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TER-MS-PGCEOP-1.0

Emergency Operations Plan

TotalEnergies - Myrtle Solar Project

Power Generation Company (PGC)

Version 1.0
Effective Date:
06/15/2023

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Approval and Implementation

Introduction:

- This EOP is developed to help ensure TotalEnergies - Myrtle Solar Project's continued power generation operations in the event of emergency conditions, including, but not limited to pandemic(s) or severe weather. This plan includes the necessary elements, pursuant to PUCT Rule §25.53.

The following individuals are responsible for maintaining, implementing, and revising the EOP.

Name	Title	Permission(s)
Nicolas Felix	Director of Operations & Asset Manager	Maintain
Bobby Hill	Electrical Specialist	Implement
JC Culberson	EPE - Director of NERC and Regulatory Compliance	Revise

- provides a revision control summary that lists the dates of each change made to the EOP since the initial EOP filing pursuant to paragraph (1) of this subsection.

Version	Approval Date	Effective Date	Revision Summary
1.0	05/17/2023	06/15/2023	Initial Emergency Operations Plan

As of 06/15/2023, EOP Version 1.0, approved on 06/15/2023, supersedes all previous EOPs.

Communication Plan

An entity with generation operations must describe the procedures during an emergency for communicating with,

- the media
- PUCT
- OPUC
- QSE
- fuel suppliers
- Local and state governmental entities, officials, and emergency operations centers, as appropriate in the circumstances for the entity
- and ERCOT, as the Reliability Coordinator.



EMERGENCY OPERATIONS CONTACT LIST (EXTERNAL)			
NAME	ENTITY	PHONE NUMBER	EMAIL
Shift Supervisor	ERCOT	512-248-6804	shiftsupv@ercot.com
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PUCT Infrastructure Staff	PUCT	512-936-7197	
Miles Stearman	Spark Power	831-233-4670	miles.stearman@sparkpowercorp.com
Travis Schuerg	Spark Power	979-799-6994	travis.schuerg@sparkpowercorp.com
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TotalEnergies - Myrtle Solar Project Emergency Operations Contact List

TotalEnergies - Myrtle Solar Project Internal Emergency Operations Contact List

INTERNAL TOTALENERGIES - MYRTLE SOLAR PROJECT EMERGENCY OPERATIONS CONTACT LIST			
NAME	ENTITY	PHONE NUMBER	EMAIL
Nicolas Felix	TotalEnergies	281 513 7388	nicolas.felix@totalenergies.com
Bobby Hill	Electrical Specialist	361-571-7422	bobby.hill@external.Totalenergies.com

Definitions and Acronyms

TERM	ACRONYM	DEFINITION
Annex		A section of an emergency operations plan that addresses how an entity plans to respond in an emergency involving a specified type of hazard or threat.
Drill		An operations-based exercise that is a coordinated, supervised activity employed to test an entity's EOP or a portion of an entity's EOP. A drill may be used to develop or test new policies or procedures or to practice and maintain current skills.
Electric Reliability Council of Texas	ERCOT	Independent System Operator for approximately 90% of the state of Texas.
Emergency		A situation in which the known, potential consequences of a hazard or threat are sufficiently imminent and severe that an entity should take prompt action to prepare for and reduce the impact of harm that may result from the hazard or threat. The term includes an emergency declared by local, state, or federal government, or ERCOT or another reliability coordinator designated by the North American Electric Reliability Corporation and that is applicable to the entity.
Entity		An electric utility, transmission and distribution utility, PGC, municipally owned utility, electric cooperative, REP, or ERCOT.
Hazard		A natural, technological, or human-caused condition that is potentially dangerous or harmful to life, information, operations, the environment, or property, including a condition that is potentially harmful to the continuity of electric service.
Power Generation Company	PGC	Generates electricity intended to be sold at wholesale and does not own a transmission or distribution facility in this state (with some exceptions, see PUC Substantive Rule 25.5(23) and 25.5(45)).
Public Utility Commission of Texas	PUCT	The PUCT is the regulatory body for energy entities in the state of Texas.
Qualified Scheduling Entity	QSE	Submit bids and offers on behalf of resource entities (REs) or load serving entities (LSEs) such as retail electric

