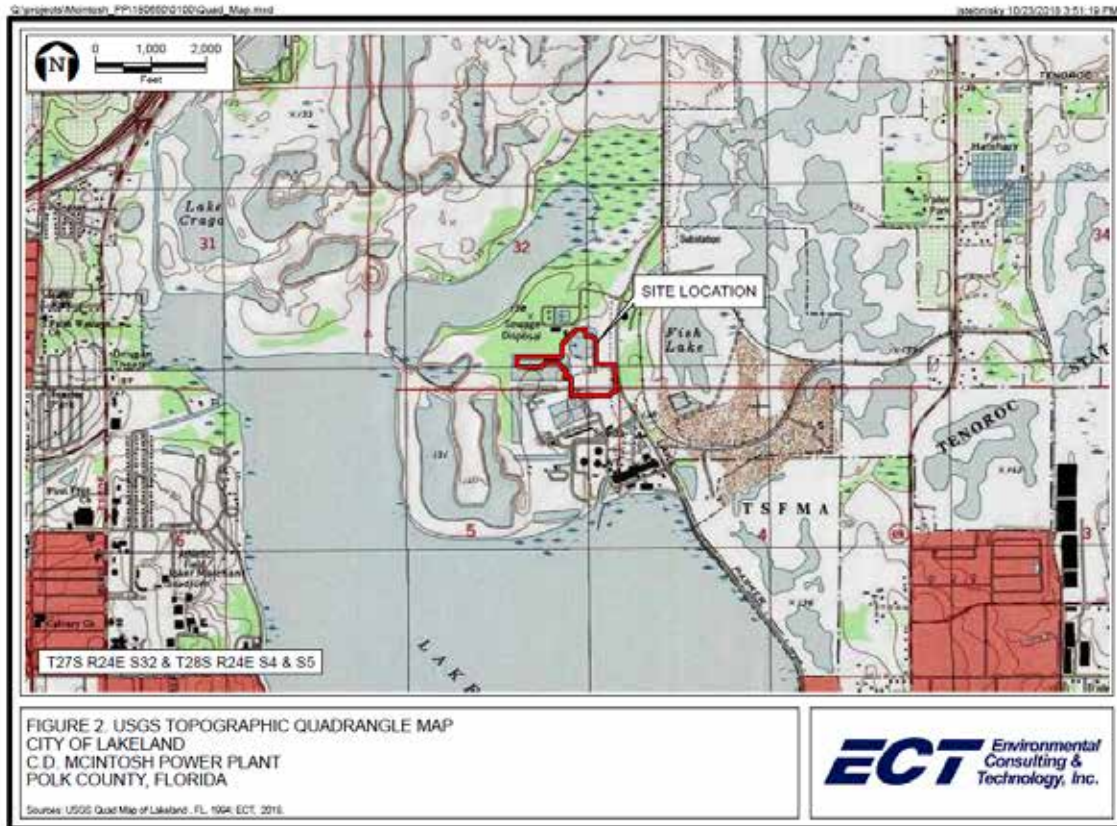


Figure 7-2: City of Lakeland – Zoning Map

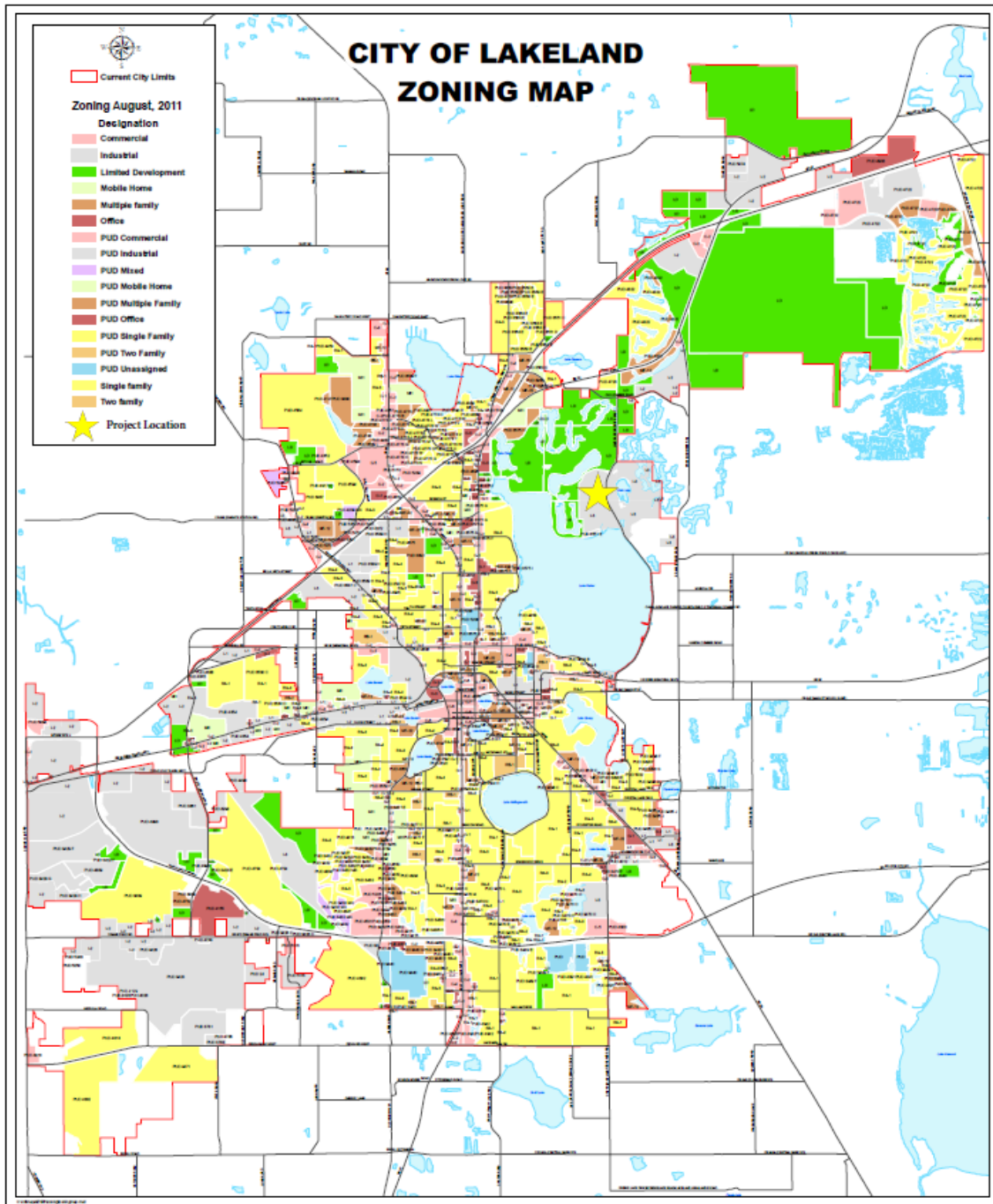


Figure 7-3: Site Location of 120 MW