



DOCKET NO. 20250135-EI

FILED 11/7/2025
DOCUMENT NO. 14975-2025
FPSC - COMMISSION CLERK

Attorneys and Counselors at Law
123 South Calhoun Street
P.O. Box 391 32302
Tallahassee, FL 32301

P: (850) 224-9115
F: (850) 222-7560

ausley.com

November 7, 2025

VIA ELECTRONIC FILING

Mr. Adam J. Teitzman
Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

In re: Tampa Electric Company's Petition for Approval of New Environmental Program for Cost Recovery Through the Environmental Cost Recovery Clause for the Company's Manatee Protection Study.

Dear Mr. Teitzman:

Attached for filing is Tampa Electric Company's Petition for Approval of New Environmental Program for Cost Recovery Through the Environmental Cost Recovery Clause for the Company's Manatee Protection Study.

Thank you for your assistance in connection with this matter.

Sincerely,

A handwritten signature in blue ink that reads 'Malcom N. Means'.

Malcom N. Means

MNM/bl
Attachment

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition of Tampa Electric Company
for approval of a new environmental
program for cost recovery through the
Environmental Cost Recovery Clause

DOCKET NO. 2025____-EI

FILED: November 7, 2025

**TAMPA ELECTRIC COMPANY’S PETITION FOR APPROVAL
OF NEW ENVIRONMENTAL PROGRAM FOR COST RECOVERY
THROUGH THE ENVIRONMENTAL COST RECOVERY CLAUSE**

Pursuant to Section 366.8255, Florida Statutes, Rule 28-106.201, Florida Administrative Code, and Florida Public Service Commission (“Commission”) Order Nos. PSC-94-0044-FOF-EI and PSC-94-1207-FOF-EI, Tampa Electric Company (“Tampa Electric,” the “company,” or the “Petitioner”) files this Petition for approval of a new environmental compliance project, known as the Manatee Protection Study, for cost recovery through the Environmental Cost Recovery Clause (“ECRC”). In support thereof, the company states:

I. Applicable Law

The ECRC

1. Section 366.8255 of the Florida Statutes authorizes utilities to recover prudently incurred “environmental compliance costs” through the ECRC.

2. The term “environmental compliance costs” is defined in Section 366.8255(1)(d), Florida Statutes as “all costs or expenses incurred by an electric utility in complying with environmental laws or regulations.”

3. The Commission established additional criteria governing cost recovery through the ECRC in Order No. PSC-94-0044-FOF-EI, issued January 12, 1994. The Commission stated:

Upon petition, we shall allow the recovery of costs associated with an environmental compliance activity through the environmental cost recovery factor if:

1. such costs were prudently incurred after April 13, 1993;
 2. the activity is legally required to comply with a governmentally imposed environmental regulation enacted, became effective, or whose effect was triggered after the company's last year upon which rates are based; and
 3. such costs are not recovered through some other cost recovery mechanism or through base rates.
4. The Commission has previously approved cost recovery for environmental projects necessary to *maintain* compliance with a governmentally imposed environmental regulation.¹

Applicable Environmental Regulations

5. The Florida Department of Environmental Protection ("FDEP") administers the federal National Pollutant Discharge Elimination System ("NPDES") program within the state of Florida. See Section 403.0885, Florida Statutes. NPDES permits prescribe requirements and limits to control discharges of pollutants to surface waters.

6. The Endangered Species Act, codified at 16 U.S.C. § 1531 *et seq.*, is a federal law which establishes protections for fish, wildlife, and plants that are listed as

¹ See Order No. PSC-2018-0594-FOF-EI, issued December 20, 2018, Docket No. 20180007-EI (ECRC), at 9-11 (finding that Florida Power & Light "shall be allowed to recover reasonable costs associated with its proposed modification to the [Manatee Temporary Heating System] Project" due to "operating circumstances" changing and due to that company's "risk of being out of compliance with environmental requirements"); Order No. PSC-2012-0493-PAA-EI, issued September 26, 2012, Docket No. 20110262-EI (Petition for Approval of New Environmental Program for Cost Recovery), at 4 (finding that Tampa Electric's proposed gypsum storage facility was necessary "to remain in compliance with the applicable environmental mandates" at Big Bend."); Order No. PSC-99-1954-PAA-EI, issued October 5, 1999, Docket No. 990667-EI (In re: Petition by Gulf Power Company for Approval of Plant Smith Sodium Injection System), at 4 (finding that Gulf Power Company's proposed project was necessary "to both comply with CAAA Phase II requirements and maintain compliance with existing air permit requirements."); Order No. PSC-07-0722-FOF-EI, issued September 5, 2007, Docket No. 060162-EI (In re: Petition by Progress Energy Florida, Inc. for Approval to Recover Modular Cooling Tower) (finding that Progress Energy Florida's "modular cooling tower project provides a reasonable means to remain in compliance with its wastewater discharge permit").

threatened or endangered. The United States Fish and Wildlife Service (“USFWS”) listed the West Indian Manatee as an endangered species in 1967² and reclassified it as a threatened species in 2017.³

II. Statement of Ultimate Facts Alleged and Providing the Basis for Relief

7. The ultimate facts that entitle Tampa Electric to the relief requested herein are the facts set forth in paragraphs 1 through 6 and the following:

8. Tampa Electric is a Florida corporation and is a wholly owned subsidiary of TECO Holdings, Inc., which is a wholly owned subsidiary of Emera, Incorporated. The company is an investor-owned public utility regulated by the Commission pursuant to Chapter 366, Florida Statutes. Tampa Electric serves approximately 860,000 retail customers in Hillsborough and portions of Polk, Pinellas, and Pasco Counties, Florida.

9. Tampa Electric operates Big Bend Power Station (“Big Bend”), which is comprised of two fossil fuel-fired generating units. Unit 1 is a natural gas-fired combined cycle unit consisting of two combustion turbines and two heat recovery steam generators. Unit 4 is a steam turbine that can be fired with coal or natural gas.

10. Big Bend withdraws cooling water from Hillsborough Bay through an intake canal on the north side of the plant and returns that water to the Bay through a discharge canal on the south side of the plant. These water discharges are typically warmer than the ambient temperature of Hillsborough Bay.

11. Manatees gather in the discharge canal at Big Bend during the fall and winter months. Water temperatures below 68 degrees Fahrenheit can be harmful or even

² 32 Fed. Reg. 4001 (Mar. 11, 1967).

³ 82 Fed. Reg. 16668 (Apr. 5, 2017).

fatal to manatees. Manatees accordingly seek out warm-water discharges from power plants, including Big Bend, when water temperatures drop.

12. FDEP issued an updated NPDES permit for Big Bend on August 27, 2025. This permit is included as **Exhibit 1** to this Petition. Specific Condition I.C.13 of the NPDES permit requires Tampa Electric to “continue compliance with the facility’s Manatee Protection Plan approved by the FDEP on August 6, 2003, and as amended thereafter.” See **Exhibit 1, at 10**.

13. Tampa Electric’s current Manatee Protection Plan dated July 2016 is included as **Exhibit 2** to this Petition. The Manatee Protection Plan requires Tampa Electric to “minimize disruption to warm water outflows during the winter” and “maintain discharge temperatures that will sustain manatees during cold events.” To accomplish these goals, Paragraph 1.d of the Manatee Protection Plan states:

During the period from November 15 through March 31 each year, to coincide with the time of greatest manatee abundance, if the ambient water temperature falls below 61°F, as measured at the plant intake, the TEC Big Bend plant shall reasonably endeavor to operate in a manner that maintains the water temperature in an adequate portion of the discharge area at or above 68°F. It is understood that due to circumstances that may compromise plant safety and reliability, other regulatory compliance issues or unusual weather conditions the target temperature level may not be achieved on a continuous basis.

See **Exhibit 2, at 2**.

14. The water temperature in the discharge canal dropped below the 68-degree threshold on eleven days in January 2025. The company was unable to maintain temperatures above the threshold due to a combination of extended cold weather and changes in the configuration of Big Bend. At the time FDEP first approved the Manatee Protection Plan in 2003, Tampa Electric operated four coal-fired generating units at Big

Bend. The company has since retired two coal-fired units, which resulted in an overall lower volume of warm water discharges from the station. Tampa Electric also repowered Big Bend Unit 1 into a more efficient natural gas combined cycle unit, which resulted in lower temperature discharges from that unit. These changes increased Big Bend's efficiency, which benefits Tampa Electric customers, but also increased the difficulty of maintaining compliance with the Manatee Protection Plan in periods of extended cold weather.⁴

15. Tampa Electric determined that, based on the company's experience in January 2025, it is necessary to conduct a study to evaluate alternative options for maintaining compliance with the Big Bend NPDES permit. Tampa Electric will use an outside contractor to complete this study, and the company has completed a competitive bidding process to select this contractor.

16. Tampa Electric estimates that it will incur approximately \$450,000 in operations and maintenance expenses associated with the study. These costs are eligible for cost recovery through the ECRC under the criteria set out in Order No. PSC-94-0044-FOF-EI because: (1) they will be incurred after April 13, 1993; (2) the activity is required for Tampa Electric to maintain compliance with Big Bend's NPDES permit and the Big Bend Manatee Protection Plan; and (3) the costs for this study are not currently recovered through either the ECRC or base rates.

17. Tampa Electric will include the costs associated with the study in the company's 2025 ECRC true-up, which the company will file in the spring of 2026. The company plans to allocate the costs of the Manatee Protection Study on an energy basis.

⁴ The company believes it would have been able to maintain temperatures above the 68-degree threshold if the two retired Units were still in operation at the site.

The company will seek Commission approval of any necessary capital investments, if any, in a future filing.

III. Information Required by Rule 28-106.201

18. The Petitioner's name and address is:

Tampa Electric Company
3600 Midtown Drive
Tampa, Florida 33607

19. Any pleading, motion, notice, order, or other document required to be served upon any party to this proceeding shall be served upon the following individuals:

J. Jeffry Wahlen
jwahlen@ausley.com
Malcolm N. Means
mmeans@ausley.com
Matt J. Jones
mjones@ausley.com
Ausley McMullen
Post Office Box 391
Tallahassee, FL 32302
(850) 224-9115
(850) 222-7560 (fax)

Paula K. Brown
regdept@tecoenergy.com
Tampa Electric Company
Post Office Box 111
Tampa, Florida 33601
(813) 228-1444
(813) 228-1770 (fax)

20. The agency affected is the Florida Public Service Commission, located at 2540 Shumard Oak Boulevard, Tallahassee, Florida, 32399.

21. This Petition represents an original proceeding and does not involve reversal or modification of an agency decision or any proposed agency action.

22. In compliance with paragraph (2)(d) of Rule 28-106.201 of the Florida Administrative Code, the Petitioners state that they are not aware of any disputed issues of material fact. The company accordingly requests that the Commission consider this Petition through its proposed agency action procedure.

WHEREFORE, Tampa Electric respectfully requests that the Commission approve the Manatee Protection Study for cost recovery through the Environmental Cost Recovery Clause.

DATED this 7th day of November, 2025.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "Malcolm N. Means", is positioned above a horizontal line.

J. JEFFRY WAHLEN
MALCOLM N. MEANS
MATT J. JONES
Ausley McMullen
Post Office Box 391
Tallahassee, Florida 32302
(850) 224-9115

ATTORNEYS FOR TAMPA ELECTRIC COMPANY

EXHIBIT 1



FLORIDA DEPARTMENT OF Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Ron DeSantis
Governor

Alexis A. Lambert
Secretary

August 27, 2025

SENT BY EMAIL TO:
(smkroh@tecoenergy.com)

In the Matter of an
Application for Permit by:

Tampa Electric Company (TEC)
Mr. Stanley M. Kroh
Manager, Land and Stewardship Programs
P.O. Box 111
Tampa, Florida 33601

Hillsborough County
Big Bend Power Station
NPDES Permit No. FL0000817
PA File No. FL0000817-013-IW1S

NOTICE OF PERMIT ISSUANCE

Enclosed is Permit Number FL0000817 to operate the Big Bend Power Station, issued under Chapter 403, Florida Statutes (F.S).

Monitoring requirements under this permit are effective on the first day of the second month following the effective date of the permit. Until such time, the permittee shall continue to monitor and report in accordance with previously effective permit requirements, if any.

NOTICE OF RIGHTS

Judicial Review

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68, F.S., by the filing of a notice of appeal under Florida Rules of Appellate Procedure 9.110 and 9.190 with the Clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice must be filed within 30 days after this order is filed with the Clerk of the Department.

Tampa Electric Company (TEC)
FL0000817-013-IW1S
Page 2

EXECUTION AND CLERKING

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



Lauren Gottfreid
Program Administrator
Wastewater Management Program
Division of Water Resource Management

Attachment(s):

1. Permit No. FL0000817
2. Fact Sheet
3. Discharge Monitoring Report

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this document and all attachments were sent on the filing date below to the following listed persons:

EPA Region 4 (r4npdespermits@epa.gov)
Karrie-Jo Shell, Power Plant NPDES Permits, EPA Region 4 (shell.karrie-Jo@epa.gov)
Bridget Staples, EPA Region 4 (staples.bridget@epa.gov)
Ken Hagan, Chairman, Board of Hillsborough County Commissioners (hagank@HCFLGov.net)
FWC, Conservation Planning Services (fwcconservationplanningservices@myfwc.com)
Lucas Davis, U.S. Fish and Wildlife Service (lucas_davis@fws.gov)
Nick Farmer, National Marine Fisheries Service (nick.farmer@noaa.gov)
Carolyn Sotka, National Marine Fisheries Service (carolyn.sotka@noaa.gov)
Pat Shaw-Allen, National Marine Fisheries Service (pat.shaw-allen@noaa.gov)
Florida Department of Economic Opportunity, State Land Planning Agency
(dcpermits@deo.myflorida.com)
Florida Department of State, Bureau of Historic Preservation
(compliancepermits@dos.state.fl.us)
U.S. Army Corps of Engineers (james.j.mcadams@usace.army.mil)
Amy Butler, P.E., TEC (ambutler@tecoenergy.com)
Nick Fletcher, P.E., TEC (ndfletcher@tecoenergy.com)
Pamala Vazquez, FDEP Tampa (pamala.vazquez@floridadep.gov)
Shannon Herbon, FDEP Tampa (shannon.herbon@floridadep.gov)
Cindy Mulkey, Siting Coordination Office, FDEP (cindy.mulkey@floridadep.gov)
Katherine Clements, Sierra Club (katherine.clements@sierraclub.org)

Tampa Electric Company (TEC)
FL0000817-013-IW1S
Page 3

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to Section 120.52, F.S., with the designated Department Clerk,
receipt of which is hereby acknowledged.

Shirley Shields

Clerk

August 27, 2025
Date

**STATE OF FLORIDA
INDUSTRIAL WASTEWATER FACILITY PERMIT**

PERMITTEE:

Tampa Electric Company (TEC)

RESPONSIBLE OFFICIAL:

Mr. Stanley M. Kroh
P.O. Box 111
Tampa, Florida 33601-3285

PERMIT NUMBER:

FL0000817 (Major)

FILE NUMBER:

FL0000817-013-IW1S

ISSUANCE DATE:

August 27, 2025

EXPIRATION DATE:

August 26, 2030

FACILITY:

Tampa Electric Company
Big Bend Power Station
13031 Wyandotte Road
Apollo Beach, FL 33572
Hillsborough County
Latitude: 27° 47' 41.3827" N Longitude: 82° 24' 3.5451" W

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and applicable rules of the Florida Administrative Code (F.A.C.) and constitutes authorization to discharge to waters of the state under the National Pollutant Discharge Elimination System. This permit does not constitute authorization to discharge wastewater other than as expressly stated in this permit. The above named permittee is hereby authorized to operate the facilities in accordance with the documents attached hereto and specifically described as follows:

FACILITY DESCRIPTION:

The Tampa Electric Company (TEC) Big Bend Station is a nominal 1,863 megawatt (MW) electric generation facility. The facility consists of two natural gas-fired combined cycle generating units and a fossil-fuel fired boiler electrical generating unit; two steam turbine electrical generators (STEG); two simple-cycle combustion turbines (SCCT) sharing a common electrical generator; solid fuels, fly ash, limestone, gypsum, slag, bottom ash storage and handling facilities.

Units 1, 4, 5, and 6 have a combined electrical generating output of 1,727 MW. Units 1, 5, and 6 have a combined nominal generating capacity of 1,241 MW. Units 5 and 6 utilize natural gas as fuel, with heat recovery steam generators which send their steam to Unit 1. Unit 4 has a design electrical generating capacity of 486 MW. The fuel fired in Unit 4 consists of coal, a coal blend, or natural gas, and Unit 4 burns natural gas during startup, shutdown, and flame stabilization. Unit 4 is also equipped with Selective Catalytic Reduction (SCRs) and a flue gas desulfurization (FGD) system.

The remaining 136 MWs are generated by solar and combustion turbine 4 (CT4), which do not require once-through cooling water.

The wastewaters generated by the flue gas desulfurization treatment system is injected into two new deep wells also known as underground injection control (UIC) program wells. The use of these wells is authorized under a separate permit (UIC Permit No.373495-004-005-UC/11).

WASTEWATER DESCRIPTION:

Once-through cooling water (OTCW) from Units 1 and 4 is discharged through individual conduits to the facility's discharge canal. Flue gas desulfurization system (FGD) blowdown is discharged internally to one or more of the two UIC wells. The UIC discharge is authorized separately under UIC Permit No. 373495-004-005-UC/11.

Reclaimed effluent water received from the South County Water Reclamation Facility is currently the primary source of fresh water for the facility. The reclaimed water may be used directly, as received, or pretreated, via a reverse osmosis (RO) treatment system. The pretreated reclaimed water principally supplies the demineralized water treatment plant. The balance of the reclaimed effluent water is used to supply the plant fire water system (emergency basis), station cooling towers, service water requirements, and inventory management for the FGD and recycle water systems.

PERMITTEE: Tampa Electric Company (TEC)
FACILITY: Big Bend Power Station

PERMIT NUMBER: FL0000817 (Major)
EXPIRATION DATE: August 26, 2030

Other industrial wastewater streams from this facility includes floor and equipment drains, water treatment equipment waste, and service cooling tower and boiler blowdown which are collected and processed by the on-site lined wastewater settling and recycle pond system, authorized under a separate permit (FLA017047). The wastewater collected in the recycle system is combined with recovered storm water and reused within the facility.

FGD wastewater, recycled water, and contact stormwater is disposed of through UIC wells, authorized under a separate permit (UIC Permit No.373495-004-005-UC/11).

Storm water discharges are authorized under a separate Department-issued Multi-Sector General Permit, permit number FLR05C544 et seq. Units 1, 4, 5, and 6 are also regulated under the Florida Electrical Power Plant Siting Act (License No. PA79-12).

In addition, effluent from the on-site Tampa Bay Water Desalination Facility enters one or more of the four OTCW discharge conduits prior to entering the discharge canal. The discharge from the Tampa Bay Water Desalination Facility is authorized under a separate NPDES permit (FL0186813).

REUSE OR DISPOSAL:

Surface Water Discharge D-001: An existing permitted discharge of combined plant wastewater at the end of the discharge canal to Hillsborough Bay, Class III Marine Waters, and (WBID 1558D). The point of discharge is located approximately at latitude 27°47' 37" N, longitude 82°24' 39" W.

Surface Water Discharges D-011, and D-014: Existing permitted discharges of once-through cooling water from Units 1 and 4 to Hillsborough Bay, Class III Marine Waters, (WBID 1558D). The points of discharge are located approximately at latitude 27°47' 36" N, longitude 82°24' 16" W (D-011), and at latitude 27°47' 36" N, longitude 82°24' 16" W (D-014).

IN ACCORDANCE WITH: The limitations, monitoring requirements and other conditions set forth in this Cover Sheet and Part I through Part IX on pages 1 through 25 of this permit.

