Title V Air Operation Permit Renewal Permit No. 0050014-040-AV

APPLICANT

The applicant for this project is Florida Power and Light Company. The applicant's responsible official and mailing address are: Mr Dirk Hunt., PGD Plant Manager, Florida Power and Light, Smith Energy Generating Plant, 4300 Road 2300, Southport, Florida 32409.

FACILITY DESCRIPTION

The applicant operates the existing Smith Energy Generating Plant, which is in Bay County at 4300 County Road 2300, Lynn Haven, Florida.

The Smith Plant is an existing electric generating plant operated by Gulf Power Company. This facility consists of a Pratt & Whitney Twin-Pac combustion turbine peaking unit, and two gas-fired combined-cycle combustion turbine (CCCT) electrical generators with duct-fired heat recovery steam generators (HRSG). The Twin-Pac system, designated as Unit A, has a maximum heat input of 542 million British thermal units per hour (MMBtu/hour) and is authorized to fire No. 2 fuel only. The two combined-cycle combustion turbines, designated as Units 3A & 3B, can achieve a nominal 610 megawatts (MW), at annual average site conditions, with duct burners, while firing exclusively natural gas. Units 3A & 3B are Acid Rain units.

The facility also includes emergency and non-emergency reciprocating internal combustion engines (RICE).

This facility also includes miscellaneous unregulated/insignificant emissions units and/or activities.

REGULATED EMISSIONS UNIT IDENTIFICATION NUMBERS AND DESCRIPTIONS

| EU No. | Brief Description |
|--------|---|
| 003 | Twin-Pac Combustion Turbine Peaking Unit (Unit A) |
| 004 | Gas Combustion Turbine with HRSG and Duct Burner (Unit 3A) |
| 005 | Gas Combustion Turbine with HRSG and Duct Burner (Unit 3B) |
| 012 | 550 HP Emergency Diesel Generator at CCCT |
| 013 | 153 HP Emergency Diesel Sump Pump (Big Blue) |
| 015 | Fire Pump Engine |
| 016 | Two 49 HP Emergency Diesel Generators for Hurricane Shelter |
| 017 | PSM Emergency Generator |

APPLICABLE REGULATIONS

Based on the Title V air operation permit renewal application received on July 8, 2024, this facility is not a major source of hazardous air pollutants (HAP). The existing facility is a prevention of significant deterioration (PSD) major source of air pollutants in accordance with Rule 62-212.400, F.A.C. A summary of applicable regulations is shown in the following table:

| Regulation | EU No(s). | |
|---|------------------------------|--|
| Federal Rule Citations | | |
| 40 CFR 60, Subpart A, NSPS, General Provisions | 004, 0012, 013, 015 016, 017 | |
| 40 CFR 60, Subpart IIII, NSPS, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines | 012, 013, 015, 016 | |
| 40 CFR 60, Subpart JJJJ, NSPS, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines | 017 | |
| 40 CFR 60, Subpart KKKK, NSPS, Standards of Performance for Stationary | 004, 005 | |

STATEMENT OF BASIS

| Regulation | EU No(s). | | |
|--|--|--|--|
| Combustion Turbines | | | |
| 40 CFR 63, Subpart A, NESHAP, General Provisions | 012, 013, 015, 016, 017 | | |
| 40 CFR 63, Subpart ZZZZ, NESHAP, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines | 012, 013, 015, 016 | | |
| 40 CFR 75 Acid Rain Monitoring Provisions | 004, 005 | | |
| State Rule Citations | | | |
| Chapter 62-4, F.A.C., Permits | All | | |
| Chapter 62-204, F.A.C., Air Pollution Control – General Provisions | 00.3, 004, 005, 006, 008, 012, 013, 015, 016 | | |
| Rule 62-210.300, F.A.C., General Preconstruction Review Requirements | | | |
| Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD) | 004, 005 | | |
| Chapter 62-213, F.A.C., Operation Permits for Major Sources of Air Pollution | 003, 004, 005, 006, 08, 012. 013 | | |
| Chapter 62-214, F.A.C., Requirements for Sources Subject to the Federal Acid Rain Program | 001, 002 (Retired) 004, 005 (Active) | | |
| Chapter 62-297, F.A.C., Stationary Sources – Emissions Monitoring | 003, 004, 005, 006, 008,012, 013, 015, 016 | | |

This facility also includes miscellaneous unregulated/insignificant emissions units and/or activities.

PROJECT DESCRIPTION

The purpose of this permitting project is to renew the existing Title V permit for the above referenced facility.

PROCESSING SCHEDULE AND RELATED DOCUMENTS

Application for a Title V Air Operation Permit Renewal received **July 8, 2024**Additional Information Request dated **July 16, 2024**Additional Information Response received **August 21, 2024**Draft Title V permit renewal package was issued on **October 3, 2024**Proposed Title V permit renewal package was issued on **November 19, 2024**Final Title V permit renewal package was issued on **January 9, 2025**

PRIMARY REGULATORY REQUIREMENTS

Standard Industrial Classification (SIC) Code: 4911 – Electrical Generation.

North American Industry Classification System (NAICS): 221112 - Fossil Fuel Electric Power Generation.

HAP: The facility is not identified as a major source of hazardous air pollutants (HAP).

Title IV: The facility operates units subject to the acid rain provisions of the Clean Air Act.

<u>Title V</u>: The facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

<u>PSD</u>: The facility is a Prevention of Significant Deterioration (PSD)-major source of air pollution in accordance with Rule 62-212.400, F.A.C.

NSPS: The facility operates units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60.

<u>NESHAP</u>: The facility operates units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR 63.

GHG: The facility is identified as a major source of greenhouse gas (GHG) pollutants.

STATEMENT OF BASIS

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PROJECT REVIEW

In addition to the standard renewal format and rule updates, renumbering of conditions, FPL requests to incorporate the PSM emergency generator addition and a gas turbine/HRSG combined cycle operation.

- 1. Changes throughout the Title V air operation permit that do not alter the intent or underlying language of any permit conditions include:
 - The renewal permit is based on the Department's updated formats for a Title V air operation permit.
 - Updated the permit rule citations and identified acronyms.
 - Updated facility and emissions unit descriptions.
 - Renumbering of permit conditions.

Section III. Emissions Unit and Conditions

Subsection B, EU 004 & 005 – Gas Combustion Turbine Peaking Unit (Unit A)

2. As requested by applicant, added Condition **B.5**. (Combined Cycle Operation with Steam Dumped to Condenser) to maintain consistency with FPL's Turkey Point Fossil Plant's 4 on 1 combined cycle operations.

Subsection D, EU 017, PSM Emergency Generator

3. As requested by applicant, added Subsection D (EU 017, PSM Emergency Generator) to incorporate newly installed equipment.

Section IV. Acid Rain Part

4. Removed the CAIR Retired Unit Exemption section (DEP Form No. 62-210.900(1)(c) as being obsolete.

CONCLUSION

This project renews Title V air operation permit No. 0050014-033- AV, which was effective on FEBRUARY 24, 2020. This Title V air operation permit renewal is issued under the provisions of Chapter 403, Florida Statues (F.S.), and Chapters 62-4, 62-210, and 62-213, F.A.C.