RICE Engines in McIntosh Plant

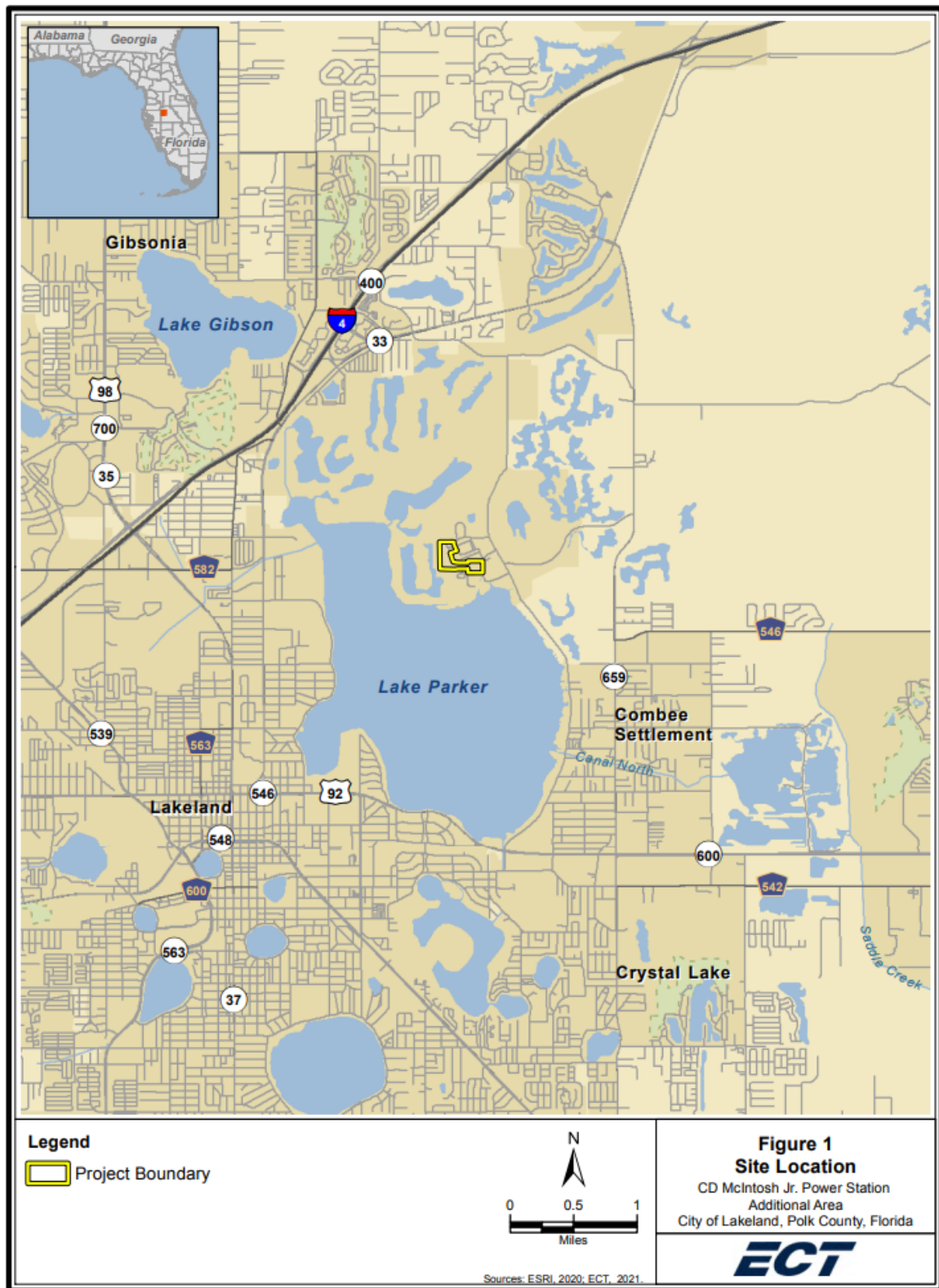


Figure 7-4: An enlarged View of Site Location of 120 MW RICE Engines in McIntosh Plant



