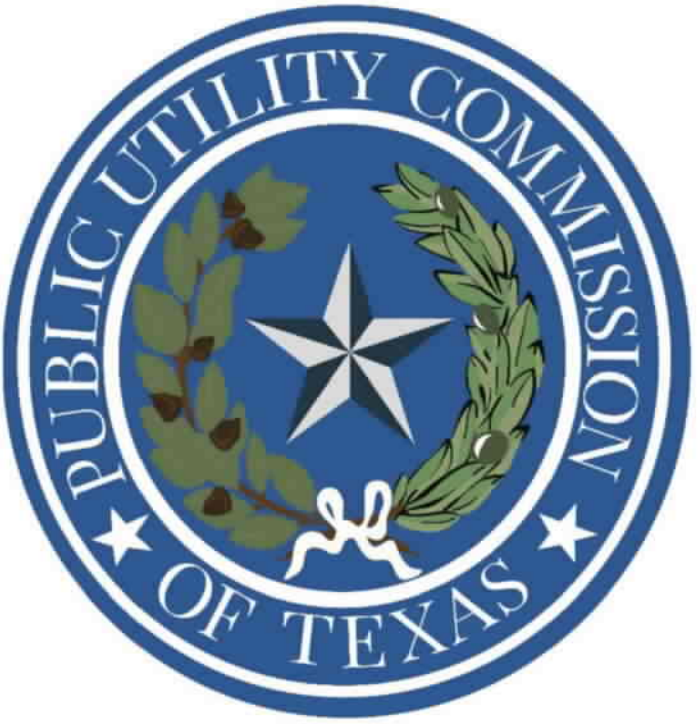


# Filing Receipt

**Filing Date - 2023-05-30 01:06:24 PM**

**Control Number - 53385**

**Item Number - 1454**

| Liberty™ | | Senate Wind Farm, LLC.<br>1065 FM 1191 N<br>Bryson, TX 76427 | |
|---|---|---|---|
| Health and Safety Form | | Doc. #: | |
| Topic | Liberty Power Emergency Operations Plan | Revision #: E | Page: 1 of 21 |
| Prepared by | EHS, Security, and Operations | Date: | March 15, 2023 |

| Revision | Date | Changes | Approved By |
|---|---|---|---|
| A | 1/23/2019 | Initial Plan | A Loudon |
| B | 8/6/2020 | Updated To include PUCT Rule change 25.53 | D Lyons |
| C | 11/1/2021 | Revised plan | N. Menchaca |
| D | 3/15/2022 | Updated to include PUCT Rule change 25.53 | N. Menchaca |
| E | 3/15/2023 | Annual Review, Updated Contacts, formatting | N. Menchaca |

This plan has been reviewed and approved by:
Nick Menchaca – Manager, Senate Wind

Nick Menchaca
Nick Menchaca (Mar 9, 2023 12:54 CST)

Josh Monroe – Site Supervisor, Senate Wind

Joshua Monroe
Joshua Monroe (Mar 9, 2023 13:02 CST)

## Table of Contents

# 1.0 Introduction (PUCT Chapter 25, Subchapter C 25.53 (c)(1)(A))

## 1.1 Executive Summary

Ensure that sites have outlined practices and have named the key parties in the occurrence of an Emergency Event. This document focuses on the communication, preparation, restoration, and guidance during an Emergency Event. All Events will be different in nature and severity. The guidance and applicability will vary, sites should use their best judgement in applying its principles. Sites will use Appendix B for site specific conditions or considerations.

## 1.2 Scope

This plan covers all assets and personnel Of Liberty Power Co at the Senate Wind Farm.

## 1.3 Site Stakeholder

**Liberty** –Owner and Operator of the facility. Liberty is made up of six departments that manage day to day operation. Operations Team handles safe, compliant, efficient operating, and project execution. Asset Performance supplies analytic based insights and actions to drive asset performance. Engineering department supplies technical support and review site projects. Asset Strategy handles the commercial management of the generation assets. Energy Services own and execute complaint market strategy for operating projects. Our compliance team is made up of a group of individuals including NERC and Environmental subject matter experts and a dedicated liaison between the groups.

**Dispatch/QSE** –Scheduling and coordinating of activities and monitoring. They are the first point of contact for directives form RC (Reliability Coordinator), BA, TOP, or TO but in case of an emergency the directives can be sent directly to site. Curtailments will be dispatched in real-time via remote monitoring service or site personnel.

**Utility** – Owner of interconnection point and how they affect the site, Voltage Regulation, Dispatch, Etc.

**RTO/ISO** – Regional Transmission Organizer/ Independent System Organizer

**Site Service Provider** – Company contracted to perform turbine and balance of plant services that include maintenance, warranty, and troubleshooting.