**TAMPA ELECTRIC COMPANY
MANATEE PROTECTION STUDY
EXHIBIT 1
FILED: NOVEMBER 7, 2025**

PERMITTEE: Tampa Electric Company (TEC)
FACILITY: Big Bend Power Station

PERMIT NUMBER: FL0000817 (Major)
EXPIRATION DATE: August 26, 2030

I. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

A. Surface Water Discharges

1. During the period beginning on the issuance date and lasting through the expiration date of this permit, the permittee is authorized to discharge the **Combined Plant Discharge** (consisting of Outfalls D-011 and D-014) from **Outfall D-001** to Hillsborough Bay. Such discharge shall be limited and monitored by the permittee as specified below and reported in accordance with Permit Condition I.C.3:

			Effluent Limitations		Monitoring Requirements			
Parameter	Units	Max/ Min	Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	Notes
Flow	MGD	Max Max	Report Report	Daily Maximum Monthly Average	Continuous	Pump Logs	FLW-1	
Temperature, Water	Deg F	Max Max	109.0 Report	Instant. Maximum Monthly Average	Continuous	Recorder	EFF-1	
Temp. Diff. between Intake and Discharge	Deg F	Max	16.8	Weekly Average	6/Day	Calculated	INT-1 EFF-1	
Dissolved Oxygen (DO)	mg/L	Min	Report	Weekly Average	Weekly	Meter	EFF-2	See I.A.3
Dissolved Oxygen (DO), % Saturation	percent	Min	Report	Weekly Average	Weekly	Meter	EFF-2	See I.A.3
Dissolved Oxygen (DO), % Saturation	percent	Min	Report	Monthly Average	Monthly	Calculated	EFF-2	See I.A.5
Dissolved Oxygen (DO), % Saturation	# of exceedances	Max	1	Rolling 3-month period	Weekly	Calculated	EFF-2	See I.A.4
Dissolved Oxygen (DO), % Saturation	# of exceedances	Max	1	Rolling 12-month period	Monthly	Calculated	EFF-2	See I.A.5
pH	s.u.	Min Max	6.5 8.5	Single Sample Single Sample	Weekly	In-situ	EFF-2	
Nitrogen, Ammonia, Total (as N)	mg/L	Max	Report	Instant. Maximum	Monthly	Grab	EFF-2	
Nitrogen, Kjeldahl, Total (as N)	mg/L	Max	Report	Instant. Maximum	Monthly	Grab	EFF-2	
Nitrite plus Nitrate, Total (as N)	mg/L	Max	Report	Instant. Maximum	Monthly	Grab	EFF-2	
Nitrogen, Total (as N)	mg/L	Max	Report	Instant. Maximum	Monthly	Grab	CAL-2	
	lbs/ mth	Max	Report	Monthly Total	Monthly	Calculated	CAL-1	See I.A.7
	tons/ yr	Max	87.9	Annual Total	Monthly	Calculated	CAL-1	See I.A.6, 7, and 8
	tons/ yr	Max	58.6	5-year Annual Average	Monthly	Calculated	CAL-1	See I.A.6, 7, and 8
Phosphorus, Total (as P)	mg/L	Max	Report	Single Sample	Monthly	Grab	EFF-2	
Phosphate, Ortho (as PO ₄)	mg/L	Max	Report	Single Sample	Monthly	Grab	EFF-2	
Chronic Whole Effluent Toxicity, 7-Day IC ₂₅ (Mysidopsis bahia)	percent	Min	100	Single Sample	Semi- annually	24-hr Composite	EFF-2	See I.A.15
Chronic Whole Effluent Toxicity, 7-Day IC ₂₅ (Menidia beryllina)	percent	Min	100	Single Sample	Semi- annually	24-hr Composite	EFF-2	See I.A.15

2. Effluent samples shall be taken at the monitoring site locations listed in Permit Condition I.A.1. and as described below:

**TAMPA ELECTRIC COMPANY
MANATEE PROTECTION STUDY
EXHIBIT 1
FILED: NOVEMBER 7, 2025**

PERMITTEE: Tampa Electric Company (TEC)
FACILITY: Big Bend Power Station

PERMIT NUMBER: FL0000817 (Major)
EXPIRATION DATE: August 26, 2030

Monitoring Site Number	Description of Monitoring Site
FLW-1	Flow shall be calculated from the operation of the once-through cooling water pumps located at the intake canal.
CAL-1	The net of the combined discharge of total nitrogen from D-011 and D-014 prior to entering the discharge canal minus the once-through cooling water intake of total nitrogen.
EFF-1	Discharge temperature shall be taken from the averaged value of the temperature array located in the discharge canal adjacent to the dilution pump house dock at Outfall D-001.
EFF-2	In the discharge canal next to the dilution pump house dock at Outfall D-001. Dissolved Oxygen readings shall be taken within 3 feet of the water surface.
CAL-2	The combined discharge of total nitrogen from D-011 and D-014 prior to entering the discharge canal.
INT-1	Intake temperature, used for calculating temperature rise, shall be taken at the intake side of each unit condenser.

3. Dissolved Oxygen (DO) shall be monitored continuously for 24 hours once per week. The average of all values taken during that 24-hour period shall be reported as the weekly average. Monitoring results shall be reported in units of both mg/L and percent saturation.
4. The minimum water quality criterion for weekly average percent Dissolved Oxygen (DO) saturation is 51%. The “# of exceedances” shall be the number of weekly average percent DO saturation values less than 51% over a rolling 3-month period.
5. The monthly average percent Dissolved Oxygen (DO) saturation shall be calculated as the average of all percent DO saturation values during the calendar month. The minimum water quality criterion for monthly average DO saturation is 56%. The “# of exceedances” shall be the number of monthly average values less than 56% over a rolling 12-month period.
6. In accordance with the Nutrient Management Consortium “Final-2009 Reasonable Assurance Addendum: Allocation and Assessment Report” dated January 22, 2010, the Total Nitrogen loading shall be calculated from the monthly average Total Nitrogen concentrations. The Total Nitrogen loading shall be calculated as a twelve-month [annual] rolling total and shall not exceed 87.9 tons/year and the five-year average of the annual totals shall not exceed 58.6 tons/year.
7. The annual discharge loading is calculated by adding the monthly mass loading of the total nitrogen for each month in the calendar year. The monthly mass loading (expressed in Tons) is calculated using the following equation:

$$Mt = \frac{(\text{Monthly Average Total Nitrogen Concentration, mg/l}) * (\text{Total Monthly Flow, MG}) * (8.3454)}{2000 \text{ lbs}}$$

Where: Mt= Tons/Month

8. The Rolling Annual Total value is the sum of the monthly totals beginning on first day of the second month following permit issuance. During the first 60 months following permit issuance, the 5-year average of the annual totals is the sum of the monthly totals divided by 5. In the 61st month and beyond, the 5-year average of the annual totals shall become a rolling 5-year average of the annual totals calculated from the monthly totals.

Annual Total (At)		
Annual Total at the end of the 2nd Month:	$At_2 = Mt_1 + Mt_2$	(1st month total + 2nd month total)
Annual Total at the end of the 12 th Month:	$At_{12} = Mt_1 + Mt_2 \dots Mt_{12}$	
Annual Total at the end of the 13 th Month:	$At_{13} = Mt_2 + Mt_3 \dots Mt_{13}$	(Now a Rolling Total)
Annual Total at the end of the n th Month:	$At_n = Mt_{n-11} + Mt_{n-10} \dots Mt_n$	(Every Month Thereafter—a Rolling Total)

5 Year Average of the Yearly Totals (5yr)		
$5yr_n = (Mt_1 + Mt_2 \dots Mt_n) / 5$		(Prior to the 60 th Month)
$5yr_{60} = (Mt_1 + Mt_2 \dots Mt_{60}) / 5$		(After the 60 th Month)
$5yr_{61} = (Mt_2 + Mt_3 \dots Mt_{61}) / 5$		(After the 61 st Month – Now a Rolling Average)
$5yr_n = (Mt_{n-59} + Mt_{n-58} \dots Mt_n) / 5$		(Every Month Thereafter—a Rolling Average)

PERMITTEE: Tampa Electric Company (TEC)
FACILITY: Big Bend Power Station

PERMIT NUMBER: FL0000817 (Major)
EXPIRATION DATE: August 26, 2030

9. For Unit 4, the permittee shall maintain current intake traveling screen practices so as to assure that the screens are cycled at least twice during each 24 hours of continuous operation unless precluded by repair or maintenance requirements. With the installation of modified traveling water screens (MTWS) and a fish return system on Unit 1, as required to meet Impingement Mortality BTA per 40 CFR 125.94(c)(5), MTWS operation shall be near continuous consistent with 40 CFR 125.92(s), unless precluded by repair or maintenance requirements. With the installation of a fish return system, fish, shellfish, and other aquatic organisms collected from or trapped on the intake screens shall be returned or relocated to their natural habitat in such a manner to minimize stress or mortality. All other materials collected on the intake screens, except natural debris (e.g. seaweed) shall be removed and disposed of in accordance with all existing federal, state and or local laws and regulations that apply to waste disposal. Such material shall not be returned to the receiving waters. *[C.W.A. 316 (b)]*
10. The intake through-screen velocity shall be maintained at current levels such that existing maximum velocity is not exceeded. *[62-620.100(3), F.A.C., C.W.A. 316(b)]*
11. The permittee shall complete all studies and gather all information required under 40 CFR 122.21(r)(2-13) for Units 1 and 4 necessary to establish impingement mortality and entrainment BTA requirements in accordance with the schedule in Permit Condition VI.3. *[62-620.100(3), F.A.C., C.W.A. 316(b)]*
12. No activity authorized under this permit shall be likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species.
13. Authorization of an activity by this permit does not authorize the “take” of a threatened or endangered species as defined under the ESA. In the absence of separate authorization from the U.S. Fish and Wildlife Service (FWS) or the National Marine Fisheries Service (NMFS), the ESA prohibits any person subject to the jurisdiction of the United States to take a listed species.
14. This permit does not authorize the permittee to “take” any Florida Endangered and Threatened Species. Compliance with state laws regulating the “take” of Florida Endangered and Threatened Species is the responsibility of the owner or permittee associated with this project. Please refer to Chapter 68A-27 of the Florida Administrative Code for definitions of “take,” and a list of Florida Endangered and Threatened Species. If state listed species are observed onsite, Florida Fish and Wildlife Conservation Commission (FWC) staff are available to provide decision support information or assist in obtaining the appropriate FWC permits. Requests for further information or review can be sent to ConservationPlanningServices@MyFWC.com.
15. The permittee shall comply with the following requirements to evaluate chronic whole effluent toxicity of the discharge from Outfall D-001.
 - a. Effluent Limitation
 - (1) In any routine or additional follow-up test for chronic whole effluent toxicity, the 25 percent inhibition concentration (IC25) shall not be less than 100% effluent. *[Rules 62-302.530(61) and 62-4.241(1)(b), F.A.C.]*
 - (2) For acute whole effluent toxicity, the 96-hour LC50 shall not be less than 100% effluent in any test. *[Rules 62-302.500(1)(a)4. and 62-4.241(1)(a), F.A.C.]*
 - b. Monitoring Frequency
 - (1) Routine toxicity tests shall be conducted once every six months, the first starting within 60 days of the issuance date of this permit and lasting for the duration of this permit.
 - c. Sampling Requirements
 - (1) For each routine test or additional follow-up test conducted, a total of three 24-hour composite samples of final effluent shall be collected and used in accordance with the sampling protocol discussed in EPA-821-R-02-014, Section 8.
 - (2) The first sample shall be used to initiate the test. The remaining two samples shall be collected according to the protocol and used as renewal solutions on Day 3 (48 hours) and Day 5 (96 hours) of the test.
 - (3) Samples for routine and additional follow-up tests shall not be collected on the same day.

PERMITTEE: Tampa Electric Company (TEC)
FACILITY: Big Bend Power Station

PERMIT NUMBER: FL0000817 (Major)
EXPIRATION DATE: August 26, 2030

d. Test Requirements

- (1) Routine Tests: All routine tests shall be conducted using a control (0% effluent) and a minimum of five test dilutions: **100%, 50%, 25%, 12.5%, and 6.25%** final effluent.
- (2) The permittee shall conduct 7-day survival and growth chronic toxicity tests with a mysid shrimp, **Americamysis (Mysdopsis) bahia**, Method 1007.0, and an inland silverside, **Menidia beryllina**, Method 1006.0, concurrently.
- (3) All test species, procedures and quality assurance criteria used shall be in accordance with Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, 3rd Edition, EPA-821-R-02-014. Any deviation of the bioassay procedures outlined herein shall be submitted in writing to the Department for review and approval prior to use. In the event the above method is revised, the permittee shall conduct chronic toxicity testing in accordance with the revised method.
- (4) The control water and dilution water used shall be artificial sea salts as described in EPA-821-R-02-014, Section 7.2. The test salinity shall be determined as follows:
 - (a) For the **Americamysis bahia** bioassays, the effluent shall be adjusted to a salinity of 20 parts per thousand (ppt) with artificial sea salts. The salinity of the control/dilution water (0% effluent) shall be 20 ppt. If the salinity of the effluent is greater than 20 ppt, no salinity adjustment shall be made to the effluent and the test shall be run at the effluent salinity. The salinity of the control/dilution water shall match the salinity of the effluent.
 - (b) For the **Menidia beryllina** bioassays, if the effluent salinity is less than 5ppt, the salinity shall be adjusted to 5 ppt with artificial sea salts. The salinity of the control/dilution water (0% effluent) shall be 5 ppt. If the salinity of the effluent is greater than 5 ppt, no salinity adjustment shall be made to the effluent and the test shall be run at the effluent salinity. The salinity of the control/dilution water shall match the salinity of the effluent.
 - (c) If the salinity of the effluent requires adjustment, a salinity adjustment control should be prepared and included with each bioassay. The salinity adjustment control is intended to identify toxicity resulting from adjusting the effluent salinity with artificial sea salts. To prepare the salinity adjustment control, dilute the control/dilution water to the salinity of the effluent and adjust the salinity of the salinity adjustment control at the same time and to the same salinity that the salinity of the effluent is adjusted using the same artificial sea salts.

e. Quality Assurance Requirements

- (1) A standard reference toxicant (SRT) quality assurance (QA) chronic toxicity test shall be conducted with each species used in the required toxicity tests either concurrently or initiated no more than 30 days before the date of each routine or additional follow-up test conducted. Additionally, the SRT test must be conducted concurrently if the test organisms are obtained from outside the test laboratory unless the test organism supplier provides control chart data from at least the last five monthly chronic toxicity tests using the same reference toxicant and test. If the organism supplier provides the required SRT data, the organism supplier's SRT data and the test laboratory's monthly SRT-QA data shall be included in the reports for each companion routine or additional follow-up test required.
- (2) If the mortality in the control (0% effluent) exceeds 20% for either species in any test or any test does not meet "test acceptability criteria", the test for that species (including the control) shall be invalidated and the test repeated. Test acceptability criteria for each species are defined in EPA-821-R-02-014, Section 14.12 (**Americamysis bahia**) and Section 13.12 (**Menidia beryllina**). The repeat test shall begin within 21 days after the last day of the invalid test.
- (3) If 100% mortality occurs in all effluent concentrations for either species prior to the end of any test and the control mortality is less than 20% at that time, the test (including the control) for that species shall be terminated with the conclusion that the test fails and constitutes non-compliance.
- (4) Routine and additional follow-up tests shall be evaluated for acceptability based on the observed dose-response relationship as required by EPA-821-R-02-014, Section 10.2.6., and the evaluation shall be included with the bioassay laboratory reports.

f. Reporting Requirements

- (1) Results from all required tests shall be reported on the Discharge Monitoring Report (DMR) as follows:
 - (a) Routine and Additional Follow-up Test Results: The calculated IC25 for each test species shall be entered on the DMR.

PERMITTEE: Tampa Electric Company (TEC)
FACILITY: Big Bend Power Station

PERMIT NUMBER: FL0000817 (Major)
EXPIRATION DATE: August 26, 2030

- (2) A bioassay laboratory report for each routine test shall be prepared according to EPA-821-R-02-014, Section 10, Report Preparation and Test Review, and mailed to the Department at the address below within 30 days after the last day of the test.
- (3) For additional follow-up tests, a single bioassay laboratory report shall be prepared according to EPA-821-R-02-014, Section 10, and mailed within 30 days after the last day of the second valid additional follow-up test.
- (4) Data for invalid tests shall be included in the bioassay laboratory report for the repeat test.
- (5) The same bioassay data shall not be reported as the results of more than one test.
- (6) All bioassay laboratory reports shall be sent to:
Florida Department of Environmental Protection
Southwest District Office
13051 N. Telecom Parkway
Temple Terrace, Florida 33637

g. Test Failures

- (1) A test fails when the test results do not meet the limits in 15.a.(1).
- (2) Additional Follow-up Tests:
 - (a) If a routine test does not meet the chronic toxicity limitation in 15.a.(1) above, the permittee shall notify the Department at the address above within 21 days after the last day of the failed routine test and conduct two additional follow-up tests on each species that failed the test in accordance with 15.d.
 - (b) The first test shall be initiated within 28 days after the last day of the failed routine test. The remaining additional follow-up tests shall be conducted weekly thereafter until a total of two valid additional follow-up tests are completed.
 - (c) The first additional follow-up test shall be conducted using a control (0% effluent) and a minimum of five dilutions: 100%, 50%, 25%, 12.5%, and 6.25% effluent. The permittee may modify the dilution series in the second additional follow-up test to more accurately bracket the toxicity such that at least two dilutions above and two dilutions below the target concentration and a control (0% effluent) are run. All test results shall be analyzed according to the procedures in EPA-821-R-02-014.
- (3) In the event of three valid test failures (whether routine or additional follow-up tests) within a 24-month period, the permittee shall notify the Department within 21 days after the last day of the third test failure.
 - (a) The permittee shall submit a plan for correction of the effluent toxicity within 60 days after the last day of the third test failure.
 - (b) The Department shall review and approve the plan before initiation.
 - (c) The plan shall be initiated within 30 days following the Department's written approval of the plan.
 - (d) Progress reports shall be submitted quarterly to the Department at the address above.
 - (e) During the implementation of the plan, the permittee shall conduct quarterly routine whole effluent toxicity tests in accordance with 15.d. Additional follow-up tests are not required while the plan is in progress. Following completion or termination of the plan, the frequency of monitoring for routine and additional follow-up tests shall return to the schedule established in 15.b.(1). If a routine test is invalid according to the acceptance criteria in EPA-821-R-02-014, a repeat test shall be initiated within 21 days after the last day of the invalid routine test.
 - (f) Upon completion of four consecutive quarterly valid routine tests that demonstrate compliance with the effluent limitation in 15.a.(1) above, the permittee may submit a written request to the Department to terminate the plan. The plan shall be terminated upon written verification by the Department that the facility has passed at least four consecutive quarterly valid routine whole effluent toxicity tests. If a test within the sequence of the four is deemed invalid, but is replaced by a repeat valid test initiated within 21 days after the last day of the invalid test, the invalid test will not be counted against the requirement for four consecutive quarterly valid routine tests for the purpose of terminating the plan.
- (4) If chronic toxicity test results indicate greater than 50% mortality within 96 hours in an effluent concentration equal to or less than the effluent concentration specified as the acute toxicity limit in 15.(a)(2), the Department may revise this permit to require acute definitive whole effluent toxicity testing.
- (5) The additional follow-up testing and the plan do not preclude the Department taking enforcement action for acute or chronic whole effluent toxicity failures.

PERMITTEE: Tampa Electric Company (TEC)
FACILITY: Big Bend Power Station

PERMIT NUMBER: FL0000817 (Major)
EXPIRATION DATE: August 26, 2030

[62-4.241, 62-620.620(3), F.A.C.]

B. Internal Outfalls

Section I.B is not applicable to this facility.

C. Other Limitations and Monitoring and Reporting Requirements

1. The sample collection, analytical test methods, and method detection limits (MDLs) applicable to this permit shall be conducted using a sufficiently sensitive method to ensure compliance with applicable water quality standards and effluent limitations and shall be in accordance with Rule 62-4.246, Chapters 62-160 and 62-600, F.A.C., and 40 CFR 136, as appropriate. The list of Department established analytical methods, and corresponding MDLs (method detection limits) and PQLs (practical quantitation limits), which is titled "Rule 62-4, F.A.C. MDL/PQL Table (November 10, 2020)" is available at <https://floridadep.gov/dear/quality-assurance/content/quality-assurance-resources>. The MDLs and PQLs as described in this list shall constitute the minimum acceptable MDL/PQL values and the Department shall not accept results for which the laboratory's MDLs or PQLs are greater than those described above unless alternate MDLs and/or PQLs have been specifically approved by the Department for this permit. Any method included in the list may be used for reporting as long as it meets the following requirements:
 - a. The laboratory's reported MDL and PQL values for the particular method must be equal or less than the corresponding method values specified in the Department's approved MDL and PQL list;
 - b. The laboratory reported MDL for the specific parameter is less than or equal to the permit limit or the applicable water quality criteria, if any, stated in Chapter 62-302, F.A.C. Parameters that are listed as "report only" in the permit shall use methods that provide an MDL, which is equal to or less than the applicable water quality criteria stated in 62-302, F.A.C.; and
 - c. If the MDLs for all methods available in the approved list are above the stated permit limit or applicable water quality criteria for that parameter, then the method with the lowest stated MDL shall be used.

When the analytical results are below method detection or practical quantitation limits, the permittee shall report the actual laboratory MDL and/or PQL values for the analyses that were performed following the instructions on the applicable discharge monitoring report.

Where necessary, the permittee may request approval of alternate methods or for alternative MDLs or PQLs for any approved analytical method. Approval of alternate laboratory MDLs or PQLs are not necessary if the laboratory reported MDLs and PQLs are less than or equal to the permit limit or the applicable water quality criteria, if any, stated in Chapter 62-302, F.A.C. Approval of an analytical method not included in the above-referenced list is not necessary if the analytical method is approved in accordance with 40 CFR 136 or deemed acceptable by the Department. *[62-4.246, 62-166]*

2. The permittee shall provide safe access points for obtaining representative influent and effluent samples which are required by this permit. *[62-620.320(6)]*
3. Monitoring requirements under this permit are effective on the first day of the second month following the effective date of the permit. Until such time, the permittee shall continue to monitor and report in accordance with previously effective permit requirements, if any. During the period of operation authorized by this permit, the permittee shall complete and submit to the Department Discharge Monitoring Reports (DMRs) in accordance with the frequencies specified by the REPORT type (i.e. monthly, quarterly, semiannual, annual, etc.) indicated on the DMR forms attached to this permit. Unless specified otherwise in this permit, monitoring results for each monitoring period shall be submitted in accordance with the associated DMR due dates below. DMRs shall be submitted for each required monitoring period including periods of no discharge.

REPORT Type on DMR	Monitoring Period	Due Date
Monthly	first day of month - last day of month	28 th day of following month
Quarterly	January 1 - March 31	April 28
	April 1 - June 30	July 28
	July 1 - September 30	October 28

**TAMPA ELECTRIC COMPANY
MANATEE PROTECTION STUDY
EXHIBIT 1
FILED: NOVEMBER 7, 2025**

PERMITTEE: Tampa Electric Company (TEC)
FACILITY: Big Bend Power Station

PERMIT NUMBER: FL0000817 (Major)
EXPIRATION DATE: August 26, 2030

	October 1 - December 31	January 28
Semiannual	January 1 - June 30 July 1 - December 31	July 28 January 28
Annual	January 1 - December 31	January 28

The permittee shall use the electronic DMR system approved by the Department (EzDMR) and shall electronically submit the completed DMR forms using the DEP Business Portal at <https://www.fldepportal.com/go/>, unless the permittee has a waiver from the Department in accordance with 40 CFR 127.15. Reports shall be submitted to the Department by the twenty-eighth (28th) of the month following the month of operation.

