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Elm Branch Solar 1 PUCT and ERCOT Emergency Operations and Weatherization Plan

Rev 2.0

CONFIDENTIAL Elm Branch Solar 1 - Emergency Operations and Weatherization Plan

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1.0 PUCT and ERCOT Emergency and Weatherization Requirements

1.1 PUCT Requirements

EOP Filing Requirement. Pursuant to PUCT regulations, every PGC must file with the PUCT a copy of its EOP or a comprehensive summary of its EOP. The initial filing of the EOP or summary is due on or before the date a PGC begins commercial operations. If a PGC makes significant changes to its EOP, it must file a revised plan or a revised comprehensive summary that appropriately addresses the significant changes. A significant change includes but is not limited to a change that has a material impact on how a PGC would respond to an emergency. The PUCT also requires that a PGC file an updated EOP if the PUCT finds that the EOP does not contain adequate information to determine whether the PGC can provide adequate electric generation services. The PUCT does not have any weatherization requirements.

Timing of Filing for Significant Changes to EOP. If a PGC makes significant changes to its EOP, the revised plan or revised comprehensive summary must be filed (i) by June 1 for updates made between November 1 and April 30 and (ii) by December 1 for updates made between May 1 and October 31.

How to File. EOPs are filed in hard copy in PUCT Central Records. The PUCT accepts filing of EOPs or revisions in Project No. 34202 but PUCT staff prefers that they be filed in **Project No. 37276**.

Confidentiality. The EOPs submitted to the PUCT are public information except for the portions considered confidential under the Texas Public Information Act or other state or federal law. If portions of the plan are designated as confidential, the EOP must be provided to the PUCT in a public redacted form with the confidential portion removed.

Required EOP Content. There is no PUCT form for an EOP. Rule 25.53(c)(2) of the PUCT's regulations states that a PGC's EOP must contain, but is not limited to, the following items described below. To the extent an item does not apply to a PGC, it must include an explanation in its EOP as to why it does not apply.

- a plan that addresses severely cold weather and severely hot weather.
- a plan that addresses any known critical failure points, including any effects of weather design limits.
- a plan that addresses an emergency shortage of water.
- a plan for identification of potentially severe weather events, including but not limited to tornadoes, hurricanes, severely cold weather, severely hot weather, and flooding.
- a plan for the inventory of pre-arranged supplies for emergencies.
- a plan that addresses staffing during severe weather events.
- checklists for generating facility personnel to address emergency events.
- a summary of alternative fuel and storage capacity.
- a plan for alternative fuel testing if the facility has the ability to utilize alternative fuels.
- priorities for recovery of generation capacity.
- a pandemic preparedness plan.
- a hurricane plan, including evacuation and re-entry procedures (*if facilities are located within a hurricane evacuation zone, as defined by the Governor's Division of Emergency Management*); and
- an affidavit from an owner, partner, officer, manager, or other official responsible for the PGC's operations affirming that all relevant operating personnel are familiar with the contents of the EOP, and

such personnel are committed to following the plan and the provisions contained therein in the event of a system-wide or local emergency that arises from natural or manmade disasters except to the extent deviations are appropriate under the circumstances during the course of an emergency.

1.2 ERCOT Requirements

EOP Filing Requirement. ERCOT Protocols require a company registered with ERCOT as a Resource Entity to submit to ERCOT a complete copy of its EOP. If a Resource Entity updates its EOP, it must file an updated version of the EOP by June 1 for updates made between November 1 and April 30 and by December 1 for updates made between May 1 and October 31.

Weatherization Requirement. In addition, a Resource Entity must address weatherization, either in its EOP or separately, and, at a minimum, must include a description of the practices and procedures undertaken in preparation for winter and summer weather and during specific occurrences of extreme weather. If a Resource Entity submits a separate weatherization plan and subsequently materially updates it, it must file an updated version of the plan by June 1 for updates made between November 1 and April 30 and by December 1 for updates made between May 1 and October 31

Filing of EOPs and Separate Weatherization Plans and Confidential Treatment. EOPs and separate weatherization plans and corresponding updates must be submitted to ERCOT electronically. Under the ERCOT Protocols, EOPs and weatherization plans are considered protected information and, as such, may not be disclosed except as permitted or required under the ERCOT Protocols.

Seasonal Weatherization Attestations. ERCOT Protocols also require seasonal weatherization attestations.

Winter attestation. By December 1 of each year, each Resource Entity must submit a declaration in the form set forth in Attachment K of ERCOT Protocols Section 22 executed by an officer or executive with authority to bind the Resource Entity attesting that all weather preparations required by the Resource Entity's weatherization plan for the winter period (December through February) are completed or will be completed. Any outstanding weather preparations must be summarized in an attachment to the attestation and a target completion date must be provided.