PUCT – Public Utility Commission of Texas

OPUC -Office of Public Utility Counsel

## 2.0 Contact Information (PUCT Chapter 25, Subchapter C 25.53 (c)(4))

| Emergency Responders - Trained in CPR/first aid/fire safety, spill response, etc. | |
|---|---|
| **Name, Position** | **24 Hour Contact Information** |
| Nick Menchaca – Liberty Site Manager | (940) 229-9092 |
| Josh Monroe – Liberty Site Supervisor | (254) 477-3170 |
| Loren Sharp – SGRE Site Manager | (215) 939-4474 |
| EZ Mares – SGRE Lead Tech | (325) 514-0489 |

| Site Contact Information | | |
|---|---|---|
| **Site Manager**<br>Nick Menchaca<br>C: (940) 229-9092/O: (940) 392-2175<br>Nicolas.Menchaca@algonquinpower.com | **Regional Operations Manager**<br>Adam Loudon<br>C: 309-428-0178<br>Adam.Loudon@algonquinpower.com | **Site Supervisor**<br>Josh Monroe<br>C: (254) 477-3170<br>Joshua.monroe@algonquinpower.com |
| **Senior EHS Manager**<br>Daniel Lyons<br>C: 940-328-2049<br>Daniel.Lyons@algonquinpower.com | **EHS Program Manager**<br>Adam Erickson<br>C:860-559-4937<br>Adam.erickson@algonquinpower.com | **Environment; Manager**<br>Anthony Jones<br>C: 365-292-0178<br>Anthony.jones@libertyutilities.com |
| **Asset Manager**<br>Atila Monteiro<br>C: 365-292-0704<br>Atila.monteiro@algonquinpower.com | **Contractor Operations Managers** | |
| | **SGRE Site Manager**<br>Loren Sharp –<br>C: (215) 939-4474/O: (940) 392-2175<br>Loren.sharp@siemensgamesa.com | **SGRE Lead Tech**<br>EZ Mares<br>C (325) 514-0489<br>Esequiel.mares@siemensgamesa.com |

| Site Address | |
|---|---|
| Office Address | 1065 FM 1191 N, Bryson, TX 76427 |
| Substation Address | 3010 FM 1191 N, Bryson, TX 76427 |

| Emergency Contacts<br>IN AN EMERENCY, DIAL 911 | | |
|---|---|---|
| **Local Law Enforcement**<br>Non-Emergency – Jack County Sherriff's Office: (940) 567-2161 | **Occupational Medical Clinic**<br>Faith Community Rural Health Clinic: (940) 282-2512<br>1005 TX-16<br>Graham, TX 76450 | **Hospital (Emergency Room)**<br>Faith Community Hospital: (940) 567-6633<br>215 Chisholm Trail<br>Jacksboro, TX 76458 |
| **Fire & Emergency Services**<br>Jacksboro Fire Dept. – 911 | **Helicopter Service**<br>911 | **Ambulance**<br>911 |
| **PUCT Hot Lines** 888-782-8477 &512-936-7000 | **Media** – Notify Wind Operations Manager or Director | **Office of Public Utility Counsel** (OUPC) 877-839-0363 & 512-936-7500 |
| **ERCOT** – 512-248-6515/3000 | **Oncor –** (214) 743-6897 | **Tenaska** – 817-462-1509 |

When calling local emergency dispatcher remain calm, speak slowly and clearly. Include the following information in your communication:

- State the facility address or turbine coordinates.
- State the type of emergency (fire, medical, etc.);
- Stay on the telephone until the responding agency releases you, answer all questions; and
- Advise the dispatcher if you need to evacuate the turbine and temporarily clear the area around the turbine.

# 3.0 Site Manager Plan Review, Approval and Implementation

(PUCT Chapter 25, Subchapter C 25.53 (d) (1))
(PUCT Chapter 25, Subchapter C 25.53 (c) (3))

The site manager has the overall responsibility for the annual review, updating as needed, implementation, distribution and submission of the plan.

3.1 The plan is to be reviewed/updated annually, no later than March 15 of each year

3.2 The plan will be submitted to PUCT and ERCOT.

If changes did not materially affect how the sites would respond to an emergency file with the commission:

A pleading that documents any changes to the list of emergency contacts.

An attestation from the company's' highest-ranking representative stating the sites did not make a change to it's EOP that materially affects how the sites would respond in an emergency.

If changes did materially affect how the sites would respond to an emergency file with the commission an executive summary that would:

Describe the changes to the contents or policies contained in the EOP

Include an updated reference to specific sections and page numbers to the EOP that correspond with the requirements of this rule

Include the record of distribution

Include the affidavit required

File with the commission a complete, revised copy of the EOP

Submit to ERCOT its revised unredacted EOP in its entirety.

3.3 The Plans internal distribution is maintained by the site manager.

3.4 The site manager is responsible for scheduling and conducting annual exercises to test the plans effectiveness.

3.5 The site manager is responsible for maintaining training records pertaining to this plan

## 4.0 Communication Plan (PUCT Chapter 25, Subchapter C 25.53 (d) (2))

To ensure minimal risk to the BES (Bulk Electric System) all communications should follow the *Liberty Power -Interpersonal Communication Protocols Rev A 032219* or *Liberty Power - Communication Protocols Rev B 040620*. Utilizing these instructions minimizes the risk of miscommunication during the operations or directives at the facility.

Communication to utility, transmission owner, qualified scheduling entity, PUCT, OPUC and to Liberty support team as soon as possible. External communications shall be tracked in the operator log and internal communications will vary depending on severity from Bazefield Redlist and emails to Unplanned Event Forms.

