




# Emergency Action Plan


## Document Change Log

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1	All	Updated to be RTO neutral	5/31/2022


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**1. Introduction**

The purpose of Orsted’s Emergency Action Plan is to address how Orsted Onshore will respond to an emergency. The first priority in responding to an emergency is to ensure the health, safety and well-being of employees and members of the public and to mitigate any potential environmental impacts. Our next priority is ensuring reliable operation to support continuity of electric service. In the event of a major disaster, the Emergency Action Plan describes the responsibilities and initial actions which will occur.

**2. Scope of Application**

It is a requirement that each employee review the Emergency Action Plan upon initial assignment and when the plan changes, those parts of the plan that the employee must know to protect themselves in the event of an emergency. In addition, the written plan shall be made available for employees to review and plan for their evacuation at all times.

**3. Maintenance and Implementation**

The following individuals will be responsible for maintenance and implementation of the Emergency Action Plan:

- The Regional Director, Asset Operations is responsible for maintaining the Emergency Action Plan for all sites within the region of responsibility.
- The Regional Director, Asset Operations and Asset Managers are allowed to modify the Emergency Action Plan.
- The Plant Manager at the affected site is responsible for implementing the Emergency Action Plan with the support of the Asset Manager and Regional Director, Asset Operations.

**4. Legislative & Regulatory**

The Occupational Safety and Health Administration established a requirement for employers to provide an Emergency Action Plan (29 CFR 1910.38).

Public Utilities Commission of Texas established a requirement for public utilities to provide an Emergency Operations Plan in accordance with Order 25.53.

**5. Definitions & Acronyms**


**Cybersecurity Incident** - A malicious or suspicious act that compromises or disrupts a computer network or system that could foreseeably jeopardize the reliability or integrity of the RTO’s System or RTO’s ability to perform the functions of an independent organization under the Public Utility Regulatory Act (PURA).

**EAP** – Emergency Action Plan

**Emergency Assembly Area** – Predetermined area employees should meet after an emergency evacuation of the building.

**Inputs** – Documents and information specifically for the site which the Emergency Action Plan is developed for.

**Muster Point** – Designated area where all employees, guests, or visitors on the work site, or a large crowd can assemble in case of an emergency.

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**Operations Center** – Center which is manned on a 24/7 basis and serves as a 24-hour point of contact for all site emergencies, especially those which may occur outside of normal operating hours. Responsible for remote operation of facility in the event that the site cannot be physically staffed due to emergency conditions.

**Outputs** – Activities, documents to aid in maintaining the Emergency Action Plan up to date.

**Plant Manager** – Refers to the Orsted appointed on-site representative responsible for overseeing activities of the OEM Site Manager.

**OEM Site Manager** – Refers to the individual responsible for maintaining reliability of wind turbines and balance of plant.

**Regional Operations Manager** – Refers to the Orsted appointed manager responsible for all operational oversight in the state in which the project is located.

**Scheduling Entity (QSE)** – Refers to the Real-time desk that serves as the primary point of contact with the Reliability Coordinator and Balancing Authority.

**Site Map** – Document which can contain information such as evacuation routes, color coding, legend, handicapped accessible exit locations, fire extinguisher locations, fire alarm locations, first aid kits, oxygen tanks, PPE locations, AED locations, spill kit location, severe weather safe rooms, emergency phone numbers, and muster point.

## 6. Overview

### 6.1 Objective

It is impossible to provide specific information for all situations and there is no guarantee implied by this plan that a perfect response to disaster emergency incidents will be practical or possible. Therefore, this plan is meant to only be a guide for employees and a document to help them to familiarize themselves with basic emergency planning, response, and evacuation.

### 6.2 Inputs

- Site Map
- Emergency contact numbers
- Emergency response facilities
- Site emergency response team

### 6.3 Outputs


- Notification to emergency management services
- Documented coordinated simulations
- Notification to supervisor
- Emergency Events Checklist

## 7. Planning

### 7.1 Pre-Planning

Proper planning and preparation will increase the margin of safety in an emergency. To evacuate successfully, the site shall ensure the following:

- Record and maintain a daily log of all site visitors and site personnel
- Train employees on EAP and actions to take when assisting others

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- Inform employees about how/who to communicate with in case of an onsite emergency
- Identify employees with specific needs
- Employees should know evacuation routes from every room. The following information should be marked on the evacuation maps.
  - Emergency and accessible exits
  - Evacuation routes
  - Location of fire extinguishers
  - Fire alarm pull station location
  - Inclement severe weather shelter location
  - Location of Emergency Assembly Area
- Ensure all site personnel are retrained on Emergency Action Plan revisions.
- Plan training exercises to test evacuation plan annually.
- Designate a Site Emergency Response Team.
- Ensure adequate supplies are available for emergency response.


**7.2 Communication**

In the event of an emergency, the following communications guidelines will be observed:

- Regional Operations Manager will be responsible for coordinating communications with the media, as well as any remote offsite entities, including but not limited to: the commission, local and state governmental entities, officials, and emergency operations centers.
- Plant Manager will be responsible for coordinating communications with any local onsite entities, including but not limited to: the commission, local and state governmental entities, officials, and emergency operations centers.