Figure 7-5: Edge Solar - Project Site Location in Polk County

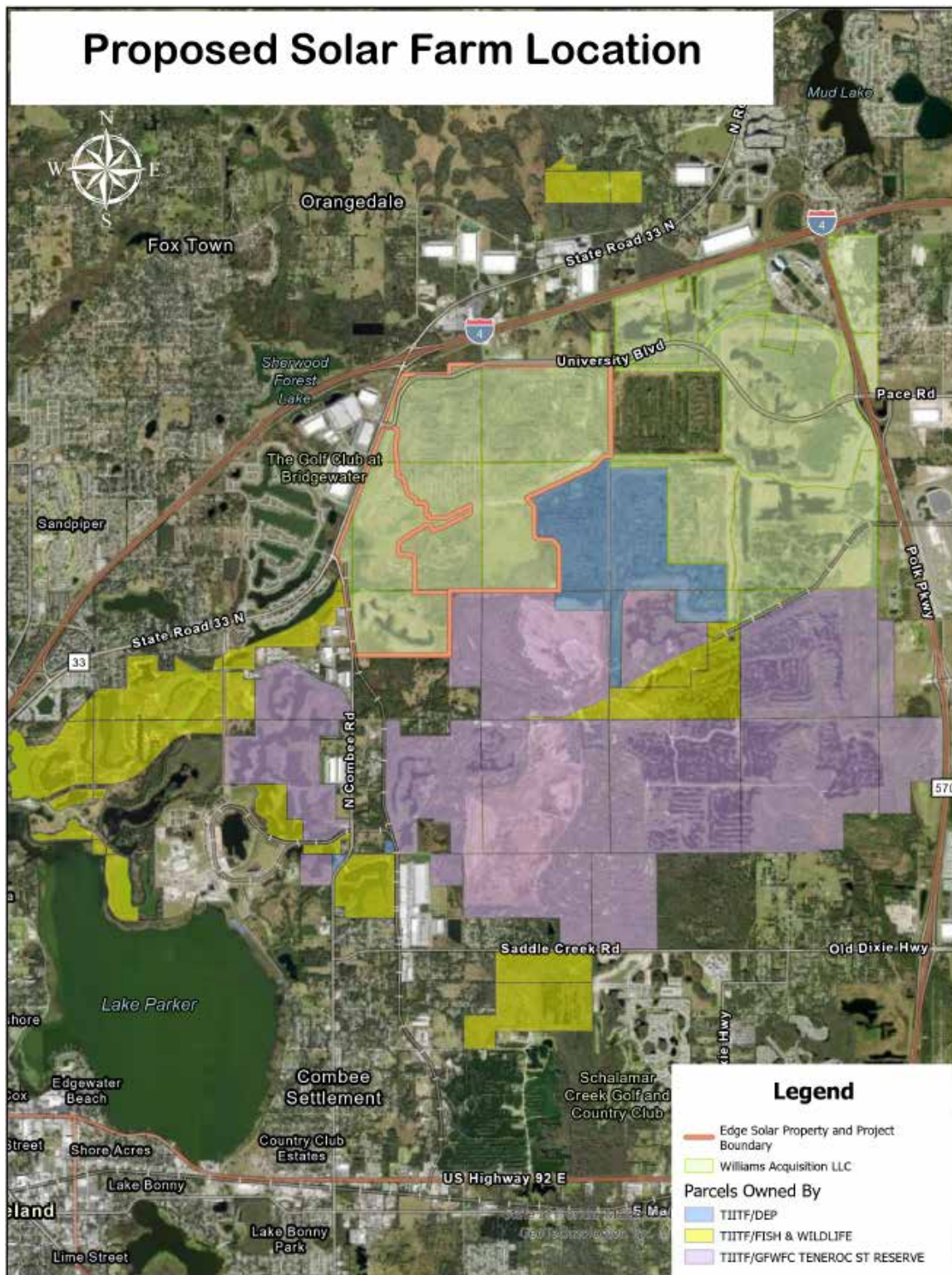


Figure 7-6: Edge Solar - Project Site under construction



8.0 Ten-Year Site Plan Schedules

This section details the schedules mandated by the Ten-Year Site Plan for the Florida Public Service Commission. Each schedule provides monthly position on Lakeland Electric's capacity and load, highlighting reserve margin levels across seasons.

Tables 8-1 and 8-1a in Schedule 1 offer details of Lakeland Electric's current unit characteristics, categorized by fuel type (primary and secondary), fuel transportation method, and achievable net capacity across various seasons.

Tables 8-2 through 8-6 offer insights into the electric peak demand and energy usage patterns of diverse customers, spanning historical records and future projections. This comprehensive data is segmented by customer class, facilitating the assessment of future capacity and energy requirements for the entire customer base in Lakeland.

Table 8-7 in Schedule 3.3 provides a historical overview of energy consumption, detailing the breakdown between retail sales and utility uses and losses. Furthermore, this data includes the shape factor of energy consumption, which indicates the capacity factor of total energy usage. Table 8-8 compares the monthly peak electric demand and energy usage forecasts for the years 2026 and 2027 with the actual monthly figures from 2025.

Tables 8-9, 8-10, and 8-11 in Schedules 5 and 6 offer a comprehensive overview of fuel requirements by fuel type, the energy mix from different types of electric generators, and the percentage mix of various fuel types in the generation of electricity within the Lakeland Electric system, inclusive of purchases made for Lakeland Electric. These tables provide both historical data and forecasts, enabling a thorough analysis of fuel requirement trends and energy generation dynamics in next 10 years.

Tables 8-12 and 8-13 in Schedule 7 provide comparisons of Lakeland Electric resources to Lakeland Electric demand. These tables indicate Lakeland Electric plans to maintain Reserve Margin of 15% or higher in each year of the Ten-Year-Site Plan period.

Tables 8-14 in Schedule 8 provides information on newly planned generation facility in Lakeland Electric's existing system.

Tables 8-15 and 8-16 outline key technical and cost characteristics of newly planned generation units and transmission lines in LE's electric system.

Table 8-1													
Schedule 1.0: Existing Generating Facilities as of December 31, 2025													
				⁴ Fuel		⁵ Fuel Transport						² Net Capability	
Plant Name	Unit No.	Location	³ Unit Type	Pri	Alt	Pri	Alt	¹ Alt Fuel Days Use	Commercial In-Service Month/Year	Expected Retirement Month/Year	Gen. Max. Nameplate kW	Summer MW	Winter MW
Charles Larsen Memorial	GT2*	16-17/28S/24E	GT	NG	DFO	PL	TK	NA	11/62	Unknown	11,250	10.0	14.0
	GT3*		GT	NG	DFO	PL	TK	NA	12/62	Unknown	11,250	9.0	13.0
	8		CA	WH	NA	NA	NA	NA	04/56	Unknown	30,000	29.7	29.7
	8		CT	NG	DFO	PL	TK	11	07/92	Unknown	101,520	84.7	94.7
Plant Total												114	124
¹ Alt Fuel Use days is based on 20% capacity factor for CC., ² Net Normal, * Long term scheduled maintenance - not included in available capacity.													
² Net Normal													
Source: Lakeland Production Department													
³ Unit Type				⁴ Fuel Type					⁵ Fuel Transportation Method				
CA Combined Cycle Steam Part				DFO Distillate Fuel Oil					PL Pipeline				
CT Combined Cycle Combustion Turbine				NG Natural Gas					TK Truck				
GT Combustion Gas Turbine				WH Waste Heat									
ST Steam Turbine				NR Not recorded									

Table 8-1a													
Schedule 1.0: Existing Generating Facilities as of December 31, 2025													
				⁴ Fuel		⁵ Fuel Transport						² Net Capability	
Plant Name	Unit No.	Location	³ Unit Type	Pri	Alt	Pri	Alt	¹ Alt Fuel Days Use	Commercial In-Service Month/Year	Expected Retirement Month/Year	Gen. Max. Nameplate kW	Summer MW	Winter MW
Winston Peaking Station	1-20	21/28S/23E	IC	DFO	NA	TK	N/A	NA	12/01	Unknown	2,500 each	50.0	50.0
Plant Total												50.0	50.0
C.D. McIntosh, Jr.	D1	4-5/28S/24E	IC	DFO	NA	TK	NA	NA	01/70	Unknown	2,600	2.5	2.5
	D2		IC	DFO	NA	TK	NA	NA	01/70	Unknown	2,600	2.5	2.5
	GT1		GT	NG	DFO	PL	TK	37	05/73	Unknown	26,640	18.0	18.0
	GT2		GT	NG	DFO	PL	TK	79	06/20	Unknown	130,050	119.5	124.5
	5		CT	NG	NA	PL	NA	NA	05/01	Unknown	292,950	234.0	280.0
	5		CA	WH	NA	NA	NA	NA	05/02	Unknown	135,000	118.0	118.0
	MREP 1-3		IC	NG	NA	PL	NA	NA	01/25	Unknown	60,800	59.5	59.5
	MREP 4-6		IC	NG	NA	PL	NA	NA	12/24	Unknown	60,800	59.5	59.5
Plant Total											711,440	613.5	664.5
System Total											842,960	778	839
¹ Alt Fuel Use days is based on 5% capacity factor for CT., ² Net Normal													
³ Unit Type				⁴ Fuel Type					⁵ Fuel Transportation Method				
CA Combined Cycle Steam Part				DFO Distillate Fuel Oil					PL Pipeline				
CT Combined Cycle Combustion Turbine				WH Waste Heat					TK Truck				
GT Combustion Gas Turbine				NG Natural Gas									
IC Internal Combustion				NR Not Recorded									
ST Steam Turbine				NA Not Applicable									
MREP - McIntosh Reciprocating Energy Project													