Summer attestation. By June 1 of each year, each Resource Entity must submit a declaration in the form set forth in Attachment K of ERCOT Protocols Section 22 executed by an officer or executive with authority to bind the Resource Entity attesting that all weather preparations required by the Resource Entity's weatherization plan for the summer period (June through September) are completed or will be completed. Any outstanding weather preparations must be summarized in an attachment to the attestation and a target completion date must be provided.

ERCOT Reports to PUCT Regarding Seasonal Attestations. ERCOT will report to the PUCT on or before January 15 of each year the names of any Resource Entities that have failed to provide a winter attestation. With respect to the summer attestation, ERCOT will report to the PUCT on or before July 15 of each year the names of any Resource

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1.3 Drills

Annual PUCT Drill Requirement for PGCs. The PUCT requires each PGC to conduct or participate in an annual drill to test its emergency procedures if its emergency procedures have not been implemented in response to an actual event within the last 12 months. If a PGC is in a hurricane evacuation zone (as defined by the Governor's Division of Emergency Management), this drill must also test its hurricane plan/storm recovery plan. A PGC can meet the requirement to conduct a drill by participating in ERCOT's annual drill.

Advance Notification to PUCT. The PUCT must be notified 21 days prior to the date of the drill. Notices can be provided by email to the PUCT employee who handles such notices or filed in Project No. 37276. The PGC must also provide 21-day notice to the PUCT staff of its intent to participate in ERCOT's annual drill and of the time and location of the drill. PUCT staff has indicated that ERCOT does not provide the PUCT notice of ERCOT's annual drill.

Post-Drill Assessment Requirement. Following the annual drills, a PGC must assess the effectiveness of the drill and modify its EOP as needed.

Texas DPS SOC Updates

Updates During SOC Inquiry or SOC-Declared Emergency. Upon request by the PUCT during a SOC inquiry or SOC-declared emergency event, affected PGCs must provide updates on the status of operations, outages, and restoration efforts. The PGC must continue such updates until all event-related outages are restored or unless otherwise notified by PUCT staff.

Post-Event Lessons Learned Report. After an emergency event declared by the Governor of the State of Texas or the President of the United States, PUCT staff may require an affected PGC to provide an after action or lessons learned report and file it with the PUCT by a date specified by PUCT staff.

PUCT Requirement for Emergency Contact Information. PUCT rules require each PGC to submit emergency contact information in a form prescribed by PUCT staff and to notify the PUCT of changes to its emergency contact information within 30 days of the change. The PUCT makes this information available to state and local emergency management coordinators upon request. The information is used to contact PGCs prior to and during an emergency event. The PUCT has additional power during an emergency involving its regulatory functions.

1.4 References

PUCT Rule § 25.53: <u>link</u>
Emergency Contact Information Portal: <u>link</u>
Click Login in the upper right-hand corner and follow the steps described.
General Information about the Texas Division of Emergency Management: <u>link</u>
General Information about SOC: <u>link</u>
ERCOT Protocols, Section 3 and Section 22, Attachments K and O: link

2.0 Introduction to Facility and Local Conditions

2.1 Facility Information



2.2 Local Weather Conditions

Weather conditions for Ennis, TX, **and the second s**



🖙 Average High 👘 Average Low 🛥 Record High 🛶 Record Low 🛥 Average Moisture (Inches)

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3.0 Purpose and Scope

3.1 Purpose

Recognizing that proper preparation and planning are essential to ensure reliability during emergencies and extreme weather conditions, this PUCT and ERCOT Emergency Operations and Weatherization Plan ("Plan") serves as Elm Branch Solar 1 's ("the Facility") Emergency Operations and Summer and Winter weather readiness program to maintain the facility's reliability and to prevent extreme weather-related events from having adverse impacts to reliability or operations.

This Plan shall be a living document, with the addition of industry best practices and lessons learned from previous severe weather events. Elm Branch Solar 1 will incorporate improvements and enhancements to the procedures herein, as appropriate, as part of an annual review and update.

3.2 Scope

This Plan is developed and implemented in accordance with the ERCOT Protocols and Public Utility Commission of Texas (PUCT) requirements. The current version of this Plan supersedes any previous versions, as of the date of last approval.

4.0 Roles and Responsibilities

This plan describes the responsibilities and activities required of various parties in preparation for the summer and winter season, including identification of severe weather events that might adversely impact operations at each Elm Branch Solar 1. The O&M Provider, as GOP for Elm Branch Solar 1, understands that LSbp Regulatory Compliance and Asset Management, with critical execution and support from the O&M Provider, play a vital role in maintaining an effective weatherization program at the facility. It is the responsibility of all personnel to exercise good judgment in the performance of this plan.

