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May 9, 2023

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

COVER LETTER

Subject: Confidential Filing - Big Sun SA1, LLC - Emergency Operations Plan Filing for PGC
Registration #20552

Pursuant to PUC Substantive Rule 25.53, Big Sun SA1, LLC is filing an emergency operations plan (EOP), executive summary, and affidavit under this section as part of the re-registering process due May 31, 2023.

This initial filing includes:

- One (1) copy of Big Sun SA1, LLC-EOP Affidavit- signed
- One (1) copy of Big Sun SA1, LLC-EOP Executive Summary
- One (1) copy of Big Sun SA1, LLC-EOP_v1



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Attn: Central Records
1701 N. Congress Ave., 8-100
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Subject: Confidential Filing - Big Sun SA1, LLC
Emergency Operations Plan Filing for PGC Registration #20552 - Affidavit

Pursuant to PUCT Substantive Rule 25.53, Big Sun SA1, LLC submits an affidavit executed by the entity's highest-ranking representative, official, or officer with binding authority over the entity affirming the below.

Rule 25.53; Filing Requirements, Section 4(C)(i-vi) Explanation of Project Construction Status

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;

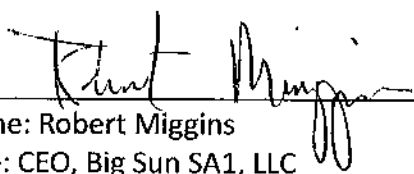
iii - Drills have been conducted to the extent required by subsection (f) of this section;

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;

vi - And 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

Reviewed and affirmed by:

By: 
Name: Robert Miggins
Title: CEO, Big Sun SA1, LLC

Executive Summary

As a registered PGC, Big Sun SA1, LLC is required to develop, maintain, and utilize (when necessary) an Emergency Operations Plan (EOP), pursuant to the requirements set forth in the PUCT Rule §25.53. Big Sun SA1, LLC 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. At all times, the most recent approved copy of the Big Sun SA1, LLC Emergency Operations Plan must be available at the Big Sun SA1, LLC's main office for PUCT inspection.

For Big Sun SA1, LLC, 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
- List of primary and, if possible, backup emergency contacts
- Affidavit stating the following:
 - 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 the rule;
 - The EOP or an appropriate summary has been distributed to local jurisdictions as needed;
 - The entity maintains a business continuity plan that addresses returning to normal operations after disruptions caused by an incident; and
 - 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
- Annexes to be included in the EOP - A Generation resource/PGC must include
 - A weather emergency annex that includes
 - Operational plan for responding to a cold and hot weather emergency, distinct from the weather preparations required under § 25.55
 - EOP, page 7 and Appendix 4
 - Verification of the adequacy and operability of fuel switching equipment, if installed; and

- It is not applicable to this site.
 - 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
 - Appendix 4
 - A water shortage annex that addresses supply shortages of water used in the generation of electricity;
 - This is not applicable to this site.
 - 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;
 - Page 8
 - A pandemic and epidemic annex;
 - Appendix 7
 - A hurricane annex that include evacuation and re-entry procedures if facilities are located within a hurricane evacuation zone, as defined by TDEM;
 - This is not applicable to this site.
 - A physical security incident annex; and
 - Appendix 6 and 8
- Drills
 - Page 5

As a registered PGC, it is Big Sun SA1, LLC's intent to fully comply with all requirements and expectations of the Public Utilities Commission of Texas.

Big Sun SA1, LLC

Emergency Operation Plan

Effective Date: 05/09/2023

Version Number: 1

Version History				
Version	Approved By	Revision Date	Description of Change	Author
1.0	R. Miggins	05/09/2023	none	J. Pittman

Big Sun SA1, LLC Emergency Operation Plan

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1. Introduction To Facilities

Big Sun SA1, LLC is a 4.785 MWac (nameplate) community solar program distributed across thirteen interconnections at eleven locations in San Antonio, Texas. The facilities were commissioned separately over 12 months while the final commercial operation date was May 27, 2021. All generation facilities are interconnected to distribution lines owned by CPS Energy. The capacity for the facilities range from 0.083MWac to 0.692MWac with CPS Energy buying all the energy through a 25 year power purchase agreement.

Big Sun SA1, LLC is the registered Power Generation Company (PGC) and serves as the asset manager for the portfolio of distributed energy generation assets.

2. Purpose

This Plan provides guidance and direction to Big Sun SA1, LLC regarding compliance with the emergency operations requirements for PGC under Chapter 25 of the Public Utilities Commission of Texas (PUCT) Electric Substantive Rules.

3. Scope

This Plan covers all in-scope Subchapter C Infrastructure and Reliability requirements. The current version of this Plan supersedes any previous versions, as of the date of last approval.