**7.3 Staffing and Responsibilities**

- The Operations Center will be responsible for the following:
  - Monitoring turbine and BOP reliability
  - Troubleshooting and recovering faulted turbines or faulted inverters as necessary
  - Notifying the OEM Site Manager of any observed reliability events
- The Plant Manager will be responsible for the following:
  - Oversight of all contractors and plant personnel
  - Coordinating the recovery of generating capacity, in the following order:
    - Recovery of any impacted BOP and substation facilities
    - Recovery of any impacted communications
    - Recovery of any individually faulted wind turbines or faulted inverters
- The Site Emergency Response Team will be responsible for the following:
  - Instructing personnel on their duties
  - Assessing nature and extent of all emergencies
  - Assuming initial control of all emergency actions until local emergency personnel arrive
  - Directing all initial emergency actions
  - Assigning tasks to personnel to carry out specific actions
  - Ordering evacuation, if deemed necessary

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Site Emergency Response Team:

Primary Emergency Manager: Plant Manager  
 Emergency Response Team Member: Regional Operations Manager

**7.4 Inventory of Emergency Supplies**

- On a quarterly basis, Plant Managers will complete inventories of emergency supplies using Attachment 2, Emergency Supply Checklist, and guidance from FEMA or other applicable state or federal agencies.

**7.5 Training and Drills**

- Assigned personnel shall be trained on how to assist others in the proper evacuation of the building.
- Employees shall be informed on the Emergency Action Plan.
- Annual drills will be performed to test the Emergency Action Plan.

**7.6 Disabilities**

An employee with a disability is responsible for informing his/her immediate supervisor that he/she will require assistance during an evacuation. It is important not to assume that persons with obvious disabilities need assistance, or to assume what type of assistance they may need.


**7.7 Evacuations**

- A map of evacuation routes will be displayed throughout site buildings. Each map will show the way to the exit, depending on where employees are located. It will be the responsibility of the Emergency Manager to inform employees of these evacuation routes. The Emergency Manager shall verify that maps are in place and up to date during site inspections.
- Muster Points will be established to account for individuals (See Attachment 4)
- The Emergency Manager will contact all visitors listed in the Visitors Log and Contractors Managers/Leaders to ensure all personnel are accounted for.
- In the event an employee is unaccounted for and cannot be reached via radio or cell phone, Emergency Medical Services and the Local Sheriff's Department must be notified immediately.

**7.8 Restoration of Service**

In the event that a generation resource fails to start or trips offline due to a hazard or threat, the below process will be used to return to normal operations:

- The operations center will call the OEM Site Manager and the QSE.
  - The QSE will notify RTO and TOP.
- The OEM Site Manager will notify the HV team and investigate the event:
  - Determine whether there is a hazard or threat present on site.
  - Pull event files to supplement investigation
    - If a hazard or threat is present on site, event files will be pulled remotely
- OEM Site Manager will determine whether it is safe to close breakers based on investigation (breakers cannot be closed from remote location).

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- In the event that there is damaged equipment in the substation, further investigation into long term recovery will continue.
- If a hazard or threat is present, the OEM Site Manager and all associated personnel will remain offsite until the hazard is gone.

## **8. Event Response**

### **8.1 Medical Emergencies**

See Attachment 4 for First Aid Kit locations.

#### **8.1.1 Injury or Illness on the Ground**

- In the event of an injury/illness requiring medical treatment, employees shall contact the Emergency Manager immediately and describe the location and severity of the injury.
- The Emergency Manager shall dial **911** and coordinate rendezvous points with Ambulance service and site personnel. Rendezvous points shall generally be at the site of the injury. However, if Emergency Responders are unable to locate the site, the O&M Building will serve as a rendezvous point. (Note: multiple personnel may be required to lead both EMT first responders and then follow-on emergency vehicles to the injured location.)
- Call an onsite person trained in CPR and First Aid to provide the assistance prior to the arrival of the professional medical help.
- In rendering assistance to personnel exposed to hazardous materials, consult the Safety Data Sheet and wear the appropriate personal protective equipment. Attempt first aid **ONLY** if trained and qualified. Call **911** and refer to Hazardous Substance Section of this document.
- Document treatment and event using Attachment 1, Emergency Events Checklist.


### **8.2 Rescue Plan – Working at Heights**

The rescue plan must be reviewed and included in any job safety analysis or pre-task planning for activities that require working at heights. The rescue plan shall provide for prompt rescue of personnel in the event of a fall or shall assure that they are able to rescue themselves.

#### **8.2.1 Self-Rescue**

If the person working at heights has been properly selected and trained on their fall protection equipment, at minimum, the following steps should be performed:

- The rescue and descent device will be secured to an anchor that is rated for at least 5,000 lbs.
- Individual will be capable of controlling descent speed with descender which is attached to chest D ring.
- In the case of a fall event:
  - Remove all components of fall arrest system impacted by the fall event from service,
  - Document (bag and tag) the components with name, date and activity at time of fall, and

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- Provide equipment to management.

### 8.2.2 Assisted rescue with mechanically aided system

If self-rescue is not possible, then an Assisted Self-Rescue will be needed. The following guidelines should be used during a mechanically aided rescue:

- The rescue and descent device will be secured to an anchor that is rated for at least 5,000 lbs.
- The haul line may be swung over or lowered to the fallen worker, who will grab the rescue lifeline snap hook and secure it to the appropriate D-ring on his body support. A positive connection to the D-ring must be verified by one of the rescue team members.
- The rescue team will raise or lower the fallen employee to the appropriate work platform or ground and provide medical aid.
- Remove all components of fall arrest system impacted by the fall event from service and document (bag and tag) the components with name, date, and activity at time of fall, and provide equipment to management.