		providers (REPs).
<u>State Operations Center</u>	SOC	The SOC is operated by TDEM on a 24/7 basis and serves as the state warning point.
<u>Texas Department of Energy Management</u>	TDEM	coordinates the state emergency management program, which is intended to ensure the state and its local governments respond to and recover from emergencies and disasters and implement plans and programs to help prevent or lessen the impact of emergencies and disasters.
<u>Threat</u>		The intention and capability of an individual or organization to harm life, information, operations, the environment, or property, including harm to the continuity of electric service.

PURPOSE & FILING REQUIREMENTS

As a registered PGC, in the ERCOT footprint, TotalEnergies - Myrtle Solar Project is required to develop, maintain, and utilize (when necessary) an Emergency Operations Plan, pursuant to the requirements set forth in the PUCT Rule §25.53. As such, TotalEnergies has developed this plan to comply with the PUCT Substantive rule, as well as ensure a greater likelihood of continued operations during an emergency. This plan must be filed with the PUCT either (a) before COD if it is a new facility or (b) within 30 days of a substantive change to the plan. A substantive change that is made to the plan between November 1st and April 30th must be filed no later than June 1st of that year. If a substantive change is made to the plan between May 1st and October 31st, the submission date is no later than December 1st of that same year. At all times, the most recent approved copy of the TotalEnergies - Myrtle Solar Project Emergency Operations Plan (TER-MS-PGCEOP-1.0) must be available at the main office for PUCT inspection.

- For Myrtle Solar, a PGC, the PUCT has ordered the following information be included and/or addressed in the Emergency Operations Plan:

Maintenance of Pre-identified Supplies for Emergency Response

A plan to maintain pre-identified supplies for emergency response.

TotalEnergies - Myrtle Solar Project staff shall identify any supplies necessary for continued operations during an extreme weather event, and must procure, to the extent possible, those supplies. A list of some of these supplies is contained below:

- Fuel for generator

- Fuel for heaters
- Gas for breakers or load-interrupting switches (if applicable)
- Oil and nitrogen for transformers (if applicable)
- Parts used for maintenance or repair of equipment
- Fuel for vehicles (if applicable)
- Etc.

See Attachment D for a listing of supplies required for emergency response.

Evidence - Any evidence that supplies were requested and procured prior to the extreme weather event. Please use the appropriate details from the bulleted list above for supplies. Completed Attachment D.

Staffing During Emergency Response

A plan that addresses staffing during emergency response. TotalEnergies - Myrtle Solar Project will identify appropriate staff and staffing levels to respond to emergency conditions, including, but not limited to severe weather events, physical threats or physical damage, and cyber security events.

TotalEnergies - Myrtle Solar Project shall identify operational and management staff that will remain on call or on stand-by for the duration of the emergency (Attachment C of TER-MS-PGCEOP-1.0 Emergency Operations Plan - Attachments B-E). This list may be dynamic and will be subject to change should conditions warrant it.

Evidence - Attachment C of TER-MS-PGCEOP-1.0 Emergency Operations Plan - Attachments B-E). should be completed to reflect a staffing plan for severe weather events. Secondary evidence would consist of dated emails or documented evidence that staff was notified and understood their expectations during this event.

Weather-related Hazards

A plan that addresses how an entity identifies weather-related hazards, including tornadoes, hurricanes, extreme cold weather, extreme hot weather, drought, and flooding, and the process the entity follows to activate the EOP.

TotalEnergies - Myrtle Solar Project staff shall actively monitor all potential extreme weather events that may affect their facilities, to include severe weather and operational circumstances arising from those events. TotalEnergies - Myrtle Solar Project staff will continue monitoring weather forecasts and ERCOT operational data aid in predicting conditions on the BES that may impact operations.