4. Training

All personnel on the asset management team managing the thirteen facilities shall receive training on this Emergency Operations Plan (EOP) whenever it is modified or on at least an annual basis. Personnel will also be trained when this plan is initially implemented. A listing of contractors and visitors with current training on this plan will be maintained.

4.1. Annual Drills

The Operation Manager will ensure that a drill of this Plan occurs annually, unless a response to an actual event has occurred in the previous calendar year. Upon completion of the drill, the Operation Manager will provide evidence of completion. The Big Sun SA1, LLC will notify PUCT staff at least 30 days before the drill with the date, time, and location of the drill.

4.2. Drill Requirements

The content of each drill will be based on current needs and will be determined by the Operation Manager. Any gaps or action items that are a result of the drill will be identified, resolved, fully documented, and filed.

5. Continual Improvement

In addition to periodic training, this plan will be reviewed and revised to ensure constant improvement addressing operational changes in conditions and lessons learned.

5.1. Annual Compliance Review

Annually, the Operation Manager will perform a detailed review and confirmation that the asset management team is following this procedure and identify areas for improvement.

5.2. Annual Improvement Plan

As part of the Annual Compliance Review, the Operation Manager will develop an Annual Improvement Plan for the following year that will address any areas of concerns as well as integrate new Industry Best Practices to the procedure.

6. Roles and Responsibilities

6.1. Operation Manager

6.1.1. Role - The Operation Manager for the Program

6.1.2. Responsibilities

6.1.2.1. Owner of the Plan

6.1.2.2. Administers the EOP for the facilities

6.2. Facility Engineer

6.2.1. Role - Daily monitoring and data review

6.2.2. Responsibilities

6.2.2.1. Provides daily monitoring and operation of the DER facilities

6.2.2.2. Provides under performance mitigation strategies as needed

6.3. Facility Technician

6.3.1. Role - On the ground daily inspection, operation and repair

6.3.2. Responsibilities

6.3.2.1. Provides inspection and repair services as needed.

7. Critical Failure Points

Personnel during an event: The Operation Manager will notify staff within a 2-hour dispatch to remain on call for response requirements as needed. This will include field technicians and engineers assigned to the DERs. Should conditions at the facility require manpower beyond the capabilities of the local staff, qualified third-party resources will be engaged as well as O&M personnel beyond the local employees.

8. Pre-Identified Supplies for Emergency Response

Big Sun SA1, LLC maintains local supply of spare solar PV modules and equipment in case of an emergency. The spare supplies are located in San Antonio, Texas and are able to be deployed within 2 hours. Spare supplies include the following:

- Solar PV modules
- Backup inverters and inverter boards
- Spare breakers
- Miscellaneous conductors and electrical balance of system

9. Severe Weather Planning and Identification

Severe weather can negatively impact the facilities. Events and disturbances that can occur in and around the facility include, but are not limited to, windstorms, severe thunderstorms, tornadoes, hail storms, hurricanes, excessive heat or cold, snowstorms, and ice storms. These weather events can be detrimental to the employees and or equipment at the facility.

After a generating plant trip or curtailment due to severe winter weather, O&M personnel are to conduct an analysis of the events, develop lessons learned, and incorporate good industry practices during these events.

9.1. Planning

Ahead of each extreme weather season, the Field Technician ensures that the EOP is reviewed, and the pre-season preparedness checklists are completed, signed, and provided to the Operation Manager. Annual review of the checklists is documented and stored in a specified database or information repository. For event response checklists extreme weather scenarios, see the appropriate Appendix included in this plan.

9.2. Events

Warnings about developing weather emergencies are tracked by desktop weather systems. These warnings should provide adequate information on the approach of weather-related emergency conditions. The Operation Manager is responsible for keeping abreast of forecasted severe weather events and reporting potential issues including::

- NOAA (National Oceanic Atmospheric Administration) channel in the O&M OCC for weather events.
- Local weather stations and alerts.
- Job site safety briefings are to be conducted prior to and following severe weather events.
- The Lead Technician ensures weather event tasks are completed according to the Plan in advance of a severe weather event.

- During an event, O&M personnel are to periodically communicate areas of concern as conditions change, prioritizing safety and then equipment critical to production.
- O&M personnel will notify CPS Energy and appropriate authorities in the instance of weather conditions leading to a plant outage, shutdown, or curtailment.

When information is received that a severe weather event such as a tornado, severely cold weather, severely hot weather, or flood watch has been issued for the facility area, the following actions shall be taken:

- The Operation Manager will notify the Facility Lead Technician
- The Operation Manager shall make a determination about whether or not the plant should be shut down due to the potential weather event(s).

The response plan to extreme cold or hot weather events is located in Appendix 4.

10. Restoration Response Time

In the event of a power outage, the site will not be able to generate solar power until an O&M representative performs an onsite site assessment or desktop review of the equipment. The target response time for this scenario is two (2) hours after weather or safety conditions permit.