4.1 LSbp Management

Management personnel are responsible for setting expectations for safety, reliability, and operational performance; overseeing the development of this Plan (including any substantive updates based on industry best practices and lessons learned); and ensuring that this Plan is in place and implemented. LSbp's Manager, Regulatory Compliance is responsible for overseeing and coordinating all NERC, ERCOT and PUCT compliance and reporting.

The organization promotes a culture of continuous improvement, and documenting lessons learned/best practices and implementing enhanced weatherization actions after each weather event required. Per PUCT Rules, senior management with responsibility for operations (coordinated under LSbp's Manager of Regulatory Compliance) will be responsible for affirming that all relevant operating personnel of the facility are familiar with the contents of this Plan, and that such personnel are committed to following this plan except to the extent that deviations are appropriate under the circumstances during an extreme weather event.

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4.2 LSbp Asset Manager

The LSbp Asset Manager is responsible for the administration, execution and continual update of the facilityspecific plan and the overall preparation for and certifying of the facility readiness for seasonal operations. The Asset Manager oversees the day-to-day operation of the facility and serves as the "Summer/Winter Readiness Coordinator" responsible for assuring completion of the actions contained in this plan to achieve sustained reliability and availability by (i) readying the facility for possible extreme weather conditions, (ii) notifying the Onsite Personnel to take action when required readiness tasks are not being completed on schedule, and (iii) ensuring that system reviews have been completed and deficiencies have been included into the work management system such that the Asset Manager has reviewed and accepted any risks to reliability. The Asset Manager will perform an annual review of this procedure and provide input for lessons learned and update the procedure on an annual basis.

4.3 O&M Provider Onsite Personnel

The O&M Provider Onsite Personnel and all contractors under their direction are responsible for:

- coordinating with the Asset Manager to ensure that this plan is properly executed;
- conducting plant readiness reviews prior to anticipated extreme weather events;
- identifying potential risk areas due to weather conditions and opportunities to improve readiness and response; and
- conducting post event reviews subsequent to extreme weather events;
- conducting an evaluation after each summer and winter season on the effectiveness of this plan and incorporating any lessons learned.

4.4 Safety

LSbp and O&M provider personnel recognize that safety remains the top priority during extreme weather events and that safety shall not be compromised. To that end, this Emergency Operations and Weatherization Plan complements the facility's safety programs to mitigate the risks to personnel, including exposure to extreme heat and extreme cold.

Facility personnel are to identify potentially severe weather events and take action by activating relevant portions of this plan. Job safety briefings are to be conducted as needed during preparation for and in response to extreme weather events.

4.5 Critical Components and Equipment

The Onsite Personnel shall ensure all equipment and components have appropriate protection for solar facilities to ensure operability during extreme weather events and shall ensure pre-season maintenance and inspections are preformed prior to the beginning of summer and winter seasons. Without compromising employee safety, increased surveillance will be implemented prior to and maintained throughout extreme weather events

As part of its winter weather readiness and preparation, the O&M personnel will identify and prioritize critical components, equipment, and other areas of vulnerability which may experience freezing problems or other cold

weather operational issues (i.e., critical equipment or components that has the potential to cause a trip, de-rate, or failure to start due to an extreme winter weather event).

5.0 EOP and Weatherization Requirements and Procedures

The following table identifies the type of events to be addressed and the actions to be taken by the facility.

REQUIREMENT	Facility Preparation/Response
a. Plan addresses severely cold	Severe weather can negatively impact the Facility. Events and disturbances that can occur in and around the facility include but are not limited to windstorms, severe thunderstorms, flooding, tornadoes, excessive heat, excessive cold, snowstorms, and ice storms. These weather events can be detrimental to the safety of employees and/or equipment and structures at the facility.
weather and severely hot weather.	Prior to any severe weather event, O&M personnel should utilize the plans and checklists contained herein to ensure the safety of both personnel and equipment.
	After a generating plant trip, de-rate, or failure to start attributed to severe weather, O&M personnel will conduct an analysis of the events, develop lessons learned, and incorporate good industry practices during these events into revised plans, procedures, checklists, and training as appropriate.
 Plan addresses any known critical failure points, including any effects of weather design limits. 	On-site personnel will check to see if temperatures are expected to exceed the LSbp facility's design criteria. If temperatures are expected to exceed design criteria, then identify probable critical failure points. If the temperatures are not expected to exceed the LSbp facility's design criteria, there are no known critical failure points.
c. Plan addresses an emergency shortage of water.	The facility does not utilize water in its generation process.
d. Plan for identification of potentially severe weather events, including but not limited to tornadoes, hurricanes, severely cold weather, severely hot weather, and flooding.	The O&M Operator Remote Operations Center monitors weather forecasts. Based on the forecasts, the PV panels can be adjusted to minimize potential damage based on the type of severe weather. If severe weather events are forecast, Operations and Onsite Personnel will determine the needed course of action utilizing Appendix 2 Pre-Event Checklist.
e. Plan for the inventory of pre- arranged supplies for emergencies.	Prior to the onset of the winter and summer seasons and/or a severe winter weather event, O&M personnel will ensure there are adequate inventories of all critical supplies, spare parts, equipment, and consumables that would aid in keeping the plant operational during severe winter weather events and responding to these events. O&M personnel will use a dated and completed Appendix 1 as evidence that the audit of the facility's inventory was performed on an annual basis .