Evidence - Screenshots of ERCOT site and weather site, complete with timestamps. Any dated correspondence to reflect communication of the potential or forecasted extreme weather event to staff.

Additional Annexes

TotalEnergies - Myrtle Solar Project, in its operational capacity as a PGC, must include the following annexes for its generation resources other than generation resources authorized under PURA §39.918:

Weather Emergency

- operational plans for responding to a cold or hot weather emergency, distinct from the weather preparations required under §25.55 of this title;
- verification of the adequacy and operability of fuel switching equipment, if installed; and
- a checklist for generation resource personnel to use during a cold or hot weather emergency response that includes lessons learned from past weather emergencies to ensure necessary supplies and personnel are available through the weather emergency.

For severe cold weather, TotalEnergies - Myrtle Solar Project shall identify, through inspection, areas of the generating facility that may be most vulnerable to malfunction during extreme cold events. TotalEnergies - Myrtle Solar Project staff shall ensure the following:

- Myrtle Solar staff will ensure, where applicable, heat tracing is present and functional for all appropriate exposed instrumentation and/or equipment, where applicable.
- Where appropriate and necessary, temporary barriers shall be erected to shield sensitive or exposed equipment and instrumentation from wind and freezing precipitation.
- Temporary barriers may be constructed of plastic sheeting or other material that is sufficient to protect exposed equipment and instrumentation, and may contain, if

conditions warrant, a portable heat source to keep temperatures above freezing in the designated area.

- Other measures may be taken, as the generation facility staff see fit, to protect the facility during an extreme cold weather event.

For severe hot weather, TotalEnergies - Myrtle Solar Project staff shall ensure the following:

- Proper ventilation is present and functional for any areas where extreme hot temperatures may negatively impact generator output.
- In addition to this, portable fans may be mobilized to force air around potentially affected areas.
- Ensure normal facility cooling measures are maintained and operational.

In all cases, TotalEnergies - Myrtle Solar Project staff will ensure that any substation or switchyard equipment that it owns is properly weatherized. This includes the following:

- Ensuring all breaker and transformer oil levels, SF6 levels, nitrogen levels, and air compressor tank levels are adequate for that equipment manufacturer and model.
- Heaters in breaker and transformer cabinets are functioning properly
- Adequate supply of spare gas and oil is available to be used during an emergency
Evidence - Maintenance records, records of inspection at generating sites, photos of erected temporary barriers, portable heaters in service, heat trace application photos, photos of unobscured ventilation, photos of any cooling measures deployed photos of any other weatherization measures with dates. If any breakers or transformers fall under the facility's purview, dated inspection and maintenance records detailing heater functionality and oil and gas levels and a list of any spare bottles of gas or stores of oil.

A water shortage annex that addresses supply shortages of water used in the generation of electricity;

Not applicable as TotalEnergies - Myrtle Solar Project assets do not use water to generate power.

An attestation declaring this portion of the plan is not applicable should suffice as evidence.

A restoration of service annex that identifies plans intended to restore to service a generation resource that failed to start or that tripped offline due to a hazard or threat;

TotalEnergies - Myrtle Solar Project's plan for emergency operation addresses its process for recovering generation capacity, should an emergency force a derate, a unit trip, or inability to generate and fulfill its MW obligations. These actions are listed in *Annex E-TER-MS-PGCEOP-1.0 - Generation Restoration Instructions* and Attachment E of *TER-MS-PGCEOP-1.0 Emergency Operations Plan - Attachments B-E*.

Evidence - By completing Attachment E of *TER-MS-PGCEOP-1.0 Emergency Operations Plan - Attachments B-E*, document all actions taken to address any inability to generate MW along with a detailed description of communications to QSE and/or ERCOT.

A pandemic and epidemic annex;

TotalEnergies - Myrtle Solar Project's existing pandemic/epidemic plan for business continuity is listed in Annex F.