### 8.2.3 Fully Assisted Rescue


If the worker's injuries prevent the worker from attaching to the rescue system, both self-rescue and assisted self-rescue are not options, and a fully assisted rescue is necessary:

- The rescue and descent device will be secured to an anchor that is rated for at least 5,000 lbs.
- A rescue team member must attach the haul line to the worker's fall arrest system. This can be performed by accessing the fallen worker and then attaching the rescue system directly to a D-ring on the worker's harness, or by using a rescue pole for the attachment. The rescue team could also attach a rescue grab to the lanyard or vertical lifeline.
- The rescue team must raise or lower the fallen worker to the appropriate work platform or ground and provide medical aid as required by OSHA.
- Remove all components of fall arrest system impacted by the fall event from service and document (bag and tag) the components with name, date, and activity at time of fall and provide equipment to management.

## 8.3 Fire Procedures

### 8.3.1 Building Fire

- Verbally warn employees in the immediate area and activate alarm (if not an automatic alarm) upon discovery of smoke or fire. The signal for a building wide evacuation will be the sound of the fire alarm. All employees are required to evacuate the building.
- Dial **911** to report the fire to the authorities.
- Give your name, address with closest major intersection and type of emergency.

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- Stay on the line with dispatcher until all necessary information has been given.
- Before opening a door, touch it near the top to see if it is hot. A fire on the other side could blast through the smallest opening with tremendous force and heat. **DO NOT OPEN A HOT DOOR.**
- Use stairways. When out, move away from the building to the **PRIMARY MUSTER POINT (secondary if primary is compromised)** for a head count. You should be at least as far out from the building as it is high. Leave walks and drives open for fire and emergency responders.
- Notify firefighters if you suspect someone may be trapped inside the building.

**8.3.2 Grass, Brush Fires**


- In the event of an unattended grass, brush, or field fire, employees shall contact the Emergency Manager with the exact location and size of the fire.
- The Emergency Manager shall dial **911** or local emergency response and coordinate with the notifying employee to lead firefighting equipment to the fire.
- All areas within the vicinity or downwind of the fire must be evacuated immediately of all personnel, to avoid entrapment, vehicle damage and smoke inhalation injuries.
- Employees will be notified by radio or cell phone of the plant entrance at which to rendezvous with the fire department, if needed.
- The Emergency Manager will assist the Fire Department in contacting homeowners in the area, if necessary.
- Employees shall, at no time, attempt to extinguish or "fight" a large brush or grass fire. The employee's role is to notify the Emergency Manager and lead Fire Department to the scene.

**8.3.3 Turbine Fire**

- The circuit must be de-energized as soon as possible if the fire is suspected of being caused by the electrical system.
- Do not allow any personnel within the vicinity of the fire.
- If fire should occur while employees are present, employees shall abandon all tools and equipment and immediately evacuate the area.

**8.3.4 Substation and Electrical Facilities Fire**

- In the event of a fire inside a substation, employees shall notify the Emergency Manager with the location and source of the fire.
- The Emergency Manager shall dial **911** or local emergency contacts and coordinate with the reporting employees to lead firefighting equipment to the location of the substation.
- If requested, the Emergency Manager will assist the Fire Department in requesting landowners that live near or downwind of the fire to evacuate until an all clear is given.
- The site should be shut down immediately and all substation breakers open to de-energize the substation.

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- Contact the Transmission Operator to notify them of the Emergency Outage and request de-energization of any incoming power to the substation.
- Once a Clearance and Lockout Tagout (LOTO) has been established, EMS should be briefed on the dangers of exploding equipment and toxic fumes from batteries.
- For a BESS fire, refer to Attachment 3 for the BESS Emergency Response Plan.
- Transformers and capacitors contain flammable combustible material. All personnel must remain in safe areas away from these explosive sources and upwind to avoid smoke exposure.

**8.4 Cybersecurity Incidents**

Site personnel shall use the Ørsted Onshore Cyber Security Incident Response and CIP Exceptional Circumstance Procedure when responding to a Cybersecurity incident. Steps to address cybersecurity incidents in the Cyber Security Incident Response and CIP Exceptional Circumstance Procedure include:

- Taking safety actions as necessary (e.g., alert on-site personnel, contact law enforcement)
- Escalating to internal technical personnel to investigate and remediate the incident
- Coordinating operational actions with Reliability Coordinator and Transmission Operator
- Coordinating with appropriate internal parties to classify incident and complete required incident reporting
- Coordinating with appropriate internal parties to identify next steps for containing and mitigating the Cybersecurity Incident

**8.5 Physical Security Incidents**


Site personnel shall use the Ørsted Onshore Cyber Security Incident Response and CIP Exceptional Circumstance Procedure when responding to a physical security incident. Steps to address physical security incidents in the Cyber Security Incident Response and CIP Exceptional Circumstance Procedure include:

- Taking safety actions as necessary (e.g., alert on-site personnel, contact law enforcement)
- Coordinating operational actions with the Reliability Coordinator and Transmission Operator
- Coordinating with appropriate internal parties to classify the incident and complete required incident reporting
- Evaluating if the physical security incident resulted in a Cybersecurity Incident

**8.6 Pandemic and Epidemic**

Defined as outbreak (local or widespread) of virulently communicable disease which threatens the ability of the company to operate at acceptable levels.

Orsted personnel shall follow Orsted’s COVID-19 Standard Operating Procedure that contains guidance to ensure safe and healthy workplace. The Standard Operating Procedure includes guidance and requirements for office access, site access, and isolation and quarantine.

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### 8.6.1 Emerging Pandemic and Epidemic Threats

On-Site Response Teams: Each Orsted location or facility shall have an on-site Emergency Response Team that has initial responsibility for responding to emergencies and potential crises that occur at Orsted locations and, determining whether the situation warrants designation as a crisis and notification of the Crisis Management Team. On-Site Emergency Response Team members are listed in Section 7.3 of this Plan.