REQUIREMENT		Facility Preparation/Response
f. Plan that addresses staffing during severe weather events.		The Onsite Lead Technician will use professional judgement to determine staffing needs during a severe weather event. Personnel safety always takes priority during these events. If shelter-in-place is necessary, on-site personnel should seek indoor shelter
		in the substation building. Personnel should remain indoors if the severe weather is affecting the immediate area of the facility and maintain communications with the Remote Operations Center and Asset Manager.
g.	Checklists for generating facility personnel to address emergency events.	Appendix 2 Pre-Event Checklist
h.	A summary of alternative fuel and storage capacity.	Not Applicable. Solar facilities do not have the capability to utilize an alternative fuel.
i.	A plan for alternative fuel testing if the facility has the ability to utilize alternative fuels.	Not Applicable. Solar facilities do not have the capability to utilize an alternative fuel.
j.	Priorities for recovery of generation capacity.	The Facility will prioritize repairs that can be made safely and quickly, given the specifics of each event, to increase availability.
k.	A pandemic/epidemic preparedness plan.	In the event of a pandemic, LSbp Management will work with the plant operator to develop a detailed plan to address the pandemic. All Federal, state, and local mandates will be monitored and adhered to. This plan shall include the level of staffing required, modified work rules to maintain employee health and safety during the pandemic, and specific areas of concern based on the pandemic.
I.	Physical Security Event	Safety of site O&M personnel and approved visitors is a priority. Site personnel will adher to the Physical Security Controls Plan. Any incidents will be communicated to all site personnel via radio and/or cellular phone. Local law enforcement will be contacted upon detection of unauthorized entry to the site, circumvention of site physical security measures, suspicious packages/items, and/or attempted/actual damage/destruction of any site property and equipment. Site staff will notify O&M Operator Remote Operations Center and LSbp Management. Operations center will determine if this was a reportable event and coordinate reporting to regulatory agencies.
m.	Cyber Security Event	Staff will maintain an awareness of cyber security. Upon detection of a suspected or confirmed cybersecurity event, site O&M personnel will implement the Cyber Security Incident Response Plan, and review site Electronic Access Controls Plan. Site staff will notify O&M Operator Remote Operations Center and LSbp Management. Operations center will determine

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REQUIREMENT	Facility Preparation/Response
	if this was a reportable event and coordinate reporting to regulatory agencies.
n. A hurricane plan, including evacuation and re-entry procedures (if facilities are located within a hurricane evacuation zone, as defined by TDEM.	The facility is not in a TDEM ¹ hurricane evacuation zone.
o. Affidavit from an owner, partner, officer, manager, or other official responsible for the PGC's operations affirming that all relevant operating personnel are familiar with the contents of the EOP, and such personnel.	See Appendix 6

5.1 Summer and Winter Seasonal Preparation

Onsite Personnel will commence summer season reviews by May 1 annually. Evidence of preparation completion will be documented using the Summer Maintenance Review Checklist in Appendix 3. If identified maintenance is not completed at the time of the review, the expected completion date is recorded.

Onsite Personnel will commence winter season reviews by November 1 annually. The review will identify manufacturer's recommended maintenance has been completed and is documented using Appendix 4 (Winter) Maintenance Review Checklist. If identified maintenance is not completed at the time of the review, the expected completion date is recorded.

5.2 Inventory

Prior to the onset of the summer and winter season, Onsite Personnel will ensure there are adequate inventories of all critical supplies, spare parts, equipment, and consumables that would aid in keeping the plant operational during severe weather events and responding to these events.

Onsite Personnel will use a dated and completed Appendix 1 Inventory, as well as the appropriate completed Seasonal Preparation Checklist, as evidence that the audit of the facility's inventory was performed on a seasonal basis.