A hurricane annex that includes evacuation and re-entry procedures if facilities are located within a hurricane evacuation zone, as defined by TDEM;

In the event of a hurricane, the first priority is always the health and safety of TotalEnergies - Myrtle Solar Project personnel. The TotalEnergies - Myrtle Solar Project hurricane response process is listed below:

- Ensure all TotalEnergies - Myrtle Solar Project personnel and any potentially affected public personnel are not in danger.
- By using the evacuation routes contained in the HRP (TER-MS-EOP-1.0 Hurricane Response Plan), TotalEnergies - Myrtle Solar Project personnel must evacuate at a time recommended by local authorities.
- The TotalEnergies - Myrtle Solar Project facility should be hardened, to the extent possible, against lasting damage from a hurricane. Some of these hardening details are listed below:
 - Ensure all loose material or equipment is secured.
 - Ensure proper draining channels exist and are functional

TotalEnergies - Myrtle Solar Project is in [Region 2](#), as specified by TDEM, and shall use the hurricane [evacuation routes](#) published by the Texas Department of Transportation.

A cyber security annex;

- The TotalEnergies - Myrtle Solar Project Cyber Security Incident Response Policy (*Annex G -TER-MS-Cyber Security Incident Response Plan*) contains this information.

A physical security incident annex;

This section contains reporting for physical threats to any TotalEnergies Renewables, USA facility, as well as actual damage to or destruction of any TotalEnergies Renewables, USA facility, per NERC Reliability Standard EOP-004. The DOE digital form, OE-417 shall be used to communicate physical attacks and cyber security incidents. Please see *Annex H - TER-MS-PGCEOP-1.0 Physical Security Plan* for more details.

Checklist(s) for generating facility personnel to address emergency events

TotalEnergies - Myrtle Solar Project shall use the checklist in Attachment C of *TER-MS-PGCEOP-1.0 Emergency Operations Plan - Attachments B-E* to identify which personnel shall address events that arise during the emergency.

Evidence - Complete Attachment C and document any actions taken to address any vulnerabilities found and addressed while completing the checklist.

A plan for alternative fuel testing if the facility has the ability to utilize alternative fuels

As a solar generating facility, measures for securing alternative fuels are not applicable.

Evidence - If the facility is capable of burning alternative fuel, dated proof that the fuel was tested prior to its use as the fuel source for the generator. If not applicable, state so in an attestation.



Affidavit from an owner, partner, officer, manager, or other official with responsibility for Myrtle Solar's operations affirming that all relevant Myrtle Solar operating personnel are familiar with the contents of the emergency operations plan; and such personnel are committed to following the plan except to the extent deviations are appropriate under the circumstances during the course of an emergency.

Completed, executed, and notarized *Annex A- TER-MS-PGCEOP-1.0 Emergency Operations Plan Affidavit*.

PUC Filing Requirements

An entity must file an emergency operations plan (EOP) and executive summary by April 15, 2022.

- A. An entity must file with the commission:
 - i. an executive summary that:
 - I. describes the contents and policies contained in the EOP;
 - II. includes a reference to specific sections and page numbers of the entity's EOP that correspond with the requirements of this rule;
 - III. includes the record of distribution required under paragraph (4)(A) of this subsection; and
 - IV. contains the affidavit required under paragraph (4)(C) of this subsection; and
 - ii. a complete copy of the EOP with all confidential portions removed.
- B. For an entity with operations within the ERCOT power region, the entity must submit its unredacted EOP in its entirety to ERCOT.
- C. In accordance with the deadlines prescribed by paragraphs (1) and (3) of this subsection, an entity must file with the commission the following documents:
 - i. A record of distribution that contains the following information in table format:
 - I. titles and names of persons in the entity's organization receiving access to and training on the EOP; and
 - II. dates of access to or training on the EOP, as appropriate.
 - ii. A list of primary and, if possible, backup emergency contacts for the entity, including identification of specific individuals who can immediately address urgent requests and questions from the commission during an emergency.
 - iii. An affidavit from the entity's highest-ranking representative, official, or officer with binding authority over the entity affirming the following:
 - I. relevant operating personnel are familiar with and have received training on the applicable contents and execution of the EOP, and such personnel are instructed to follow the applicable portions of the EOP except to the extent deviations are appropriate as a result of specific circumstances during the course of an emergency;
 - II. the EOP has been reviewed and approved by the appropriate executives;
 - III. drills have been conducted to the extent required by subsection (f) of this section;
 - IV. the EOP or an appropriate summary has been distributed to local jurisdictions as needed;
 - V. the entity maintains a business continuity plan that addresses returning to normal operations after disruptions caused by an incident; and
 - VI. the entity's emergency management personnel who are designated to interact with local, state, and federal emergency management officials during emergency events have received the latest IS-100, IS-200, IS-700, and IS-800 National Incident Management System training.