All media communication requests will be directed to the Wind Operations Manager US or Wind Operations Director.

## 5.0 Site Operating States

Normal – Site is connected to the grid and producing expected power. All equipment is in normal operation and producing expected power from the current wind resource.

Emergency – Site has been taken offline by the utility, transmission, or site operator for safety or equipment protection.

Curtailment – A reduction of the site's generating output which is regulated by any combination of the following: commercial pricing, reactive/active power support, grid reliability, excessive supply, or congestion.

Forced Outage – An external force that results with the site being pushed to an offline state, this could impact the entire site or a portion. This can be from control, reliability, or weather-related influences that prevent the site form working in a normal condition.

Planned Outage – An occurrence when internal or external parties consider it required for the site to come offline for maintenance or work that requires the system to be de-energized to fulfill the work scope. Outages can consist of full or partial outages from generation but may also include reactive power outage.

## 6.0 Restoration Plans (PUCT Chapter 25, Subchapter C 25.53 (d) (4))

PUCT Chapter 25, Subchapter C 25.53 (e)(2)(C))

PUCT Chapter 25, Subchapter C(2)(C))

Restoration of the facility shall only continue once the safety of all site personnel and public has been verified and restoration has no potential to be a hazard. Once safety has been proven condition of the site equipment needs to be verified. The Verification method shall consist of Engineering review of event files or field notes from the site personnel including third party contractors. If all site personnel and equipment has been inspected without signs of damage the restoration process can continue.

Prior to the Event (<7days)

- Analyze the condition of the site through Scada and forecasting tools. Figure out whether the event will push equipment outside of operating parameters.
- Notify Energy Services of event and potential impact, allowing mitigation strategies time to come together.
- Identify staffing needs to support the return to service. Ensure staffing has access to the site or housing can be met at site to allow extended stays.
- Verify Contractors have been named and proven in our system. This includes alternates and limitations of primary contractor of when another contractor is needed.
- Supplies to withstand the duration of the event has been obtained and is available at site. This should cover food, water, fuel for generators/vehicles, and any extended stay materials.
- Ensure all site inspections are up to date and action items found, have been addressed prior to any unplanned event. This includes seasonal checklists and actions coming from those inspections.
- The exterior of the facility will need to be walked down and trash should be removed. This will prevent debris and waste from exiting the grounds during an extreme event.

During the Event

- Continuously check equipment and if possible, perform field inspections keeping proper clearances from overhead and energized equipment.
- Keep Equipment is ready state. This prevents moisture build ups, reduces soaking times, and keeps turbine systems functioning.

- Analyze the faults and alarms from Scada. This should focus on tracking local and remote reset capabilities, also consideration should be made for the time taken for each of the repairs if necessary. Turbine visit plans should be formulated to bring back the most MWs prior to location of repairs. Access to turbine should also be considered for site specific physical layout. The goal of this practice is to return the most capacity back to service in the shortest amount of time in a logical manner.
- If turbine access is needed prior to event concluding (local resets), Managers should collectively review the site conditions for the safest access to the facilities. Looking for periods where equipment is accessible and plans to watch conditions for entrance and exit.
- Site manager will supply updates of the event to the site team, regional management, and supporting departments.

Post Event

- Once event concludes check for the safety of site personnel.
- Site access will be verified, and all collector lines/equipment will be inspected for any damage. Starting at the interconnections and working downstream the that point.
- Repair plans, developed during the monitoring of the event, will be implemented with the turbines with local resets addressed first, the "Quick Fix" turbines, and then the remaining turbines shall be addressed by location/ team skill set.
- Lessons Learned should be held with site management and project leads. Focusing on what went well, what could be improved upon, and who helped the site bounce back.
- All supplies used during the event should be noted and replenished at the earliest time available.

## 7.0 External Factors Annexes

(PUCT Chapter 25, Subchapter C 25.53 (e) (2))

| Event | Description/Impact | Actions/Checklists |
|---|---|---|
| Severe Cold Weather<br><br>(PUCT Chapter 25, Subchapter C, (e)(2)(A) | Turbine parameters dictate the capability of the turbine to run through cold weather events. Temperatures limit the operating functionality of the equipment. Site personnel can be put at risk with long spells of exposure to cold. | ☒<br><br>Appendix B: Senate Wind Operations Seasonal Weather checklist<br><br>-Internal and external communication plans should be identified and milestones established to report updates of the situation.<br><br>-Proper staffing should be named and briefed on the site conditions.<br><br>-Work will be completed according to the site safety manual.<br><br>-Other staffing should be sought after to supply support if climbs are limited due to temperature.<br><br>-Turbines should be placed in a ready state to return to service as quickly as possible once ambient site conditions reach turbine parameters. |
| Severe Hot Weather<br><br>(PUCT Chapter 25, Subchapter C, (e)(2)(A) | Turbine parameters dictate the capability of the turbines. Personnel have limitations during the hot weather. This could extend the duration of down towers by limiting how many can be climbed during a set period. | ☒<br><br>Appendix B: Senate Wind Operations Seasonal Weather checklist<br><br>-Internal and external communication plans should be identified and milestones |