Table 8-2

Schedule 2.1: History and Forecast of Energy Consumption and Number of Customers by Customer Class

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Year	Rural & Residential					Commercial		
	Population	Members per Household	GWh	Average No. of Customers	Average kWh Consumption per Customer	GWh	Average No. of Customers	Average kWh Consumption per Customer
2016	279,331	2.64	1,473	105,932	13,905	795	12,225	65,031
2017	283,626	2.63	1,460	107,703	13,556	803	12,372	64,905
2018	288,157	2.64	1,524	109,043	13,976	813	12,543	64,817
2019	292,465	2.65	1,540	110,403	13,949	806	12,687	63,530
2020	295,899	2.64	1,612	112,175	14,370	789	12,889	61,215
2021	299,557	2.61	1,597	114,683	13,925	832	13,219	62,940
2022	303,910	2.60	1,637	116,907	14,003	843	13,452	62,667
2023	312,872	2.65	1,669	118,281	14,110	845	13,823	61,130
2024	315,830	2.62	1,714	120,371	14,239	866	14,230	60,857
2025	318,926	2.62	1,727	121,742	14,186	863	14,284	60,417
Forecast								
2026	322,417	2.61	1,708	123,625	13,816	885	14,478	61,127
2027	325,926	2.60	1,732	125,494	13,801	895	14,699	60,888
2028	329,467	2.59	1,754	127,158	13,794	905	14,885	60,799
2029	333,165	2.59	1,777	128,766	13,800	916	15,061	60,819
2030	337,282	2.59	1,800	130,344	13,810	926	15,233	60,789
2031	341,483	2.59	1,822	131,865	13,817	936	15,400	60,779
2032	345,652	2.59	1,843	133,347	13,821	945	15,562	60,725
2033	349,840	2.60	1,868	134,801	13,857	955	15,720	60,751
2034	354,044	2.60	1,890	136,212	13,875	964	15,875	60,724
2035	358,216	2.60	1,917	137,639	13,928	974	16,027	60,772

Table 8-3 Schedule 2.2: History and Forecast of Energy Consumption and Number of Customers by Customer Class							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Year	Industrial			Railroads and Railways	Street & Highway Lighting GWh	Other Sales to Public Authorities GWh	Total Sales to Ultimate Consumers GWh
	GWh	Average No. of Customers	Average kWh Consumption per Customer				
2016	655	74	8,851,351	0	34	73	3,030
2017	648	72	9,000,000	0	35	72	3,018
2018	676	74	9,135,135	0	35	70	3,118
2019	667	76	8,776,316	0	35	69	3,117
2020	660	75	8,800,000	0	35	68	3,163
2021	679	71	9,563,380	0	35	67	3,210
2022	697	76	9,171,053	0	35	67	3,279
2023	696	73	9,534,247	0	34	67	3,311
2024	670	80	8,375,000	0	35	71	3,356
2025	697	82	8,500,000	0	34	73	3,394
Forecast							
2026	717	81	8,851,852	0	34	69	3,413
2027	722	81	8,913,580	0	33	70	3,452
2028	727	82	8,865,854	0	33	70	3,489
2029	731	83	8,807,229	0	33	69	3,526
2030	736	84	8,761,905	0	33	69	3,564
2031	741	85	8,717,647	0	32	70	3,601
2032	746	86	8,674,419	0	32	70	3,636
2033	750	86	8,720,930	0	32	70	3,675
2034	755	87	8,678,161	0	32	70	3,711
2035	760	88	8,636,364	0	32	70	3,753

Table 8-3 Schedule 2.2: History and Forecast of Energy Consumption and Number of Customers by Customer Class							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Year	Industrial			Railroads and Railways	Street & Highway Lighting GWh	Other Sales to Public Authorities GWh	Total Sales to Ultimate Consumers GWh
	GWh	Average No. of Customers	Average kWh Consumption per Customer				
2016	655	74	8,851,351	0	34	73	3,030
2017	648	72	9,000,000	0	35	72	3,018
2018	676	74	9,135,135	0	35	70	3,118
2019	667	76	8,776,316	0	35	69	3,117
2020	660	75	8,800,000	0	35	68	3,163
2021	679	71	9,563,380	0	35	67	3,210
2022	697	76	9,171,053	0	35	67	3,279
2023	696	73	9,534,247	0	34	67	3,311
2024	670	80	8,375,000	0	35	71	3,356
2025	697	82	8,500,000	0	34	73	3,394
Forecast							
2026	717	81	8,851,852	0	34	69	3,413
2027	722	81	8,913,580	0	33	70	3,452
2028	727	82	8,865,854	0	33	70	3,489
2029	731	83	8,807,229	0	33	69	3,526
2030	736	84	8,761,905	0	33	69	3,564
2031	741	85	8,717,647	0	32	70	3,601
2032	746	86	8,674,419	0	32	70	3,636
2033	750	86	8,720,930	0	32	70	3,675
2034	755	87	8,678,161	0	32	70	3,711
2035	760	88	8,636,364	0	32	70	3,753

Table 8-4					
Schedule 2.3: History and Forecast of Energy Consumption and Number of Customers by Customer Class					
(1)	(2)	(3)	(4)	(5)	(6)
Year	Wholesale Purchases for Resale GWh	Wholesale Sales for Resale GWh	Net Energy for Load GWh	Other Customers (Average No.)	Total No. of Customers
2016	0	0	3,109	8,921	127,152
2017	0	0	3,086	8,966	129,113
2018	0	0	3,180	8,997	130,658
2019	0	0	3,189	9,051	132,217
2020	0	0	3,273	9,103	134,242
2021	65	0	3,305	9,189	137,162
2022	71	0	3,406	9,200	139,635
2023	104	0	3,442	8,869	141,046
2024	67	0	3,509	9,109	143,790
2025	62	0	3,531	9,116	145,223
Forecast					
2026	35	0	3,563	8,918	147,263
2027	0	0	3,604	8,908	149,367
2028	0	0	3,642	8,898	151,232
2029	0	0	3,681	8,888	153,032
2030	0	0	3,721	8,880	154,798
2031	0	0	3,759	8,871	156,502
2032	0	0	3,796	8,863	158,163
2033	0	0	3,837	8,855	159,793
2034	0	0	3,874	8,848	161,376
2035	0	0	3,918	8,842	162,974