Annual Review

An entity must continuously maintain its EOP. Beginning in 2023, an entity must annually update information included in its EOP no later than March 15 under the following circumstances:

- A. An entity that in the previous calendar year made a change to its EOP that materially affects how the entity would respond to an emergency must:
 - a. file with the commission an executive summary that:
 - i. describes the changes to the contents or policies contained in the EOP;
 - ii. includes an updated reference to specific sections and page numbers of the entity's EOP that correspond with the requirements of this rule;
 - iii. includes the record of distribution required under paragraph (4)(A) of this subsection; and
 - iv. contains the affidavit required under paragraph (4)(C) of this section;
 - b. file with the commission a complete, revised copy of the EOP with all confidential portions removed; and
 - c. submit to ERCOT its revised unredacted EOP in its entirety if the entity operates within the ERCOT power region.
- B. An entity that in the previous calendar year did not make a change to its EOP that materially affects how the entity would respond to an emergency must file with the commission:
 - a. a pleading that documents any changes to the list of emergency contacts as provided under paragraph (4)(B) of this subsection;
 - b. an attestation from the entity's highest-ranking representative, official, or officer with binding authority over the entity stating the entity did not make a change to its EOP that materially affects how the entity would respond to an emergency; and
 - c. the affidavit described under paragraph (4)(C) of this subsection.

Annual Drill

An entity must conduct or participate in at least one drill each calendar year to test its EOP. Following an annual drill, the entity must assess the effectiveness of its emergency response and revise its EOP as needed. If the entity operates in a hurricane evacuation zone as defined by TDEM, at least one of the annual drills must include a test of its hurricane annex. An entity conducting an annual drill must, at least 30 days prior to the date of at least one drill each calendar year, notify commission staff, using the method and form prescribed by commission staff on the commission's website, and the appropriate TDEM District Coordinators, by email or other written form, of the date, time, and location of the drill. An entity that has activated its EOP in response to an emergency is not required, under this subsection, to conduct or participate in a drill in the calendar year in which the EOP was activated.

By applying the Emergency Operations Drill Instructions and completing Attachment B of *TER-MS-PGCEOP-1.0 Emergency Operations Plan - Attachments B-E*, TotalEnergies - Myrtle Solar



Project Emergency Operations Plan shall be tested each year, no later than December 31, and includes a review section, to identify and correct any vulnerabilities in the Emergency Operations Plan. TotalEnergies - Myrtle Solar Project Emergency Operations Drill Procedure has a section dedicated to any generation facility that is located within a defined hurricane evacuation zone.

Evidence - Emergency Operations Drill documentation, instructions, Attachment B of *TER-MS-PGCEOP-1.0 Emergency Operations Plan - Attachments B-E*, attendance/participation records with dates and names.

Myrtle Solar, as a registered RE, shall provide ERCOT with any updated versions of their emergency operations plan by **June 1** *for any updates made between November 1 and April 30*, and by **December 1** *for any updates made between May 1 through October 31*. TotalEnergies - Myrtle Solar Project shall submit all updated plans electronically. *Attachment I - TER-MS-PGCEOP-1.0 ERCOT Protocols Section 22(O) - Declaration of Generation Resource Winter Weather Preparations* is the attestation ERCOT requires for notification, along with the EOP.

Evidence - Electronic copy or screenshot of successful submittal to ERCOT (Attachment I and complete plan, should there be any updates).