11. Required Emergency Operations Plan Drill

11.1. Annual Drill

The Operation Manager will ensure that a drill of this plan occurs annually, if a response to an actual event has not occurred within the preceding calendar year.

Appendix 1: Designation of Emergency Coordinators

The Big Sun SA1, LLC Operation Manager is responsible for specific actions detailed in this plan. Alternate personnel may serve as the Facility Emergency Coordinator when necessary.

Operation Manager: Charlie Kirk

Field Technician: James Morin

Appendix 2: O&M Contact List

In the event of a fire emergency, medical emergency, police emergency or weather-related emergency, ensure that the following roles are notified after emergency responders are contacted.

Role	Name	Contact Info
Operations Manager	Charlie Kirk	210.488.1564
Lead Engineer	Katerhine Searcy	512.497.0490
Field Technician	James Morin	210.876.3331
President	Jason Pittman	210.907.3078

Appendix 3: General Emergency Procedures

General Emergency Procedures

Facility Location for Outside Emergency Responders - **Determine which facility is impacted.**

Facility	Address
Austin Highway	2735 Austin Highway, SATX 78218
Cuisine Solutions	8339 Aviation Landing, SATX 78223
Farinon	12707 Silicon Dr, SATX 78249
Cavender GMC	7400 TX-1604 Loop, SATX 78254
IHO 3	2834 W Bitters Rd, SATX 78248
Inwood	2722 W. Bitters, SATX 78248
Ridgewood	19026 Ridgewood Parkway, SATX 78259
Rush A	8922 Interstate 10 E, SATX 78109
Steves	211 New Laredo Hwy, SATX 78211
Walker Ranch	14410 Wurzbach Pkwy, SATX 78216
Windcrest	8940 Fourwinds Drive, SATX 78239

This emergency plan was developed for the following plausible contingencies that could transpire at the facility:

1. Personnel injuries and serious health conditions
2. Fires
3. Weather-related causes
4. Pandemics and Epidemics
5. Sabotage Reporting
6. Other unanticipated events

It will be the responsibility of the Field Technician to identify a developing emergency situation and initiate the appropriate actions in this plan to protect personnel, the surrounding environment, and plant equipment from adverse damages. In the event of an emergency, the following actions will be immediately performed:

If the event is a fire, medical, or police emergency, contact 911 immediately.

General Emergency Protocols

Based upon the type and extent of the emergency, the Facility Lead technician should assess whether an evacuation should be initiated. The following criteria should be considered in rendering a decision to conduct an evacuation of the facility:

1. The affected parts of the facility and severity of the emergency;
2. Restrictions in egress routes caused by the emergency; and
3. People currently located at the facility (employees, visitors/contractors, etc.).

Appendix 4: Extreme Hot or Cold Weather Plan

Preparations for Operations During Extreme Cold Weather Conditions

For severe cold weather, Big Sun SA1, LLC will identify, through inspection, areas of the generating facility that may be most vulnerable to malfunction during extreme cold events.

Big Sun SA1, LLC staff shall ensure the following:

- Big Sun SA1, LLC staff will ensure 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.

Preparations for Operations During Extreme Hot Weather Conditions

For extreme hot weather, Big Sun SA1, LLC 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.

In all cases, Big Sun SA1, LLC's staff will ensure that any electrical equipment that it owns is properly weatherized. This includes the following:

- Ensuring all breaker and transformer oil levels are adequate for that equipment manufacturer and model.
- Breaker and transformer cabinets are functioning properly

It is important, after any weather-related emergency, to analyze the performance of the generating plant, identify any equipment failures that occurred (if any), and develop an action plan to address those issues. These issues may include the following:

- A list of equipment that failed during the last cold or hot weather event must be identified and addressed. Additionally, any critical failure points identified must be

tracked through the normal maintenance processes to ensure appropriate maintenance has taken place for the identified equipment. Any facility equipment design limits that could limit generator output must be identified and addressed, to the extent possible, to ensure no interruption of operations occurs during an extreme weather event.

- Big Sun SA1, LLC's 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.
- If the facility is located in an area where flooding is expected, it is imperative to ensure entry and egress routes are hardened to the extent possible. Make sure to elevate and/or secure equipment that may be subject to being carried away by flood currents, and ensure cabinets and other fixed structures are weatherproofed to extent possible.

Appendix 5: Hail Response Plan

The Facility has a Hail Response Plan that describes measures taken at the facility to minimize the severity of, and proactively prepare for the event of an extreme hail event. If a hail event should occur at the facility, this Hail Response Plan describes the actions that should be taken by personnel.

Asset Management Personnel will schedule an on-site coordination meeting with the team after the event. They are to discuss access points, personnel points of contact and contact information.