Table 8-5 Schedule 3.1: History and Forecast of Summer Peak Demand Base Case (MW)									
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Total	Wholesale	Retail	Interrupt.	Residential		Commercial/Industrial		Net Firm Demand
					Load Management	Conservation	Load Management	Conservation	
2016	649	0	649	0	0	0	0	0	649
2017	644	0	644	0	0	0	0	0	644
2018	639	0	639	0	0	0	0	0	639
2019	667	0	667	0	0	0	0	0	667
2020	678	0	678	0	0	0	0	0	678
2021	692	0	692	0	0	0	0	0	692
2022	704	0	704	0	0	0	0	0	704
2023	752	0	752	0	0	0	0	0	752
2024	722	0	722	0	0	0	0	0	722
2025	753	0	753	0	0	0	0	0	753
Forecast									
2026	754	0	754	0	0	0	0	0	754
2027	763	0	763	0	0	0	0	0	763
2028	772	0	772	0	0	0	0	0	772
2029	781	0	781	0	0	0	0	0	781
2030	790	0	790	0	0	0	0	0	790
2031	800	0	800	0	0	0	0	0	800
2032	808	0	808	0	0	0	0	0	808
2033	818	0	818	0	0	0	0	0	818
2034	827	0	827	0	0	0	0	0	827
2035	837	0	837	0	0	0	0	0	837

Table 8-5a									
Schedule 3.1a: History and Forecast of Summer Peak Demand Low Case (MW)									
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Total	Wholesale	Retail	Interrupt.	Residential		Commercial/Industrial		Net Firm Demand
					Load Management	Conservation	Load Management	Conservation	
2016	649	0	649	0	0	0	0	0	649
2017	644	0	644	0	0	0	0	0	644
2018	639	0	639	0	0	0	0	0	639
2019	667	0	667	0	0	0	0	0	667
2020	678	0	678	0	0	0	0	0	678
2021	692	0	692	0	0	0	0	0	692
2022	704	0	704	0	0	0	0	0	704
2023	752	0	752	0	0	0	0	0	752
2024	722	0	722	0	0	0	0	0	722
2025	753	0	753	0	0	0	0	0	753
Forecast									
2026	750	0	750	0	0	0	0	0	750
2027	759	0	759	0	0	0	0	0	759
2028	767	0	767	0	0	0	0	0	767
2029	777	0	777	0	0	0	0	0	777
2030	786	0	786	0	0	0	0	0	786
2031	795	0	795	0	0	0	0	0	795
2032	803	0	803	0	0	0	0	0	803
2033	813	0	813	0	0	0	0	0	813
2034	822	0	822	0	0	0	0	0	822
2035	832	0	832	0	0	0	0	0	832

Table 8-5b Schedule 3.1b: History and Forecast of Summer Peak Demand High Case (MW)									
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Total	Wholesale	Retail	Interrupt.	Residential		Commercial/Industrial		Net Firm Demand
					Load Management	Conservation	Load Management	Conservation	
2016	649	0	649	0	0	0	0	0	649
2017	644	0	644	0	0	0	0	0	644
2018	639	0	639	0	0	0	0	0	639
2019	667	0	667	0	0	0	0	0	667
2020	678	0	678	0	0	0	0	0	678
2021	692	0	692	0	0	0	0	0	692
2022	704	0	704	0	0	0	0	0	704
2023	752	0	752	0	0	0	0	0	752
2024	722	0	722	0	0	0	0	0	722
2025	753	0	753	0	0	0	0	0	753
Forecast									
2026	759	0	759	0	0	0	0	0	759
2027	768	0	768	0	0	0	0	0	768
2028	777	0	777	0	0	0	0	0	777
2029	786	0	786	0	0	0	0	0	786
2030	795	0	795	0	0	0	0	0	795
2031	804	0	804	0	0	0	0	0	804
2032	813	0	813	0	0	0	0	0	813
2033	823	0	823	0	0	0	0	0	823
2034	832	0	832	0	0	0	0	0	832
2035	843	0	843	0	0	0	0	0	843

Table 8-6
Schedule 3.2: History and Forecast of Winter Peak Demand Base Case (MW)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Total	Wholesale	Retail	Interrupt.	Residential		Comm./Ind.		Net Firm Demand
					Load Management	Conservation	Load Management	Conservation	
2015/16	583	0	583	0	0	0	0	0	583
2016/17	534	0	534	0	0	0	0	0	534
2017/18	701	0	701	0	0	0	0	0	701
2018/19	545	0	545	0	0	0	0	0	545
2019/20	600	0	600	0	0	0	0	0	600
2020/21	605	0	605	0	0	0	0	0	605
2021/22	663	0	663	0	0	0	0	0	663
2022/23	620	0	620	0	0	0	0	0	620
2023/24	537	0	537	0	0	0	0	0	537
2024/25	643	0	643	0	0	0	0	0	643
Forecast									
2025/26*	783	0	783	0	0	0	0	0	783
2026/27	682	0	682	0	0	0	0	0	682
2027/28	688	0	688	0	0	0	0	0	688
2028/29	693	0	693	0	0	0	0	0	693
2029/30	698	0	698	0	0	0	0	0	698
2030/31	702	0	702	0	0	0	0	0	702
2031/32	707	0	707	0	0	0	0	0	707
2032/33	711	0	711	0	0	0	0	0	711
2033/34	715	0	715	0	0	0	0	0	715
2034/35	720	0	720	0	0	0	0	0	720

Note: *2025/26 load is actual and is the highest in last 15 years.