[62-620.610(18)]

4. Unless specified otherwise in this permit, all reports and other information required by this permit, including 24-hour notifications, shall be submitted to or reported to, as appropriate, the Department's Southwest District Office at the address specified below:

Florida Department of Environmental Protection
Southwest District
13051 N. Telecom Parkway
Temple Terrace, Florida 33637

Phone Number - (813) 470-5700

[62-620.305]

5. All reports and other information shall be signed in accordance with the requirements of Rule 62-620.305, F.A.C. *[62-620.305]*
6. If there is no discharge from the facility on a day when the facility would normally sample, the sample shall be collected on the day of the next discharge. *[62-620.320(6)]*
7. Any bypass of the treatment facility which is not included in the monitoring specified in sections I.A is to be monitored for flow and all other required parameters. For parameters other than flow, at least one grab sample per day shall be monitored. Daily flow shall be monitored or estimated, as appropriate, to obtain reportable data. All monitoring results shall be reported on the appropriate DMR.
8. The permittee is authorized to discharge from Outfalls D-011 and D-014 in accordance with permit condition I.A.1.
9. The permittee is authorized to discharge intake screen backwash water from Units 1 and 4 to the intake canal without limitations or monitoring requirements, except as noted in Permit Condition I.C.10 below.
10. Intake screen wash water from Unit 4 shall be discharged to the Apollo Beach embayment, south of the discharge canal during the period from March 15 through October 15 and may be discharged without limitations or monitoring requirements. Any bypasses of the fine mesh screens during this period shall be reported to the Department.
11. There shall be no discharge of floating solids or visible foam in such amounts that form a nuisance and no discharge of a visible oil sheen at any time in accordance with Rules 62-302.500 and 62-302.530, F.A.C. Any such discharges shall be reported to the Department when submitting DMR's.
12. Discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act to any waste stream that ultimately may be released to waters of the State is prohibited unless specifically authorized elsewhere in a permit; except products used for lawn and agricultural purposes or to the use of herbicides if used in accordance with labeled instructions and any applicable State permit.

PERMITTEE: Tampa Electric Company (TEC)
FACILITY: Big Bend Power Station

PERMIT NUMBER: FL0000817 (Major)
EXPIRATION DATE: August 26, 2030

In the event the permittee proposes to use biocides, corrosion inhibitors, or additives not authorized in this permit, or not previously reported to the Department, that ultimately may be released to waters of the State, the permittee shall notify the Department in writing a minimum of thirty (30) days prior to instituting the use of such product. The product shall not be used prior to a determination by the Department that a permit revision is not required or prior to Department approval. Such notification shall include:

- a. Name and general composition of biocide or chemical
- b. Frequencies of use
- c. Quantities to be used
- d. Proposed effluent concentrations
- e. Acute and/or chronic toxicity data (laboratory reports shall be prepared, depending on the test type, according to Section 12 of EPA document no. EPA-821-R-02-012 entitled, Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters for Freshwater and Marine Organisms, Section 10 of EPA document no. EPA-821-R-02-013 entitled, Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms or Section 10 of EPA document no. EPA-821-R-02-014 entitled, Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, or most current addition)
- f. Product data sheet
- g. Product label, or EPA registration number, if applicable.

A revision to this permit is not necessary for use of products equivalent to those authorized in this permit provided the equivalent products consist of the same active ingredients and the product is applied at the same location with the same or lower concentrations of the active ingredients at the outfall. The permittee is responsible for maintaining documentation on-site which demonstrates equivalency of any new water treatment products from another vendor or manufacturer with a different product name from those listed above.

13. The permittee shall continue compliance with the facility's Manatee Protection Plan approved by the Department on August 6, 2003, and as amended thereafter.
14. A revision to this permit is not necessary for the following activities:
 - a. Structural changes that do not change the quality, nature, or quantity of the discharge of wastes or that do not cause water pollution; and
 - b. Construction, replacement or repair of components at the facility which does not change the permitted treatment works or the terms and conditions of this permit.

Records of these activities shall be kept by the permittee (activity description, start date and length of activity). The documentation shall be kept onsite in accordance with Permit Condition V.2, and made available to Department staff upon request. *[62-620.200(26)(a)&(b), F.A.C.]*
15. The permittee shall not store soil, or other similar erodible materials in a manner in which runoff is uncontrolled, nor shall construction activities be conducted in a manner which produces uncontrolled runoff unless such uncontrolled runoff has been specifically approved by the Department. "Uncontrolled" shall mean without sedimentation basin or other controls approved by the Department.
16. Discharge of any waste resulting from the combustion of toxic, hazardous, or metal cleaning wastes to any waste stream which ultimately discharges to waters of the State is prohibited, unless specifically authorized elsewhere in this permit.
17. The discharge shall not contain components that, alone or in combination with other substances or in combination with other components of the discharge:
 - a. Settle to form putrescent deposits or otherwise create a nuisance; or
 - b. Float as debris, scum, oil, or other matter in such amounts as to form nuisances; or

PERMITTEE: Tampa Electric Company (TEC)
FACILITY: Big Bend Power Station

PERMIT NUMBER: FL0000817 (Major)
EXPIRATION DATE: August 26, 2030

- c. Produce color, odor, taste, turbidity, or other conditions in such degree as to create a nuisance; or
- d. Are acutely toxic; or
- e. Are present in concentrations which are carcinogenic, mutagenic, or teratogenic to human beings or to significant, locally occurring, wildlife or aquatic species, unless specific standards are established for such components in subsection 62-302.500(2) or Rule 62-302.530, F.A.C.; or
- f. Pose a serious danger to the public health, safety, or welfare.

[62-302.500(1)(a)]

18. There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid. The permittee shall dispose of all known PCB equipment, articles, and wastes either in accordance with:

- a. Department-issued permits governing soil thermal treatment (Chapter 62-713, F.A.C.) or Department-approved landfills provided the PCB concentrations meet the Florida landfill's permitted limit when concentrations are less than 50 ppm; or
- b. 40 CFR 761 when concentrations are greater than or equal to 50 ppm.

[40 CFR Part 423.12(b)(2)]

19. Combined Waste Stream: In the event that waste streams from various sources are combined for treatment or discharge, the quantity of each pollutant or pollutant property attributable to each controlled waste source shall not exceed the specified limitation for that waste source. *[40 CFR 423.12(b)(13), 423.13(n)]*

20. Unless otherwise specifically permitted in this permit, there shall be no point source discharges of any wastes to waters of the State, or to any waste stream which enters such waters. The permittee shall operate and maintain loading and unloading facilities in such a manner in order to preclude spillage of chemicals, etc., used at the facility, and shall take all actions necessary to clean-up and control any such spill which may occur.

II. SLUDGE MANAGEMENT REQUIREMENTS

1. The permittee shall be responsible for proper treatment, management, use, and disposal of its sludge. *[62-620.320(6)]*
2. Storage, transportation, and disposal of sludge/solids characterized as hazardous waste shall be in accordance with requirements of Chapter 62-730, F.A.C. *[62-736]*
3. Vegetation and materials removed from intake screens must be properly stored onsite until they are disposed in accordance with requirements in Chapter 62-701, F.A.C., and other applicable State and Federal requirements. Storage, transportation, and disposal of sludge/solids characterized as hazardous waste shall be in accordance with requirements of Chapter 62-730, F.A.C. *[62-736]*
4. The permittee shall keep records of the amount of sludge or residuals disposed, transported, or incinerated in (Please specify units). If a person other than the permittee is responsible for sludge transporting, disposal, or incineration, the permittee shall also keep the following records:
 - a. Name, address and telephone number of any transporter, and any manifests or bill of lading used;
 - b. Name and location of the site of disposal, treatment or incineration;
 - c. Name, address, and telephone number of the entity responsible for the disposal, treatment, or incineration site.

III. GROUND WATER REQUIREMENTS

1. Groundwater monitoring requirements are included in a separate non-NPDES permit issued by the Department's Southwest District Office (FLA017047) and Conditions of Certification under the Florida Electrical Power Plant Siting Act for Unit 4 (License No. PA 79-12).

PERMITTEE: Tampa Electric Company (TEC)
FACILITY: Big Bend Power Station

PERMIT NUMBER: FL0000817 (Major)
EXPIRATION DATE: August 26, 2030

2. The discharge to groundwater shall not impair the designated use of contiguous surface waters. *[62-520.310(2)]*

IV. ADDITIONAL LAND APPLICATION REQUIREMENTS

Section IV is not applicable to this facility.

V. OPERATION AND MAINTENANCE REQUIREMENTS

1. During the period of operation authorized by this permit, the wastewater facilities shall be operated under the supervision of a person who is qualified by formal training and/or practical experience in the field of water pollution control. *[62-620.320(6)]*
2. The permittee shall maintain the following records and make them available for inspection on the site of the permitted facility.
 - a. Records of all compliance monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, including, if applicable, a copy of the laboratory certification showing the certification number of the laboratory, for at least three years from the date the sample or measurement was taken;
 - b. Copies of all reports required by the permit for at least three years from the date the report was prepared;
 - c. Records of all data, including reports and documents, used to complete the application for the permit for at least three years from the date the application was filed;
 - d. Records of all disposal of vegetation and materials removed from intake screens and vegetation, sediments and sludge removed from wastewater and stormwater basins;
 - e. A copy of the current permit;
 - f. A copy of any required record drawings; and
 - g. Copies of the logs and schedules showing plant operations and equipment maintenance for three years from the date of the logs or schedules.

[62-620.356]

3. The applicant shall continue to implement the fine mesh screens inspection and maintenance program submitted to the Department on July 21, 1987, to assure that the screens are properly maintained and operated. The applicant shall maintain logs of inspections, maintenance, and repairs. The logs shall include the date of inspection, items inspected, repairs needed, and date maintenance or repair is performed. Any bypasses of the fine mesh screens on Unit 4 between March 15 and October 15 shall be reported to the Department.
4. During the period of operation authorized by this permit, the permittee shall, as part of its preventative maintenance program, review the structural integrity of all outfalls, including all outfalls which have been taken out of service, on an annual basis. All pipes no longer in service shall be either removed, capped, or filled. *[62-620.320(6), F.A.C.]*

VI. SCHEDULES

1. A Best Management Practices Pollution Prevention (BMP3) Plan shall be prepared and implemented in accordance with Part VII of this permit and the following schedule:

Action Item	Scheduled Completion Date
Continue Implementing Existing BMP3 Plan	Issuance Date of Permit

2. If the permittee wishes to continue operation of this wastewater facility after the expiration date of this permit, the permittee shall submit an application for renewal no later than one-hundred and eighty days (180) prior to the expiration date of this permit. Application shall be made using the appropriate forms listed in Rule 62-620.910,

**TAMPA ELECTRIC COMPANY
MANATEE PROTECTION STUDY
EXHIBIT 1
FILED: NOVEMBER 7, 2025**

PERMITTEE: Tampa Electric Company (TEC)
FACILITY: Big Bend Power Station

PERMIT NUMBER: FL0000817 (Major)
EXPIRATION DATE: August 26, 2030

F.A.C., including submittal of the appropriate processing fee set forth in Rule 62-4.050, F.A.C. [62-620.335(1) and (2)]

3. The permittee shall submit information to address impingement and entrainment required by the applicable provisions of 40 CFR 122.21(r) for Units 1 and 4 in accordance with permit condition I.A.11. and the following:
 - a. Within three months of the effective date of this permit, the permittee shall schedule a meeting with the Department to discuss the facility's plan to address the requirements of Section 316(b) of the Clean Water Act (CWA), including the applicable requirements under 40 CFR 122.21(r)(2-13), any previous data and/or studies which the facility plans to use to satisfy any requirements under §122.21(r)(2-13), and the proposal for a peer review group.
 - b. Within six months of the effective date of this permit, the permittee shall submit to the Department a Plan of Study (POS) to address the timely implementation of the 316(b) cooling water intake regulations. The POS shall include a schedule for the submittal of 122(r)(2-13) forms and any associated reports. All applicable forms, reports, and associated material shall be submitted no later than one-hundred and eighty days (180) prior to the expiration date of this permit.
4. The permittee shall submit a copy of the Manatee Protection Plan, including any amendments, with the permit renewal application to each of the following agencies no later than one-hundred and eighty days (180) prior to the expiration date of this permit:

Florida Department of Environmental Protection
Wastewater Management Program, Mail Station 3545
Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Florida Fish and Wildlife Conservation Commission
Bureau of Protected Species Management
620 South Meridian Street
OES-BPS
Tallahassee, Florida 32399-1600

And

US Fish and Wildlife Service
Jacksonville Field Office
7915 Baymeadows Way, Suite 200
Jacksonville, Florida 32256-7517

5. Starting with the issuance of this permit, the permittee shall submit to the Department's Tallahassee Wastewater Management Program semi-annual progress reports on implementation and completion of options selected to reduce horseshoe crab impingement.
6. The facility is required to conduct and submit the "impingement technology performance optimization study" described in 40 CFR 122.21(r)(6)(i), demonstrating that operation has been optimized to minimize impingement mortality. The facility shall notify the Department's Tallahassee Wastewater Management Program upon commencement of the study. The facility shall submit the results of the study within 90 days following completion to the Department's Tallahassee Wastewater Management Program. Based upon the results, the permit may be reopened as necessary (in accordance with Part VIII.E of the permit) to include additional requirements, monitoring, reporting, or limitations.
7. Starting with the issuance of this permit, the permittee shall submit to the Department all applicable Section 316(b), Clean Water Act, annual reports required by Title 40 of the Code of Federal Regulations (CFR) Part 125 Subpart J no later than February 1 of each year. Starting December 21, 2025, the permittee shall submit all applicable annual reports electronically pursuant to 40 CFR 127.16 unless covered by waivers under 40 CFR 127.15 and 40 CFR 127.24. Annual reports are applicable if additional monitoring requirements or additional measures to protect Federally-listed threatened or endangered species are required in this permit. If applicable, the annual reports shall

PERMITTEE: Tampa Electric Company (TEC)
FACILITY: Big Bend Power Station

PERMIT NUMBER: FL0000817 (Major)
EXPIRATION DATE: August 26, 2030

include biological monitoring for species name and number, threatened or endangered status, species impinged and entrained, and applicable measures to protect designated critical habitat.
[62-620.100(3)(z)]

8. Starting with the issuance of this permit, the permittee shall submit to the Department's Tallahassee Wastewater Management Program no later than February 1 of each year an annual certification statement and report pursuant to 40 CFR 125.97(c). If any unit at the facility has been substantially modified that impacts cooling water withdrawals or operation of your cooling water intake structures, the permittee shall provide a summary of those changes in the report. In addition, the permittee must submit revisions to the information required at 40 CFR 122.21(r) in the next permit application. If the information contained in the previous year's annual certification is still pertinent, the permittee may simply state as such in a letter to the Department and the letter, along with any applicable data submission requirements specified in 40 CFR 125.97, shall constitute the annual certification. The annual certification statement shall be signed by a responsible corporate officer in accordance with Rule 62-620.305, F.A.C. [62-620.100(3)(z)]
9. The permittee shall submit DEP Form 62-620.910(12), Notification of Completion of Construction for Wastewater Facilities or Activities, to the Department's Tallahassee Wastewater Management Program upon completion of installation of the fish return system and modified traveling water screens.
10. The permittee shall submit DEP Form 62-620.910(13), Notification of Availability of Record Drawings and Final Operation and Maintenance Manuals, to the Department's Tallahassee Wastewater Management Program within six months upon completion of installation of the fish return system and modified traveling water screens.
11. Within six months of the final issuance of this permit, the permittee shall schedule a meeting with the Department's Tallahassee Wastewater Management Program to discuss the contents of a 316(a) thermal variance re-evaluation plan. The plan shall be submitted to the Department within 12 months of the final issuance of this permit and shall be implemented within 24 months subsequent to approval by the Department. All applicable forms, reports, and associated material shall be submitted as soon as practicable but no later than 180 days prior to the expiration date of the permit (also the due date for submission of the permit renewal application).

VII. BEST MANAGEMENT PRACTICES

1. General Conditions

In accordance with Section 304(e) and 402(a)(2) of the Clean Water Act (CWA) as amended, 33 U.S.C. §§ 1251 et seq., and the Pollution Prevention Act of 1990, 42 U.S.C. §§ 13101-13109, the permittee must develop and implement a plan for utilizing practices incorporating pollution prevention measures. References to be considered in developing the plan are "Criteria and Standards for Best Management Practices Authorized Under Section 304(e) of the Act," found at 40 CFR 122.44 Subpart K and the Storm Water Management Industrial Activities Guidance Manual, EPA/833-R92-002 and other EPA documents relating to Best Management Practice guidance.

a. Definitions

- (1) The term "pollutants" refers to conventional, non-conventional and toxic pollutants.
- (2) Conventional pollutants are: biochemical oxygen demand (BOD), suspended solids, pH, fecal coliform bacteria and oil & grease.
- (3) Non-conventional pollutants are those which are not defined as conventional or toxic.
- (4) Toxic pollutants include, but are not limited to: (a) any toxic substance listed in Section 307(a)(1) of the CWA, any hazardous substance listed in Section 311 of the CWA, or chemical listed in Section 313(c) of the Superfund Amendments and Reauthorization Act of 1986; and (b) any substance (that is not also a conventional or non-conventional pollutant except ammonia) for which EPA has published an acute or chronic toxicity criterion.
- (5) "Significant Materials" is defined as raw materials; fuels; materials such as solvents and detergents; hazardous substances designated under Section 101(14) of CERCLA; and any chemical the facility is required to report pursuant to EPCRA, Section 313; fertilizers; pesticides; and waste products such as ashes, slag and sludge.
- (6) "Pollution prevention" and "waste minimization" refer to the first two categories of EPA's preferred hazardous waste management strategy: first, source reduction and then, recycling.
- (7) "Recycle/Reuse" is defined as the minimization of waste generation by recovering and reprocessing usable products that might otherwise become waste; or the reuse or reprocessing of usable waste products

PERMITTEE: Tampa Electric Company (TEC)
FACILITY: Big Bend Power Station

PERMIT NUMBER: FL0000817 (Major)
EXPIRATION DATE: August 26, 2030

in place of the original stock, or for other purposes such as material recovery, material regeneration or energy production.

- (8) "Source reduction" means any practice which: (a) reduces the amount of any pollutant entering a waste stream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment or disposal; and (b) reduces the hazards to public health and the environment associated with the release of such pollutant. The term includes equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control. It does not include any practice which alters the physical, chemical, or biological characteristics or the volume of a pollutant through a process or activity which itself is not integral to, or previously considered necessary for, the production of a product or the providing of a service.
- (9) "BMP3" means a Best Management Practices Pollution Prevention Plan incorporating the requirements of 40 CFR § 125, Subpart K, plus pollution prevention techniques, except where other existing programs are deemed equivalent by the permittee. The permittee shall certify the equivalency of the other referenced programs.
- (10) The term "material" refers to chemicals or chemical products used in any plant operation (i.e., caustic soda, hydrazine, degreasing agents, paint solvents, etc.). It does not include lumber, boxes, packing materials, etc.

2. Best Management Practices/Pollution Prevention Plan

The permittee shall develop and implement a BMP3 plan for the facility, which is the source of wastewater and storm water discharges, covered by this permit. The plan shall be directed toward reducing those pollutants of concern, including mercury, which discharge to surface waters and shall be prepared in accordance with good engineering and good housekeeping practices. For the purposes of this permit, pollutants of concern shall be limited to toxic pollutants, as defined above, known to the discharger. The plan shall address all activities which could or do contribute these pollutants to the surface water discharge, including process, treatment, and ancillary activities.

a. Signatory Authority & Management Responsibilities

The BMP3 plan shall be signed by permittee or their duly authorized representative in accordance with rule 62-620.305(2)(a) and (b). The BMP3 plan shall be reviewed by plant environmental/engineering staff and plant manager. Where required by Chapter 471-(P.E.) or Chapter 492 (P.G.) Florida Statutes, applicable portions of the BMP3 plan shall be signed and sealed by the professional(s) who prepared them.

A copy of the plan shall be retained at the facility and shall be made available to the permit issuing authority upon request.

The BMP3 plan shall contain a written statement from corporate or plant management indicating management's commitment to the goals of the BMP3 program. Such statements shall be publicized or made known to all facility employees. Management shall also provide training for the individuals responsible for implementing the BMP3 plan.

b. BMP3 Plan Requirements

- (1) Name & description of facility, a map illustrating the location of the facility & adjacent receiving waters, and other maps, plot plans or drawings, as necessary;
- (2) Overall objectives (both short-term and long-term) and scope of the plan, specific reduction goals for pollutants, anticipated dates of achievement of reduction, and a description of means for achieving each reduction goal;
- (3) A description of procedures relative to spill prevention, control & countermeasures and a description of measures employed to prevent storm water contamination;
- (4) A description of practices involving preventive maintenance, housekeeping, recordkeeping, inspections, and plant security; and
- (5) The description of a waste minimization assessment performed in accordance with the conditions outlined in condition c below, results of the assessment, and a schedule for implementation of specific waste reduction practices.

c. Waste Minimization Assessment

PERMITTEE: Tampa Electric Company (TEC)
FACILITY: Big Bend Power Station

PERMIT NUMBER: FL0000817 (Major)
EXPIRATION DATE: August 26, 2030

The permittee is encouraged but not required to conduct a waste minimization assessment (WMA) for this facility to determine actions that could be taken to reduce waste loading and chemical losses to all wastewater and/or storm water streams as described in this permit.

If the permittee elects to develop and implement a WMA, information on plan components can be obtained from the Department's Industrial Wastewater website, or from:

Florida Department of Environmental Protection
Industrial Wastewater Program, Mail Station 3545
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
(850) 245-8589
(850) 245-8669 – Fax

d. Best Management Practices & Pollution Prevention Committee Recommended:

A Best Management Practices Committee (Committee) should be established to direct or assist in the implementation of the BMP3 plan. The Committee should be comprised of individuals within the plant organization who are responsible for developing the BMP3 plan and assisting the plant manager in its implementation, monitoring of success, and revision. The activities and responsibilities of the Committee should address all aspects of the facility's BMP3 plan. The scope of responsibilities of the Committee should be described in the plan.

e. Employee Training

Employee training programs shall inform personnel at all levels of responsibility of the components & goals of the BMP3 plan and shall describe employee responsibilities for implementing the plan. Training shall address topics such as good housekeeping, materials management, record keeping & reporting, spill prevention & response, as well as specific waste reduction practices to be employed. Training should also disclose how individual employees may contribute suggestions concerning the BMP3 plan or suggestions regarding Pollution Prevention. The plan shall identify periodic dates for such training.

f. Plan Development & Implementation

The BMP3 plan shall be developed and implemented 6 months after the effective date of this permit, unless any later dates are specified in this permit. Any portion of the WMA which is ongoing at the time of development or implementation shall be described in the plan. Any waste reduction practice which is recommended for implementation over a period of time shall be identified in the plan, including a schedule for its implementation.

g. Submission of Plan Summary & Progress/Update Reports

(1) Plan Summary: Not later than 2 years after the effective date of the permit, a summary of the BMP3 plan shall be developed and maintained at the facility and made available to the permit issuing authority upon request. The summary should include the following: a brief description of the plan, its implementation process, schedules for implementing identified waste reduction practices, and a list of all waste reduction practices being employed at the facility. The results of waste minimization assessment studies already completed as well as any scheduled or ongoing WMA studies shall be discussed.

