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Rodeo Ranch Energy Storage, LLC

Cold Weather Annex

Revision 1.0

TABLE OF CONTENTS

1.0 INTRODUCTION

This annex to the Rodeo Ranch Emergency Operations Procedure (EOP) provides guidance and direction to Rodeo Ranch Energy Storage, LLC (Rodeo Ranch) specific to cold weather operations, planning, and emergency response.

This annex addresses the requirements in §25.53 under *(d) Information to be included in the emergency operations plan.* Within this annex and all other EOP documents, the use of "EOP" refers to the entire suite of documents that address the PUCT requirements, which includes relevant Annexes, as listed in the Resources and Related References section.

Any questions regarding the EOP should be directed to the Rodeo Ranch Compliance Manager.

2.0 LOCAL CONDITIONS

2.1 Local Conditions

Monahans, Texas (the closest National Oceanic and Atmospheric Administration (NOAA) Station for historical data) is used for comparison of the local Facility conditions. The lowest average low temperature during extended Winter months of November through February is 23 degrees Fahrenheit, with recorded temperatures as low as -9 degrees Fahrenheit. The greatest amount of precipitation was 11.68 inches in September of 1980.

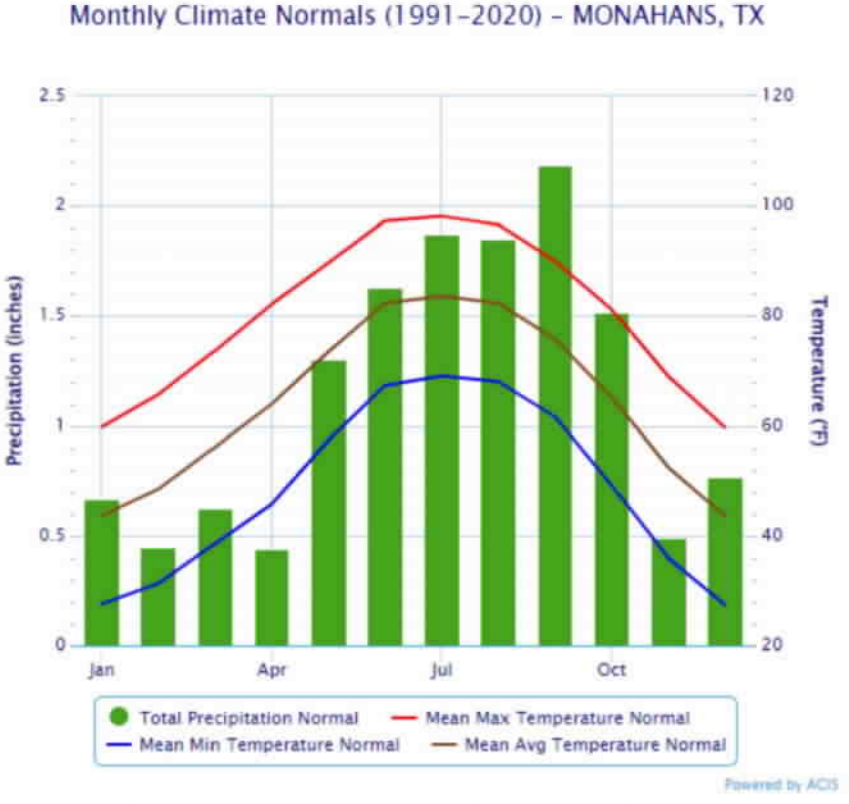

Figure 1: https://www.weather.gov/wrh/Climate?wfo=maf

Month	Total Precipitation Normal (inches)	Mean Max Temperature Normal (°F)	Mean Min Temperature Normal (°F)	Mean Avg Temperature Normal (°F)
January	0.67	59.8	27.6	43.7
February	0.45	65.7	31.3	48.5
March	0.63	73.7	38.6	56.2
April	0.44	82.2	45.8	64.0
May	1.30	89.7	57.4	73.5
June	1.63	97.3	67.3	82.3
July	1.87	98.1	69.1	83.6
August	1.85	96.6	68.0	82.3
September	2.19	90.0	61.6	75.8
October	1.52	81.2	49.2	65.2
November	0.49	68.9	35.9	52.4
December	0.77	59.7	27.4	43.6
Annual	13.81	80.2	48.3	64.3

Figure 2: https://www.weather.gov/wrh/Climate?wfo=maf

3.0 REQUIRED TIMELINES FOR WINTER PREPARATIONS

3.1 Pre-Winter Season Checks

Prior to **October 1** of each calendar year, Field Services will complete a *Pre-Winter Checklist* (Attachment 3).