Below are examples of a few scenarios Orsted could ask you to assess:

- Significant reduction in staff
- Primary location compromised or unavailable
- Supply chain challenges
- Products and customers
- Collaboration and travel

### 8.7 Biological, Radiological, Explosive, Chemical (BREC) Threat

The threat that a bomb/BREC has been planted is usually made via telephone. In the majority of cases, these threats have been provided to be false and no device or material was located. However, the potential for loss of human life and property is so great that each situation must be pursued and evaluated. A calm response to the bomb threat caller could result in obtaining additional information.

- **Telephone Threat**
  - Remain Calm
  - Attempt to keep the caller on the line as long as possible by asking the caller to repeat the message. Record words spoken (as many words as possible) by the person and use the telephone threat checklist below:
    - Ask for the exact location where threat has been or is going to be planted.
    - Get as much information as possible about the caller (i.e., vocal characteristics, sex, group affiliation, reason)
    - Listen for clues from background noises which might indicate caller's location or area which call was placed.
  - Immediately after the caller hangs up, report the threat to **911** and your supervisor.
    - Remain available as law enforcement personnel will want to interview you.
    - Wait for further direction from your supervisor.
    - Do not spread rumors.
- **Written Threat**
  - Remain calm.
  - Avoid unnecessary handling in order to preserve possible fingerprint(s), handwriting or typewriting paper, and postal marks. These will prove essential in tracing the threat and identifying the writer.
  - While written messages are usually associated with generalized threats and extortion attempts, a written warning of a specific device may occasionally be received, it should never be ignored.

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- Immediately contact local authorities and report to immediate supervisor.
- Wait for further instructions.
- Do not spread rumors.

- **Suspicious Package:**

- If a suspicious package or device is found, immediately notify the appropriate law enforcement authorities.
- Do not shake or empty contents of any suspicious package or envelope.
- Put the package or envelope down on a stable surface, do not sniff, touch, taste or look closely at it or at any contents that may have spilled.
- Alert others in the area but DO NOT use the fire alarm.
- Leave the area. Close any doors and assemble outside the room's entrance.
- Do not allow anyone to reenter the area.
- Wash hands with soap and water to prevent spreading potentially infectious material to face or skin.
- If possible, create a list of persons who were in the room or area when the suspicious letter or package was recognized and a list of persons who also may have handled it.

- **Hazardous Substance**

See Attachment 4 for the location of Spill Containment Equipment, Safety Data Sheets, and the SPCC Plan.

A separate Spill Prevention, Control and Countermeasures Plan (SPCC) has been developed to address spills in detail. Refer to the SPCC for more detailed instructions regarding spill prevention and response.

Should the spill be too extensive to be resolved using the available spill kit, then the spill should be contained as far as is practicable and the site's environmental contract should be contacted to resolve the situation.


The spill should be reported to the National Response Center (NRC) and the State:

NRC: 1-800-424-8802

State: See SPCC Plan for reporting requirements.

The following information will be required when reporting the incident:

- Clear identification of the location of the spill.
- Substance involved in spill
- Approximate quantity spilled
- Approximate concentration of the spilled material, if appropriate
- The source of the spill
- Individuals cleaning the spill
- Any damaged resources, if applicable
- Contact information
- If spill left site or reached any water

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## 9. Severe Weather Response

### 9.1 Severe Weather Event Identification


Severe weather warnings are commonly forecasted days in advance by the National Weather Service. Orsted will monitor forecasted severe weather in relation to its generation Facilities to identify potential impacts to personnel safety and operational reliability.

### 9.2 Emergency Action Plan Activation

If Orsted identifies any potential impacts to personnel safety or operational reliability due to severe weather, the Site Emergency Response Team will coordinate to determine if and when the Emergency Action Plan should be activated. The Emergency Response Team is responsible for activating the Emergency Action Plan and communicating activation status to site personnel and the Asset Manager.

### 9.3 Tornado or Severe Thunderstorm Procedures

- **Severe weather events may have negative impacts on equipment and BOP facilities.** Safeguards against severe weather include:
  - Lightning arresters to ground lightning strikes in substations
  - Lightning protection systems in solar arrays to ground strikes and protect integrity of the equipment
  - Lightning protection systems in wind turbine blades to ground strikes and protect integrity of the blade
  - High wind speed cut-out parameters, allowing the turbine to pitch blades and yaw the nacelle out of the wind in the event that wind speeds meet or exceed 25 m/s.
- **Prevention and practice before the storm:** Turn on local TV, radio or NOAA Weather Radio and stay alert for warnings.
  - Tornado or Thunderstorm Watch: Weather conditions are favorable for the possible development of tornados or severe thunderstorms. Continue normal activities and have someone monitor the situation and notify others if conditions deteriorate.
  - Tornado or Thunderstorm Warning: A tornado or thunderstorm is occurring or sighted in the area. In addition to dark clouds and/or hail, the emergency siren may sound.
  - Ensure personnel are aware of the location of tornado shelters. See Attachment 4 for Tornado Shelters.
- **Know the warning signs of a tornado:** Weather forecasting science is not perfect, and some tornadoes do occur without a tornado warning. There is no substitute for staying alert to the sky. Besides an obviously visible tornado, here are some things to look and listen for:
  - Strong, persistent rotation in the cloud base.
  - Whirling debris on the ground under a cloud base. Note, tornadoes do not always have a funnel.
  - Hail or heavy rain followed by either dead calm or a fast, intense wind shift. Many tornadoes are wrapped in heavy precipitation and cannot be seen.
  - Day or night – Loud continuous roar or rumble

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- Night – Small, bright, blue-green to white flashes at ground level near a thunderstorm (as opposed to silvery lightning up in the clouds). These mean power lines are being snapped by very strong wind, maybe a tornado.
- Night – Persistent lowering from the cloud base, illuminated or silhouetted by lightning – especially if it is on the ground or there is a blue-green-white power flash underneath.
- **Turbines:** Employees working in turbine nacelles, upon issuance of a tornado watch or warning within the outer ring shall descend and exit the turbine immediately or seek shelter in the base of the tower as appropriate. If any of the tornado warning signs are observed, employees shall take cover in low lying areas and not attempt to drive to a building.