5.3 Extreme/Severe Weather Events

Onsite Personnel and the Generation Control Center personnel will monitor local weather conditions for other

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severe weather events, including tornado, flood, and severe thunderstorms. Based on the weather forecasts, Impact will implement the appropriate severe weather checklist to ensure generator reliability is maintained. For severe weather events likely to occur at a LSbp facility, the following actions will be taken:

Tornado or high wind alerts – Tracking systems will set per manufacturer's recommendation to reduce wind resistance.

Hailstorm – Tracking systems will be stowed at the -52 degrees position to minimize potential damage caused by hail.

Ice/Snowstorm – Similar to hailstorms, the tracking systems will be stowed to minimize expected accumulation on solar panels.

Hurricane/Flooding - The facility specific attachment will check to see if the LSbp facility is either located in a hurricane evacuation zone or located within a 100-year flood plain. If either is true, flooding may be expected to occur. If neither are true, flooding is not expected to occur. If flooding occurs on the site, Onsite Personnel will identify the areas where flooding occurred and recommend means to reduce future flooding events, as warranted, to ensure reliable operations.

5.4 Pre-Event Checklists

Appendix 2 Pre-Event Checklist will be completed prior to the forecasted temperature reaching 110° F in the summer or 0° F in the winter and/or the possibility of extreme or severe weather events listed in Section 5.3.

5.5 Post-Event and Annual Review

After each severe weather event, Appendix 5 Post-Event Review Checklist will be completed. At the start of the summer or winter season, Onsite Personnel will utilize a review process to formally recognize procedural strengths, evaluate improvement opportunities, identify corrective actions needed, and share lessons learned, which will be incorporated into this plan going forward.

Any work orders arising from the review process will also be implemented once approved as required by LSbp. All changes to these procedures and the plan must be communicated to all appropriate personnel and regulators. In addition, Onsite Personnel will identify for their management the need for any weatherization improvements that should be included for the subsequent year's budget.

5.6 Training

All relevant facility operating personnel are to be familiar with the contents and implementation of this plan. To the extent that deviations are appropriate under the circumstances during an event, implementation of the deviations should be implemented with management approval and documented for inclusion in future revisions. To that end, training will be conducted on facility-specific awareness topics to support readiness for executing and implementing summer and winter preparation. Training may include the following topics:

- Identification of the checks required on critical facility components and equipment most effected by severe summer and/or winter weather conditions.
- A review of any flood risks or concerns at the facility.
- Troubleshooting, inspections, and repairs.
- ERCOT extended weather outlook; and

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• Lessons learned from previous experiences implementing the procedures under this Emergency Operations and Weatherization Plan.

These topics can be covered either as a semi-annual review of the seasonal plan, or during a plant operations discussion. The review should walk Onsite Personnel through a hypothetical summer or winter weather event scenario (including the loss of critical equipment during a severe weather event) and to test the procedures in this plan, including a review of the appropriate roles and responsibilities of the Onsite Personnel and any contractors.

All records of attendance for the annual training, drills, or exercises involving this Emergency Operations and Weatherization Plan will be retained in the LSbp facility evidence repository.

5.7 Staffing

Onsite Personnel will consider the need for enhanced staffing at the facility, up to and including coverage on a 24x7 basis during severe weather events. Based on the determination for the needed staffing, arrangements for transportation, lodging/meals, and in-house food inventories, will be made as appropriate. Based on the operating characteristics of the LSbp Facility, Onsite Field Personnel will determine what course of action, remaining at the plant or relocating to a different location, is most appropriate. As the generator is controlled at an off-site location, it is unlikely that personnel will be required to stay at the plant for extended periods of time.

5.8 Event Communications

Onsite Personnel will ensure that appropriate communication protocols are followed during an extreme weather event.

Key communication points include the following:

- Before an extreme weather event, the Onsite Lead Technician will communicate with the Onsite Personnel, O&M Provider's control center, and LSbp corporate personnel that the site-specific weather readiness activities and preparation procedures, checklists, and reviews have been completed.
- Before and during an extreme weather event, communicate with all personnel about changing conditions and potential areas of concern to heighten awareness around safe and reliable operations.
- The O&M Provider will notify the QSE and other appropriate parties in the instance of weather conditions leading to a plant outage, shutdown, or curtailment.
- After a generating plant trip, de-rate, or failure to start due to extreme weather, operator personnel will conduct an analysis of the events, develop lessons learned, and incorporate good industry practices during these events.

A "feedback loop" will be used to enhance this severe weather readiness program, processes, procedures, checklists, and training to ensure continuous improvement.

• Job safety briefings during extreme temperatures or severe weather events will include the availability of Interpersonal Communication capability and available back-up communications options. To that end, Onsite Personnel will identify and verify the operations of all back-up communications options in case the primary system is not available.