3.2 Winter Season Review

By **November 1**[1] of each calendar year, Field Services will commence Winter season review by completing the *Freeze Protection Checklist* (Attachment 4).

3.3 Pre-Event Checks

Field Services will complete the *Pre-Event and Extreme Cold Checklist* (Attachment 5) prior to the forecasted temperature dropping to 35°F or below, and/or the possibility of extreme cold or severe winter weather events.

4.0 RODEO RANCH CRITICAL COMPONENTS AND EQUIPMENT

As part of its Winter weather readiness and preparation, the Site Manager and Field Services will identify and prioritize critical components, equipment, and other areas of vulnerability which may experience severe Winter weather operational issues (i.e., critical equipment or components that have the potential to cause a trip, de-rate, or failure to start due to extreme cold or a severe Winter weather events).

[1] Must be completed by this date to meet requirement for Rodeo Ranch to submit *Declaration of Completion of Generation Resource Winter Weatherization Preparations* between November 1 and December 1, as required by ERCOT.

The *Rodeo Ranch Critical Component Matrix* (Attachment 1) identifies the critical components and equipment at the facility that perform or support significant reliability or operating functions, including any existing type(s) of weather protection and weather design limits.

Field Services will ensure all critical site-specific equipment and components have adequate protection to ensure operability during extreme cold or severe Winter weather events, including but not limited to performing maintenance prior to the beginning of Winter, monthly testing and verification checks and increasing surveillance during extreme cold or severe Winter weather events.

4.1 Equipment Design Parameters and Weather Design Limits

The Rodeo Ranch facility has a design maximum ambient temperature (maximum operating temperature) of 140 degrees Fahrenheit (temperature >122 degrees Fahrenheit results in equipment derations) and a design minimum ambient temperature (minimum operating temperature) of -22 degrees Fahrenheit.

Field Services will utilize, as part of the implementation of this annex, manufacturers recommendations to determine at what ambient temperature the facility and any critical equipment will be able to operate.

5.0 COLD WEATHER PREPARATION AND RESPONSE PROCESSES

To support the facility's seasonal Winter preparedness, address known critical failure points, and address the effects of equipment and facility weather design limitations, several checklists are provided to prepare and safeguard the facility. Field Services will utilize these checklists to prepare for Winter and respond to winter weather events.

5.1 Pre-Cold Weather Season Annual Review

Prior to the beginning of the Cold Weather Season, Field Services will;

- Review previous Cold Weather Season operations and lessons learned.
- Review the *Rodeo Ranch Critical Component Matrix* (Attachment 1) and update the list as necessary,
- Review the adequacy of staffing plans to be used during a winter weather emergency and revise the staffing plans, as appropriate, and
- Train relevant operational personnel on winter weather preparations and operations.

Field Services will document and archive each of the above activities in meeting minutes or confirmation emails to the Site Manager and Compliance Manager.

5.2 Cold Weather Equipment Inventory

Prior to the onset of the winter season and/or a severe winter weather event, Field Services will ensure there are adequate inventories of all critical supplies, spare parts, equipment, and

consumables that would aid in keeping the facility operational during severe winter weather events and responding to these events. Field Services will complete the *Cold Weather Equipment Inventory* (Attachment 2) list and provide the dated checklist to the Site Manager and Compliance Manager as evidence that the inventory review was performed.

5.3 Pre-Winter Checklist

The *Pre-Winter Checklist* (Attachment 3) includes verifications of Field Services readiness and review of this annex. These checklists are due within specified timeframes, per Section 3.0 of this Annex, as they are required by ERCOT and the PUCT.

5.4 Monthly Verification of Critical Component Freeze Protections

The *Monthly Verification of Freeze Protection Checklist* (Attachment 4) will be completed by Field Services each calendar month to test or verify the functionality of freeze protection equipment for all cold weather critical components.

5.5 Pre-Event Checklist

The *Pre-Event and Extreme Cold Checklist* (Attachment 5) will be completed by Field Services to verify that the Facility's critical equipment is protected and functioning properly in advance of each forecasted extreme cold or severe Winter weather event.