(2) Progress/Update Reports: Annually thereafter for the duration of the permit progress/update reports documenting implementation of the plan shall be maintained at the facility and made available to the permit issuing authority upon request. The reports shall discuss whether or not implementation schedules were met and revise any schedules, as necessary. The plan shall also be updated as necessary and the attainment or progress made toward specific pollutant reduction targets documented. Results of any ongoing WMA studies as well as any additional schedules for implementation of waste reduction practices shall be included.

(3) A timetable for the various plan requirements follows:

Timetable for BMP3 Plan Requirements:

<u>REQUIREMENT</u>	<u>TIME FROM EFFECTIVE DATE OF THIS PERMIT</u>
Progress/Update Reports	3 years, and then annually thereafter

The permittee shall maintain the plan and subsequent reports at the facility and shall make the plan available to the Department upon request.

PERMITTEE: Tampa Electric Company (TEC)
FACILITY: Big Bend Power Station

PERMIT NUMBER: FL0000817 (Major)
EXPIRATION DATE: August 26, 2030

h. Plan Review & Modification

If following review by the Department, the BMP3 plan is determined insufficient, the permittee will be notified that the BMP3 plan does not meet one or more of the minimum requirements of this Part. Upon such notification from the Department, the permittee shall amend the plan and shall submit to the Department a written certification that the requested changes have been made. Unless otherwise provided by the Department, the permittee shall have 30 days after such notification to make the changes necessary.

The permittee shall modify the BMP3 plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to waters of the State or if the plan proves to be ineffective in achieving the general objectives of reducing pollutants in wastewater or storm water discharges. Modifications to the plan may be reviewed by the Department in the same manner as described above.

VIII. OTHER SPECIFIC CONDITIONS

A. Specific Conditions Applicable to All Permits

1. Where required by Chapter 471 or Chapter 492, F.S., applicable portions of reports that must be submitted under this permit shall be signed and sealed by a professional engineer or a professional geologist, as appropriate. *[62-620.310(4)]*
2. The permittee shall provide verbal notice to the Department's Southwest District Office as soon as practical after discovery of a sinkhole or other karst feature within an area for the management or application of wastewater or wastewater sludges. The permittee shall immediately implement measures appropriate to control the entry of contaminants, and shall detail these measures to the Department's Southwest District Office in a written report within 7 days of the sinkhole discovery. *[62-620.320(6)]*
3. This permit satisfies Wastewater Management Program permitting requirements only and does not authorize operation of this facility prior to obtaining any other permits required by local, state or federal agencies.

B. Specific Conditions Related to Preservation of State Historical Resources

1. If prehistoric or historic artifacts, such as pottery or ceramics, projectile points, dugout canoes, metal implements, historic building materials, or any other physical remains that could be associated with Native American, early European, or American settlement are discovered at any time within the project site area, the permittee shall immediately notify the Florida Department of State, Division of Historical Resources, Compliance Review Section at (850)245-6333, to determine appropriate action
2. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately and the proper authorities notified in accordance with Section 872.05, Florida Statutes.

C. Specific Conditions Related to Existing Manufacturing, Commercial, Mining, and Silviculture Wastewater Facilities or Activities

1. Existing manufacturing, commercial, mining, and silvicultural wastewater facilities or activities that discharge into surface waters shall notify the Department as soon as they know or have reason to believe:
 - a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following levels;
 - (1) One hundred micrograms per liter,
 - (2) Two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2, 4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter for antimony, or
 - (3) Five times the maximum concentration value reported for that pollutant in the permit application; or
 - b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following levels;

PERMITTEE: Tampa Electric Company (TEC)
FACILITY: Big Bend Power Station

PERMIT NUMBER: FL0000817 (Major)
EXPIRATION DATE: August 26, 2030

- (1) Five hundred micrograms per liter,
- (2) One milligram per liter for antimony, or
- (3) Ten times the maximum concentration value reported for that pollutant in the permit application.

[62-620.625(1)]

D. Duty to Reapply

1. The permittee is not authorized to discharge to waters of the State after the expiration date of this permit, unless:
 - a. the permittee has applied for renewal of this permit at least 180 days before the expiration date (**February 27, 2030**) using the appropriate forms listed in Rule 62-620.910, F.A.C., and in the manner established in the Department of Environmental Protection Guide to Permitting Wastewater Facilities or Activities Under Chapter 62-620, F.A.C., including submittal of the appropriate processing fee set forth in Rule 62-4.050, F.A.C.; or
 - b. the permittee has made complete the application for renewal of this permit before the permit expiration date.

[62-620.335(1)-(4), F.A.C.]

2. When publishing Notice of Draft and Notice of Intent in accordance with Rules 62-110.106 and 62-620.550, F.A.C., the permittee shall publish the notice at its expense in a newspaper of general circulation in the county or counties in which the activity is to take place either
 - a. Within thirty days after the permittee has received a notice; or
 - b. Within thirty days after final agency action.

Failure to publish a notice is a violation of this permit.

E. Reopener Clauses

1. The permit shall be revised, or alternatively, revoked and reissued in accordance with the provisions contained in Rules 62-620.325 and 62-620.345 F.A.C., if applicable, or to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2) and 307(a)(2) of the Clean Water Act (the Act), as amended, if the effluent standards, limitations, or water quality standards so issued or approved:
 - a. Contains different conditions or is otherwise more stringent than any condition in the permit/or;
 - b. Controls any pollutant not addressed in the permit.

The permit as revised or reissued under this paragraph shall contain any other requirements then applicable.

2. The permit may be reopened to adjust effluent limitations or monitoring requirements if a need for different or more stringent limitations or monitoring requirements is shown, based on
 - a. Water Quality Based Effluent Limitation (WQBEL) determinations;
 - b. DEP or EPA approved changes in water quality standards;
 - c. DEP or EPA established Total Maximum Daily Loads (TMDLs);
 - d. Basin Management Action Plans (BMAPs); or
 - e. Other water quality studies or information.
3. The Department or EPA may develop a TMDL during the life of the permit. Once a TMDL has been established and adopted by rule, the Department shall revise this permit to incorporate the final findings of the TMDL.

PERMITTEE: Tampa Electric Company (TEC)
FACILITY: Big Bend Power Station

PERMIT NUMBER: FL0000817 (Major)
EXPIRATION DATE: August 26, 2030

4. The permit may be reopened for revision as appropriate to address new information that was not available at the time of this permit issuance or to comply with requirements of new regulations, standards, or judicial decisions relating to CWA 316(b).

F. Impoundment Design, Construction, Operation, and Maintenance

1. All impoundments used to hold or treat wastewater and other associated wastes shall be operated and maintained to prevent the discharge of pollutants to waters of the State, except as authorized under this permit.
2. Operation and maintenance of any impoundment shall be in accordance with all applicable State regulations. Unless it is determined impracticable, piezometers or other instrumentation shall be used as a means to aid monitoring of impoundment integrity.
3. For the purpose of compliance with the conditions in Sections VIII of this permit, an impoundment is considered an earthen dam that is used to hold or treat wastewater and other associated wastes, is capable of impounding more than 40 acre-feet above natural grade, and is capable of discharging to waters of the State, if breached.

G. Impoundment Integrity Inspections

1. During the term of this permit, all impoundments shall be inspected at least annually by qualified personnel with knowledge and training in impoundment integrity. Records validating qualified personnel knowledge and training in impoundment integrity shall be available to the Department upon request. Annual inspections shall include observations of embankment and toe areas for:
 - a. erosion, cracks or bulges, seepage, wet or soft soil;
 - b. changes in geometry;
 - c. changes in the depth and elevation of the impounded water, sediment or slurry, or freeboard;
 - d. changes in vegetation such as overly lush, dead or unnaturally tilted vegetation;
 - e. torn or damaged pond liners, or
 - f. any other changes which may indicate a potential compromise to impoundment integrity, including subsidence and animal burrows.
2. Within 30 days after the annual inspection, a qualified company employee shall certify to the Department's District Office that no breaches or structural defects resulting in the discharges to surface waters of the State occurred during the previous calendar year and to indicate whether any changes were observed which may indicate a potential compromise to impoundment integrity during the previous calendar year. The permittee shall also maintain records of completed and on-going corrective actions taken due to observed changes which may indicate a potential compromise to impoundment integrity.

The permittee shall maintain records indicating that the impoundment provides the necessary minimum wet weather detention volume to contain the combined volume for all direct rainfall and all rainfall runoff to the pond resulting from the 10-year, 24-hour rainfall event and maximum dry weather plant waste flows which could occur during a 24-hour period.

3. The permittee shall conduct inspections within 7 days after large or extended rain events, which are equivalent to or greater than the amount of a 25-year, 24-hour precipitation event, as defined for the locality.
4. In the event that a routine, annual or other inspection indicates that a critical condition in the impoundment is suspected that could result in a potential discharge to surface waters of the State, such as the conditions listed below, the permittee shall notify the Department's District Office within twenty-four (24) hours of becoming aware of the situation. The permittee shall further provide a proposed course of corrective action and implementation schedule within fifteen (15) days from the time existence of the critical condition is confirmed and the Department was notified. The permittee shall provide monthly progress reports until the corrective action has been completed and completion noted in the final monthly report.

PERMITTEE: Tampa Electric Company (TEC)
FACILITY: Big Bend Power Station

PERMIT NUMBER: FL0000817 (Major)
EXPIRATION DATE: August 26, 2030

5. Critical conditions include but are not limited to observed changes such as:
- a. concentrated seepage on the downstream of the slope, at the top of the slope, or downstream from the toe of the slope;
 - b. evidence of slope instability including sloughing, bulging, or heaving of the downstream slope, or subsidence of the impoundment slope or crest; or
 - c. cracking of surface on the crest or either face of the impoundment.

General or concentrated seepage in the vicinity of, or around, any conduit through the impoundment may be signs of imminent impoundment failure and should be addressed immediately.

H. Reporting and Recordkeeping Requirements for Impoundments

1. The summarized findings of all monitoring activities, inspections, and corrective actions pertaining to the impoundment integrity, and operation and maintenance of all impoundments shall be documented and kept on-site and made available to the Department's inspectors upon request.
2. Starting with the issuance of this permit, all pertinent impoundment permits, design, construction, operation, and maintenance information, including but not limited to: plans, geotechnical and structural integrity studies, copies of permits, associated certifications by qualified, Florida-registered professional engineer, and regulatory approvals, shall be kept on site and made available to the Department's inspectors upon request.

I. Other Noncompliance Reporting Requirements

1. Report of noncompliance events related to sanitary sewer overflows or bypass events must include the data described in Permit Condition IX.20 (with the exception of time of discovery) as well as the type of event (sanitary sewer overflows or bypass events), type of sewer overflow (e.g., manhole), discharge volumes by the treatment works treating domestic sewage, types of human health and environmental impacts of the sewer overflow event, and whether the noncompliance was related to wet weather. The written submission may be provided electronically using the Department's Business Portal at <http://www.fldepportal.com/go/> (via "Submit" followed by "Report" or "Registration/Notification"). Notice required under Permit Condition VIII.I.2 below may be provided together with the written submission using the Business Portal. All noncompliance events related to sanitary sewer overflows or bypass events submitted after December 21, 2020 shall be submitted electronically.

[62-620.100(3)] [403.077, F.S.]

2. In accordance with Section 403.077, F.S., unauthorized releases or spills reportable to the State Watch Office pursuant to Permit Condition IX.20.b.1. shall also be reported to the Department within 24 hours from the time the permittee becomes aware of the discharge. The permittee shall provide to the Department information reported to the State Watch Office. Notice of unauthorized releases or spills may be provided to the Department through the Department's Public Notice of Pollution web page at <https://floridadep.gov/pollutionnotice>.
 - a. If, after providing notice pursuant to paragraph 2 above, the permittee determines that a reportable unauthorized release or spill did not occur or that an amendment to the notice is warranted, the permittee may submit additional notice to the Department documenting such determination.
 - b. If, after providing notice pursuant to paragraph 2 above, the permittee discovers that a reportable unauthorized release or spill has migrated outside the property boundaries of the installation, the permittee must provide an additional notice to the Department that the release has migrated outside the property boundaries within 24 hours after its discovery of the migration outside of the property boundaries.

[62-620.100(3)] [403.077, F.S.]

IX. GENERAL CONDITIONS

PERMITTEE: Tampa Electric Company (TEC)
FACILITY: Big Bend Power Station

PERMIT NUMBER: FL0000817 (Major)
EXPIRATION DATE: August 26, 2030

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit are binding and enforceable pursuant to Chapter 403, Florida Statutes. Any permit noncompliance constitutes a violation of Chapter 403, Florida Statutes, and is grounds for enforcement action, permit termination, permit revocation and reissuance, or permit revision. *[62-620.610(1)]*
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviations from the approved drawings, exhibits, specifications or conditions of this permit constitutes grounds for revocation and enforcement action by the Department. *[62-620.610(2)]*
3. As provided in subsection 403.087(7), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor authorize any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit or authorization that may be required for other aspects of the total project which are not addressed in this permit. *[62-620.610(3)]*
4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title. *[62-620.610(4)]*
5. This permit does not relieve the permittee from liability and penalties for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted source; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department. The permittee shall take all reasonable steps to minimize or prevent any discharge, reuse of reclaimed water, or residuals use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. *[62-620.610(5)]*
6. If the permittee wishes to continue an activity regulated by this permit after its expiration date, the permittee shall apply for and obtain a new permit. *[62-620.610(6)]*
7. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control, and related appurtenances, that are installed and used by the permittee to achieve compliance with the conditions of this permit. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to maintain or achieve compliance with the conditions of the permit. *[62-620.610(7)]*
8. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. *[62-620.610(8)]*
9. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, including an authorized representative of the Department and authorized EPA personnel, when applicable, upon presentation of credentials or other documents as may be required by law, and at reasonable times, depending upon the nature of the concern being investigated, to:
 - a. Enter upon the permittee's premises where a regulated facility, system, or activity is located or conducted, or where records shall be kept under the conditions of this permit;
 - b. Have access to and copy any records that shall be kept under the conditions of this permit;
 - c. Inspect the facilities, equipment, practices, or operations regulated or required under this permit; and
 - d. Sample or monitor any substances or parameters at any location necessary to assure compliance with this permit or Department rules.*[62-620.610(9)]*
10. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data, and other information relating to the construction or operation of this permitted source which are submitted to the

PERMITTEE: Tampa Electric Company (TEC)
FACILITY: Big Bend Power Station

PERMIT NUMBER: FL0000817 (Major)
EXPIRATION DATE: August 26, 2030

Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except as such use is proscribed by Section 403.111, F.S., or Rule 62-620.302, F.A.C. Such evidence shall only be used to the extent that it is consistent with the Florida Rules of Civil Procedure and applicable evidentiary rules. *[62-620.610(16)]*

11. When requested by the Department, the permittee shall within a reasonable time provide any information required by law which is needed to determine whether there is cause for revising, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. The permittee shall also provide to the Department upon request copies of records required by this permit to be kept. If the permittee becomes aware of relevant facts that were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be promptly submitted or corrections promptly reported to the Department. *[62-620.610(11)]*
12. Unless specifically stated otherwise in Department rules, the permittee, in accepting this permit, agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard. *[62-620.610(12)]*
13. The permittee, in accepting this permit, agrees to pay the applicable regulatory program and surveillance fee in accordance with Rule 62-4.052, F.A.C. *[62-620.610(13)]*
14. This permit is transferable only upon Department approval in accordance with Rule 62-620.340, F.A.C. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the Department. *[62-620.610(14)]*
15. The permittee shall give the Department written notice at least 60 days before inactivation or abandonment of a wastewater facility or activity and shall specify what steps will be taken to safeguard public health and safety during and following inactivation or abandonment. *[62-620.610(15)]*
16. The permittee shall apply for a revision to the Department permit in accordance with Rules 62-620.300, F.A.C., and the Department of Environmental Protection Guide to Permitting Wastewater Facilities or Activities Under Chapter 62-620, F.A.C., at least 90 days before construction of any planned substantial modifications to the permitted facility is to commence or with Rule 62-620.325(2), F.A.C., for minor modifications to the permitted facility. A revised permit shall be obtained before construction begins except as provided in Rule 62-620.300, F.A.C. *[62-620.610(16)]*
17. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. The permittee shall be responsible for any and all damages which may result from the changes and may be subject to enforcement action by the Department for penalties or revocation of this permit. The notice shall include the following information
 - a. A description of the anticipated noncompliance;
 - b. The period of the anticipated noncompliance, including dates and times; and
 - c. Steps being taken to prevent future occurrence of the noncompliance.*[62-620.610(17)]*
18. Sampling and monitoring data shall be collected and analyzed in accordance with Rule 62-4.246 and Chapters 62-160, 62-601, and 62-610, F.A.C., and 40 CFR 136, as appropriate.
 - a. Monitoring results shall be reported at the intervals specified elsewhere in this permit and shall be reported on a Discharge Monitoring Report (DMR), DEP Form 62-620.910(10), or as specified elsewhere in the permit.
 - b. If the permittee monitors any contaminant more frequently than required by the permit, using Department approved test procedures, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.

PERMITTEE: Tampa Electric Company (TEC)
FACILITY: Big Bend Power Station

PERMIT NUMBER: FL0000817 (Major)
EXPIRATION DATE: August 26, 2030

- c. Calculations for all limitations which require averaging of measurements shall use an arithmetic mean unless otherwise specified in this permit.
- d. Except as specifically provided in Rule 62-160.300, F.A.C., any laboratory test required by this permit shall be performed by a laboratory that has been certified by the Department of Health Environmental Laboratory Certification Program (DOH ELCP). Such certification shall be for the matrix, test method and analyte(s) being measured to comply with this permit. For domestic wastewater facilities, testing for parameters listed in Rule 62-160.300(4), F.A.C., shall be conducted under the direction of a certified operator.
- e. Field activities including on-site tests and sample collection shall follow the applicable standard operating procedures described in DEP-SOP-001/01 adopted by reference in Chapter 62-160, F.A.C.
- f. Alternate field procedures and laboratory methods may be used where they have been approved in accordance with Rules 62-160.220, and 62-160.330, F.A.C.

[62-620.610(18)]

- 19. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule detailed elsewhere in this permit shall be submitted no later than 14 days following each schedule date. *[62-620.610(19)]*
- 20. The permittee shall report to the Department any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; clean up actions taken and status; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. For noncompliance events related to sanitary sewer overflows, bypass events, or unauthorized discharges, these reports must include the data described above (with the exception of time of discovery) as well as the type of event (e.g., sanitary sewer overflow, bypass, unauthorized discharge); type of sanitary sewer overflow structure (e.g., manhole); the discharge location address and latitude/longitude; type of water discharged; discharge volumes and volumes recovered; volume discharged to surface waters and receiving waterbody name; types of human health and environmental impacts of the sanitary sewer overflow, bypass event, or unauthorized discharge (e.g., beach closure); whether the noncompliance was caused by a third party; and whether the noncompliance was related to wet weather. The written submission may be provided electronically using the Department's Business Portal at <http://www.fldepportal.com/go/> (via "Submit" followed by "Report" or "Registration/Notification"). Notice required for public notice of pollution under paragraph (d) may be provided together with the written submission using the Business Portal. All noncompliance events related to sanitary sewer overflows or bypass events submitted after (effective date of rule), shall be submitted electronically.
 - (a) The following shall be included as information which must be reported within 24 hours under this condition:
 - 1. Any unanticipated bypass which causes any reclaimed water or the effluent to exceed any permit limitation or results in an unpermitted discharge,
 - 2. Any upset which causes any reclaimed water or the effluent to exceed any limitation in the permit,
 - 3. Violation of a maximum daily discharge limitation for any of the pollutants specifically listed in the permit for such notice; and,
 - 4. Any unauthorized discharge to surface or ground waters, except for discharges to ground water of reclaimed water meeting Part III or Part V treatment standards under Chapter 62-610, F.A.C.
 - (b) Oral reports as required by this subsection shall be provided as follows:
 - 1. For unauthorized releases or spills of treated or untreated wastewater reported pursuant to subparagraph (a)4., that are in excess of 1,000 gallons per incident, or where information indicates that public health or the environment will be endangered, oral reports shall be provided to the Department by calling the STATE WATCH OFFICE TOLL FREE NUMBER (800)320-0519, as soon as practicable, but no later than 24 hours from the time the permittee becomes aware of the discharge. The permittee, to the extent known, shall provide the following information to the State Watch Office:
 - a. Name, address, and telephone number of person reporting,
 - b. Name, address, and telephone number of permittee or responsible person for the discharge,
 - c. Date and time of the discharge and status of discharge (ongoing or ceased),

PERMITTEE: Tampa Electric Company (TEC)
FACILITY: Big Bend Power Station

PERMIT NUMBER: FL0000817 (Major)
EXPIRATION DATE: August 26, 2030

- d. Characteristics of the wastewater spilled or released (untreated or treated, industrial or domestic wastewater),
 - e. Estimated amount of the discharge,
 - f. Location or address of the discharge,
 - g. Source and cause of the discharge,
 - h. Whether the discharge was contained on-site, and cleanup actions taken to date,
 - i. Description of area affected by the discharge, including name of water body affected, if any; and,
 - j. Other persons or agencies contacted.
2. Oral reports, not otherwise required to be provided pursuant to subparagraph (b)1., above, shall be provided to the Department within 24 hours from the time the permittee becomes aware of the circumstances.
- (c) If the oral report has been received within 24 hours, the noncompliance has been corrected, and the noncompliance did not endanger health or the environment, the Department shall waive the written report.
- (d) In accordance with Section 403.077, F.S., unauthorized releases or spills reportable to the State Watch Office pursuant to subparagraph (b)1. above shall also be reported to the Department within 24 hours from the time the permittee becomes aware of the discharge. The permittee shall provide to the Department information reported to the State Watch Office. Notice of unauthorized releases or spills may be provided to the Department through the Department's Public Notice of Pollution web page at <https://floridadep.gov/pollutionnotice> or by reporting electronically using the Department's Business Portal at <http://www.fldepportal.com/go/> (via "Submit" followed by "Report" or "Registration/Notification").
1. If, after providing notice pursuant to paragraph (d) above, the permittee determines that a reportable unauthorized release or spill did not occur or that an amendment to the notice is warranted, the permittee may submit a letter to the Department documenting such determination at pollution.notice@floridadep.gov.
2. If, after providing notice pursuant to paragraph (d) above, the permittee discovers that a reportable unauthorized release or spill has migrated outside the property boundaries of the installation, the permittee must provide an additional notice to the Department that the release has migrated outside the property boundaries within 24 hours after its discovery of the migration outside of the property boundaries.
- (e) Unless discharged to surface waters, a spill, release, discharge, upset or bypass involving reclaimed water meeting Part III or Part V treatment standards under Chapter 62-610, F.A.C., shall not be considered to endanger health or the environment and shall be reported under subsection (21) of this permit.