*After a tornado has passed through the area and an all clear has been given, employees shall regroup at the Primary Shelter Location.*

- **Inside a building:**  
Go immediately to the Tornado Shelter. Go to the basement, lowest floor, small center room (like a bathroom or closet), under a stairwell, or in an interior hallway or room with no windows. Go to the center of the room. Stay away from corners because they tend to attract debris.
- **If you are in a vehicle:** Park the car as quickly and safely as possible – out of the traffic lanes. Get out and seek shelter in a sturdy building. If in the open country, run to low ground away from any cars (which may roll over on you). Lie flat and face down, protecting the back of your head with your arms. Avoid seeking shelter under bridges, which can create deadly traffic hazards while offering little protection against flying debris.
- **In the open outdoors:** If possible, seek shelter in a sturdy building. If not, lie flat and face down on low ground, protecting the back of your head with your arms. Get as far away from trees and cars as you can; they may be blown onto you in a tornado.
- **After a Tornado:** Wait for emergency personnel to arrive. Carefully render aid to those who are injured. Stay away from power lines and puddles with wires in them as they may still be conducting electricity. Watch your step to avoid broken glass, nails, and other sharp objects. Stay out of any heavily damaged houses or buildings as they could collapse at any time. Do not use matches or lighters, in case of leaking natural gas pipes or fuel tanks nearby. Remain calm and alert and listen for information and instructions from emergency crews or local officials.

#### **9.4 Lightning**

- No personnel are permitted in or near a turbine during and after a lightning storm, until an all clear has been given by the Emergency Manager.
- An automated warning will be issued to the site when the lightning is detected within the outer ring. All crews, contractors and visitors will be notified that lightning has been detected within the outer ring and a tower evacuation may be required.

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- If the storm is fast moving and the site is in the path of the storm, the evacuation should begin immediately.
- Each crew must acknowledge the warning by radio or cell phone. Also, crews should monitor the area themselves upon notification because many lightning strikes go undetected by the monitoring services.
- A stand down notification will be issued when lightning is detected within the inner ring of the site. Upon notification, crews will stop work, acknowledge the notification by radio or cell phone, evacuate the turbine and return to the O&M Building.
- The stand down will remain in effect until the site has received an “All Clear”.
- All site personnel must notify the Emergency Manager of any lightning in the area.


**9.5 Extreme Cold or Hot Weather**

**9.5.1 Extreme Cold or Hot Weather Operational Response**

- In the event that the Reliability Coordinator or Balancing Authority issues a Weather Advisory (SPP); Operating Condition Notice (ERCOT); or Hot Weather, Cold Weather or Severe Weather Alert (MISO) related to extreme cold or hot weather conditions, the following guidance will be applied:
  - Conduct an all-hands meeting with relevant site personnel prior to the weather arriving.
  - Evaluate ongoing outages to determine if the resource can be returned to service for the weather event.
  - Evaluate scheduled outages to determine if planned work can be deferred and the outage rescheduled until after the weather event.
  - Confirm 24/7 availability of the operations center to monitor and remote troubleshoot turbines for the duration of the event.
  - Emphasize to operations center the need to monitor turbine and inverter performance and communicate derates in an expeditious manner.
  - A site evacuation should be issued if conditions could restrict travel from the site. Get personnel home before dangerous travel conditions are present (extreme cold weather).
  - Ensure backup generators are tested and filled with fuel where generators are in use.
  - Verify no HVAC related alarms present in control house or BESS Facilities, as applicable to the site.
  - Verify location and response time for high-voltage personnel to respond to any events in the substation.
- Document completion of activities using the checklist in Attachment 5. Record any identified issues to be included as lessons learned for future events.

**9.5.2 Site Personnel Safety (Hot Weather)**


- Hot weather can present various risks; therefore, the following guidance will be applied:
  - If indoors:

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- Stay indoors as much as possible while site maintenance does not necessitate outdoor work.
- Eat and drink. Salty foods and fluids prevent dehydration, cramping, and heat-related illness. Water or sports drinks are better than caffeinated beverages.
- Wear loose-fitting, lightweight, moisture-wicking clothing, if available.
- If outdoors:
  - Cover all exposed parts of the body to avoid sun overexposure/burn.
  - Notify someone of your current position and estimated time of arrival.
  - If confusion or disorientation occurs, seek shade, fluids, and medical attention as those are the initial signs of heat exhaustion.
  - If in a vehicle:
    - Notify someone of your location and status.
    - Idling motor may lead to fire risk given that extreme hot weather generally coincides with dry grasses.
    - Stay hydrated – before leaving buildings, ensure there is plenty of drinking water available in vehicle.