| | | |
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| | | established to report updates of the situation.<br><br>-Proper staffing should be named and briefed on the site conditions.<br><br>-Work will be completed according to the site safety manual.<br><br>-Other staffing should be sought after to supply support if climbs are limited due to temperature.<br><br>-Turbines should be placed in a ready state to return to service as quickly as possible once ambient site conditions reach turbine parameters.<br><br>-Scheduling of work shall be such to avoid peak temperature periods to prolong the efficiency of site technicians. |
| Water Shortage PUCT Chapter 25, Subchapter C,(e)(2)(B) | Not applicable as water is not used as an energy source on Senate Wind Farm | |
| Restoration Plans PUCT Chapter 25, Subchapter C(2)(C)) | REF EOP Section 6.0 | |
| Pandemic<br><br>(PUCT Chapter 25, Subchapter C, e(2)(D) | A spreading disease that prevents personnel from meeting in groups or restricts access to sites. This Delays response times and adds other considerations when bringing in contractors to perform work. | -Internal and external communication plans should be identified and milestones established to report updates of the situation.<br><br>-Classify the needs of the business as essential workers. |

| | | |
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| | | -Having documentation readily available to keep workers in access to the site.<br><br>-Onsite teams shall remain in assigned groups to prevent multi-team exposure.<br><br>-Limit exposure from personnel and splitting shifts to allow groups to work independently of one another.<br><br>-Identification of backfill replacements regionally to allow seamless transition of workers if one falls ill during the pandemic.<br><br>-Controls in place to allow safe access to the facility.<br><br>-Ensure remote access to continue work remotely.<br><br>-All workers with any symptoms should remain offsite and be extremely conservative with the decision to return to site. |
| Hurricane<br><br>(PUCT Chapter 25, Subchapter C, (e)(2)(E) | Hurricanes have potential to bring heavy rains and damaging winds. This poses a risk to the collector system and turbines themselves. | -Internal and external communication plans should be identified and milestones established to report updates of the situation.<br><br>-Storms should be tracked through various methods to predict impact to the site. |

| | | |
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| | | -Equipment needs to be watched remotely for emergency purpose and confirm they are running to their design.<br><br>-Site staffing seek shelter once the storm hits a 30-mile radius of the site.<br><br>-Sump pumps should be available for use if needed. |
| Cyber Security Incident<br><br>PUCT Chapter 25, Subchapter C,(e)(2)(F) | This Plan applies to all LP personnel (employees, contractors, and vendors) responsible for operation, protection, and maintenance of the LP BES Cyber Systems that support the reliable operation of the Bulk Electric System (BES). All applicable LP personnel are responsible for understanding and following this Plan. | In accordance with the Algonquin Power & Utilities Corp. (APUC) Cyber Security Policy for Low Impact BCS (APUC-4000), the purpose of this Cyber Security Incident Response Plan for Low Impact BCS (Plan) is to ensure the proper identification, classification, response, communication, and reporting of Cyber Security Incidents involving Liberty Power (LP) (Algonquin Power Co.) Low Impact BES Cyber Systems and to maintain relevant documentation related to Reportable Cyber Security Incidents. |
| Physical Security Incident<br><br>PUCT Chapter 25, Subchapter C,(e)(2)(G) | This plan applies to all Liberty Power personnel (employees, contractors, and vendors) responsible for operation, protection, and maintenance of the Liberty Power BES Cyber Systems that support the reliable operation of the Bulk Electric System (BES). All applicable Liberty Power personnel are responsible for understanding and following this plan. | This Liberty Power Physical Security Plan for Low Impact BCS documents the measures to control access to 1) Liberty Power Low Impact assets or the locations of BES Cyber Assets, and the 2) Cyber Asset(s) that provide electronic access control(s) per CIP-003 R2, Attachment 1, Section 2. |
| Damaging Winds<br><br>PUCT Chapter 25, Subchapter C, (e)(2)(H) | Damaging winds can come during any of the listed events. These winds can blow debris or damage tall structures such as poles or any overhead structure. | ☒<br><br>Appendix C: Senate Wind Balance of Plant Inspection |

| | | |
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| | | -Internal and external communication plans should be identified and milestones established to report updates of the situation.<br><br>-Equipment that is loose should be tied down to structures that won't allow movement.<br><br>-Trash and materials outside should be picked up and moved indoors if possible.<br><br>-In event of a damaged equipment, secure the location, find repair parts, secure vendor, and implement repair plan. |
| Drought<br><br>(PUCT Chapter 25, Subchapter C, (e)(2)(H) | Droughts pose minimal risk to equipment and personnel. There is no equipment on site that requires water for function. Dust storms and dust from traveling vehicles impact visibility. Ground cracks pose trip hazard for field work. | -Internal and external communication plans should be identified and milestones established to report updates of the situation.<br><br>-Site Vehicles to be prepared for dusty travel conditions. Topping off windshield washer fluid, vehicle filters inspected, etc.<br><br>-Vehicles should avoid dry vegetation to prevent hot surface contact with any combustible materials.<br><br>-PPE will be available for site including googles and masks. |
| Earthquake<br><br>(PUCT Chapter 25, Subchapter C, (e)(2)(H) | Tremors from earthquakes can potentially cause issues with the structural integrity of equipment. Vibrations could lead to the shifting of equipment and uneven settling of ground-based equipment. | -Locations for staff endure the tremors are noted. Training of what to do has been reviewed at site.<br><br>-Internal and external communication plans should be identified and milestones |