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Appendix 1: Inventory

Date of Inventory Review:

Completed By:

For Season/Event:

ltem #	Description	Model # (if req.)	Qty. Required	Qty. On Hand	Notes
1.	Flashlights and batteries		3,6		3 flashlights & 6 battery sets
2.	Fuel reserves for ATV/Vehicle				Fuel for ATV is maintained in the fuel tank mounted in service vehicle onsite.
3.	Appropriate PPE (e.g., fire-resistant jackets and rain gear, cooling bandanas, sunscreen)				As specified in the Site-Specific Safety Plan
4.	First Aid kits fully stocked				As specified in the Site-Specific Safety Plan
5.	Verify inventory of spare parts for reliable operation of the plant for upcoming season or event.				

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Appendix 2: Pre-Event Checklist

Event Date: _____

1. Event Type:

□ Extreme Heat (Temperature forecast to reach 110°F or more)

- □ Extreme Cold (Temperature forecast to reach 0°F or below)
- □ Windstorm/Tornado
- \Box Snow/Blizzard
- 🗆 Hailstorm
- 🗆 Flood
 - 2. Review Open Maintenance Items to determine if any may be expedited (Document review using the relevant **Maintenance Review Checklist**, Appendix 3 or 4, as appropriate.)
 - 3. If Windstorm/Tornado, Snow or Hail is forecast, determine time to change angle of PV Panels to minimize potential damage.

Date/Time angle will be reset: _____ Completed \Box

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Appendix 3: Summer Preparation Checklist

Purpose

The purpose of this document is to provide guidance for preparing for hot weather operation. Actions and inspections will be made prior to the onset of hot weather operations June 1st each year and this document utilized to document the inspection and the actions taken.

Desired Outcome

Identify and prioritize components, systems, and other area of vulnerability which may experience issues when exposed to hot temperatures. This includes critical components and systems that have the potential to:

- Initiate an automatic unit trip
- Impact unit start-up
- Cause damage to the unit
- Cause other operational problems such as slowed or impaired field devices
- Create a safety hazard

Safety

Safety remains the overriding value during hot weather operations. Job Safety Assessments (JSAs) should include potential risks created by hot weather operation of the site.

Training

Coordinate annual training in weather and plant specific awareness and maintenance. This should include Heat Illness Prevention and Response training, equipment parameters that may be affected by hot weather, equipment and component inspections and remedial processes and procedures. Also include lessons learned from previous seasons with regards to events and seasonal operation.

Pre- Season Items

Activity	Response	Completed By	Date
Planni	ng and Training		
Review notification Process for inclement weather response – include field tech, control center, and owner/owner's representative			
Review process for tracking inclement weather and identify responsible personnel			
Describe or provide procedures for the likely weather scenarios (i.e., high			

ambient temperature, flooding, tornado,		
hurricane) as regionally applicable to the		
facility.		
Hold annual Heat Illness Prevention		
training prior to June 1 st		
Provide Heat Illness Response training for		
all personnel who will be working on site		
Is Heat Illness Awareness included as part		
of the Site Safety Orientation for guests		
and workers?		
Review and act on lessons learned from		
prior hot weather operation		
Review site evacuation notification		
process and evacuation procedure		
When was the Emergency Operations		
Procedure last updated?		
Does the Emergency Operations		
Procedure include an annual review? If		
so, what was the date that was		
completed?		
Identify primary and secondary		
communications process to ensure all		
involved persons are notified in the event		
of inclement weather events		
Hold and document attendance at		
summer readiness meetings on an		
annual basis to prepare for severe		
weather operation prior to June 1st,		
highlighting preparations and		
expectations		
Assign, prioritize and schedule work		
orders and summer preparation tasks		
Review summer weather scenarios		
affecting critical equipment		
Establish staff responsibilities to monitor		
weather and weather alerts and a		
communication system to notify local		
and remoter operations personnel		

Develop a list of critical instruments that		
require increased surveillance during		
severe weather events		
Employee Transportation Plan in place		
"Buddy System" to be implemented in		
cases of inclement weather		
Hold and document a summer weather		
drill highlighting a summer event such as		
extreme heat, high winds, flash flooding		
or tornado		
In	spections	
Hot Weather PPE and supplies available –		
ice vests, cooling bandanas etc.		
Ample drinking water available		
First Aid Kits inspected and refreshed		
No Broken, damaged cabinet doors and		
access panels		
All HVAC and air conditioning equipment		
serviced and available f		
Cabinet and Inverter weatherization		
intact		
Filters in good shape		
Activate plan to inspect inverter		
ventilation		
systems on a regular basis to ensure that		
they are not dirty or plugged		
Wire management – no wires hanging		
without support		
Review facility CMMS to ensure		
adequate annual preventative work		
orders exist for summer weather		
preparedness		
Check vehicles for correct maintenance		
and emergency preparation kits		
Verify adequate inventory parts and		
supplies are available		
Ensure all exterior housekeeping is in		
good order and nothing left out that		
should be discarded or covered		