**9.5.3 Site Personnel Safety (Cold Weather)**


- In the event that site personnel are not able to evacuate, the following guidance will be applied:
  - If indoors:
    - Stay indoors and do not attempt travel.
    - Stay calm and await instructions from the National Weather Service.
    - Eat and drink. Food provides the body with energy and heat. Fluids prevent dehydration.
    - Wear layers of loose-fitting, lightweight, warm clothing, if available.
  - If outdoors:
    - Find a dry shelter. Cover all exposed parts of the body.
    - Use caution while driving in low visibility. Notify someone of your current position and estimated time of arrival.
    - If stranded in a vehicle:
      - Stay in car or truck.
      - Notify someone of your location and status.
      - Run motor to turn heater on 10 minutes out of every hour and make sure to open the window a little for fresh air.
      - Check the tailpipe before turning on heater – a blocked tailpipe can send carbon monoxide into the vehicle and cause death.
      - Make yourself noticeable to rescuers (hazard lights or honk horn).
      - Stay hydrated – if no water is available, melt snow and drink.

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- Exercise to keep blood circulating and to keep warm.
- Icing Conditions
  - If there are concerns of icing conditions at the beginning of the work shift, an overview of the weather and possible icing conditions shall be discussed and shared to all personnel.
  - If shedding of ice is observed in the area, personnel should not attempt to work on equipment. Personnel should remain in a safe location and contact site management immediately.
  - Work will be halted if equipment has any ice attached.
  - All site personnel are responsible for notifying the Site Manager of possible icing on the equipment in the scheduled work area.

## 9.6 Hurricane


- **Hurricanes may have negative impacts on equipment and BOP facilities.** Safeguards against hurricanes include:
  - Lightning arresters to ground lightning strikes in substations.
  - Lightning protection systems in solar arrays to ground strikes and protect integrity of the equipment.
  - Lightning protection systems in wind turbine blades to ground strikes and protect integrity of blade
  - High wind speed cut-out parameters, allowing the turbine to pitch blades and yaw the nacelle out of the wind in the event that wind speeds meet or exceed 25 m/s
  - Wind stow functionality on solar sites to protect the modules and minimize wind impact to equipment and facilities.
- **Prevention and practice before the storm:** Turn on local TV, radio or NOAA Weather Radio and stay alert for warnings.
  - Hurricane Advisory: Information released approximately every 6-12 hours when a hurricane exists providing current hurricane location, strength of storm, and expected direction of travel.
  - Hurricane Watch: Communication from NOAA issued when a hurricane is between 24 and 48 hours from making landfall on the US coast.
  - Hurricane Warning: Communication from NOAA issued when a hurricane is between 12 to 24 hours from making landfall on the US coast and is issued to areas approximately 50 miles to either side of the expected location of impact. The warning may also describe where high water, floods, or high waves can be expected.
  - Tie down all trailers and connexes, board up windows, check operation of and fuel supply for portable generators, and secure or store any loose equipment on site. Expect low-lying areas to flood and plan accordingly.
  - Boom down any cranes on site in anticipation of high winds.
  - Should a warning be issued indicating the hurricane path will likely involve the facility, plan to evacuate farther inland away from the coast. See Attachment 6 for Hurricane Evacuation Routes if applicable.
- **Know the warning signs of a hurricane:** While hurricane path predictions are not perfect, sufficient warning is normally provided to allow for at least

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72 hours of preparation and planning should an evacuation become necessary.

- Know the difference between hurricane watch and hurricane warning
- Note the increasing severity in hurricane categorization (1 to 5) equating to increasing wind speeds (74 to 155+ mph winds).
- Hail or heavy rain followed by either dead calm or a fast, intense wind shift may occur. Most hurricanes are wrapped in heavy precipitation and involved massive amounts of debris being lifted airborne.
- At night, be aware of small, bright, blue green to white flashes at ground level (as opposed to silvery lightning up in the clouds). These mean power lines are being snapped by very strong winds.

- **Turbines:** Employees working in turbines, upon issuance of a hurricane watch, shall exit the turbine and confirm site plans/instructions for hurricane preparedness of the equipment.
- **Solar arrays:** Employees working in solar arrays, upon issuance of a hurricane watch, shall exist the solar arrays and confirm site plan/instructions for hurricane preparedness of the equipment.
- **Inside a building (if evacuation is not possible):**  
Go to the Tornado Shelter. Go to the basement, lowest floor, small center room (like a bathroom or closet), under a stairwell, or in an interior hallway with no windows. Go to the center of the room. Stay away from corners because they tend to attract debris. Be aware of water potentially entering the structure and should that occur, move to higher point within the building to avoid flooding.
- **After a Hurricane:** Wait for emergency personnel to arrive. Carefully render aid to any who may be injured. Stay away from power lines and standing water with wires in it as they may still be conducting electricity. Watch your step to avoid broken glass, nails, and other sharp objects. Stay out of any heavily damaged houses or buildings as they could collapse at any time. Do not use matches or lighters, in case of leaking natural gas pipes or fuel tanks nearby. Remain calm and alert and listen for information and instructions from emergency crews or local officials. Flooded areas should be avoided as the unknown depths of the water could pose a drowning risk.
- **Re-entry Following a Hurricane:** Due to the immense size of hurricanes, it may be several days following an evacuation before re-entry is possible. Prior to attempting to re-enter evacuated areas, sufficient supplies of drinking water, non-perishable food items, and fuel should be sourced and transported into the area as these items are likely to be scarce. Plant personnel should check with local officials and news sources to determine whether road access is possible, being careful to avoid any flooding areas due to the risk of drowning in unknown depths. Downed power lines in or near standing water should also be avoided as they may still be conducting electricity. When on site and on foot, personnel should be aware of storm debris, being careful to avoid broken glass, nails, and other sharp objects. Personnel should also expect animal displacement and the

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increased potential presence of dangerous animals including snakes and spiders. Stay out of any heavily damaged hours or buildings as they could collapse at any time. Do not use matches or lighters, in case of leaking natural gas pipes or fuel tanks nearby. Remain calm and alert and listen for information and instructions from emergency crews or local officials.