[62-620.610(26)]

21. The permittee shall report all instances of noncompliance not reported under Permit Conditions IX. 17, 18 or 19 of this permit at the time monitoring reports are submitted. This report shall contain the same information required by Permit Condition IX.20 of this permit. [62-620.610(21)]
22. Bypass Provisions.
- a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment works.
 - b. Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless the permittee affirmatively demonstrates that:
 - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (3) The permittee submitted notices as required under Permit Condition IX.22.c. of this permit.
 - c. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the Department, if possible at least 10 days before the date of the bypass. The permittee shall submit notice of an unanticipated bypass within 24 hours of learning about the bypass as required in Permit Condition IX.20. of this permit. A notice shall include a description of the bypass and its cause; the period of the bypass, including exact dates and times; if the bypass has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the bypass.

**TAMPA ELECTRIC COMPANY
MANATEE PROTECTION STUDY
EXHIBIT 1
FILED: NOVEMBER 7, 2025**

PERMITTEE: Tampa Electric Company (TEC)
FACILITY: Big Bend Power Station

PERMIT NUMBER: FL0000817 (Major)
EXPIRATION DATE: August 26, 2030

- d. The Department shall approve an anticipated bypass, after considering its adverse effect, if the permittee demonstrates that it will meet the three conditions listed in Permit Condition IX.22.b.(1) through (3) of this permit.
- e. A permittee may allow any bypass to occur which does not cause reclaimed water or effluent limitations to be exceeded if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Permit Condition IX.22.b. through d. of this permit.

[62-620.610(22)]

23. Upset Provisions.

- a. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based effluent limitations because of factors beyond the reasonable control of the permittee.
 - (1) An upset does not include noncompliance caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, careless or improper operation.
 - (2) An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of upset provisions of Rule 62-620.610, F.A.C., are met.
- b. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that:
 - (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
 - (2) The permitted facility was at the time being properly operated;
 - (3) The permittee submitted notice of the upset as required in Permit Condition IX.20. of this permit; and
 - (4) The permittee complied with any remedial measures required under Permit Condition IX.5. of this permit.
- c. In any enforcement proceeding, the burden of proof for establishing the occurrence of an upset rests with the permittee.
- d. Before an enforcement proceeding is instituted, no representation made during the Department review of a claim that noncompliance was caused by an upset is final agency action subject to judicial review.

[62-620.610(23)]

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION



Lauren Gottfreid
Program Administrator
Wastewater Management Program
Division of Water Resource Management

**FACT SHEET
FOR
STATE OF FLORIDA INDUSTRIAL WASTEWATER FACILITY PERMIT**

PERMIT NUMBER: FL0000817 (Major)

FACILITY NAME: Big Bend Power Station

FACILITY LOCATION: 13031 Wyandotte Road, Apollo Beach, FL 33572
Hillsborough County

NAME OF PERMITTEE: Tampa Electric Company (TEC)

PERMIT WRITER: Frank Wall

Addendum to the Fact Sheet for the Notice of Intent:

- a) Permit condition VIII.I.1 reference to VIII.F.2 was revised to VIII.I.2.

1. SUMMARY OF APPLICATION

a. Purpose

This is a renewal of the existing NPDES industrial wastewater discharge permit No. FL0000817 for the Big Bend Power Station.

b. Chronology of Application

Application Number:	FL0000817-013-IW1S/NR
Application Submittal Date:	July 26, 2016
Additional Information Received:	August 19, November 2, December 13, 2016; July 19, November 21, December 22, 2017; January 12, February 8, 28, March 21, May 8, 16, June 25, December 21, 2018; March 22, May 15, 24, August 21, September 10, 20, December 11, 20, 2019; February 21, 2020; November 5, 2021; July 26, 2023; January 18, February 2, 29, April 3, 19, August 16, November 13, 2024; February 26, April 3, May 13, 2025
Notice of Draft:	June 24, 2025 (issued) July 2, 2025 (published)
Notice of Intent:	August 6, 2025 (issued) August 10, 2025 (published)

A draft permit was published on January 25, 2017. During the public comment period, the Department received substantial comments on the draft permit that was issued, primarily related to the Revised Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category (40 CFR Part 423) (ELGS), Clean Water Act (CWA) 316(a) and 316(b), dissolved oxygen, and potential discharges to waters of the State from coal combustion residual (CCR) units. Since the initial draft permit issuance, the facility has been modernized and remediation projects completed as described below.

c. Facility Description

The Tampa Electric Company (TEC) Big Bend Station is a nominal 1,863 megawatt (MW) electric generation facility. The facility consists of two natural gas-fired combined cycle generating units and a fossil-fuel fired boiler electrical generating unit; two steam turbine electrical generators (STEG); two simple-cycle combustion turbines (SCCT) sharing a common electrical generator; solid fuels, fly ash, limestone, gypsum, slag, bottom ash storage and handling facilities.

Units 1, 4, 5, and 6 have a combined electrical generating output of 1,727 MW. Units 1, 5, and 6 have a combined nominal generating capacity of 1,241 MW. Units 5 and 6 utilize natural gas as fuel, with heat recovery steam generators which send their steam to Unit 1. Unit 4 has a design electrical generating capacity of 486 MW. The fuel fired in Unit 4 consists of coal, a coal blend, or natural gas, and Unit 4 burns natural gas during startup, shutdown, and flame stabilization. Unit 4 is also equipped with Selective Catalytic Reduction (SCRs) and a flue gas desulfurization (FGD) system.

The remaining 136 MWs are generated by solar and combustion turbine 4 (CT4), which do not require once-through cooling water.

The wastewaters generated by the flue gas desulfurization treatment system is injected into two new deep wells also known as underground injection control (UIC) program wells. The use of these wells is authorized under a separate permit (UIC Permit No.373495-004-005-UC/11). The wells became operational on December 29, 2023.

Attached Figures

Figure 1 identifies the location of the facility and unit operations. Figure 2 identifies the facility's intake structures, surface water monitoring locations, and fish return systems. Figure 3 identifies the facility's groundwater monitoring network. Figure 4 is the post-modernization water balance.

d. Description of Wastewater

Once-through cooling water (OTCW) from Units 1 and 4 is discharged through individual conduits to the facility's discharge canal. Flue gas desulfurization system (FGD) blowdown is discharged internally to one or more of the two UIC wells. The UIC discharge is authorized separately under UIC Permit No. 373495-004-005-UC/11.

Reclaimed effluent water received from the South County Water Reclamation Facility is currently the primary source of fresh water for the facility. The reclaimed water may be used directly, as received, or pretreated, via a reverse osmosis (RO) treatment system. The pretreated reclaimed water principally supplies the demineralized water treatment plant. The balance of the reclaimed effluent water is used to supply the plant fire water system (emergency basis), station cooling towers, service water requirements, and inventory management for the FGD and recycle water systems.

Other industrial wastewater streams from this facility includes floor and equipment drains, water treatment equipment waste, and service cooling tower and boiler blowdown which are collected and processed by the on-site lined wastewater settling and recycle pond system, authorized under a non-NPDES permit issued by the Department's Southwest District Office (FLA017047) and Conditions of Certification under the Florida Electrical Power Plant Siting Act (License No. PA 79-12). The wastewater collected in the recycle system is combined with recovered storm water and reused within the facility.

FGD wastewater, recycled water, and contact stormwater are disposed of through UIC wells, authorized under a separate permit (UIC Permit No.373495-004-005-UC/11).

Storm water discharges are authorized under a separate Department-issued Multi-Sector General Permit, permit number FLR05C544 et seq. Units 1, 4, 5, and 6 are also regulated under the Florida Electrical Power Plant Siting Act (License No. PA 79-12).

In addition, effluent from the on-site Tampa Bay Water Desalination Facility enters one or more of the four OTCW discharge conduits prior to entering the discharge canal. The discharge from the Tampa Bay Water Desalination Facility is authorized under a separate NPDES permit (FL0186813).

e. Primary Regulatory Requirements

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

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

316(a): The facility operates once-through cooling water systems subject to alternative temperature limitations under 316(a) of the Clean Water Act.

316(b): The facility operates once-through cooling water systems with intake structures subject to Section 316(b) of the Clean Water Act.

ELGs: The facility is subject to the Effluent Limitations Guidelines and Standards (ELGS) for the Steam Electric Power Generating Point Source Category (40 CFR Part 423).

Facility Capacity

Existing Permitted Capacity:	1440 MGD Design Flow
Proposed Increase in Capacity:	0 MGD Design Flow
Proposed Total Permitted Capacity:	1440 MGD Design Flow

The OTCW discharge flow rate for both Units 1 and 4 is approximately 360 MGD (720 MGD combined).

2. SUMMARY OF SURFACE WATER DISCHARGE

This permit does not authorize any new or expanded discharges to surface waters.

Monitoring Group D-001: An existing permitted discharge of combined plant wastewater (consisting of Outfalls D-011 and D-014) at the end of the discharge canal to Hillsborough Bay, Class III Marine Waters, and (WBID 1558D).

Pollutants which are present in significant quantities or which are subject to permit limitations are as follows:

Parameter	Units	Max/Min	Reported Value	Statistical Basis
Flow	MGD	Max	1440	Daily Maximum
Mercury	ug/L	Max	0.0015	Daily Maximum
Nickel	ug/L	Max	2.30	Daily Maximum
Total Nitrogen	mg/L	Max	0.394	Daily Maximum
Total Phosphorus	mg/L	Max	0.0350	Daily Maximum

Pollutants reported from updated renewal application submitted February 29, 2024:

Parameter	Units	Max/Min	Reported Value	Statistical Basis
Flow	MGD	Max	1400	Daily Maximum
Mercury	ug/L	Max	< 0.0002	Daily Maximum
Nickel	ug/L	Max	< 5.0	Daily Maximum
Total Nitrogen	mg/L	Max	0.577	Daily Maximum
Total Phosphorus	mg/L	Max	0.13	Daily Maximum

Monitoring Groups D-011, D-014: Existing permitted discharges of once-through cooling water from Units 1 and 4 to Hillsborough Bay, Class III Marine Waters, (WBID 1558D).

3. BASIS FOR PERMIT LIMITATIONS AND MONITORING REQUIREMENTS

This facility is authorized to discharge once-through non-contact cooling water and intake screen wash water from **Outfall D-001**, the **Combined Plant Discharge**, to Hillsborough Bay based on the following:

**TAMPA ELECTRIC COMPANY
MANATEE PROTECTION STUDY
EXHIBIT 1
FILED: NOVEMBER 7, 2025**

Parameter	Units	TBEL		WQBEL		Permit Limit		Rationale
		Daily Max	Monthly Average	Daily Max	Monthly Average	Daily Max	Monthly Average	
Flow	MGD	N/A	N/A	N/A	N/A	Report	Report	308(a) CWA and 62-620.320(6), F.A.C.
Temperature, Water	Deg F	N/A	N/A	N/A	N/A	109.0	Report	62-302.520(1)(a) and 62-620.320(6), F.A.C.; CWA 316(a)
Temp. Diff. between Intake and Discharge	Deg F	N/A	N/A	N/A	N/A	Report	16.8 (Wk.Avg.)	62-302.520(1)(a) and 62-620.320(6), F.A.C.; CWA 316(a)
Dissolved Oxygen (DO)	mg/L	N/A	N/A	N/A	N/A	Report	Report (Wk.Avg.)	62-302.533(2), F.A.C.
Dissolved Oxygen (DO), % Saturation	percent	N/A	N/A	N/A	N/A	Report	Report (Wk.Avg.)	62-302.533(2), F.A.C.
Dissolved Oxygen (DO), % Saturation	percent	N/A	N/A	N/A	N/A	Report	Report	62-302.533(2), F.A.C.
Dissolved Oxygen (DO), % Saturation	# of exceedances	N/A	N/A	1 (3-Month)	N/A	1 (3-Month)	N/A	62-302.533(2), F.A.C. (See Note Below)
Dissolved Oxygen (DO), % Saturation	# of exceedances	N/A	N/A	1 (12-Month)	N/A	1 (12-Month)	N/A	62-302.533(2), F.A.C. (See Note Below)
pH	s.u.	N/A	N/A	6.5	8.5	6.5	8.5	62-302.530 and 62-620.320(6), F.A.C.
Nitrogen, Ammonia, Total (as N)	mg/L	N/A	N/A	N/A	N/A	Report	Report	62-620.320(6), F.A.C.; 2009 Reasonable Assurance Addendum: Allocation and Assessment Report
Nitrogen, Kjeldahl, Total (as N)	mg/L	N/A	N/A	N/A	N/A	Report	Report	62-620.320(6), F.A.C.; 2009 Reasonable Assurance Addendum: Allocation and Assessment Report
Nitrite plus Nitrate, Total (as N)	mg/L	N/A	N/A	N/A	N/A	Report	Report	62-620.320(6), F.A.C.; 2009 Reasonable Assurance Addendum: Allocation and Assessment Report
Nitrogen, Total (as N)	mg/L	N/A	N/A	N/A	N/A	Report	Report	62-620.320(6), F.A.C.; 2009 Reasonable Assurance Addendum: Allocation and Assessment Report
Nitrogen, Total (as N)	lbs/mth	N/A	N/A	N/A	N/A	Report	Report	62-620.320(6), F.A.C.; 2009 Reasonable Assurance Addendum: Allocation and Assessment Report
Nitrogen, Total (as N)	tons/yr	N/A	N/A	87.9 (An.Total)	58.6 (5-Yr An.Avg.)	87.9 (An.Total)	58.6 (5-Yr An.Avg.)	62-620.320(6), F.A.C.; 2009 Reasonable Assurance Addendum: Allocation and Assessment Report
Phosphate, Ortho (as PO4)	mg/L	N/A	N/A	N/A	N/A	Report	Report	62-620.320(6), F.A.C.
Phosphorus, Total (as P)	mg/L	N/A	N/A	N/A	N/A	Report	Report	62-620.320(6), F.A.C.
Chronic Whole Effluent Toxicity, 7-Day IC25 (Mysidopsis bahia)	percent	N/A	N/A	N/A	N/A	100 (Min.)	N/A	62-302.530(20) and (62), 62-4.241(1)(b), 62-620.620(3), F.A.C.
Chronic Whole Effluent Toxicity, 7-Day IC25 (Menidia beryllina)	percent	N/A	N/A	N/A	N/A	100 (min.)	N/A	62-302.530(20) and (62), 62-4.241(1)(b), 62-620.620(3), F.A.C.

Dissolved Oxygen

NOTE: The effluent limitations for percent saturation of dissolved oxygen (DO) in this draft permit are the same as those in the current permit. They are developed directly from the water quality criteria (WQC) for predominantly marine waters in Rule 62-302.533(2), F.A.C. This rule was approved by the U.S. Environmental Protection Agency (EPA) Region 4 on

September 9, 2013, as the appropriate DO water quality standard (WQS) for use in NPDES permitting. As such they replace previous DO criteria, which were deleted from FDEP rules upon approval of the current criteria.

The permittee is authorized to discharge non-contact once-through cooling water from **Outfalls D-011 and D-014**.

Reasonable Assurance

The permittee has provided reasonable assurance that the discharges to Waters of the State from the site will neither cause nor contribute to an exceedance of water quality standards nor cause non-attainment of specified designated uses of the receiving waters. Inspection data, as well as all other available data, have been evaluated in accordance with the Department's reasonable assurance procedures to ensure that no limits other than those included in this permit are needed. The facility provided an antidegradation demonstration in accordance with Rule 62-4.242, F.A.C. for the modernization project.

Water Quality Effluent Limitation (WQBEL) and Technology Based Effluent Limitation (TBEL) Considerations

Effluent limitations were determined based on an evaluation of the impact of the discharge on the receiving bodies. This evaluation was conducted in accordance with the Level I WQBEL process described in Rule 62-650.400, F.A.C.

When developing permit limitations, the Department applies both technology-based and water quality-based permit requirements. When both may apply, permit limitations are chosen by whichever is more stringent. Criteria and standards for the inclusion of technology-based requirements in permits are described in 40 CFR Part 125, Subpart A, adopted by the Department in Rule 62-620.100(3)(h), F.A.C.

Technology-based requirements represent the minimum level of control that must be imposed to meet best practicable control technology currently available (BPT) for certain conventional pollutants, best conventional control technology (BCT) for conventional pollutants, and best available technology economically achievable (BAT) for toxic and non-conventional pollutants. Effluent limitations guidelines for the Steam Electric Power Generating Point Source Category are found at 40 C.F.R. Part 423, adopted by the Department in Rule 62-660.400(1)(e), F.A.C.

Water quality-based effluent limitations are required in NPDES permits when the Department determines that limits more stringent than technology-based limits are necessary to maintain or achieve state Water Quality Standards (WQS). WQS provide a classification for all the water bodies in the state along with their designated uses and designates numeric and narrative water quality criteria that the water bodies in each classification should be able to achieve. NPDES permit limitations are derived to ensure that discharges and cooling water withdrawals do not cause a violation of these standards.

For each effluent limitation included in the permit, technology and water quality-based limitations were compared and the most stringent limitation was selected. The evaluation can be seen in the tables located above. In addition, all applicable federal rules regarding NPDES facilities were reviewed and incorporated into the draft permit, as described below.

4. BASIS FOR SPECIFIC PERMIT CONDITIONS

a. 316(b) Demonstration

Section 316(b) of the Clean Water Act (CWA) requires that the location, design, construction, and capacity of cooling water intake structures (CWIS) reflect the best technology available (BTA) to protect aquatic organisms from physical, thermal, or chemical stresses from impingement (pinned against intake screens) or entrainment (drawn completely through cooling water systems from intake to discharge).

The United States Environmental Protection Agency (EPA) published rules for existing steam electric power plants that use surface waters in their cooling systems on August 15, 2014, and the rules became effective on October 14, 2014. The Department adopted the final rule by reference in subsection 62-620.100(3), F.A.C. The final rule describes the compliance schedule for submitting reports and supporting documents to the Department, along with the requirement for the Department to conduct a BTA analysis for both impingement and entrainment, as described in 40 CFR 125.94(r) and (d), respectively, upon submittal of all relevant information.

For facilities that have NPDES permits that expire prior to July 14, 2018, the rule allows the Department to establish an alternate schedule for completion of the studies if the facility demonstrates it cannot develop the

required information by the applicable submission date. The permittee requested an alternative schedule during the application process. After reviewing the justifications included in the request, the Department approved and incorporated an alternative schedule in permit condition VI.3 of the draft permit.

The facility has a design intake flow of approximately 1,440 MGD and an expected actual average intake flow of 916 MGD; therefore, the permittee must address the requirements of 40 CFR 122.21(r)(2) through (13) of the rule. Much of the information and data needed for §122.21(r)(2) through (5) may already be available from previous studies or public sources. The permittee consulted with the National Marine Fishery Service and the U.S. Fish and Wildlife Service (collectively referred to as the Services) and the Florida Fish and Wildlife Commission (FWC) to identify species of concern and to develop a plan of study (POS) to discuss collection of required information, which includes impingement mortality and entrainment.

Following the submittal of the information in 40 CFR 122.21(r)(2-13) during the upcoming permit cycle, the Department, Services, and FWC will review the information, including the entrainment characterization study, and conduct a Best Technology Available (BTA) analysis at that time. If the BTA analysis concludes that new technology or other modifications of the cooling water system are needed to protect threatened or endangered species, the Department will require those changes at that time. In the meantime, interim measures as allowed under 40 CFR 125.98(b)(5) are included in Section I.A of the draft permit.

A Clean Water Act Section 316(b) Biological Characterization Report for Fish and Shellfish Impingement and Entrainment at the Tampa Electric Company Big Bend Power Station, Hillsborough County, Florida was prepared by Golder Associates, Inc., September 2009, and revised March 2010.

Between 2006 and 2007, entrainment monitoring was conducted in response to the requirements of the Phase II 316(b) rule. The monitoring was conducted in a manner similar to the 1987 optimization study, with samples being collected both in front and behind the fine mesh screens (FMS). Fish exclusion ranged from 63 percent to 73 percent depending on life stage. Shellfish exclusion was between 61 and 82 percent.

The facility made the decision to modernize Unit 1 to a highly efficient, natural gas-fired unit and to retire Unit 2 (November 2021) and Unit 3 (April 2022). Unit 4 remains operational. There are two separate intake structures for Units 1 and 4. The facility identified the fish-friendly modified traveling water screens (MTWS) with fish return as the most cost-effective solution to address impingement mortality requirements for Unit 1 and modified the intake structure to install dual flow MTWS with a fish collection and return system (FRS). The modernized Unit 1 (with new MTWS and FRS) became operational in December 2022. As a result of modernization project, Unit 1 will experience a 58 percent reduction in cooling water utilization per megawatt. The facility-wide reduction in the use of cooling water will be approximately 32 percent per megawatt.

Unit 1 uses MTWS to filter water before entering the circulating water pumps. Any organisms that are impinged against these screens are then gently washed off of the screens and into a fish return trough which leads to the FRS, returning them safely to the waters of Hillsborough Bay. Unit 4 uses standard coarse-mesh, dual-flow Traveling Water Screens (TWS) to filter water before entering the circulating water pumps. Additionally, Unit 4 has a set of FMS which are TWS with 0.5-millimeter (mm) mesh equipped with an organism return on each circulating pump. The FMS are operated seasonally to correspond with juvenile season (March 15 to October 15). The coarse-mesh screens protect the pumps and condenser from debris if the emergency slide gates open upon high differential pressure during FMS operation.