Ensure adequate supply of N2 and SF6		
gas in equipment		
Verify oil levels and N2 pressures in		
transformers are appropriate for the		
actual oil temperature		
Physically verify trackers will go to full		
stow (52 or 60 degrees dependent on		
type) in preparation for forecasted		
hailstorms		
Physically verify wind monitoring systems		
are functioning and tracker systems can		
respond to high-wind events		
Verify tracker flood detection systems		
are functioning properly		

Elm Branch Solar 1 - Emergency Operations and Weatherization Plan

Appendix 4: Winter Preparation Checklist

Purpose

The purpose of this document is to provide guidance for preparing Impact Solar for winter operation. Actions and inspections will be made prior to winter operations on December 1 each year and this document utilized to document the inspection and the actions taken.

Desired Outcome

Identify and prioritize components, systems, and other areas of vulnerability which may experience freezing or other cold weather operational issues. This includes critical components and systems that have the potential to:

- Create a safety hazard
- Initiate an automatic unit trip
- Impact unit start-up
- Cause partial outages
- Cause damage to the unit
- Cause other operational problems such as delayed action of field devices

Safety

Safety remains the overriding value during winter operations and weather events. Job Safety Assessments (JSAs) should include potential risks created by cold weather operation of the site.

Training

The O&M provider will coordinate annual training in winter specific and plant specific awareness and maintenance. This should include personal safety, equipment parameters that may be affected by cold weather, equipment and component inspections and remedial processes and procedures. Annual training should also include lessons learned from previous winters and related cold weather experience.

Pre-Winter Season Checklist

Personnel Preparation

Activity	Response	Completed By	Date
Planni	ng and Training		
Review notification Process for inclement weather response – include field tech, control center, and owner/owner's representative			
Review process for tracking inclement weather and identify responsible personnel			

Describe or provide procedures for the		
likely weather scenarios (i.e., flooding,		
tornado, hurricane) as regionally		
applicable to the facility.		
Review and act on lessons learned from		
prior cold weather operation		
Review site evacuation notification		
process and evacuation procedure		
When was the Emergency Operations		
Procedure last updated?		
Does the Emergency Operations		
Procedure include an annual review? If		
so, what was the date that was		
completed?		
Identify primary and secondary		
communications process to ensure all		
involved persons are notified in the event		
of inclement weather		
Hold and document attendance at winter		
readiness meetings on an annual basis to		
prepare for severe cold weather		
operation before December 1st,		
highlighting preparations and		
expectations		
Assign, prioritize and schedule work		
orders and winter preparation tasks		
Review cold weather scenarios affecting		
critical equipment		
Develop a list of critical instruments that		
require increased surveillance during		
severe winter weather events		
Employee Transportation Plan in place		
"Buddy System" to be implemented in		
cases of inclement weather		
In	spections	
Cold Weather PPE available		
No Broken, damaged cabinet doors and		
access panels		
All cabinet heaters and desiccant		
functioning and/fresh if applicable		

Cabinet and Inverter weatherization		
intact		
Filters in good shape		
Activate plan to inspect inverter		
ventilation		
systems on a regular basis to ensure that		
they are not iced up or plugged		
Wire management – no wires hanging		
without support		
Review facility CMMS to ensure		
adequate annual preventative work		
orders exist for winter weather		
preparedness		
Inspect or install site markers in areas		
that may need to have snow plowed for		
access		
Check vehicles for correct maintenance		
and emergency preparation kits		
Verify adequate inventory parts and		
supplies are available		
Ensure all exterior housekeeping is in		
good order and nothing left out that		
should be discarded or covered		
Ensure adequate supply of N2 and SF6		
gas in equipment and associated heaters,		
if any, are operable		
Verify oil levels in transformers are		
appropriate for the actual oil		
temperature		
Ensure snow removal equipment is		
appropriately staged and in good		
working order if applicable	 	
Physically verify trackers will go to full		
stow (60 degrees) in preparation for		
forecasted hailstorms		
Physically verify wind monitoring systems		
are functioning and tracker systems can		
respond to high-wind events		

Physically verify trackers will go to full		
snow shed position in preparation for		
forecasted snowstorms		

Elm Branch Solar 1 - Emergency Operations and Weatherization Plan

Appendix 5: Post-Weather Event Review Checklist

Event Date: _____

1. Event Type:

□ Extreme Heat (Temperature reaching 110°F or more)

- □ Extreme Cold (Temperature reaching 0°F or below)
- □ Windstorm/Tornado
- \Box Snow/Blizzard
- □ Hailstorm
- 🗆 Flood
 - 2. Was the Weather Plan Implemented for this event?