## 9.7 Flooding


Flooding can occur as a result of either long-term, sustained participation or short-term intense weather events.

- **If ordered to evacuate:**
  - Time permitting, turn off the gas, electricity, and water and move vital materials and equipment to higher ground.
  - Disconnect appliances to prevent electrical shock when power is restored.
  - DO NOT attempt to drive or walk across creeks or flooded roads.
- **Driving Flood Facts:**
  - Six inches of water will reach the bottom of most passenger cars causing loss of control and possible stalling.
  - A foot of water will float many vehicles.
  - Two feet of rushing water can carry away most vehicles including sport utility vehicles (SUVs) and pickups.
- **After a Flood:**
  - Listen for news reports to learn whether the community's water supply is safe to drink.
  - Avoid floodwaters; water may be contaminated by oil, gasoline, or raw sewage. Water may also be electrically charged from underground or downed power lines.
  - Avoid moving water.
  - Be aware of areas where floodwaters have receded. Roads may have weakened and could collapse under the weight of a car.
  - Stay away from downed power lines and report them to the power company.
  - Return home only when authorities indicate it is safe.
  - Stay out of any building if it is surrounded by floodwaters.
  - Use extreme caution when entering buildings; there may be hidden damage, particularly in foundations.
  - Service damaged septic tanks, cesspools, pits, and leaching systems as soon as possible. Damaged sewage systems are seriously health hazards.
  - Clean and disinfect everything that got wet. Mud left from floodwater can contain sewage and chemicals.
  - Drive site roads to evaluate any damage and schedule repairs.


## 9.8 Earthquake

An earthquake usually occurs without any type of warning. Due to the suddenness, all personnel should attempt to get under a table or desk. After the earthquake has stopped, initiate the following procedure:

- **Indoor Safety:**

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- If an earthquake strikes, you may be able to take cover under a heavy desk or table. It can provide you with air space if the building collapses. If you get under a table and it moves, try to move with it.
  - Inner walls or door frames are the least likely to collapse and may also shield against falling objects. If other cover is not available, go to an inner corner or doorway, away from windows or glass panels.
  - Stay away from glass, hanging objects, cabinets with doors that could swing open, bookcases, or other large furniture that could fail.
  - Grab something to shield your head and face from falling debris and broken glass.
  - If the lights go out, use a battery-operated flashlight. Don't use candles, matches, or lighters during or after the earthquake. If there is a gas leak, an explosion could result.
  - If you are in the kitchen, quickly turn off the stove and take cover at the first sign of shaking.
- **Performing work in a wind turbine:**
    - Stay inside the turbine but avoid standing below openings where objects could fall from above. Move away from the front of any open electrical panels.
    - Quickly take a look around the work area for heavy equipment, construction or maintenance in process, as materials may fall, tip over, or collapse in the area. Stay clear.
    - Immediately move away from electrical hardware or panels, or
    - If outside in a wind plant during an earthquake and closely adjacent to overhead objects such as turbines or met towers, immediately move farther away if possible and be cognizant of the need to avoid falling objects.
- **Performing work in the field:**
    - Stay clear of equipment but avoid standing below openings where objects could fall from above. Move away from the front of any electrical panels.
    - Quickly take a look around the work area for heavy equipment, construction or maintenance in process, as materials may fall, tip over, or collapse in the area. Stay clear.
    - If outside during an earthquake and closely adjacent to overhead objects, immediately move farther away if possible and be cognizant of the need to avoid falling objects.
- **Automobiles:**
    - If you are in a moving automobile, stop as quickly and safely as possible and move over to the shoulder or curb, away from utility poles, overhead wires, and under overpasses.
    - Stay in the vehicle, set the parking brake, and turn on the radio for emergency broadcast information.
    - A car may jiggle violently on its springs, but it is a good place to stay until the shaking stops.
- **After the Earthquake:**

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Once the initial shock is over, calmly walk out of the area to the site’s Emergency Assembly Area. Be prepared for additional earth movements called “aftershocks”. Although most of these are smaller than the main earthquake, some may be large enough to cause additional damage or bring down weakened structures.

- **Checking Utilities:** An earthquake may break gas, electrical, and water lines. If you smell gas:
  - Open windows
  - Shut off the main gas valve
  - Do not turn any electrical appliances or lights on or off
  - Go outside
  - Report the leak to authorities
  - Do not reenter the building until a utility official says it is safe to do so.
  
- **Other Precautions:**
  - Check to see if sewage lines are intact before using bathrooms or plumbing.
  - Do not touch downed power lines or objects in contact with downed lines. Report electrical hazards to the authorities.
  - Immediately clean up spilled medicines, drugs, flammable liquids, and other potentially hazardous materials.
  - Stay off all telephones except to report an emergency. Replace telephone receivers that may have been knocked off by the earthquake.
  - Cooperate fully with public safety officials. Respond to requests for volunteer assistance from police, firefighters, emergency management officials, and relief organizations, but do not go into damaged areas unless assistance has been requested.


## 9.9 Water Shortage

The purpose of this section is to help develop short-term water shortage response plans. A water shortage can be any situation in which water supply is inadequate to meet demand. Causes of water shortages are:

- Drought
- Water contamination
- Inadequate planning to meet demand
- Shallow wells
- Inadequate pumping equipment
- Water waste
- Water outage due to loss of power or major service disruption

The frequency or cause of a water shortage may indicate the best way to overcome it. Droughts are temporary, but often recur. Thus, depending upon drought frequency, a solution to the problems created by drought may be reducing demand or augmenting supply.