5.6 Post-Winter Season

After each winter Season, Field Services will review equipment performance and determine if any improvements need to be made.

5.7 Documenting Cold Weather Preparedness Activities via Work Order Management

Field Services will review its work management system to ensure adequate annual preventative maintenance work orders exist for cold weather preparedness. Field Services will also prioritize: (i) all open corrective maintenance items that could affect facility operation and reliability in cold weather; and (ii) all cold weather preparedness preventative maintenance work orders.

6.0 COLD-RELATED SAFETY INFORMATION

6.1 Personnel Safety

Personnel safety during extreme cold or severe winter weather events is a priority. The information in this section is aimed at reducing or preventing operating personnel weather-related risks.

Rodeo Ranch personnel will stay informed of potential severe weather events and utilize the information in this annex to respond. Job safety briefings will be conducted as needed during preparation for, and in response to, extreme cold or severe Winter weather events.

6.2 Frostbite

Frostbite is most common on the fingers, toes, nose, ears, cheeks, and chin. Because of skin numbness, you may not realize you have frostbite until someone else points it out.

6.2.1 Signs and symptoms of frostbite include:

- At first, cold skin and a prickling feeling.
- Numbness.
- Red, white, bluish-white, or grayish-yellow skin.
- Hard or waxy-looking skin.
- Clumsiness due to joint and muscle stiffness.
- Blistering after rewarming, in severe cases.

6.2.2 Seek medical attention if you experience:

- Signs and symptoms of superficial or deep frostbite.
- Increased pain, swelling, redness or discharge in the area that was frostbitten.
- Fever.
- New, unexplained symptoms.

6.3 Hypothermia

Seek immediate medical attention if you suspect hypothermia, a condition in which your body loses heat faster than it can be produced.

6.3.1 Signs of hypothermia include:

- Intense shivering.
- Slurred speech.
- Drowsiness and loss of coordination.

6.4 Safety Procedures

6.4.1 During extreme cold or severe winter weather events, Field Services should adhere to the following procedures.

6.4.1.1 Limit your time outdoors in cold, wet, or windy weather.

6.4.1.2 Dress in multiple layers of loose, warm clothing, along with using Personal Protective Equipment (PPE), as needed.

6.4.1.3 Change out of wet clothing as soon as possible.

6.4.1.4 Wear a hat or headband that fully covers your ears.

6.4.1.5 Wear socks and sock liners that fit well, wick moisture, and provide insulation.

6.4.1.6 Seek medical care immediately if you or a co-worker shows symptoms of cold weather-related illness.

7.0 COLD WEATHER EVENT COMMUNICATIONS

7.1 Communication Protocols

7.1.1 The Site Manager or lead Field Services will communicate all cold preparation and response activities to the Compliance Manager.

7.1.2 Before anticipated extreme cold or severe cold weather event, the Site Manager will:

7.1.2.1 Communicate with Field Services, Operating Personnel, and the Compliance Manager that the site-specific cold weather readiness activities and preparation procedures, checklists, and reviews have been completed.

7.1.2.2 Communicate with all personnel about changing conditions and potential areas of concern to heighten awareness around safe and reliable operations.

7.1.3 Operating Personnel will notify the Compliance Manager, the QSE and other entities of instances of weather conditions leading to a facility outage, shutdown, or curtailment.

7.1.4 Field Services will conduct job safety briefings during extreme cold or severe cold weather events including interpersonal communication capability and available back-up communications options. Field Services will identify and verify the operations of all back-up communications options in case the primary system is not available.

8.0 ERCOT ANNUAL WINTER WEATHER DECLARATION SUBMITTAL

8.1 ERCOT Requirement for Annual Winter Weatherization Declaration Submittal

8.1.1 Rodeo Ranch must submit a declaration between **November 1 and December 1** that it has completed or will complete all weather preparations required by this annex for equipment critical to the reliable operation of the Generation Resource during the winter-time period (December through February).

8.1.1.1 If the work on the equipment that is critical to the reliable operation of the Generation Resource is not complete at the time of filing the declaration, Rodeo Ranch shall provide a list and schedule of remaining work to be completed. The declaration shall be executed by an officer or executive with authority to bind Rodeo Ranch.

8.1.2 Rodeo Ranch will follow all other requirements per ERCOT's direction concerning the submission of the declaration, as applicable.