		Yes (Go to	Question	3)	🗆 No
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If no, what was the reason for not implementing the plan?

3. Were any issues identified during the event, such as damage to equipment, flooding, etc. that could be addressed through improvements to the Emergency Operations and Weatherization Plan?

🗆 Yes	(Go to Question 4)) 🗆 🗆 No
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4. If responding Yes on question 3, record the issues seen and provide recommendations to address if known.

Elm Branch Solar 1 - Emergency Operations and Weatherization Plan

Appendix 6: Elm Branch Critical Equipment Matrix

Item #	Equipment Type	Manufacturer	Equipment	Weather Design Limits
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

Elm Branch Solar 1 - Emergency Operations and Weatherization Plan

ltem #	Equipment Type	Manufacturer	Equipment	Weather Design Limits
11.				

Disclaimer: Specifications may change in the event manuals are updated

Appendix 7: Distribution

Name	Title	Organization	Contact

	Document Name Elm Branch Emergency Operations and Winterization Plan					
	Issue Date			Next Review		
	Issue Date			Date		
	Issuing Authority			Content Owner		
Rev#	Revision Date		Revision Detail		Issuing	Content Owner
					Authority	

Appendix 8: Document Control Details

The following files are not convertible:

20220414 Elm Branch Solar I LLC - EOP

Executive Summary.xlsx

Please see the ZIP file for this Filing on the PUC Interchange in order to access these files.

Contact centralrecords@puc.texas.gov if you have any questions.

AFFIDAVIT

STATE OF TEXAS
COUNTY OF ELLIS §

§ §

Before me, the undersigned notary public, on this day personally appeared KEVIN SMITH, to me known to be the person whose name is subscribed to the foregoing instrument, who being duly sworn according to law, deposes and says:

"1. My name is Kevin Smith. I am over the age of eighteen and am a resident of the State of California. I am competent to testify to all the facts stated in this Affidavit, and I have the authority to make this Affidavit on behalf of Elm Branch Solar I, LLC.

2 I swear or affirm that in my capacity as Chief Executive Officer and President of Elm Branch Solar I, LLC, I have personal knowledge of the facts stated in the Emergency Operations Plan ("EOP") submitted to ERCOT and filed into Project No. 53385.

- 3. I further swear or affirm that I have personal knowledge of the facts stated below:
 - 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;
 - The EOP has been reviewed and approved by the appropriate executives;
 - Drills have been conducted to the extent required by subsection (f) of PUC Subst.
 R. § 25.53 and limited by paragraph 4 below;
 - The EOP or an appropriate summary has been distributed to local jurisdictions as needed;
 - Elm Branch Solar I, LLC maintains a business continuity plan that addresses returning to normal operations after disruptions caused by an incident; and
 - Elm Branch Solar I, LLC's emergency management personnel who are designated to interact with local, state, and federal emergency management officials during emergency events will receive the latest IS-100, IS-200, IS-700, and IS-800 National Incident Management Systems training by July, 2022.

4. Elm Branch Solar I, LLC intends to conduct a drill consistent with subsection (f) of PUC Subst. R. § 25.53 by November, 2022 and will provide notice to the Commission at least 30 days before that drill is conducted. Once that drill is conducted, Elm Branch Solar I, LLC will notify the Commission.

5. I further swear or affirm the information, statements and/or representations contained in the Emergency Operations Plan are true, complete, and correct to the best of my knowledge and belief."

Further affiant sayeth not.

Kevin Smith CEO and President Elm Branch Solar I, LLC

SWORN TO AND SUBSCRIBED TO BEFORE ME on the 14 day of April 2022.



Notary Public in and for the

Notary Public in and for the State of Texas

My Commission Expires: 3.1.24

lightsource bp

April 15, 2022

Public Utility Commission of Texas Attn: Central Records 1701 N. Congress Ave., 8-100 Austin, TX 78711-3326

COVER LETTER

Subject: Confidential Filing – Elm Branch Solar I, LLC - Emergency Operations Plan Filing

Pursuant to PUC Substantive Rule 25.53, Elm Branch Solar I, LLC is filing an emergency operations plan (EOP), executive summary, and affidavit under this section by April 18, 2022, as detailed below.

This initial filing includes:

- One (1) copy of 20220414 Elm Branch Solar I LLC PUCT Executed Affidavit
- One (1) copy of 20220414 Elm Branch Solar I LLC Emergency Operations Plan
- One (1) copy of 20220414 Elm Branch Solar I LLC EOP Executive Summary

Regards,

John P. Horishny Directory, Regulatory Compliance John.horishny@lightsourcebp.com

912.344.6699