| | | |
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| | | established to report updates of the situation.<br><br>-Proper PPE (Personal Protective Equipment) is available for all site personnel. Including hard hats and steels toe (or equivalent).<br><br>-Inspections of equipment and facilities for any hazards generated by the tremors or vibrations should be completed prior to entrance or operation. |
| Flooding<br><br>(PUCT Chapter 25, Subchapter C, (e)(2)(H) | Floods can damage property and washouts of access roads could be dangerous to the access of the site. | -Internal and external communication plans should be identified and milestones established to report updates of the situation.<br><br>-Roads will be kept preventing pooling on a regular basis.<br><br>-Drive safe training will be conducted with employees.<br><br>-Travel through moving flood waters is prohibited.<br><br>-Sump pumps will be readily available on site to remove water from any location believed necessary by site manager. |
| Ice Storms/ Ice Build-Up<br><br>PUCT Chapter 25, Subchapter C, (e)(2)(H) | Icing can impact a turbine's ability to produce in multiple ways. Ice can build up on the wind sensing instruments preventing an accurate reading for proper control of the turbine. Ice can form on the blades derating the output and can cause the turbine to pause through the logic of the turbine. This buildup of ice on the blade can also | -Ensure turbine are up to date with maintenance activities.<br><br>-Follow safe access protocol to the turbine. This is key is getting turbines to a ready state by visiting towers while ice is stable or away from the turbine entrance. |

| | | |
|---|---|---|
| | prevent safe access to the turbine delaying troubleshooting of faulted towers. | -Seasonal check of the turbine heaters are key in ensuring proper function of the turbine during icing events.<br><br>-Forecasting of weather is warranted to communicate the status of the site to internal and external parties.<br><br>-Establish routine inspection intervals to monitor the site conditions.<br><br>-Predict the site conditions to address turbines once the shedding has begun. This could include staffing plans that allow the turbines to address as many turbines as possible during the allotted work time.<br><br>-Complete site inspection to address and means of road access. Ensuring the are clear to perform. |
| Lightning Storms<br><br>(PUCT Chapter 25, Subchapter C, (e)(2)(H) | Lightning storms have potential of striking towers, collector equipment, and local utility equipment. | -Internal and external communication plans should be identified and milestones established to report updates of the situation.<br><br>-Storms checked using the Weather Sentry location notification system.<br><br>-Personnel should remain in doors and if working outside seek shelter at once.<br><br>-Weather Sentry Strike archive will be viewed during/after storm to show potential tower and equipment strikes.<br><br>-Site will follow blade inspection procedure following the storm. |

| | | |
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| | | -Scada events reviewed to figure out turbines affected by static or have potential lightning strikes in the area.<br><br>-Access to turbines will follow site specific lightning protocol.<br><br>-Site inspection of equipment will follow the storm and focus on the towers reflected in the report the following day or the use of weather sentry to track strikes. |
| Tornado<br><br>(PUCT Chapter 25, Subchapter C, (e)(2)(H) | Tornados pose a risk to site personnel on site as well as propose a risk to the equipment and facilities onsite. Utilities to the facility can be damaged resulting in loss of supply or line constraints. | -Internal and external communication plans should be identified and milestones established to report updates of the situation.<br><br>-Storm shelter is free and accessible. Also stocked with supplies to ensure comfort while event lasts.<br><br>-Turbines are watched during storm for proper behavior and response for the site ambient conditions.<br><br>-Single point of failures have been reviewed for collector system.<br><br>-Contractors named to respond to any above ground equipment damage.<br><br>-Turbine visits are not prohibited during tornado warnings, but work shall be limited to as needed visits. |
| Utility Outage | Loss of power to the facility and Substation. Loss of visibility to the park control could be affected. | -Internal and external communication plans should be identified and milestones |

| | | |
|---|---|---|
| PUCT Chapter 25, Subchapter C, (e)(2)(H) | | established to report updates of the situation.<br><br>-Back up power supply is available and fuel to run is adequate.<br><br>-Alternate communication and data sourcing have been proven for RTO/ISO and utilities. |
| Serial Defect<br><br>PUCT Chapter 25, Subchapter C, (e)(2)(H) | For any component that sees repetitive failures or part failures that pose a risk to damaging equipment and leads to potential safety risks. | -Internal and external communication plans should be identified and milestones established to report updates of the situation.<br><br>-Root cause analysis should be highest priority in understanding the failure.<br><br>-Manufacturer guidance will be followed for stoppage and replacements.<br><br>-Engineering feedback will be sought after to aid in the RCA (Root Cause Analysis) and remedial actions.<br><br>-Materials should be sourced for all components affected and alternate vendor to be found if needed.<br><br>-Warranty claims should be named and communicated to Asset Strategy for proper notices and tracking. |
| | | |
| | | |

## 8.0 Inventory (PUCT Chapter 25, Subchapter C 25.53 (d) (3))

Single Point of Failure- An inventory list shall be kept current of all components found on the site grounds. Vendors should be named which will support gathering more materials failures occurring in case of an outage.