9.0 RESOURCES AND RELATED DOCUMENTS

Rodeo Ranch Emergency Operations Plan

Rodeo Ranch Pandemic Annex

Rodeo Ranch Hot Weather Annex

Rodeo Ranch Cyber and Physical Security Incident Annex

PUCT

Electric Substantive Rules: Chapter 25 Rules webpage:
https://www.puc.texas.gov/agency/rulesnlaws/subrules/electric/25.53/25.53ei.aspx

Subchapter C, §25.53 - Electric Service Emergency Operations Plans:
https://www.puc.texas.gov/agency/rulesnlaws/subrules/electric/25.53/25.53.pdf

Subchapter A, §25.5 – Definitions:
https://www.puc.texas.gov/agency/rulesnlaws/subrules/electric/25.5/25.5.pdf

ERCOT

Current Protocols - Nodal: http://www.ercot.com/mktrules/nprotocols/current

- Section 3: Management Activities for the ERCOT System

DOCUMENT OWNERS

Title	Name
Compliance Manager	Karl Perman
Sr. Director of Asset Management	Bree Maria

DISTRIBUTION LIST

Title	Name
Compliance Manager	Karl Perman
Sr. Director of Asset Management	Bree Maria
Sr. Asset Manager	Keith Merkel
Site Manager	Kyle Rabe
Chief Communications Officer	Polly Shaw
Commercial Asset Manager	Carolyn Pino
NovaSource Control Room Lead Operators	Via distribution to NSCR-LeadOPS@novasourcepower.com
NovaSource Electric Regulatory Compliance	Via distribution to ERC@novasourcepower.com
NovaSource Account Managers	Via distribution to nspsam@novasourcepower.com

APPROVALS

The approval signatures in this section indicate review of the document and approval to publish.

Name	Date	Signature
Karl Perman		
Bree Maria		

VERSION HISTORY

Version	Effective Date	Author	Description of Changes
1.0		Rodeo Ranch and GridSME	New plan

ATTACHMENT 1: RODEO RANCH CRITICAL COMPONENT MATRIX

This critical component matrix identifies all components necessary to operate the facility during extreme cold weather conditions.

Rodeo Ranch Critical Equipment				
Item #	**Description (Manufacturer and Model)**	**Quantity**	**Weather Protections**	**Weather Design Limits**
1.	VTL-1 - CVT Kuhlman DDB-145 Capacitive Voltage Transformer	Three (3)	Mineral oil filled equipment	Operating temperature range -50 °C (-58 °F) to +50 °C (122 °F)[1]
2.	52-L1/52-T1/52-T2 - Siemens SPS2S-145-40-1 Circuit Breaker	Three (3)	SF_6 Gas Filled Equipment	Operating temperature range -30 °C (-22 °F) to +55 °C (131 °F)[2]
3.	T1/T2 - Virginia-Georgia Transformer Main Power Transformers 138-34.5 kV, 97/129/161 MVA (ONAN/ONAF/ONAF), with multi-ratio bushing current transformers	Two (2)	Mineral oil filled equipment	65 °C rise above ambient temperature.[3]
4.	52-F1/F2/F3/F4/F5/F6/C1/C2 - EMA VDH 34.5kV Feeder Circuit Breakers	Eight (8)	Vacuum	Operating temperature range -20 °C (-4 °F) to +50 °C (122 °F)[4]
5.	Substation Control House HVAC – 3 Ton Bard 11EER WA Series Wall Mount	Two (2)	"Low Ambient Control" option selected, allowing for operation to 0°F	Operating temperature range -18 °C (0 °F) to +40 °C (105 °F)[5]
6.	4,000 kVA, 34.5 kV Delta / 0.800 kV Delta-Wye, Pad-Mount Transformers supplied as part of Sungrow skid units	Eighty Eight (88)	Mineral oil filled equipment	60 °C rise above ambient temperature[6]
7.	Sungrow SC4000UD-MV-US PCS Unit (Inverters)	Eighty Eight (88)	NEMA 3R Enclosure. Independent Force Air Cooling. Installed additional capacity to account for derates.	Ambient operating temperature range -35°C (-31 °F) to +60 °C (140 °F). Derate above +45 °C (113 °F)[7]
8.	Sungrow ST2752UX-US ESS Battery Modules	Eighty Eight (88)	Liquid Cooling	Operating temperature range -30°C (-22 °F) to +50°C (122 °F). Derates for module operating temperatures above +45 °C (113 °F)[8]