The permittee has proposed that within six months of issuance of the final NPDES permit, the facility would submit a plan of study to establish the impingement and entrainment compliance schedule. Impingement and entrainment mortality compliance for Unit 4 and entrainment mortality compliance for the modernized Unit 1 will be addressed based on the results of the studies TEC is performing and will be submitted according to a schedule established in the plan of study.

The facility is required to conduct and submit the “impingement technology performance optimization study” described in 40 CFR 122.21(r)(6)(i), demonstrating that operation has been optimized to minimize impingement mortality in accordance with schedule item VI.6. These requirements are to demonstrate compliance with 40 CFR 125.94(c)(5) as BTA consistent with 40 CFR 125.92(s).

The permittee shall complete all studies and gather all information required under 40 CFR 122.21(r)(2-13) necessary to establish impingement mortality and entrainment BTA requirements in accordance with Permit Condition I.A.11 and Schedule Item VI.3.

In accordance with 40 CFR 122.21(r)(13) the applicant must conduct an external peer review of the relevant reports (i.e., those defined at 40 CFR 122.21(r)(10)-(12)) by qualified experts prior to submission with the permit application. The facility has proposed and the Department accepted the following peer reviewers: Dr. Paul Jakus, economics; Dr. Steven Layman, biology; and James Cuchens, P.E., engineering.

Figure 2 identifies the facility's intake structures, surface water monitoring locations, and fish return systems.

b. Thermal Considerations (316(a))

TEC submitted a Section 316(a) Demonstration Report in 1977 and 1980 to the EPA. The EPA determined that the thermal discharge was not causing an unacceptable adverse impact in Hillsborough Bay in 1980. The temperature difference between the intake and discharge described below has been authorized through NPDES permitting since issuance on December 31, 1974, with an effective date of February 18, 1975. Since then, the facility has requested continuation of the variance at subsequent renewal applications.

The facility's discharge is subject to the numeric temperature limitations in Rule 62-302.520, F.A.C. However, the permit includes alternative thermal limitations for the discharge authorized under Section 316(a) of the Clean Water Act (CWA) and previously approved by the EPA. Section 316(a) allows for a variance from numeric limitations on the thermal component of a discharge if the permittee is able to demonstrate that the limitations for thermal components are more stringent than necessary to assure the protection and propagation of a balanced and indigenous population of shellfish, fish, and wildlife in and on the receiving body of water (RBW).

Regulations implementing section 316(a) are located in 40 C.F.R. Part 125, subpart H. These regulations identify the criteria and process for determining whether an alternative effluent limitation (i.e., a thermal variance from the otherwise applicable effluent limit) may be included in a permit and, if so, what that limit should be. This means that before a thermal variance can be granted, 40 C.F.R. §§ 125.72 and 125.73 require the permittee to demonstrate that the otherwise applicable thermal discharge effluent limit is more stringent than necessary to assure the protection and propagation of the waterbody's balanced, indigenous population (BIP) of shellfish, fish and wildlife.

The variance is granted for the 5-year permit periods, and reissuance must be requested by the permittee as part of the application of permit renewal. The facility's variance, under 316(a), is defined as a 16.8°F weekly average temperature difference between the intake and discharge.

In response to the requirements of Consent Order 98-2888G, the applicant completed a *Biological Report in Support of 316(a) Thermal Variance Reissuance* (Report), which was submitted to the Department in October 2013. In a letter dated July 10, 2014, the Department concurred that the report indicated that the thermal limitations in the permit are protective of the indigenous shellfish, fish and wildlife and concluded the variance may continue.

Operational changes affecting the thermal discharge plume have been completed at the facility since the report was submitted. As a result of the modernization project described above, Unit 1 will experience a 58 percent reduction in cooling water utilization per megawatt. The facility wide reduction in the use of cooling water will be approximately 32 percent per megawatt. With the retirement of Units 2 and 3, the thermal load to the receiving waters could potentially decrease by 50 percent.

The Department's Biology Section provided the following comments on the Report:

"The Report includes the characterization of the thermal plume, including the three-dimensional extent of the plume and an assessment of the zones of passage for aquatic organisms. The thermal plume data collected previously or by other programs demonstrate that tide and wind influence the direction of the plume and that solar heating contributes to elevated temperatures created by the thermal discharge. Although the plume is largely restricted to approximately within 1m or less of the surface, there are periods within a day of thermal impingement and restricted zones of passage in the discharge canal and some of the shallow, adjacent waters.

The Report includes discussion on the balanced and indigenous population (BIP) and representative important species (RIS). It includes discussion on phytoplankton (and chlorophyll thresholds), zooplankton, seagrass, fish and shellfish and benthic invertebrates. The report examines a variety of community indices and includes a variety of analyses used on the fish/shellfish and benthic invertebrate data, including species dominance, community indices (diversity and richness), trend analyses of abundance data using Generalized Additive Models (GAMS), analysis of community similarities and similarity percentages (ANOSIM and SIMPER), graphical Detrended Correspondence Analysis (DCA), regression analysis and species occurrence mapping.

The supplemental 2012-2013 benthic invertebrate data (from the Plan of Study (POS)) agrees with conclusions drawn from previous studies. Overall, diversity was found to decline 32% to 34% in the discharge canal compared to the average diversity of two control sites, which exceeds the Class III Criteria for marine waters (62-302.530(10) F.A.C.). Diversity was impacted in areas adjacent to the discharge canal as well but the percent change was within the criteria limits. Despite a seasonal decline in diversity and abundance in the discharge canal and adjacent waters compared to the other sites in the Fall, the data also shows a period of recovery in the following seasons. Community composition appears to be similar among sites and relatively consistent for the period of record (as indicated by the ANOSIM, SIMPER, and GAM analyses).

From the data presented in the Report it is Biology's opinion that a balanced and indigenous population, as defined in the Report, exists. Although a cooler thermal discharge would be beneficial to the biological community, especially during late summer/Fall when ambient temperatures are highest, the Biology Section supports the continuation of the thermal variance based on the consistency of the results from the various biological studies conducted during the period of record."

Included in the permit schedule is a requirement for the facility to conduct a thermal variance re-evaluation plan.

c. Impaired Water Considerations

Receiving Waters

The direct receiving water for Outfall D-001 is Lower Hillsborough Bay WBID 1558D, a Class 3 Marine Estuary. WBID 1558D is listed for dissolved oxygen, mercury (in fish tissue), and nutrients (chlorophyll-*a*) on the November 2024 Comprehensive Delist List. The downstream receiving waters are Upper Tampa Bay WBID 1558C, a Class 2 Marine Estuary and Middle Tampa Bay WBID 1558B, Class 2 Marine Estuary. The direct and downstream receiving waters are segments of the Tampa Bay Estuary system. WBID 1558C is listed for total and fecal coliform, and mercury (in fish tissue), on the November 2024 Comprehensive Delist List. WBID 1558B is listed for fecal coliform, and mercury (in fish tissue), on the November 2024 Comprehensive Delist List.

Numeric Nutrient Criteria (NNC)

As part of the Tampa Bay's Total Maximum Daily Load (TMDL) for nitrogen (contained in the Tampa Bay Nitrogen Management Consortium's 2009 Reasonable Assurance Addendum: Allocation and Assessment Report), the facility has a total annual nitrogen load allocation of 87.9 tons and a 5-year rolling average load allocation of 58.6 tons. The nitrogen TMDL limitation was included in the previous permit in the effluent limitations table for Internal Outfall I-130. The nutrient monitoring requirements were moved to Outfall D-001 as Internal Outfall I-130 was taken out of service with FGD wastewater being discharged to UIC. These load limits were developed under the Department's *Final Order Adopting Water Quality Based Effluent Limits for Point Source Discharges to the Tampa Bay Watershed adopted November 16, 2010*, which is based on the *2009 Reasonable Assurance (RA) Addendum: Allocation & Assessment Report for Tampa Bay*.

The receiving waters are also subject to the estuary NNC for Tampa Bay in 62-302.532(1)(b), F.A.C. The TN limits noted above meet the estuary TN requirements. Additionally, TP levels in the existing discharge are acceptable because the Tampa Bay/Hillsborough Bay system is making reasonable progress under the RA plan objectives, based on the Tampa Bay Estuary Program (TBEP) 2022 annual Progress Report. The total phosphorus loading estimates to Hillsborough Bay from 2017 – 2021 in a report dated March 2023 and prepared for the TBEP showed TP loads between 9 and 15 percent from non-specified industrial sources. With the removal of loading from FGD wastewater, the discharge to surface water consists solely of untreated OTCW from the facility, therefore, any loading of TP, and TN would be from background conditions at the intake. The facility is

considering treatment of OTCW with Spectrus CT1300 which does not contain phosphorus but does contain nitrogen.

Mercury

A Statewide Mercury TMDL has been adopted in Rule 62-304.900, F.A.C. The TMDL requires industrial facilities with quantifiable mercury (total) levels in their effluent to prepare and implement a mercury minimization plan addressing sources of mercury (total) within the facility, which was included as a requirement for the Best Management Practices Plan located in Section VII of the permit.

d. Revised Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category (40 CFR Part 423)

On November 17, 2015, EPA published the final revised rule for Effluent Limitations Guidelines and Standards (ELGS) for the Steam Electric Power Generating Point Source Category (40 CFR Part 423). The revised rule establishes new limitations for both existing and new generating units for various waste streams that were previously considered low volume wastes under the prior rule. The waste streams included in the revised rule are flue gas desulfurization (FGD), flue gas mercury control (FGMC) and gasification wastewaters, combustion residual leachate water (CRL), and fly, and bottom ash (BA) transport water. As part of the permit renewal process, the Department evaluated the facility for each of the applicable waste streams. Listed below are the results of the evaluation.

On April 25, 2017, EPA published a notice in the Federal Register titled, "Postponement of Certain Compliance Dates for Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category." [82 Fed. Reg. 19005]. The notice indefinitely postponed (stayed) the compliance dates for meeting the effluent limitation guidelines for fly ash transport water, bottom ash transport water, FGD wastewater, FGMC wastewater and gasification wastewater. On June 6, 2017, EPA published notice of its proposal to postpone those compliance dates "as a stopgap measure to prevent the unnecessary expenditure of resources until EPA completes reconsideration of the 2015 Rule." [82 Fed. Reg. 26017-26018].

In September 2017, EPA postponed the earliest compliance dates for the BAT standards for bottom ash transport water and FGD wastewater [82 Fed. Reg. 43494-43500]. The earliest compliance dates for these two waste streams was extended from November 1, 2018, to November 1, 2020. The compliance date of the new BAT standards for the other four wastewater streams remains November 1, 2018.

On April 12, 2019, the Fifth Circuit concluded that portions of the final rule regulating legacy wastewater and combustion residual leachate were unlawful, hence those portions of the rule were vacated and remanded to EPA for reconsideration. For purposes of BAT limitations in the current rule, FGD wastewater is a legacy wastewater if generated prior to the date established by the permitting authority that is as soon as possible beginning November 1, 2020 (previously November 1, 2018) but no later than December 31, 2023. Therefore, final effluent limitations specified to become applicable after November 1, 2020 (previously November 1, 2018), the specified date must be as soon as possible, but no later than December 31, 2023.

On October 13, 2020, the EPA published a final ELG Rule that included revisions to the FGD and Bottom Ash limitations of the 2015 Rule. The 2020 steam electric reconsideration rule became effective on December 14, 2020. For FGD wastewater discharges, numeric effluent limitations were established for mercury, arsenic, selenium, and nitrate/nitrite as nitrogen. For bottom ash transport water, high recycle rate systems are required and allows for a site-specific discharge, referred to in the final rule as bottom ash purge water, which cannot exceed 10 percent of the bottom ash transport water system volume. The purge volume and associated effluent limitations are based on BAT. The rule also includes subcategories for high flow units, low utilization units, and units that will cease coal combustion by 2028.

For high flow facilities and low utilization boilers, numeric effluent limitations for mercury and arsenic were established for FGD wastewater discharges. For low utilization boilers, numeric limitations for TSS were established and requires implementation of a BMP plan for bottom ash transport water. For boilers ceasing combustion of coal by 2028, numeric limitations for TSS in FGD wastewater and bottom ash transport water were established.

Compliance with these new, more stringent limitations is one year after the final rule is published in the Federal Register, but no later than December 31, 2025, for FGD and bottom ash transport water.

The final rule includes a Voluntary Incentives Program with a compliance date of December 31, 2028, for facilities to implement new requirements, to achieve more stringent limitations on mercury, arsenic, selenium, nitrate/nitrite, bromide, and total dissolved solids in FGD wastewater.

On January 25, 2021, EPA announced its decision to undertake rulemaking, proposing to revise the ELGS to determine whether more stringent limitations and standards are appropriate and consistent with the technology-forcing statutory scheme and the goals of the CWA. Notice was published in the Federal Register, FR Doc. 2021-16478, on August 3, 2021.

Proposed ELG rule revisions for FGD wastewater, BA transport water, and CRL at existing sources was published March 29, 2023.

Proposed rule changes include a zero-discharge limitation for all pollutants in FGD wastewater and BA transport water, and numeric (non-zero) discharge limitations for mercury and arsenic in CRL. The proposed rule would create separate requirements for a new subcategory of facilities that have already complied with either the 2015 or 2020 rule's requirements ("early adopters") for facilities retiring by 2032. For both the existing and new subcategory, additional requirements are proposed for affected facilities to demonstrate permanent cessation of coal combustion or that permanent retirement will occur.

No rule changes apply to existing subcategories for oil-fired electric generating units (EGUs) and small generating units (50 MW or less) (2015 rule), nor to the existing subcategory for EGUs permanently ceasing the combustion of coal by 2028 (2020 rule).

While BAT limitations in the proposed rule are more stringent than previously established BPT and BAT limitations, new limitations would apply as soon as possible, but no later than December 31, 2029.

Pursuant to the EPA's direct final rule published on March 29, 2023, the rule became effective May 30, 2023. The amendment revises rule 40 CFR 423.19(f)(1) as follows:

"Notice of Planned Participation. For sources seeking to qualify as an electric generating unit that will achieve permanent cessation of coal combustion by December 31, 2028, under this part, a Notice of Planned Participation shall be made to the permitting authority, or to the control authority in the case of an indirect discharger, no later than June 27, 2023."

The final rule was published on May 9, 2024, and became effective July 8, 2024 [89 Fed. Reg. 40198].

For existing sources that discharge directly to surface water, with the exception of the subcategories discussed below, the final rule establishes the following effluent limitations based on Best Available Technology Economically Achievable (BAT):

- A zero-discharge limitation for all pollutants in FGD wastewater, BA transport water, and CRL; and
- Numeric (nonzero) discharge limitations for mercury and arsenic in unmanaged CRL and for legacy wastewater discharged from surface impoundments during the closure process if those surface impoundments have not commenced closure under the Coal Combustion Residuals (CCR) regulations as of July 8, 2024.

An unmanaged CRL is defined as a CRL which either: (1) the permitting authority determines are the functional equivalent of a direct discharge (FEDD) to waters of the United States (WOTUS) through groundwater or (2) CRL that has leached from a waste management unit into the subsurface and mixed with groundwater prior to being captured and pumped to the surface for discharge directly to a WOTUS.

The final rule eliminates the 2020 rule subcategories for high flow and low utilization electric generating units (EGUs), except to the extent they apply to EGUs in the new subcategory for permanent cessation of coal combustion by 2034.

For this subcategory, the final rule retains the 2020 rule requirements for FGD wastewater and BA transport water and the pre-2015 BPJ-based BAT requirements for CRL rather than requiring the new zero-discharge requirements for these waste streams. After the permanent cessation of coal combustion, EGUs in this subcategory must meet limitations on arsenic and mercury based on chemical precipitation for CRL.

New limitations for direct dischargers do not apply until a date determined by the permitting authority that is as soon as possible on or after July 8, 2024, but no later than December 31, 2029.

For indirect discharges (i.e., discharges to publicly owned treatment works (POTWs)), the final rule establishes pretreatment standards for existing sources that are the same as the BAT limitations except where limitations are for total suspended solids (TSS), a pollutant that does not pass through POTWs. Pretreatment standards are directly enforceable and apply May 9, 2027.

The final rule sets new source performance standards and pretreatment standards for discharges of CRL from new sources that are equivalent to the new BAT limitations described above.

- (1) The facility does generate FGD wastewater and the resulting FGD blowdown is discharged to UIC wells. Therefore, the limitations of 40 CFR 423.13(g)(1) for FGD wastewater are not applicable in this case.
- (2) The facility does not generate FGMC wastewater from any processes; therefore, the provisions of 40 CFR 423.13(i)(1) are not applicable to this facility.
- (3) The facility does not generate coal gasification wastewater from any processes; therefore, the provisions of 40 CFR 423.13(j)(1) are not applicable to this facility.
- (4) The facility currently utilizes a wet-sluicing system for both fly and bottom ash. However, fly and bottom ash transport waters are sluiced from lined ponds to the lined long term storage pond and then used as makeup water to the flue gas desulfurization system (FGD) scrubber which discharges to UIC or is discharged directly from the lined long term storage pond with reclaimed water to UIC. Because both waste streams are reused in the FGD scrubber instead of directly discharged, in accordance with 40 CFR 423.13(h)(1) and 40 CFR 423.13(k)(1)(i), these waste streams are instead subject to the BAT limitations of FGD wastewater, as listed in 40 CFR 423.13(g)(1).
- (5) The facility generates coal combustion residual leachate in the ash storage area. Leachate is collected in lined ponds as part of the recycle water system and is reused in plant processes or discharged to UIC. Therefore, the BPT provisions of 40 CFR 423.12 are not applicable to this facility. The lined ponds are permitted under a separate non-NPDES permit issued by the Department's Southwest District Office (FLA017047) and Conditions of Certification under the Florida Electrical Power Plant Siting Act (License No. PA 79-12).

e. Federal Endangered Species Act (ESA) and State-Listed Threatened Species

1. Incidental Take

The Endangered Species Act prohibits the **"take"** of listed species through direct harm or habitat destruction. In the 1982 ESA amendments, Congress authorized the U.S. Fish and Wildlife Service (through the Secretary of the Interior) to issue permits for the "incidental take" of endangered and threatened wildlife species that results from, but is not the purpose of, carrying out an otherwise lawful activity (see Sections 9 and 4(d) of the ESA).

The ESA directs all federal agencies to work to conserve endangered and threatened species and to use their authorities to further the purposes of the Act. Section 7 of the ESA, called "Interagency Cooperation," is the mechanism by which federal agencies ensure the actions they take, including those they fund or authorize, do not jeopardize the existence of any listed species. EPA requested a formal consultation with U.S. Fish and Wildlife Service and NMFS (collectively referred to as the Services) as part of the 316(b), CWA, rulemaking. In 2015, the Services issued a final biological opinion (Opinion) on the EPA issuance and implementation of the final regulations implementing Section 316(b), CWA. The Opinion recognizes that: the 316(b) rule includes a number of provisions specifically designed to ensure that the rule as it is implemented is not likely to jeopardize the

continued existence of listed species or result in the destruction or adverse modification of designated critical habitat pursuant to the ESA; and the NPDES permit process to establish 316(b) controls for CWIS under the rule provides a framework for addressing and minimizing adverse environmental impact that may include adverse effects to listed species and designated critical habitat.

As it pertains to incidental take, the Opinion states: “any take incidental to the operation of a CWIS [cooling water intake structure] permitted under the Rule through the implementation process described in this Opinion will be exempt from Section 9 and Section 4(d) prohibitions if the owner/operator implements enforceable control measures, monitoring, and reporting as agreed upon by the owner/operator and the Services, and as reflected in the permit.” The permittee consulted with the Services and FWC as part of the development of its plan of study for collecting the required 316(b) CWIS information (see Section 4.a. above).

As stated above in Section 4.a., the NPDES permit includes interim provisions for the operation of the facility’s CWIS, and the Department may revise these provisions following review of the submitted 316(b) CWIS information or other additional information in accordance with draft permit condition VIII.E.4. Additionally, new take conditions were included in Section I.A of the draft permit.

Furthermore, information concerning incidental take of federal or state listed species is reported to the Services and FWC, respectively. The draft permit includes a requirement for the permittee to copy the Department on take incidents related to the facilities CWIS that are reported to the Services and FWC.

2. Threatened or Endangered Species

An informal consultation was held with National Oceanic and Atmospheric Administration (NOAA) concerning the possibility of the presence of three endangered species in waters near the intake: Gulf sturgeon, Hawksbill sea turtle, and West Indian manatee. The consultation included a visit to Big Bend and a discussion of both Big Bend and Bayside. Confirmation was received that NOAA (2016), “did not have concerns regarding federally listed species under Section 316(b) and did not believe that seeking an incidental take authorization under the Endangered Species Act was appropriate.”

TEC and Environmental Consulting & Technology, Inc. (ECT) met with the 316(b) coordinator for NOAA Fisheries, Mr. Jason Rueter at the Big Bend Power Station on March 29, 2016, to tour the intakes and discuss the potential effects of the cooling systems of both Big Bend and Bayside on federally listed species. Mr. Rueter indicated to TEC that neither Gulf sturgeon nor hawksbill sea turtle were likely to be found in the vicinity of the two plants due to their geographic range and habitat preferences. Neither species has ever been encountered in surveys of impingement or entrainment or in the Fisheries Independent Monitoring (FIM) program. West Indian manatees are encountered at the plant, therefore, the facility has a manatee protection plan in-place developed with the assistance of FWC with review by NOAA Fisheries. The plan was approved by the Department on August 6, 2003, with amendments thereafter as necessary. Mr. Rueter indicated to TEC that he did not have concerns about the interaction of the CWIS and the cooling system with aquatic federally listed species (NOAA, 2016).

The permittee reported two manatee deaths at the facility’s discharge canal in 2015, which were caused by the entrance of the manatees into the discharge pipe when the units were offline. The permittee coordinated with FWC to install screens and other equipment in October 2015 to prevent future occurrences. One additional manatee death was discovered in December of 2018, when unbeknownst to the plant, failure in the structure of the deterrent gate allowed the manatee to enter the discharge flume while circulators were off. Immediate corrective actions were taken to prevent similar occurrences in the future. This permit does not authorize an incidental take of any listed threatened or endangered species.