Emergency Supplies – Any materials needed to support the site; this includes fuel, housing, food, water, tools, batteries, specialty vehicles, etc.

Turbine repair parts – Service provider shall keep on hand frequently used parts and identify trending failures for seasonal consumption. Parts should be readily available and in good condition for the use in the return to service plan.

## 9.0 Training (PUCT Chapter 25, Subchapter C 25.53 (C)(4))

Emergency response plan will be reviewed during orientation and annually thereafter for site personnel. Operating personnel will be familiar with and have received training on the applicable contents and execution of the ERP, and such personnel are instructed to follow the applicable portions of the ERP except to the extent deviations are appropriate as a result of specific circumstances during an emergency.

## 10. Contractor Engagement

A list of vendors supplying services to the site shall be included in Appendix A. The list will have the company, point of contact, contact information, and scope of services they would supply to address an operational emergency. (Ref Appendix A)

## 11. Affidavit for Receipt of Emergency Response and Operations Plan

This page is to be printed out and supplied to any site personnel working at Senate Wind Farm either directly for, or an agent of Liberty Power, Vestas, SGRE, or any other applicable organization conducting business on site. This complete document should be shown and explained in detail to such personnel as part of the site induction process. A signed copy of this form is to be stored by Liberty Site Management for all personnel that have received such training.

I _____ have been supplied with the Senate Wind Farm Emergency Operations Plan and corresponding procedures, policies, and plans. I agree to make Liberty Site Management aware of any questions or concerns I have related to this document.

Liberty Power Site Management

Employee

_____ _____

_____ _____

_____ _____

Appendix A

Contractor List

| Contact | Person | Number | Reason to Call/ Scope |
|---|---|---|---|
| Loren Sharp | SGRE Site Manager | 215-939-4474 | Turbine Issues |
| EZ Mares | SGRE Lead Tech | 325-514-0489 | Turbine Issues |

## Appendix B

Senate Wind Operations Seasonal Weather Checklist

## Appendix C

Senate Wind Balance of Plant Inspection

# Liberty Wind Ops Emergency Operating Plan Senate 3 15 23

Final Audit Report 2023-03-09

| | |
|---|---|
| Created: | 2023-03-09 |
| By: | Keith Jenkins (keith.jenkins@algonquinpower.com) |
| Status: | Signed |
| Transaction ID: | CBJCHBCAABAAX8qu8ejm_MbPgbVj9X3RfqfiQrs-5z5l |

## "Liberty Wind Ops Emergency Operating Plan Senate 3 15 23" History

Document created by Keith Jenkins (keith.jenkins@algonquinpower.com)
2023-03-09 - 6:36:35 PM GMT

Document emailed to nicolas.menchaca@algonquinpower.com for signature
2023-03-09 - 6:40:01 PM GMT

Email viewed by nicolas.menchaca@algonquinpower.com
2023-03-09 - 6:53:41 PM GMT

Signer nicolas.menchaca@algonquinpower.com entered name at signing as Nick Menchaca
2023-03-09 - 6:54:37 PM GMT

Document e-signed by Nick Menchaca (nicolas.menchaca@algonquinpower.com)
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Document emailed to joshua.monroe@algonquinpower.com for signature
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Signer joshua.monroe@algonquinpower.com entered name at signing as Joshua Monroe
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Document e-signed by Joshua Monroe (joshua.monroe@algonquinpower.com)
Signature Date: 2023-03-09 - 7:02:41 PM GMT - Time Source: server

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Senate, TX (Wind) / Liberty Renewables

Search: Ask Genny

"Inspection Tool"
Print Format Checklist

**Checklist:** Wind Balance of Plant Inspection

**Summary**

| | | | |
|---|---|---|---|
| **ID#** | | **Organization** | Liberty Renewables |
| **Site** | Senate, TX (Wind) | **Facility** | All |
| **Building/Vehicle** | All | **Inspection Type** | |
| **Inspection Date** | | **Checklist Introduction** | The Balance Of Plant (BOP) Audit Form is used to insure areas outside of the wind turbines and around the site are being kept up to APCO standards.<br><br>Please complete the following checklist in Yes/No format. If the question is not applicable to your site, select 'N/A'. If 'YES' is selected there is no issue and is in good working order. If you select 'No' as an answer indicate 'why' by adding a finding in the finding section.<br><br>Please add photos where you can to allow for a reference point for findings.<br><br>Export the finding if necessary, to the Action Tracking System using the Gensuite Guidance Document as a guide. |

**Comments**

NA

**1.0 O+M Building - exterior**

| Question | NA | Yes | No | Findings/Comments |
|---|---|---|---|---|
| 1.1: Is the access road/parking area in good condition? Has the grass been cut, snow removed, ice salted or sand dusted (please base response on season)? | ○ NA | ○ Yes | ○ No | |
| 1.2: Are all gates/locks in good condition and in working order? | ○ NA | ○ Yes | ○ No | |
| 1.3: Are all warning signs present, visible and legible? Is the site project sign posted and updated with current contact information? | ○ NA | ○ Yes | ○ No | |
| 1.4: Is the exterior of the building in good condition and in good working order? (siding, steel, paint, roof, gutters, windows, doors) | ○ NA | ○ Yes | ○ No | |
| 1.5: Is the outdoor lighting clean and in working order? | ○ NA | ○ Yes | ○ No | |
| 1.6: Is the Storm shelter clean, free from damage and is the storm safety kit present and stocked? | ○ NA | ○ Yes | ○ No | |
| 1.7: Is the backup generator operational? Oil level and Coolant level OK? Date of last operation test? Total hours?<br>Guidance:<br>In the comments record total runtime in hours and date of last test. | ○ NA | ○ Yes | ○ No | |