Table 8-6a
Schedule 3.2a: History and Forecast of Winter Peak Demand Low Case (MW)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Total	Wholesale	Retail	Interrupt.	Residential		Comm./Ind.		Net Firm Demand
					Load Management	Conservation	Load Management	Conservation	
2015/16	583	0	583	0	0	0	0	0	583
2016/17	534	0	534	0	0	0	0	0	534
2017/18	701	0	701	0	0	0	0	0	701
2018/19	545	0	545	0	0	0	0	0	545
2019/20	600	0	600	0	0	0	0	0	600
2020/21	605	0	605	0	0	0	0	0	605
2021/22	663	0	663	0	0	0	0	0	663
2022/23	620	0	620	0	0	0	0	0	620
2023/24	537	0	537	0	0	0	0	0	537
2024/25	643	0	643	0	0	0	0	0	643
Forecast									
2025/26	673	0	673	0	0	0	0	0	673
2026/27	678	0	678	0	0	0	0	0	678
2027/28	683	0	683	0	0	0	0	0	683
2028/29	688	0	688	0	0	0	0	0	688
2029/30	692	0	692	0	0	0	0	0	692
2030/31	696	0	696	0	0	0	0	0	696
2031/32	701	0	701	0	0	0	0	0	701
2032/33	705	0	705	0	0	0	0	0	705
2033/34	708	0	708	0	0	0	0	0	708
2034/35	713	0	713	0	0	0	0	0	713

Table 8-6b

Schedule 3.2b: History and Forecast of Winter Peak Demand High Case (MW)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Total	Wholesale	Retail	Interrupt.	Residential		Comm./Ind.		Net Firm Demand
					Load Management	Conservation	Load Management	Conservation	
2015/16	583	0	583	0	0	0	0	0	583
2016/17	534	0	534	0	0	0	0	0	534
2017/18	701	0	701	0	0	0	0	0	701
2018/19	545	0	545	0	0	0	0	0	545
2019/20	600	0	600	0	0	0	0	0	600
2020/21	605	0	605	0	0	0	0	0	605
2021/22	663	0	663	0	0	0	0	0	663
2022/23	620	0	620	0	0	0	0	0	620
2023/24	537	0	537	0	0	0	0	0	537
2024/25	643	0	643	0	0	0	0	0	643
Forecast									
2025/26	678	0	678	0	0	0	0	0	678
2026/27	686	0	686	0	0	0	0	0	686
2027/28	692	0	692	0	0	0	0	0	692
2028/29	697	0	697	0	0	0	0	0	697
2029/30	702	0	702	0	0	0	0	0	702
2030/31	706	0	706	0	0	0	0	0	706
2031/32	711	0	711	0	0	0	0	0	711
2032/33	715	0	715	0	0	0	0	0	715
2033/34	719	0	719	0	0	0	0	0	719
2034/35	724	0	724	0	0	0	0	0	724

Note: *2024/25 value is actual.

Table 8-7 Schedule 3.3: History and Forecast of Annual Net Energy for Load – GWh Base Case								
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Year	Total Sales	Residential Conservation	Comm./Ind. Conservation	Retail	Wholesale	Utility Use & Losses	Net Energy for Load	Load Factor %
2016	3,030	0	0	3,030	0	79	3,109	55%
2017	3,018	0	0	3,018	0	68	3,086	55%
2018	3,118	0	0	3,118	0	62	3,180	52%
2019	3,117	0	0	3,117	0	73	3,190	55%
2020	3,163	0	0	3,163	0	109	3,273	55%
2021	3,210	0	0	3,210	0	95	3,304	54%
2022	3,279	0	0	3,279	0	127	3,406	55%
2023	3,310	0	0	3,310	0	132	3,442	52%
2024	3,356	0	0	3,356	0	153	3,509	55%
2025	3,393	0	0	3,393	0	138	3,531	54%
Forecast								
2026	3413	0	0	3413	0	150	3563	54%
2027	3451	0	0	3451	0	152	3603	54%
2028	3489	0	0	3489	0	153	3642	54%
2029	3526	0	0	3526	0	155	3682	54%
2030	3564	0	0	3564	0	157	3721	54%
2031	3601	0	0	3601	0	159	3759	54%
2032	3636	0	0	3636	0	160	3796	54%
2033	3674	0	0	3674	0	162	3836	54%
2034	3711	0	0	3711	0	164	3874	53%
2035	3753	0	0	3753	0	165	3918	53%

Table 8-7a Schedule 3.3a: History and Forecast of Annual Net Energy for Load – GWh Low Case							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Year	Total Sales	Residential Conservation	Comm./Ind. Conservation	Retail	Wholesale	Utility Use & Losses	Net Energy for Load
2016	3,030	0	0	3,030	0	79	3,109
2017	3,018	0	0	3,018	0	68	3,086
2018	3,118	0	0	3,118	0	62	3,180
2019	3,117	0	0	3,117	0	73	3,190
2020	3,163	0	0	3,163	0	109	3,273
2021	3,210	0	0	3,210	0	95	3,304
2022	3,279	0	0	3,279	0	127	3,406
2023	3,310	0	0	3,310	0	132	3,442
2024	3,356	0	0	3,356	0	153	3,509
2025	3,393	0	0	3,393	0	138	3,531
Forecast							
2026	3394	0	0	3394	0	150	3544
2027	3432	0	0	3432	0	152	3584
2028	3469	0	0	3469	0	153	3623
2029	3506	0	0	3506	0	155	3662
2030	3543	0	0	3543	0	157	3700
2031	3580	0	0	3580	0	159	3738
2032	3615	0	0	3615	0	160	3775
2033	3653	0	0	3653	0	162	3814
2034	3689	0	0	3689	0	164	3853
2035	3731	0	0	3731	0	165	3896

Table 8-7b							
Schedule 3.3b: History and Forecast of Annual Net Energy for Load – GWh							
High Case							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Year	Total Sales	Residential Conservation	Comm./Ind. Conservation	Retail	Wholesale	Utility Use & Losses	Net Energy for Load
2016	3,030	0	0	3,030	0	79	3,109
2017	3,018	0	0	3,018	0	68	3,086
2018	3,118	0	0	3,118	0	62	3,180
2019	3,117	0	0	3,117	0	73	3,190
2020	3,163	0	0	3,163	0	109	3,273
2021	3,210	0	0	3,210	0	95	3,304
2022	3,279	0	0	3,279	0	127	3,406
2023	3,310	0	0	3,310	0	132	3,442
2024	3,356	0	0	3,356	0	153	3,509
2025	3,393	0	0	3,393	0	138	3,531
Forecast							
2026	3432	0	0	3432	0	150	3582
2027	3470	0	0	3470	0	152	3622
2028	3509	0	0	3509	0	153	3662
2029	3546	0	0	3546	0	155	3702
2030	3584	0	0	3584	0	157	3741
2031	3621	0	0	3621	0	159	3780
2032	3657	0	0	3657	0	160	3817
2033	3695	0	0	3695	0	162	3857
2034	3733	0	0	3733	0	164	3896
2035	3775	0	0	3775	0	165	3941

Table 8-8

Schedule 4: Previous Year and Two Year Forecast of Retail Peak Demand and Net Energy for Load by Month