ATTACHMENT 2: COLD WEATHER EQUIPMENT INVENTORY

Date inventory completed	
Completed by Field Services, Site Manager or Designee	

Item #	Description	Model # (if req.)	Qty. Required	Qty. On Hand	Notes
1.	Tarps				
2.	Battery-powered radio with National Oceanic and Atmospheric Administration (NOAA) weather radio with tone alert				
3.	Extension cords				
4.	Flashlights and batteries				
5.	Potable water supply				
6.	Fully stocked First Aid kits				
7.	Verify adequate inventory of spare parts for reliable operation of the facility during winter season				
8.	Blankets				
9.	Cold weather clothing, gear and PPE				

ATTACHMENT 3: PRE-WINTER CHECKLIST – DUE BY OCTOBER 1 ANNUALLY

Date performed	
Completed by (name)	

Pre-Winter Checks **Instructions**: Check each item when complete and provide completed checklist to Site Manager and Compliance Manger.	
☐	Complete and submit to the Site Manager and Compliance Manager the *Cold Weather Equipment Inventory* (Attachment 2).
☐	Review industry best practices or lessons learned from the previous Winter season. Collect Field Service's feedback on the EOP and, without unnecessary delay, provide to Compliance Manager so they can update and submit the Plan to ERCOT within the required timeframe (by November 1). Make updates to this annex, as needed.
☐	Conduct annual Winter readiness training and drill with all operating personnel. Utilize and follow this Cold Weather annex during the training and drill.
☐	Ensure critical site-specific equipment and components have adequate protection to ensure operability during extreme cold or severe cold weather event, including but not limited to scheduling and performing winter-related maintenance (e.g. check SF-6 gas pressure levels, transformer oil levels, enclosures and waterproofing in good working order, heating systems) prior to the beginning of Winter and increasing surveillance during extreme cold or severe Winter weather events. Schedule tasks in the work management system.
☐	Review work orders for cold weather preparedness preventative work to confirm they are scheduled for completion, as needed, prior to the onset of the Winter season.
☐	Notify Rodeo Ranch Compliance Manager in writing that weatherization work has been completed and/or identify any exceptions and scheduled work to be performed to complete winter weatherization.

ATTACHMENT 4: MONTHLY VERIFICATION OF FREEZE PROTECTION CHECKLIST

Item#	Description (Manufacturer and Model)	Quantity	Verify/ Test	Protection Measure Details	Monthly Check Satisfactory?
1	MPT Transformer, Virginia Transformer, 345 kV, Three-Phase, 60 Hz (Serial Number: GA456B)	2	Verify	Verify employment and accurate function: • Wind breaks • Cabinet doors, opening covers • Heaters and thermostats • Oil levels	☐ Yes ☐ No WO #
2	HV Breakers, Siemens, 145 kV, 2000A, SF6 Circuit breaker (Serial Number: SPS2S-145-40-1, 75007943-3)	**3**	Verify	Verify employment and accurate function: • Wind breaks • Cabinet doors, opening covers • Heaters and thermostats • Oil levels	☐ Yes ☐ No WO #
3	Disconnect Switch, Southern States, 138 kV, Aluminum Vertical Break (Serial Number: EV-2)	**3**	Verify	Verify employment and accurate function: • Proper seatings of switches • Doors, windows, ventilation louvers • Lubricants • Add any other preparations not listed	☐ Yes ☐ No WO #
4	MV Breakers, EMA, 38 kV, Vacuum Substation Circuit Breaker (Serial Number: 3484...3489)	**8**	Verify	Verify employment and accurate function: • Wind breaks • Cabinet doors, opening covers • Heaters and thermostats • Oil levels	☐ Yes ☐ No WO #
5	Medium Voltage Transformer, JHSP (Sungrow)		Verify	Verify employment and accurate function: • Wind breaks • Cabinet doors, opening covers • Heaters and thermostats • Oil levels	☐ Yes ☐ No WO #
6	Power Conversion System (Inverter), Sungrow, ST4000UD-MV-US		Verify	Verify employment and accurate function: • Cabinet doors, opening covers, louvers • Inverter cooling fans • Cabinet heaters and thermostats • Inverter transformer oil levels • Inverter circuit breakers lubricants • Add any other preparations not listed	☐ Yes ☐ No WO #
7	Storage System (Battery Unit), Sungrow, ST2752UX-US-V11		Verify	Verify employment and accurate function: • Cabinet doors, opening covers, louvers • Inverter cooling fans • Cabinet heaters and thermostats • Inverter transformer oil levels • Inverter circuit breakers lubricants • Add any other preparations not listed	☐ Yes ☐ No WO #