Water contamination can put a water supply out of commission permanently. In this case, a new source of supply may be warranted.

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**Step 1: Problem Assessment**

- a. Assess your demand and supply situation.
- b. Determine if you are likely to have a water shortage.

**Step 2: Options for Dealing with a Water Shortage**

- a. Develop and clarify policies regarding ways to address potential water shortages.
- b. Consider a wide range of options for dealing with a water shortage (including demand reduction and supply augmentation options.)
- c. Evaluate and select a course of action that is consistent with your policies.

**Step 3: Plan Implementation**

- a. Establish a schedule for implementation of your program.
- b. Determine the total cost of your program.
- c. Monitor the effectiveness of your program.


**10. Rule 25.53 Applicability (for ERCOT projects)**

The following sections of Rule 25.53 do not apply to Orsted’s Facilities:

- 1. (d)(2)(A) – This section of the rule is applicable to transmission or distribution service operations. Orsted does not own or operate any transmission or distribution service operations.
- 2. (d)(2)(C) – This section is applicable to Retail Electric Providers. Orsted is not a Retail Electric Provider.
- 3. (d)(2)(D) – This section is applicable to ERCOT.
- 4. (d)(6) – This section is applicable to transmission and distribution facilities. Orsted does not own or operate any transmission or distribution facilities.
- 5. (e)(3)(A) through (E) – This section is applicable to Retail Electric Providers. Orsted is not a Retail Electric Provider.
- 6. (e)(4)(A) through (F) – This section is applicable to ERCOT.


**11. Attachments**

- 11.1 Emergency Events Checklist
- 11.2 Emergency Supply Checklist
- 11.3 BESS Emergency Response Plan
- 11.4 Emergency Locations
- 11.5 Extreme Hot or Cold Weather Response Checklist
- 11.6 Hurricane Evacuation Route (if applicable)

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**Attachment 1 – Emergency Events Checklist**

Emergency Events Checklist	
Site	Date
Job description	
Contacts	Rescue Equipment (if applicable)
Rescue Team	Respirators:  Fire extinguisher:  Communication devices:  Rescue/descent kit:
Emergency Contacts	
EMS	First Aid Kit  AED
Fire Dept	Spec pak
	Additional information
Emergency Manager	
SSC	


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**Attachment 2 – Emergency Supply Checklist**

Date
Performed By


Inventory No.	Item Description	Quantity	Location	Satisfactory
1	Cot	3		Y <input type="checkbox"/> N <input type="checkbox"/>
2	Cot blankets	3		Y <input type="checkbox"/> N <input type="checkbox"/>
3	Flashlight	2		Y <input type="checkbox"/> N <input type="checkbox"/>
4	MREs	3 packs of 12		Y <input type="checkbox"/> N <input type="checkbox"/>
5	AAA batteries	1		Y <input type="checkbox"/> N <input type="checkbox"/>
6	Commercial tote	2		Y <input type="checkbox"/> N <input type="checkbox"/>
7	Current evacuation maps	Throughout Site Buildings		Y <input type="checkbox"/> N <input type="checkbox"/>
8	Current Emergency Action Plan (Hardcopy)	1		Y <input type="checkbox"/> N <input type="checkbox"/>
9	Current Cyber Security Incident Response Plan (Hardcopy)	1		Y <input type="checkbox"/> N <input type="checkbox"/>
10	Current Event Reporting Operating Plan (Hardcopy)	1		Y <input type="checkbox"/> N <input type="checkbox"/>

Signature
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**Attachment 3 – BESS Emergency Response Plan**

Not Applicable

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**Attachment 4 – Emergency Locations**

**Muster Points**

	Primary	Secondary	Inclement Weather
Badger	TBD	TBD	TBD

**Tornado Shelters**

	Primary	Secondary
Badger	TBD	TBD


**First Aid Kit Locations**

Badger	TBD

**Hazardous Substance Equipment / Documentation**


Facility	Spill Containment Equipment	Safety Data Sheets	SPCC Plan
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**Attachment 5 – Extreme Hot or Cold Weather Response Checklist**

<b>Plant Manager</b>		
<b>Applicable Sites</b>		
<b>Activity</b>	<b>Event Applicability</b>	<b>Date Completed</b>
Conduct an all-hands meeting with relevant site personnel prior to the weather arriving.	Extreme Hot and Cold Weather	
Evaluate ongoing outages to determine if the resource can be returned to service for the weather event.	Extreme Hot and Cold Weather	
Evaluate scheduled outages to determine if planned work can be deferred and the outage rescheduled until after the weather event.	Extreme Hot and Cold Weather	
Confirm 24/7 availability to monitor and remote troubleshoot turbines for the duration of the event.	Extreme Hot and Cold Weather	
Emphasize to operations center the need to monitor turbine and inverter performance and communicate derates in an expeditious manner.	Extreme Hot and Cold Weather	
A site evacuation should be issued if conditions could restrict travel from the site. Get personnel home before dangerous travel conditions are present.	Extreme Cold Weather	
Ensure backup generators are tested and filled with fuel where generators are in use.	Extreme Hot and Cold Weather	
Verify no HVAC related alarms present in control house or BESS Facilities, as applicable to the site.	Extreme Hot and Cold Weather	
Verify location and response time for high-voltage personnel to respond to any events in the substation.	Extreme Hot and Cold Weather	
Comments/Issues:		

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**Attachment 6 – Hurricane Evacuation Route**

Not Applicable