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Month	2025 Actual		2026 Forecast		2027 Forecast	
	¹ Peak Demand MW	NEL GWh	¹ Peak Demand MW	NEL GWh	¹ Peak Demand MW	NEL GWh
January	643	280	676	265	682	268
February	538	225	610	231	615	233
March	583	246	542	272	547	274
April	619	278	597	272	604	275
May	707	333	691	341	699	345
June	700	337	731	337	740	341
July	753	368	734	364	742	368
August	736	362	754	365	763	370
September	670	327	715	323	723	327
October	617	290	663	283	670	287
November	514	241	564	244	570	246
December	516	244	459	266	463	269
¹ Includes Conservation						

Table 8-9														
Schedule 5: Fuel Requirements														
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
				Calendar Year										
	Fuel Requirements	Type	UNITS	2025-Actual	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
(1)	Nuclear		Trillion Btu	0	0	0	0	0	0	0	0	0	0	0
(2)	Coal		1000 Ton	0	0	0	0	0	0	0	0	0	0	0
	Residual	Steam	1000 BBL	0	0	0	0	0	0	0	0	0	0	0
(3)		CC	1000 BBL	0	0	0	0	0	0	0	0	0	0	0
(4)		CT	1000 BBL	0	0	0	0	0	0	0	0	0	0	0
(5)		Total	1000 BBL	0	0	0	0	0	0	0	0	0	0	0
(6)														
(7)	Distillate	Steam	1000 BBL	0	0	0	0	0	0	0	0	0	0	0
(8)		CC	1000 BBL	3	0	0	0	0	0	0	0	0	0	0
(9)		CT	1000 BBL	5	0	0	0	0	0	0	0	2	1	0
(10)		Total	1000 BBL	8	0	0	0	0	0	0	0	2	1	0
(11)	Natural Gas	Steam	1000 MCF	0	0	0	0	0	0	0	0	0	0	0
(12)		CC	1000 MCF	13,872	17,048	16,580	15,562	17,205	17,971	17,832	17,404	17,330	17,504	17,467
(13)		CT	1000 MCF	2,417	1,089	766	437	769	737	668	775	701	719	458
(14)		Total	1000 MCF	16,289	18,137	17,346	15,999	17,974	18,708	18,500	18,179	18,031	18,223	17,925
(15)	Other		Trillion Btu	0	0	0	0	0	0	0	0	0	0	0

Table 8-10
Schedule 6.1: Energy Sources

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	Energy Sources	Type	Units	Calendar Year										
				2025 - Actual	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
	Inter-Regional Interchange													
(1)	Nuclear		GWh	0	0	0	0	0	0	0	0	0	0	0
(2)	Coal		GWh	0	0	0	0	0	0	0	0	0	0	0
(3)	Residual	Steam		0	0	0	0	0	0	0	0	0	0	0
(4)		CC	GWh	0	0	0	0	0	0	0	0	0	0	0
(5)		CT	GWh	0	0	0	0	0	0	0	0	0	0	0
(6)		Total	GWh	0	0	0	0	0		0	0	0	0	0
(7)														
(8)	Distillate	Steam	GWh	0	0	0	0	0	0	0	0	0	0	0
(9)		CC	GWh	0	0	0	0	0	0	0	0	0	0	0
(10)		CT	GWh	1	0	0	0	0	0	0	0	1	1	0
(11)		Total	GWh	1	0	0	0	0	0	0	0	1	1	0
(12)	Natural Gas	Steam		0	0	0	0	0	0	0	0	0	0	0
(13)		CC	GWh	2,161	2,442	2,389	2,267	2,491	2,602	2,581	2,523	2,518	2,547	2,540
(14)		CT	GWh	252	131	94	52	95	89	80	94	82	86	56
(15)		Total	GWh	2,413	2,573	2,483	2,319	2,586	2,691	2,661	2,617	2,600	2,633	2,596
(16)	NUG													
(17)	Solar [#]		GWh	30	33	187	214	213	213	213	213	204	203	204
(18)	¹ Other (Purchase/Sales)		GWh	1,087	957	933	1,109	883	817	885	966	1,031	1,037	1,118
(19)	Net Energy for Load		GWh	3,531	3,563	3,603	3,642	3,682	3,721	3,759	3,796	3,836	3,874	3,918

¹ Intra-Regional Economy Purchases. [#] Includes solar farms and net solar from customers under net-metering program.

Table 8-11
Schedule 6.2: Energy Sources

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	Energy Source	Type	Units	Calendar Year										
				2025- Actual	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
(1)	Inter-Regional Interchange		%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(2)	Nuclear		%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(3)	Coal		%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(4)	Residual	Steam	%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(5)		CC	%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(6)		CT	%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(7)		Total	%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(8)	Distillate	Steam	%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(9)		CC	%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(10)		CT	%	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.03%	0.03%	0.00%
(11)		Total	%	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.03%	0.03%	0.00%
(12)	Natural Gas	Steam	%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(13)		CC	%	61.20%	68.54%	66.31%	62.25%	67.65%	69.93%	68.66%	66.46%	65.64%	65.75%	64.83%
(14)		CT	%	7.14%	3.68%	2.61%	1.43%	2.58%	2.39%	2.13%	2.48%	2.14%	2.22%	1.43%
(15)		Total	%	68.34%	72.21%	68.91%	63.67%	70.23%	72.32%	70.79%	68.94%	67.78%	67.97%	66.26%
(16)	NUG		%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(17)	Solar [#]		%	0.85%	0.93%	5.19%	5.88%	5.78%	5.72%	5.67%	5.61%	5.32%	5.24%	5.21%
(18)	¹ Other (Specify)		%	30.78%	26.86%	25.90%	30.45%	23.98%	21.96%	23.54%	25.45%	26.88%	26.77%	28.53%
(19)	Net Energy for Load		%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

¹ Other - Economy Energy Purchases, [#] also includes net solar from customers in 2025.

Table 8-12

Schedule 7.1: Forecast of Capacity, Demand, and Scheduled Maintenance at Time of Summer Peak

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Year	Total Installed Capacity	Firm Capacity Import	Firm Capacity Export	Projected Firm Net To Grid from NUG	Firm Contracts	Total Capacity Available	System Firm Peak Demand	Reserve Margin Before Maintenance ¹		Scheduled Maintenance	¹ Reserve Margin After Maintenance	
	MW	MW	MW	MW	MW	MW	MW	MW	%	MW	MW	%
2026	778	0	0	7	100	885	754	131	17%	0	131	17%
2027	778	0	0	44	60	882	763	119	16%	0	119	16%
2028	778	0	0	44	70	892	772	120	16%	0	120	16%
2029	778	0	0	44	80	902	781	121	16%	0	121	16%
2030	778	0	0	44	90	912	790	122	15%	0	122	15%
2031	778	0	0	44	100	922	800	122	15%	0	122	15%
2032	778	0	0	44	110	932	808	124	15%	0	124	15%
2033	778	0	0	44	120	942	818	124	15%	0	124	15%
2034	778	0	0	44	130	952	827	125	15%	0	125	15%
2035	778	0	0	44	140	962	837	125	15%	0	125	15%

¹ Includes conservation.