**2.0 O+M Building - interior**

| Question | NA | Yes | No | 🔗 | Findings/Comments |
|---|---|---|---|---|---|
| 2.1: Are the compliance posters present, visible and legible? | ◯ NA | ◯ Yes | ◯ No | | |
| 2.2: Are safety alerts. close calls and minutes posted? | ◯ NA | ◯ Yes | ◯ No | | |
| 2.3: Is the inside of the building clean and organized? | ◯ NA | ◯ Yes | ◯ No | | |
| 2.4: Is all of the lighting clean and in working order? Are the Emergency lights in working order? | ◯ NA | ◯ Yes | ◯ No | | |
| 2.5: Is the visitor and site sign in and out sheet being utilized properly? Is the site ERP and emergency exits posted? | ◯ NA | ◯ Yes | ◯ No | | |
| 2.6: Are the Emergency contacts and site presonel phone numbers posted and up to date? | ◯ NA | ◯ Yes | ◯ No | | |
| 2.7: Are the Fire extinguisher/s, AED/s, Eye wash station/s and First Aid kit/s inspected, not expired, and are they accessible? | ◯ NA | ◯ Yes | ◯ No | | |
| 2.8: Are the site operating procedures, diagrams, and maps accessible and up to date? | ◯ NA | ◯ Yes | ◯ No | | |
| 2.9: Is the warehouse neat and organized? Does the site utilize the 5s system? | ◯ NA | ◯ Yes | ◯ No | | |
| 2.10: Is the site SDS inventory up to date and accessible? Do the SDS and Flammable cabinets have the inventory posted and up to date? | ◯ NA | ◯ Yes | ◯ No | | |
| 2.11: Is the site SPCC plan up to date and are the inspections being completed? | ◯ NA | ◯ Yes | ◯ No | | |

**3.0 Substation - exterior and surroundings**

| Question | NA | Yes | No | 🔗 | Findings/Comments |
|---|---|---|---|---|---|
| 3.1: Is the Substation free of weeds and grass? | ◯ NA | ◯ Yes | ◯ No | | |
| 3.2: Is the outside lighting clean and in good working order? | ◯ NA | ◯ Yes | ◯ No | | |
| 3.3: Is fencing in good condition and grounded? | ◯ NA | ◯ Yes | ◯ No | | |
| 3.4: Are warning signs present, legible and visible? | ◯ NA | ◯ Yes | ◯ No | | |
| 3.5: Are all locks, gates and doors in good working order? | ◯ NA | ◯ Yes | ◯ No | | |

**4.0 Site Access Roadways**

| Question | NA | Yes | No | 🔗 | Findings/Comments |
|---|---|---|---|---|---|
| 4.1: Are roadway gates closed, locked and free of damage? | ◯ NA | ◯ Yes | ◯ No | | |

| Question | NA | Yes | No | 🔗 | Findings/Comments |
|---|---|---|---|---|---|
| 4.2: Are all the site roadway ditches and catch basins clean and in good working order? | ◌ NA | ◌ Yes | ◌ No | | |
| 4.3: Are all site roadways free of washouts and in good driveable condition? | ◌ NA | ◌ Yes | ◌ No | | |
| 4.4: Are all site warning signs, speed limit signs, turbine addresses and nomenclature posted and up to date? | ◌ NA | ◌ Yes | ◌ No | | |
| 4.5: Have all the site roadways had vegetation control or been plowed or salted for snow and ice? (depending on the season) | ◌ NA | ◌ Yes | ◌ No | | |

**5.0 Met Tower/s**

| Question | NA | Yes | No | 🔗 | Findings/Comments |
|---|---|---|---|---|---|
| 5.1: Is the met tower fence locked, free of damage and in good working order? | ◌ NA | ◌ Yes | ◌ No | | |
| 5.2: Is the met tower back up source in good working order? If back up source requires maintenance, Is that maintenance up to date? | ◌ NA | ◌ Yes | ◌ No | | |
| 5.3: Are all the met tower cabinets locked, free of damage or defects, and free of rodents? | ◌ NA | ◌ Yes | ◌ No | | |
| 5.4: Is the Met tower communicating with scada? If so are all functions and sensors working correctly? | ◌ NA | ◌ Yes | ◌ No | | |
| 5.5: Is the Day time and Night time aviation lights working? (Daytime strobe and Night time red flashing lights) | ◌ NA | ◌ Yes | ◌ No | | |

**6.0 Junction Boxes**

| Question | NA | Yes | No | 🔗 | Findings/Comments |
|---|---|---|---|---|---|
| 6.1: Are all site junction box/s free of defects, cracks or damage? Are they locked and is the locking metinism in good working order? | ◌ NA | ◌ Yes | ◌ No | | |
| 6.2: Do all junction boxes have IR windows? If so has an annual IR inspection been done? | ◌ NA | ◌ Yes | ◌ No | | |