Horseshoe Crabs (*Limulus polyphemus*)

The facility has been in consultation with FWC to discuss options at reducing impingement of horseshoe crabs. The crabs are classified as arachnids as opposed to crustaceans and are generally absent from entrainment samples. From the 2009 (rev. 2010) Clean Water Act Section 316(b) Biological Characterization Report for Fish and Shellfish Impingement and Entrainment at the Tampa Electric Company Big Bend Power Station, horseshoe crabs represented 95 percent of impinged biomass, and 28.6 percent of total numbers.

f. Seawall Restoration Project

The seawall restoration project entails upgrading and/or replacement of areas identified as requiring restoration. On the south side of the station, the existing seawall structure will be covered with new vinyl sheet piling and new concrete pile caps with tie backs. The seawall will be raised 3 feet to raise the pile caps out of high surf/storm conditions. The project will replace all the seawall perimeter fencing on the waterfront and new gates will be installed. The bidding process and permitting began in 2017. The project was completed in November of 2019.

g. Coal Combustion Residuals

The Disposal of Coal Combustion Residuals Rule from Electric Utilities (“CCR” Rule) was finalized on December 19, 2014, by EPA. The rule establishes nationally applicable minimum criteria for the safe disposal of CCR in landfills and surface impoundments, along with technical requirements for CCR landfills and surface impoundments under subtitle D of the Resource Conservation and Recovery Act (RCRA).

The CCR rule is a self-implementing rule, meaning that facilities must comply with requirements without regulatory oversight, and the rule requires owners or operators of a CCR facility to document how the provisions of the rule are being met by placing the information in an operating record and maintaining a publicly accessible internet site that posts documentation that in many instances also been entered into the operating record (<https://www.tampaelectric.com/company/environment/wastemanagement/>).

In 2016, the Water Infrastructure Improvements for the Nation Act was passed. Section 2301 of the Act amended Section 4005 of the RCRA to provide for state CCR permit programs. According to the final rule, a state is not required to adopt or implement the regulations or to develop a permit program.

The facility is required to determine what CCR units are regulated under 40 CFR Part 257. TEC has identified the Economizer Ash and Pyrite Pond System (EAPPS) which contains three ponds (North Economizer Ash Pond, South Economizer Ash Pond, Economizer Ash Suction Pond) is considered one CCR unit (a surface impoundment) under 40 CFR Part 257.53. All three ponds are lined. The facility submitted the *Groundwater Monitoring System Design and Construction Report*, dated October 2017 in accordance with 40 CFR Part 257.91 for the economizer ash and pyrite pond system. The facility notified the Department in December 2017 that closure of the ponds described above will commence in mid-2018 and be completed by October 19, 2021, in accordance with 40 CFR 257 requirements. Closure activities include dewatering, excavation, CCR transport and offsite disposal, site restoration, and post-closure groundwater monitoring. The project was completed in November of 2021.

The Big Bend East Coal Stormwater pond (formerly a slag fines settling pond) project commenced in September 2018. The pond will be dewatered and excavated, then lined with an 80-mil HDPE liner and continued to be used as a stormwater pond. The pond has an existing groundwater monitoring well. The project was completed in January of 2021.

Disposal Area DA-2 is a lined CCR storage facility, as described below, that was closed and capped in 2002 under the direction of the Department’s Southwest District (SWD), Solid Waste Section. The sprayfields were permitted and operated in accordance with industrial wastewater permit (FLA017047). The sprayfields ceased receiving wastewater in 1999.

CCR material was historically placed in Disposal Area DA-2 at land surface (+/-5.0 feet mean sea level [ft msl]). The groundwater elevation in this area of the facility ranges from approximately 1.5 ft msl to 2.6 ft msl (Surficial Aquifer Groundwater Potentiometric Surface Map, August 2014). CCR was not placed below the water table and CCR in DA-2 is not hydraulically connected to the surficial aquifer.

DA-2 consists of three areas: DA-2A, DA-2B, and DA-2C contained within an earthened berm. The area has a stormwater collection system placed above the liner which discharge into three top cover inlet swale structures which discharge to culverts. DA-2A, DA-2B, and DA-2C areas are covered with an impermeable 60 mil polyethylene geotextile liner with a two-foot clean soil cover topped with a vegetative cover. DA-2B, and DA-2C also contain liners underneath, so that all material is completely encapsulated. The stormwater collection system and liner prevent CCR material from coming into contact with rainfall.

The facility indicated that the North and South Bottom Ash Ponds (lined in 2009 and 2010) do not meet the definition of a CCR unit pursuant to 40 CFR 257.53 since they are operated for beneficial use only. Following dewatering, CCR materials are excavated periodically as needed from the ponds, then transported off-site for use by customers.

The solids separation units (settling basins) are constructed of concrete.

On April 12, 2019, the EPA published, “Interpretive Statement on Application of the Clean Water Act National Pollutant Discharge Elimination System Program to Releases of Pollutants from a Point Source to Groundwater”. The EPA concluded that, “the CWA is best read as excluding all releases of pollutants from a point source to groundwater from NPDES program coverage, regardless of a hydrologic connection between the groundwater and jurisdictional surface water”.

On April 23, 2020, the United States Supreme Court published its decision in *County of Maui, Hawaii v. Hawaii Wildlife Fund et al.*, regarding Clean Water Act jurisdiction over discharges to surface waters via groundwater, vacating the Ninth Circuit’s decision and remanding the case for further proceedings consistent with its opinion. From the opinion, “The statutory provisions at issue require a permit when there is a direct discharge from a point source into navigable waters or when there is the *functional equivalent of a direct discharge*.”

On November 20, 2023, EPA issued a draft guidance titled, “Applying the Supreme Court’s *County of Maui v. Hawaii Wildlife Fund* Decision in the Clean Water Act Section 402 National Pollutant Discharge Elimination System Permit Program to Discharges through Groundwater”, seeking public comments by December 27, 2023.

5. INDUSTRIAL SLUDGE MANAGEMENT

Sludge management requirements are contained in Section II of the permit. In addition, sludge which is not recycled and vegetation and materials removed from the intake screens must be disposed in accordance with the requirements of Chapter 62-701, F.A.C.

6. GROUND WATER MONITORING REQUIREMENTS

Groundwater monitoring requirements are included in a separate non-NPDES permit issued by the Department’s Southwest District Office (FLA017047) and Conditions of Certification under the Florida Electrical Power Plant Siting Act (License No. PA 79-12).

7. DISCUSSION OF OTHER CHANGES TO PERMIT LIMITATIONS

- a. The facility and wastewater descriptions were updated based on modernization of the facility.
- b. Permit condition I.A.1, Dissolved oxygen. See dissolved oxygen discussion in Section 3 above.
- c. Permit condition I.A.1, Nutrient monitoring is included in this table for Outfall D-001. Associated permit conditions were also moved from Section I.B to I.A. Previously, nutrient monitoring requirements applied to Internal Outfall I-130 which has been taken out of service with FGD wastewater now disposed of to UIC wells. Section I.B. is no longer applicable to the facility.
- d. New permit condition I.A.11. The facility is required to submit reports in accordance with 40 CFR 122.21(r)(2-13) to establish impingement mortality and entrainment BTA.
- e. New Permit Conditions I.A.12, I.A.13, and I.A.14. These conditions are related to the ESA and take prohibitions.
- f. Permit condition I.C.3. New requirements were included for the facility to submit monitoring data via the Department’s electronic reporting system (EzDMR).
- g. New permit condition I.C.14 describes activities not requiring a revision to the permit.
- h. New permit condition I.C.15 was included to prohibit the storage of erodible materials which produce uncontrolled runoff.

- i. New permit conditions I.C.16 and I.C.17 contains other prohibitions for discharges.
- j. New permit condition I.C.18 prohibits the discharge of polychlorinated biphenyl (PCB) compounds.
- k. New permit condition I.C.19 defines combined waste streams.
- l. New permit condition I.C.20 prohibits point source discharges unless specifically authorized in this permit.
- m. Permit condition II.1 was removed as the facility no longer generates filter cake sludge from the flue gas desulfurization purge treatment system.
- n. New permit condition II.4 describes sludge management record keeping requirements.
- o. New permit condition III.2 prohibits groundwater discharges from impairing the designated use of contiguous surface waters.
- p. New permit condition V.3 was included from the Conditions of Certification which contains operational and maintenance requirements for the fine mesh screens.
- q. New permit condition V.4 requires annual inspections of all outfalls, including the requirement to take outfalls out of service when no longer in operation.
- r. New schedule item VI.3 requires the facility to submit 40 CFR 122.21(r)(2-13) reports.
- s. New schedule item VI.5 requires the permittee to provide progress reports on implementation and completion of options selected to reduce horseshoe crab impingement.
- t. New schedule item VI.6 requires the facility to conduct and submit the “impingement technology performance optimization study” described in 40 CFR 122.21(r)(6)(i).
- u. New schedule Items VI.7 and VI.8 contain annual reporting requirements regarding 316(b).
- v. New schedule Items VI.9 and VI.10 requires submittals of the Notification of Completion of Construction for Wastewater Facilities or Activities, and Availability of Record Drawings and Final Operation and Maintenance Manuals upon completion of installation of the fish return system and modified traveling water screens.
- w. New schedule item VI.11 requires re-evaluation of the 316(a) thermal variance.
- x. New Section VIII.B was included to require the permittee to notify Division of Historical Resources (DHR) if artifacts or human remains are found during permitted activities at the facility.
- y. New Sections VIII.F – H. These permitting requirements were added to the permit regulating impoundment design, construction, operation, maintenance, integrity inspections, reporting, and recordkeeping.
- z. New Section VIII.I, “Other Noncompliance Reporting Requirements”, was created to include additional reporting requirements pursuant to Rule 62-620.100(3), Florida Administrative Code (F.A.C.), and 403.077 Florida Statutes (F.S.).

8. PERMIT SCHEDULES

See Section VI. (Schedules) of the permit.

9. BEST MANAGEMENT PRACTICES PLAN

Due to the nature of the facility, a Best Management Practices Pollution Prevention (BMP3) Plan is appropriate for the facility. The facility will continue implementing the existing BMP3 plan.

10. EFFECTS OF SURFACE WATER DISCHARGE ON THREATENED OR ENDANGERED SPECIES

The Department does not anticipate adverse impacts on threatened or endangered species as a result of permit issuance. (See Section 4.e above.)

11. ADMINISTRATIVE ORDERS (AO) AND CONSENT ORDERS (CO)

This permit is not accompanied by an AO and is not currently under a CO with the Department.

12. REQUESTED VARIANCES OR ALTERNATIVES TO REQUIRED STANDARDS

This permit includes the renewal of the thermal CWA 316(a) variance. Please see Section 4.b. above for additional information.

13. THE ADMINISTRATIVE RECORD

The administrative record including application, draft permit, fact sheet, public notice (after release), comments received and additional information is available for public inspection during normal business hours at the location specified in Section 16 below. Copies will be provided at a minimal charge per page.

14. PROPOSED SCHEDULE FOR PERMIT ISSUANCE

Draft Permit and Public Notice to Applicant and EPA	June 24, 2025
Public Comment Period	Beginning: June 30, 2025 Ending: July 30, 2025
Proposed Permit to EPA	August 7, 2025
Notice of Intent to Issue	August 7, 2025
Notice of Permit Issuance	September 2, 2025

15. DEP CONTACT

Additional information concerning the permit and proposed schedule for permit issuance may be obtained during normal business hours from:

Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400
Telephone Number: (850) 245-8589

Fax Number: (850) 245-8669

16. PROCEDURES FOR THE FORMULATION OF FINAL DETERMINATIONS

a. Public Comment Period

The Department of Environmental Protection proposes to issue a wastewater facility permit to this applicant subject to the aforementioned effluent limitations and conditions. This decision is tentative and open to comment from the public.

Interested persons are invited to submit written comments regarding permit issuance on the draft permit limitations and conditions to the following address:

Department of Environmental Protection
2600 Blair Stone Road

Mail Station 3545
Tallahassee, FL 32399-2400
Attn.: Lauren Gottfreid

All comments received within 30 days following the date of public notice, pursuant to Rule 62-620.550, F.A.C., will be considered in the formulation of the final decision with regard to permit issuance.

Any interested person may submit written comments on the Department's proposed permitting decision or may submit a written request for a public meeting to the address specified above, in accordance with Rule 62-620.555, F.A.C. The comments or request for a public meeting must contain the information set forth below and must be received in the above address of the Department within 30 days of receipt or publication of the public notice. Failure to submit comments or request a public meeting within this time period will constitute a waiver of any right such person may have to submit comments or request a public meeting under Rule 62-620.555, F.A.C.

The comments or request for a public meeting shall contain the following information:

- (1) The commenter's name, address and telephone number, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (2) A statement of how and when notice of the draft permit was received;
- (3) A description of any changes the commenter proposes for the draft permit;
- (4) A full explanation of the factual and legal reasons for each proposed change to the draft permit; and
- (5) A request that a public meeting be scheduled (if applicable) including a statement of the nature of the issues proposed to be raised at the meeting.

b. Public Meeting

The Department will hold a public meeting if there is a significant degree of public interest in the draft permit or if it determines that useful information and data may be obtained thereby. Public notice of such a meeting shall be published by the applicant at least 30 days prior to the meeting.

If a public meeting is scheduled the public comment period is extended until the close of the public meeting. If a public meeting is held any person may submit oral or written statements and data at the meeting on the Department's proposed action.

c. Issuance of the Permit

The Department will make its decision regarding permit issuance after consideration of all written comments, including comments from the EPA on surface water discharge (NPDES) aspects of the draft or proposed permit; the requirements of Chapter 403, F.S., and appropriate rules; and, if a public meeting is held, after consideration of all comments, statements and data presented at the public meeting. The Department will respond to all significant comments in writing. The Department's response to significant comments will be included in the administrative record of the permit and will be available for public inspection at the above address of the Department.

Unless a request for an administrative hearing, or an extension of time to file a petition for an administrative hearing, pursuant to Chapter 120, F.S., as indicated in d. below, is granted, the Department will take final agency action by issuing the permit or denying the permit application. If an administrative hearing is convened, final agency action will be based on the outcome of the hearing.

d. Administrative Hearing

A person whose substantial interests are affected by the Department's proposed permitting decision has the opportunity to petition for an administrative proceeding (hearing) to challenge the Department's decision in accordance with Section 120.57, F.S.

An administrative hearing is an evidentiary proceeding in which evidence is presented by testimony and exhibits before an independent hearing officer. The result of an administrative hearing is the issuance of the hearing officer's recommended order to the Department, including the hearing officer's findings of fact, based on the evidence presented at the hearing. The Department will issue a final order, granting or denying the permit, based on the hearing officer's recommended order.

The petition for an administrative hearing must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, within 14 days of publication of notice of agency action or within 14 days of personal receipt of notice of agency action, whichever occurs first. The petitioner is to mail a copy of the petition to the applicant at the time of filing. Failure to file a petition within this time period will constitute a waiver of any right such person may have to request an administrative determination (hearing) under section 120.57, F.S. The petition is to contain the following information:

- (1) The name, address and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (2) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (3) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (4) A statement of the material facts which the petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (5) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and
- (6) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in the notice of agency action. Persons whose substantial interests will be affected by any decision of the Department on the application have the right to petition to become a party to the proceeding, regardless of their agreement or disagreement with the Department's proposed action indicated in the notice of agency action.

Figure 1



Figure 2

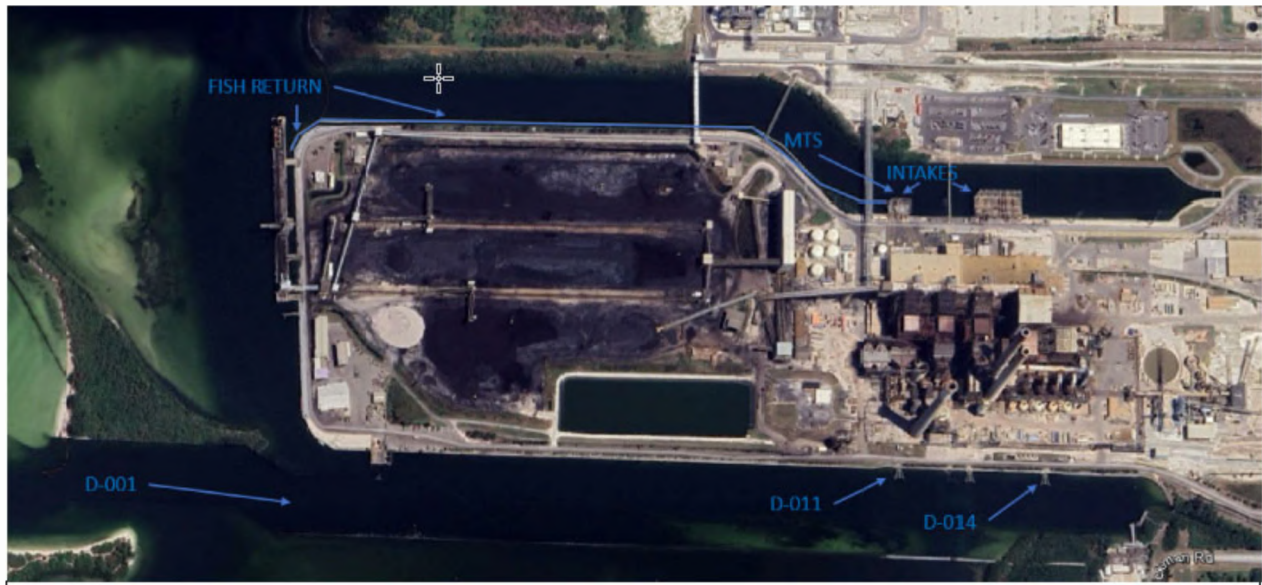
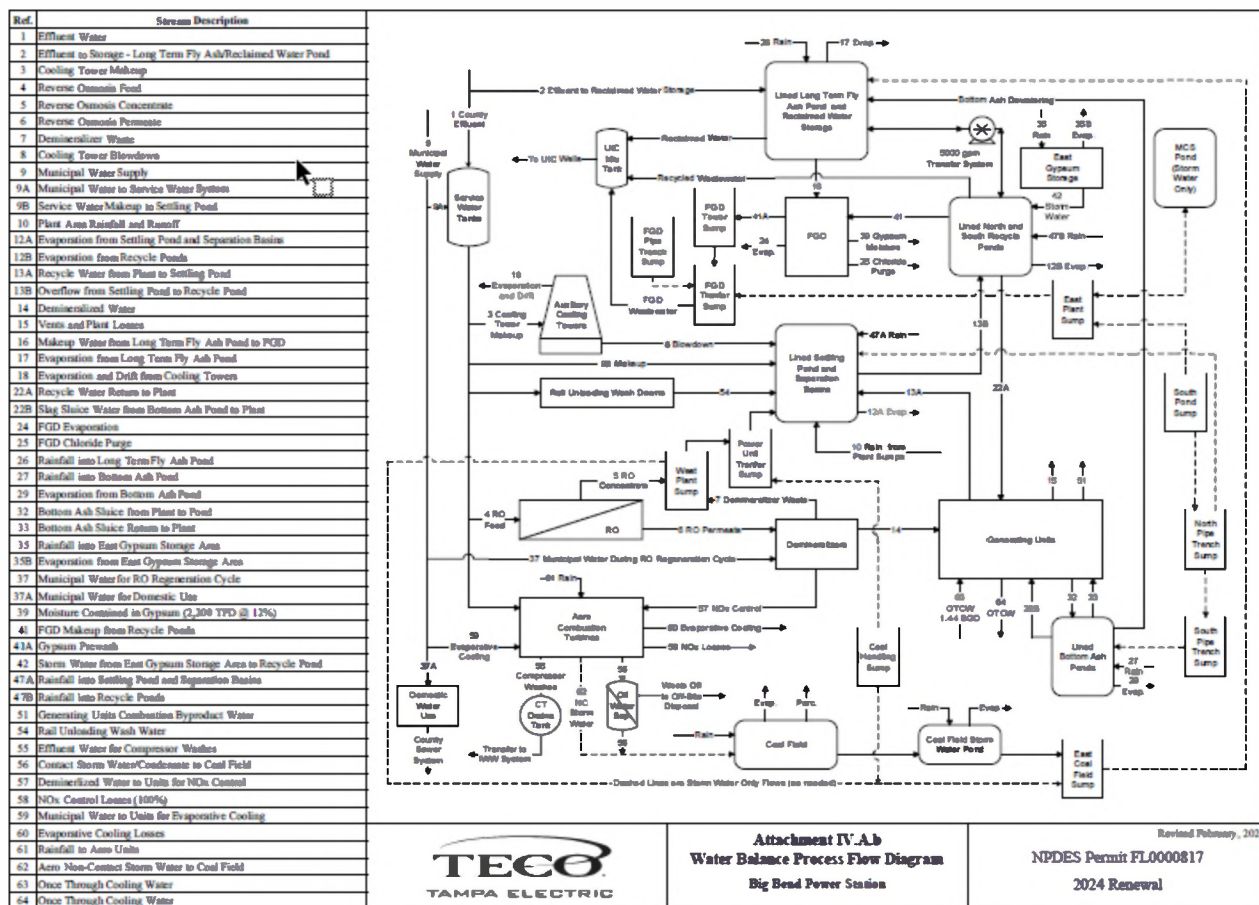


Figure 3



Figure 4



DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When completed submit this report to: <https://www.fldepportal.com/go/>PERMITTEE NAME: Tampa Electric Company
MAILING ADDRESS: P.O. Box 111
Tampa, Florida 33601-3285

PERMIT NUMBER:

FL0000817-013-IW1S

FACILITY: Tampa Electric Co Big Bend Power Station
LOCATION: 13031 Wyandotte Rd.
Apollo Beach, Florida 33572LIMIT:
CLASS SIZE:
MONITORING GROUP NUMBER:
MONITORING GROUP DESCRIPTION:
RE-SUBMITTED DMR: ☐
NO DISCHARGE FROM SITE: ☐
MONITORING PERIOD From: _____ To: _____Final
MA
D-001
REPORT FREQUENCY: Monthly
PROGRAM: IndustrialCOUNTY: Hillsborough
OFFICE: Tallahassee