Table 8-13

Schedule 7.2: Forecast of Capacity, Demand, and Scheduled Maintenance at the time of Winter Peak

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Year	Total Installed Capacity	Firm Capacity Import	Firm Capacity Export	Projected Firm Net To Grid from NUG	Firm Contracts	Total Capacity Available	System Firm Peak Demand	Reserve Margin Before Maintenance		Scheduled Maintenance	Reserve Margin After Maintenance ¹	
	MW	MW	MW	MW		MW	MW	MW	%	MW	MW	%
*2025/26	839	0	0	0	50	889	783	106	14	0	106	14
2026/27	839	0	0	0	0	839	682	157	23	0	157	23
2027/28	839	0	0	0	0	839	688	151	22	0	151	22
2028/29	839	0	0	0	0	839	693	146	21	0	146	21
2029/30	839	0	0	0	0	839	698	141	20	0	141	20
2030/31	839	0	0	0	0	839	702	137	20	0	137	20
2031/32	839	0	0	0	0	839	707	132	19	0	132	19
2032/33	839	0	0	0	0	839	711	128	18	0	128	18
2033/34	839	0	0	0	0	839	715	124	17	0	124	17
2034/35	839	0	0	0	0	839	720	119	17	0	119	17
¹ includes Conservation, * 2025/26 peak demand is actual.												

Table 8-14
Schedule 8.0: Planned and Prospective Generating Facility Additions and Changes

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Plant Name	Unit No.	Location	Unit Type	Fuel		Fuel Transport		Const Start	Commercial In-Service	Expected Retirement	Gen Max Nameplate	Net Capability		¹ Status
				Pri.	Alt.	Pri.	Alt.	Mo/Yr	Mo/Yr	Mo/Yr	MW	Sum MW	Win MW	
Edge Solar	1	Polk County	PV	SUN	NA	NA	NA	Jan-26	Mar-27	---	74.8	74.8	74.8	P

¹Notes: P - Planned for installation, NA - Not Applicable

Table 8-15		
Schedule 9.1: Status Report and Specifications of newly Proposed Generating Facilities		
(1)	Plant Name and Unit Number:	
(2)	Nameplate Capacity:	
(3)	Firm Summer MW	
(4)	Firm Winter MW	
(5)	Technology Type:	
(6)	Anticipated Construction Timing:	
(7)	Field Construction Start-date:	
(8)	Commercial In-Service date:	
(9)	Fuel	
(10)	Primary	
(11)	Alternate	
(12)	Air Pollution Control Strategy:	
(13)	Cooling Method:	
(14)	Total Site Area (Acres):	
(15)	Construction Status:	
(16)	Certification Status:	
(17)	Status with Federal Agencies:	
(18)	<i>Projected</i> Unit Performance Data:	
(19)	Planned Outage Factor (POF):	
(20)	Forced Outage Factor (FOF):	
(21)	Equivalent Availability Factor (EAF):	
(22)	Resulting Capacity Factor (%):	
(23)	Average Net Operating Heat Rate (ANOHR):	
(24)	Unit Financial Data:	
(25)	Book Life:	
(26)	Total Installed Cost (2024 \$/kW):	
(27)	Direct Construction Cost \$/(kW)	
(28)	¹ Finance Amount (2024\$/kW):	
(29)	² Escalation (\$/kW):	
(30)	Fixed O&M (\$/kW-yr):	
(31)	Variable O&M (\$/MWh):	
(32)	K-Factor	
Note: There are currently no Lakeland Electric-financed new plants planned.		

Table 8-16 Schedule 10.1: Status Report and Specifications of Proposed Directly Associated Transmission Lines		
(1)	Point of Origin and Termination:	Hamilton S/S to JD Page (TEC) S/S
(2)	Number of Lines:	1
(3)	Right of Way:	Lakeland Electric owned
(4)	Line Length:	1.15
(5)	Voltage:	69 KV
(6)	Anticipated Construction Time:	Jun-27
(7)	Anticipated Capital Investment in 2025	--
(8)	Substations:	Hamilton, JD Page (TEC)
(9)	Participation with Other Utilities:	Tampe Eletric (TEC)

Table 8-16a Schedule 10.2: Status Report and Specifications of Proposed Directly Associated Transmission Lines		
(1)	Point of Origin and Termination:	Sutton S/S to Varrea (TEC) S/S
(2)	Number of Lines:	1
(3)	Right of Way:	Lakeland Electric
(4)	Line Length:	5.12
(5)	Voltage:	69 KV
(6)	Anticipated Construction Time:	Jun-28
(7)	Anticipated Capital Investment in 2026	--
(8)	Substations:	Sutton, Varrea (TEC)
(9)	Participation with Other Utilities:	Tampe Eletric (TEC)

Table 8-16b Schedule 10.3: Status Report and Specifications of Proposed Directly Associated Transmission Lines		
(1)	Point of Origin and Termination:	Indian Lake S/S to Galloway S/S
(2)	Number of Lines:	1
(3)	Right of Way:	Lakeland Electric
(4)	Line Length:	6.4
(5)	Voltage:	69 KV
(6)	Anticipated Construction Time:	Dec-29
(7)	Anticipated Capital Investment in 2026	--
(8)	Substations:	Indian Lake, Galloway
(9)	Participation with Other Utilities:	None

8.1 Abbreviations and Descriptions

The following abbreviations are used throughout the Ten-Year Site Plan Schedules.

<u>Abbreviation</u>	<u>Description</u>
Unit Type	
CA	Combined Cycle Steam Part
GT	Combustion Gas Turbine
ST	Steam Turbine
CT	Combined Cycle Combustion Turbine
CC	Combined Cycle
IC	Internal Combustion Engine
RICE	Reciprocating Internal Combustion Engine
Fuel Type	
NG	Natural Gas
DFO	Distillate Fuel Oil
RFO	Residual Fuel Oil
BIT	Bituminous Coal
WH	Waste Heat
Fuel Transportation Method	
PL	Pipeline
TK	Truck
RR	Railroad
Unit Status Code	
RE	Retired
RT	To be Retired
SB	Cold Standby (Reserve)
TS	Construction Complete, not yet in commercial operation
U	Under Construction
P	Planned for installation
OP	Operating

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