Senate, TX (Wind) / Liberty Renewables

Search: Ask Genny

## Inspection Tool

*Print Format Checklist*

**Checklist:** Wind Operations Seasonal Weather Checklist

**1.0 General**

| Question | NA | Yes | No | | Findings/Comments |
|---|---|---|---|---|---|
| 1.1: Have events from the previous seasonal period been reviewed and appropriate lessons learned applied? | ◌ NA | ◌ Yes | ◌ No | | |
| 1.2: Has Emergency Response Plan for personnel safety been updated and review with site personnel for the affected seasonal period? | ◌ NA | ◌ Yes | ◌ No | | |
| 1.3: Have Contact lists for the site been updated? (Utility, dispatch, site, balancing authority) | ◌ NA | ◌ Yes | ◌ No | | |
| 1.4: Does the site have sufficient emergency supplies in the building and in the storm shelter? | ◌ NA | ◌ Yes | ◌ No | | |
| 1.5: Has the site back up generator or battery back up been tested for functionality? | ◌ NA | ◌ Yes | ◌ No | | |
| 1.6: Has planned outages been communicated to all entities to ensure reliability? | ◌ NA | ◌ Yes | ◌ No | | |
| 1.7: Are restoration plans in place to recover from a unplanned outage and all site personnel aware of these plans? | ◌ NA | ◌ Yes | ◌ No | | |

**2.0 Site Access**

| Question | NA | Yes | No | | Findings/Comments |
|---|---|---|---|---|---|
| 2.1: Are all site vehicles prepared for seasonal weather and up to date on maintenance? | ◌ NA | ◌ Yes | ◌ No | | |
| 2.2: Are all vehicles equipped with emergency supplies and tools? | ◌ NA | ◌ Yes | ◌ No | | |
| 2.3: Is equipment or contractors identified to support access to the site and equipment? | ◌ NA | ◌ Yes | ◌ No | | |

| Question | NA | Yes | No | 🔗 | Findings/Comments |
|---|---|---|---|---|---|
| 2.4: Are site access roads maintained to allow proper travel and all hidden hazards removed? | ◌ NA | ◌ Yes | ◌ No | | |
| 2.5: Has all site personnel reviewed the safe access procedures for the seasonal encounters? | ◌ NA | ◌ Yes | ◌ No | | |

**3.0 Collector System**

| Question | NA | Yes | No | 🔗 | Findings/Comments |
|---|---|---|---|---|---|
| 3.1: Is substation up to date with monthly inspection? | ◌ NA | ◌ Yes | ◌ No | | |
| 3.2: Are all cabinet doors and junction boxes sealed and verified that latches are functioning properly? | ◌ NA | ◌ Yes | ◌ No | | |
| 3.3: Are all heaters and fans working? Are they set to appropriate operational mode with set points? | ◌ NA | ◌ Yes | ◌ No | | |
| 3.4: Has all SF6 equipment pressure levels checked and reviewed against temperature corrected value? | ◌ NA | ◌ Yes | ◌ No | | |
| 3.5: Has single point of failure inventory | ◌ NA | ◌ Yes | ◌ No | | |
| 3.6: Have all junction boxes been inspected for being locked, properly sealed, and exterior in suitable condition free from damage? | ◌ NA | ◌ Yes | ◌ No | | |

**4.0 Turbine**

| Question | NA | Yes | No | 🔗 | Findings/Comments |
|---|---|---|---|---|---|
| 4.1: Has SCADA been reviewed for alarms and warnings of turbines that would cause temperature related shutdown? If any conditions exist has an action plan been developed to address deficiencies? | ◌ NA | ◌ Yes | ◌ No | | |
| 4.2: Has temperature regulating equipment been verfied and appropiate set point is active? | ◌ NA | ◌ Yes | ◌ No | | |
| 4.3: Is the exterior venting equipment operating as intended? | ◌ NA | ◌ Yes | ◌ No | | |

| Question | NA | Yes | No | 🔗 | Findings/Comments |
|---|---|---|---|---|---|
| 4.4: All maintenance records reviewed and fluid levels are in the acceptable range? | ◌ NA | ◌ Yes | ◌ No | | |
| 4.5: Did the results of a spot check of machines indicate that thermostats reflect the approiate set point of the machines? | ◌ NA | ◌ Yes | ◌ No | | |

**AFFIDAVIT**

Resource Entity: Senate Wind LLC (RE)

Generation Resource or Energy Storage Resource: SENATEWD-UNIT 1

I affirm I am an official or officer with binding authority over the Resource Entity identified above

I affirm the following items related to the requirements of §25.53 Electric Service Emergency Operations Plans;

1) 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;
2) The EOP has been reviewed and approved by the appropriate executives;
3) Drills have been conducted to the extent required;
4) The EOP or an appropriate summary has been distributed to local jurisdications as needed;
5) The entity maintains a business continuity plan that addresses returning to normal operations after disruptions caused by an incident; and
6) 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.

Signature: 

Signatory Name: Adam Loudon

Title: President