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Flow	Sample Measurement										
PARM Code 50050 1 Mon. Site No. FLW-1	Permit Requirement	Report (Mo.Avg.)	Report (Day.Max.)	MGD					0	Continuous	Elapsed Time Measurement on Pump
Temperature (F), Water	Sample Measurement										
PARM Code 00011 1 Mon. Site No. EFF-1	Permit Requirement				Report (Mo.Avg.)	109.0 (Inst.Max.)		Deg F		Continuous	Recorder
Temp. Diff. between Intake and Discharge	Sample Measurement										
PARM Code 61576 1 Mon. Site No. EFF-1	Permit Requirement					16.8 (Max.Wk.Avg.)		Deg F		6/Day	Calculated
Oxygen, Dissolved (DO)	Sample Measurement										
PARM Code 00300 1 Mon. Site No. EFF-2	Permit Requirement				Report (Max.Wk.Avg.)			mg/L	0	Weekly	Meter
Oxygen, Dissolved Percent Saturation	Sample Measurement										
PARM Code 00301 1 Mon. Site No. EFF-2	Permit Requirement				Report (Max.Wk.Avg.)			percent	0	Weekly	Meter
Oxygen, Dissolved Percent Saturation	Sample Measurement										
PARM Code 00301 P Mon. Site No. EFF-2	Permit Requirement				Report (Min.Mo.Avg.)			percent	0	Monthly	Calculated

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

ISSUANCE/REISSUANCE DATE:

DMR EFFECTIVE DATE: 1st day of the 2nd month following effective date of permit - Permit expiration

DEP Form 62-620.910(10), Effective Nov. 29, 1994

58

TAMPA ELECTRIC COMPANY
MANATEE PROTECTION STUDY
EXHIBIT 1
FILED: NOVEMBER 7, 2025

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY: Tampa Electric Co Big Bend Power Station

MONITORING GROUP D-001

PERMIT NUMBER: FL0000817-013-IW1S

NUMBER:

MONITORING PERIOD

From: _____ To: _____

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Oxygen, Dissolved Percent Saturation ¹	Sample Measurement										
PARM Code 00301 Q Mon. Site No. EFF-2	Permit Requirement		1 (3Mo.Avg.)	# of Exceedances						Weekly	Calculated
Oxygen, Dissolved Percent Saturation ²	Sample Measurement										
PARM Code 00301 R Mon. Site No. EFF-2	Permit Requirement		1 (12Mo.Roll.Total)	# of Exceedances						Monthly	Calculated
pH	Sample Measurement										
PARM Code 00400 1 Mon. Site No. EFF-2	Permit Requirement				6.5 (Min.)	8.5 (Max.)		s.u.		Weekly	In Situ
Nitrogen, Ammonia, Total (as N)	Sample Measurement										
PARM Code 00610 1 Mon. Site No. EFF-2	Permit Requirement					Report (Inst.Max.)		mg/L	0	Monthly	Grab
Nitrogen, Kjeldahl, Total (as N)	Sample Measurement										
PARM Code 00625 1 Mon. Site No. EFF-2	Permit Requirement					Report (Inst.Max.)		mg/L	0	Monthly	Grab
Nitrite plus Nitrate, Total 1 det. (as N)	Sample Measurement										
PARM Code 00630 1 Mon. Site No. EFF-2	Permit Requirement					Report (Inst.Max.)		mg/L	0	Monthly	Grab
Nitrogen, Total	Sample Measurement										
PARM Code 00600 P Mon. Site No. CAL-2	Permit Requirement					Report (Inst.Max.)		mg/L	0	Monthly	Grab
Nitrogen, Total	Sample Measurement										
PARM Code 00600 Q Mon. Site No. CAL-1	Permit Requirement		Report (Mo.Total)	lb/mth					0	Monthly	Calculated
Nitrogen, Total	Sample Measurement										
PARM Code 00600 R Mon. Site No. CAL-1	Permit Requirement		87.9 (An.Total)	ton/yr						Monthly	Calculated
Nitrogen, Total	Sample Measurement										
PARM Code 00600 S Mon. Site No. CAL-1	Permit Requirement		58.6 (5Yr.Avg.)	ton/yr						Monthly	Calculated

¹ Rolling 3-month period.² Rolling 12-month period.

ISSUANCE/REISSUANCE DATE:

DMR EFFECTIVE DATE: 1st day of the 2nd month following effective date of permit - Permit expiration

DEP Form 62-620.910(10), Effective Nov. 29, 1994

TAMPA ELECTRIC COMPANY
 MANATEE PROTECTION STUDY
 EXHIBIT 1
 FILED: NOVEMBER 7, 2025

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY: Tampa Electric Co Big Bend Power Station

MONITORING GROUP
NUMBER:
MONITORING PERIOD

D-001

PERMIT NUMBER: FL0000817-013-IW1S

From: _____ To: _____

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Phosphorus, Total (as P)	Sample Measurement										
PARM Code 00665 1 Mon. Site No. EFF-2	Permit Requirement					Report (Max.)	mg/L	0		Monthly	Grab
Phosphate, Ortho (as PO4)	Sample Measurement										
PARM Code 00660 1 Mon. Site No. EFF-2	Permit Requirement					Report (Max.)	mg/L	0		Monthly	Grab
7-DAY CHRONIC STATRE Americamysis (Mysidopsis) bahia (Routine)	Sample Measurement										
PARM Code TRP3E P Mon. Site No. EFF-2	Permit Requirement				100 (Min.)		percent			Semi-Annually; twice per year	24-hr TPC
7-DAY CHRONIC STATRE Americamysis (Mysidopsis) bahia (Additional)	Sample Measurement										
PARM Code TRP3E Q Mon. Site No. EFF-2	Permit Requirement				100 (Min.)		percent			As needed	As required by the permit
7-DAY CHRONIC STATRE Americamysis (Mysidopsis) bahia (Additional)	Sample Measurement										
PARM Code TRP3E R Mon. Site No. EFF-2	Permit Requirement				100 (Min.)		percent			As needed	As required by the permit
7-DAY CHRONIC STATRE Menidia beryllina (Routine)	Sample Measurement										
PARM Code T6P6J P Mon. Site No. EFF-2	Permit Requirement				100 (Min.)		percent			Semi-Annually; twice per year	24-hr TPC
7-DAY CHRONIC STATRE Menidia beryllina (Additional)	Sample Measurement										
PARM Code T6P6J Q Mon. Site No. EFF-2	Permit Requirement				100 (Min.)		percent			As needed	As required by the permit
7-DAY CHRONIC STATRE Menidia beryllina (Additional)	Sample Measurement										
PARM Code T6P6J R Mon. Site No. EFF-2	Permit Requirement				100 (Min.)		percent			As needed	As required by the permit

60

TAMPA ELECTRIC COMPANY
MANATEE PROTECTION STUDY
EXHIBIT 1
FILED: NOVEMBER 7, 2025

ISSUANCE/REISSUANCE DATE:

DMR EFFECTIVE DATE: 1st day of the 2nd month following effective date of permit - Permit expiration

DEP Form 62-620.910(10), Effective Nov. 29, 1994

INSTRUCTIONS FOR COMPLETING THE WASTEWATER DISCHARGE MONITORING REPORT

Read these instructions before completing the DMR. Hard copies and/or electronic copies of the required parts of the DMR were provided with the permit. All required information shall be completed in full and typed or printed in ink. A signed, original DMR shall be mailed to the address printed on the DMR by the 28th of the month following the monitoring period. Facilities who submit their DMR(s) electronically through eDMR do not need to submit a hardcopy DMR. The DMR shall not be submitted before the end of the monitoring period.

The DMR consists of three parts--A, B, and D--all of which may or may not be applicable to every facility. Facilities may have one or more Part A's for reporting effluent or reclaimed water data. All domestic wastewater facilities will have a Part B for reporting daily sample results. Part D is used for reporting ground water monitoring well data.

When results are not available, the following codes should be used on parts A and D of the DMR and an explanation provided where appropriate. Note: Codes used on Part B for raw data are different.

CODE	DESCRIPTION/INSTRUCTIONS
ANC	Analysis not conducted.
DRY	Dry Well
FLD	Flood disaster.
IFS	Insufficient flow for sampling.
LS	Lost sample.
MNR	Monitoring not required this period.

CODE	DESCRIPTION/INSTRUCTIONS
NOD	No discharge from/to site.
OPS	Operations were shutdown so no sample could be taken.
OTH	Other. Please enter an explanation of why monitoring data were not available.
SEF	Sampling equipment failure.

When reporting analytical results that fall below a laboratory's reported method detection limits or practical quantification limits, the following instructions should be used, unless indicated otherwise in the permit or on the DMR:

1. Results greater than or equal to the PQL shall be reported as the measured quantity.
2. Results less than the PQL and greater than or equal to the MDL shall be reported as the laboratory's MDL value. These values shall be deemed equal to the MDL when necessary to calculate an average for that parameter and when determining compliance with permit limits.
3. Results less than the MDL shall be reported by entering a less than sign ("<") followed by the laboratory's MDL value, e.g. <0.001. A value of one-half the MDL or one-half the effluent limit, whichever is lower, shall be used for that sample when necessary to calculate an average for that parameter. Values less than the MDL are considered to demonstrate compliance with an effluent limitation.

PART A -DISCHARGE MONITORING REPORT (DMR)

Part A of the DMR is comprised of one or more sections, each having its own header information. Facility information is preprinted in the header as well as the monitoring group number, whether the limits and monitoring requirements are interim or final, and the required submittal frequency (e.g. monthly, annually, quarterly, etc.). Submit Part A based on the required reporting frequency in the header and the instructions shown in the permit. The following should be completed by the permittee or authorized representative:

Resubmitted DMR: Check this box if this DMR is being re-submitted because there was information missing from or information that needed correction on a previously submitted DMR. The information that is being revised should be clearly noted on the re-submitted DMR (e.g. highlight, circle, etc.)

No Discharge From Site: Check this box if no discharge occurs and, as a result, there are no data or codes to be entered for all of the parameters on the DMR for the entire monitoring group number; however, if the monitoring group includes other monitoring locations (e.g., influent sampling), the "NOD" code should be used to individually denote those parameters for which there was no discharge.

Monitoring Period: Enter the month, day, and year for the first and last day of the monitoring period (i.e. the month, the quarter, the year, etc.) during which the data on this report were collected and analyzed.

Sample Measurement: Before filling in sample measurements in the table, check to see that the data collected correspond to the limit indicated on the DMR (i.e. interim or final) and that the data correspond to the monitoring group number in the header. Enter the data or calculated results for each parameter on this row in the non-shaded area above the limit. Be sure the result being entered corresponds to the appropriate statistical base code (e.g. annual average, monthly average, single sample maximum, etc.) and units. Data qualifier codes are not to be reported on Part A.

No. Ex.: Enter the number of sample measurements during the monitoring period that exceeded the permit limit for each parameter in the non-shaded area. If none, enter zero.

Frequency of Analysis: The shaded areas in this column contain the minimum number of times the measurement is required to be made according to the permit. Enter the actual number of times the measurement was made in the space above the shaded area.

Sample Type: The shaded areas in this column contain the type of sample (e.g. grab, composite, continuous) required by the permit. Enter the actual sample type that was taken in the space above the shaded area.

Signature: This report must be signed in accordance with Rule 62-620.305, F.A.C. Type or print the name and title of the signing official. Include the telephone number where the official may be reached in the event there are questions concerning this report. Enter the date when the report is signed.

Comment and Explanation of Any Violations: Use this area to explain any exceedances, any upset or by-pass events, or other items which require explanation. If more space is needed, reference all attachments in this area.

PART B - DAILY SAMPLE RESULTS

Monitoring Period: Enter the month, day, and year for the first and last day of the monitoring period (i.e. the month, the quarter, the year, etc.) during which the data on this report were collected and analyzed.

Daily Monitoring Results: Transfer all analytical data from your facility's laboratory or a contract laboratory's data sheets for all day(s) that samples were collected. Record the data in the units indicated. Table 1 in Chapter 62-160, F.A.C., contains a complete list of all the data qualifier codes that your laboratory may use when reporting analytical results. However, when transferring numerical results onto Part B of the DMR, only the following data qualifier codes should be used and an explanation provided where appropriate.

CODE	DESCRIPTION/INSTRUCTIONS
<	The compound was analyzed for but not detected.
A	Value reported is the mean (average) of two or more determinations.
J	Estimated value, value not accurate.
Q	Sample held beyond the actual holding time.
Y	Laboratory analysis was from an unpreserved or improperly preserved sample.

To calculate the monthly average, add each reported value to get a total. For flow, divide this total by the number of days in the month. For all other parameters, divide the total by the number of observations.

Plant Staffing: List the name, certificate number, and class of all state certified operators operating the facility during the monitoring period. Use additional sheets as necessary.

PART D - GROUND WATER MONITORING REPORT

Monitoring Period: Enter the month, day, and year for the first and last day of the monitoring period (i.e. the month, the quarter, the year, etc.) during which the data on this report were collected and analyzed.

Date Sample Obtained: Enter the date the sample was taken. Also, check whether or not the well was purged before sampling.

Time Sample Obtained: Enter the time the sample was taken.

Sample Measurement: Record the results of the analysis. If the result was below the minimum detection limit, indicate that. Data qualifier codes are not to be reported on Part D.

Detection Limits: Record the detection limits of the analytical methods used.

Analysis Method: Indicate the analytical method used. Record the method number from Chapter 62-160 or Chapter 62-601, F.A.C., or from other sources.

Sampling Equipment Used: Indicate the procedure used to collect the sample (e.g. airlift, bucket/bailer, centrifugal pump, etc.)

Samples Filtered: Indicate whether the sample obtained was filtered by laboratory (L), filtered in field (F), or unfiltered (N).

Signature: This report must be signed in accordance with Rule 62-620.305, F.A.C. Type or print the name and title of the signing official. Include the telephone number where the official may be reached in the event there are questions concerning this report. Enter the date when the report is signed.

Comments and Explanation: Use this space to make any comments on or explanations of results that are unexpected. If more space is needed, reference all attachments in this area.

SPECIAL INSTRUCTIONS FOR LIMITED WET WEATHER DISCHARGES

Flow (Limited Wet Weather Discharge): Enter the measured average flow rate during the period of discharge or divide gallons discharged by duration of discharge (converted into days). Record in million gallons per day (MGD).

Flow (Upstream): Enter the average flow rate in the receiving stream upstream from the point of discharge for the period of discharge. The average flow rate can be calculated based on two measurements; one made at the start and one made at the end of the discharge period. Measurements are to be made at the upstream gauging station described in the permit.

Actual Stream Dilution Ratio: To calculate the Actual Stream Dilution Ratio, divide the average upstream flow rate by the average discharge flow rate. Enter the Actual Stream Dilution Ratio accurate to the nearest 0.1.

No. of Days the SDF > Stream Dilution Ratio: For each day of discharge, compare the minimum Stream Dilution Factor (SDF) from the permit to the calculated Stream Dilution Ratio. On Part B of the DMR, enter an asterisk (*) if the SDF is greater than the Stream Dilution Ratio on any day of discharge. On Part A of the DMR, add up the days with an "*" and record the total number of days the Stream Dilution Factor was greater than the Stream Dilution Ratio.

CBOD₅: Enter the average CBOD₅ of the reclaimed water discharged during the period shown in duration of discharge.

TKN: Enter the average TKN of the reclaimed water discharged during the period shown in duration of discharge.

Actual Rainfall: Enter the actual rainfall for each day on Part B. Enter the actual cumulative rainfall to date for this calendar year and the actual total monthly rainfall on Part A. The cumulative rainfall to date for this calendar year is the total amount of rain, in inches, that has been recorded since January 1 of the current year through the month for which this DMR contains data.

Rainfall During Average Rainfall Year: On Part A, enter the total monthly rainfall during the average rainfall year and the cumulative rainfall for the average rainfall year. The cumulative rainfall for the average rainfall year is the amount of rain, in inches, which fell during the average rainfall year from January through the month for which this DMR contains data.

No. of Days LWWD Activated During Calendar Year: Enter the cumulative number of days that the limited wet weather discharge was activated since January 1 of the current year.

Reason for Discharge: Attach to the DMR a brief explanation of the factors contributing to the need to activate the limited wet weather discharge.

EXHIBIT 2

**Tampa Electric Company
Big Bend Station
Manatee Protection Plan – July 2016**

Background:

Tampa Electric Company's Big Bend Power Station is a steam-electric power generating facility located on Hillsborough Bay. Condenser cooling water for the facility's four units is withdrawn from Hillsborough Bay via an intake canal on the north side of the plant and returned back to Hillsborough Bay through a discharge canal on the south side of the plant. Attached is a Site Location Map.

Purpose:

The purpose of the Manatee Protection Plan is to set forth Tampa Electric Company's procedures to comply with Tasks 25 and 251 of the U.S. Fish and Wildlife Service (USFWS) "Florida Manatee Recovery Plan". These tasks require the development of a plan and procedures addressing potential manatee impacts, which is required to include an implementation schedule and to address, at a minimum:

- Plans to minimize disruption to warm water outflows during the winter and response procedures in case of disruptions.
- Strategy to maintain discharge temperatures that will sustain manatees during cold events.
- Plan to monitor ambient and discharge temperatures.
- Precautions to minimize hazards to manatees at intake and outfall areas.
- Timely communication to manatee recovery program personnel of any long-term changes in the availability of warm water.

Compliance:

1. This Manatee Protection Plan will be in effect during the term of the permit. In order for the plant's warm water discharge to provide a safe, warm water refuge for the manatees and to comply with Specific Condition 14, TEC will take the following actions:
 - a. In the case of an unplanned plant shutdown or a plant failure occurring that adversely affects the warm water refuge during the period from November 15 through March 31, when the ambient water temperature is below 61 °F, reasonable efforts shall be made to notify the Florida Fish and Wildlife Conservation Commission (FWCC) and USFWS no later than four hours after the event has occurred. If an unplanned plant shutdown occurs during the period from November 15 through March 31 that is expected to result in no thermal discharge for 24 hours or longer, regardless of ambient water temperature, the Fish and Wildlife Research Institute (FWRI) also should be notified.

The following agency representatives shall be notified in the above referenced events or if any distressed manatees are observed at any time:

FWCC – FWRI - Marine Mammal Pathobiology Lab: (727)-893-2904

USFWS – North Florida Ecological Services: (904) 731-3336

The FWCC Imperiled Species Management Section (ISMS) shall be provided a schedule of any anticipated in-water work within the discharge area or work that will affect the warm-water refuge during the period of November 15 through March 31 each year. No routine in-water maintenance work shall occur in the discharge area during the period of November 15 through March 31, unless it is considered essential by TEC and TEC consults with ISMS prior to the start of work. If emergency in-water work is needed, the ISMS will be notified and consulted no later than two weeks following the commencement of the activity. All vessels used in the operation or associated with the activity shall be operated pursuant to the standard manatee construction conditions.

- b. During the period from November 15 through March 31 each year, to coincide with the time of greatest manatee abundance, if the ambient water temperature falls below 61°F, as measured at the plant intake, the TEC Big Bend plant shall reasonably endeavor to operate in a manner that maintains the water temperature in an adequate portion of the discharge area at or above 68°F. It is understood that due to circumstances that may compromise plant safety and reliability, other regulatory compliance issues or unusual weather conditions the target temperature level may not be achieved on a continuous basis.
 - c. The TEC Big Bend power plant will provide personnel from the ISMS, USFWS, FWRI, USGS-Sirenia Project, or a designee of these agencies, access to the TEC Big Bend power plant property at reasonable times and subject to appropriate safety considerations to conduct manatee research or monitoring activities. Access would be limited to normal business hours (8:00 a.m. - 5:00 p.m.) unless arrangements are made in advance with the TEC Big Bend power plant.
 - d. Intake Area: No special surveys will be required for the intake area.
Discharge Area: No special surveys will be required for the discharge area.
 - e. Should TEC decide to retire these units, notice will be provided to FWCC and USFWS as soon as practical after the definite decision is made or, if possible, at least five years prior to the date of retirement.
 - f. The TEC Big Bend Power Plant will provide phone numbers for weekday and weekend notification of appropriate plant personnel for the purpose of allowing FWCC or USFWS to coordinate manatee rescue operations as necessary.
2. Attached is a figure showing the location of the Big Bend Manatee Sanctuary. Tampa Electric Company shall comply with the following standard manatee construction conditions for artificial warm water refugia during the period of November 15 through March 31:

STANDARD MANATEE CONDITIONS FOR IN-WATER WORK

2011

The permittee shall comply with the following conditions intended to protect manatees from direct project effects:

- a. All personnel associated with the project shall be instructed about the presence of manatees and manatee speed zones, and the need to avoid collisions with and injury to manatees. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act.
- b. All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
- c. Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee movement.
- d. All on-site project personnel are responsible for observing water-related activities for the presence of manatee(s). All in-water operations, including vessels, must be shutdown if a manatee(s) comes within 50 feet of the operation. Activities will not resume until the manatee(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the manatee(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.
- e. Any collision with or injury to a manatee shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1-888-404-3922. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336) for north Florida or in Vero Beach (1-772-562-3909) for south Florida, and emailed to FWC at ImperiledSpecies@myFWC.com.
- f. Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the permittee upon completion of the project. Temporary signs that have already been approved for this use by the FWC must be used. One sign which reads *Caution: Boaters* must be posted. A second sign measuring at least 8½ " by 11" explaining the requirements for "Idle Speed/No Wake" and the shut down of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. These signs can be viewed at http://www.myfwc.com/WILDLIFEHABITATS/manatee_sign_vendors.htm. Questions concerning these signs can be forwarded to the email address listed above.

CAUTION: MANATEE HABITAT

All project vessels

IDLE SPEED / NO WAKE

When a manatee is within 50 feet of work
all in-water activities must

SHUT DOWN

Report any collision with or injury to a manatee:

Wildlife Alert:

1-888-404-FWCC(3922)

cell *FWC or #FWC



**TAMPA ELECTRIC COMPANY
MANATEE PROTECTION STUDY
EXHIBIT 2
FILED: NOVEMBER 7, 2025**