Electrical safety, equipment voltages, currents and arc flash information, safe working distances, electrical isolation with zones of protection as appropriate are to be covered with the team to ensure safety and develop clear expectations prior to facility inspection.

The following products will be conducted to determine if the solar generation asset was damaged in the event.

1. The production monitoring software will determine if the system successfully energizes after the event.
2. Personnel will conduct a visual inspection looking for damaged solar modules or electrical equipment.
3. Drones will collect video and thermal images above the solar PV generator to identify possible equipment failures.
4. Personnel will collect thermal images of all electrical equipment to identify potential damage.
5. In response to the hail event, the Technician will need to make the following determinations:
 - a. The equipment or activities that need to be shut down and/or ceased.
 - b. Identify system repairs
6. Develop and submit an inspection report to Big Sun SA1, LLC.
7. Utilize equipment and materials (PV modules, spare inverter) in storage to repair the system.

Appendix 6: Physical Damage Response Plan

The Facilities have a Physical Damage Response Plan to mitigate and repair physical damage to the generating asset. With the Big Sun SA1, LLC facilities located in parking lots across San Antonio, occasionally cars and trucks impact the system.

If a physical damage event should occur at the facility, this Physical Damage Response Plan describes the actions that should be taken by personnel.

Electrical safety, equipment voltages, currents and arc flash information, safe working distances, electrical isolation with zones of protection as appropriate are to be covered with the team to ensure safety and develop clear expectations prior to facility inspection.

The following procedures will be conducted to determine if the solar generation asset was damaged in the event.

1. The facilities will be shut down for the inspection period.
2. Personnel will conduct a visual inspection looking for damaged solar modules or electrical equipment.
3. The damaged portion of the facilities will be electrically isolated from the rest of the facility.
4. Drones will collect video and thermal images above the solar PV generator to identify possible equipment failures.
5. Personnel will collect thermal images of all electrical equipment to identify potential damage.
6. Remove damaged equipment from the facility.
7. The undamaged portion of the facility will be energized.
8. Develop and submit an inspection report to Big Sun SA1, LLC.
9. Utilize equipment and materials (PV modules, spare inverter) in storage to repair the system.

Appendix 7: Pandemic Response Plan

Continue Business Operations During a Pandemic

In the event of a pandemic or epidemic, work absences, due to medical issues attributed to the widespread medical event, can lead to dramatic decreases in productivity, potentially leading to the shutdown of facilities. To maintain the best possible operational posture, it is imperative to communicate duties to the appropriate personnel, helping to ensure Big Sun SA1, LLC's facilities can remain operational to the greatest extent possible. In many cases, employees may log in remotely and perform their duties, fostering as much of an illness-free atmosphere as possible, however, there will be the need for onsite staff to maintain and operate facilities, leading to the identification of mission essential staff.

Big Sun SA1, LLC management will identify those mission essential individuals and will communicate tasks to them. As each case may differ, there will be no "One-size-fits-all" approach, and each response to a pandemic or epidemic will require its own set of responsible personnel and tasks. It is imperative that all possible measures are taken to keep Big Sun SA1, LLC staff from contracting or spreading the illness. Maintaining social distancing, where appropriate and possible, wearing proper PPE, and maintaining hygienic work and living spaces is crucial to combatting a widespread medical event. Depending on the nature of the event, the measures below may serve to facilitate the continued operations of Big Sun SA1, LLC facilities:

- Wearing of PPE;
 - Masks (N-95 or similar)
 - Social distancing
 - Proper hygiene
 - Eye, face, or other protection (as applicable)
- Remote work, where appropriate and possible; and
- Encourage the use of approved medications and/or vaccine(s).

Appendix 8: Threats to Facility

In the event that the site receives threatening correspondence either by phone or by other means of communications, the following actions should be performed immediately:

Actions by the person receiving the threat:

1. Gather as much information as possible from the person making the threat. If the threat is via written correspondence, place the correspondence in a location in which it will not be touched or otherwise disturbed until police can be contacted. If the threat is being made verbally (phone, or other), communicate and obtain information from the individual making the threat for as long as possible.
2. Inform the Operation Manager of the situation.

Anyone receiving the threat may consider any or all of the following actions to take in response to the threat situation, depending upon the circumstances of the threat:

1. Order an evacuation of the facility;
2. Call 911 for Police or Fire Assistance;
3. Arrange for additional security personnel for the facility; and/or
4. Commence a controlled shutdown of the facility.

Distribution List

Entity	Title
Big Sun SA1, LLC	CEO
GS Solar, LLC	President
CPS Energy	Director of Technology and Product Innovation
Big Sun SA1, LLC	Asset Management Team

Approvals

Entity	Title	Date Approved
Big Sun SA1, LLC	CEO	05/09/2023