ATTACHMENT 5: PRE-EVENT AND EXTREME COLD CHECKLIST

Date performed	
Completed by (name)	

	Pre-Event Checklist **Instructions**: Check each item when complete and provide completed checklist to Site Manager and Compliance Manger.
☐	Monitor weather and weather alerts. Site Manager or lead Field Services to schedule and conduct meeting to discuss the weather forecast and to keep all personnel alerted to possible weather conditions.
☐	Check equipment inventory and replenish all quantities. Refer to Extreme **Cold Weather Equipment Inventory** (Attachment 2). Be sure to check all First Aid kits and confirm PPE "in use" dates.
☐	Place any required severe weather protections in service where extreme cold or severe or freezing winter weather could adversely impact personnel, operations, or forced outage recovery.
☐	Establish and document communications with Operating Personnel on weather event conditions and discuss appropriate restrictions on maintenance to maximize generation capability.
☐	Establish staffing plan (including supplemental coverage) and review/update emergency callout list as needed.
☐	Review outstanding preventative work orders. Perform necessary and immediate work needed to protect the facility, and ensure adequate annual preventive work exist for freeze protection and winter weather preparations.
☐	Refer to **Critical Equipment Matrix** (Attachment 3), check that all critical equipment is operating and protected per the manufacturer's recommendations during extreme cold weather events. Emphasize the points at the facility where cold weather impacts can occur (e.g. container enclosures, transformer oil levels).
☐	Develop a list of critical equipment and transmitters that require increased surveillance during extreme cold or severe weather events, refer to Attachment 3.
☐	Conduct site inspection. Check for extra precautions or outfitting of site components and/or critical equipment that may be impacted by exposure to elements (e.g. checking drainage, proper installation of equipment, enclosure doors ae shut, no loose equipment, no inappropriate exposure of equipment, etc.).
☐	Consider the effect of wind chill when applying freeze protection, including checking insulation thickness, quality, and proper installation.

Pre-Event Checklist	
Instructions: Check each item when complete and provide completed checklist to Site Manager and Compliance Manger.	
☐	Inspect entrances, windows, fan louvers, and other openings for potential exposure of critical equipment to the elements.

Rodeo Ranch Energy Storage, LLC

Emergency Operations Plan

Revision 1.0

TABLE OF CONTENTS

1.0 APPROVAL AND IMPLEMENTATION SECTION

A. Introduction and Applicability

1.1 Introduction

This *Emergency Operations Plan* (Plan) provides guidance to Rodeo Ranch Energy Storage, LLC (Rodeo Ranch) covering the Power Generation Company (PGC) emergency operations Plan (EOP) requirements under Chapter 25, Subchapter C, §25.53 and §25.55, of the Public Utilities Commission of Texas (PUCT) Electric Substantive Rules.

This EOP addresses the requirements in *(d) Information to be included in the emergency operations Plan*. Within this and all other EOP documents, the use of "EOP" refers to the entire suite of documents that address the PUCT requirements, which includes relevant Annexes, as listed in the Resources and Related References section.

Any questions regarding the EOP should be directed to the Rodeo Ranch Compliance Manager.

1.2 Applicability

This document applies to the power generating company registered with the PUCT as Rodeo Ranch Energy Storage, LLC.

1.3 Statements of §25.53 Non-Applicability

Section	Statement of Non-Applicability
(e)(2)(A)(ii) Adequacy and operability of fuel switching equipment	Rodeo Ranch, as a BESS facility, does not have alternative fuels and has no capability to perform fuel switching.
(e)(2)(B) Water Shortage Annex	Rodeo Ranch does not utilize water in the generation of electricity.
(e)(2)(E) Hurricane Annex	Rodeo Ranch's facility is not located within a Texas Department of Emergency Management (TDEM) hurricane evacuation zone.

1.4 Generation Resource Information

Rodeo Ranch Energy Storage, LLC (Rodeo Ranch or "Facility"), a 300 MW (at POI) BESS facility located in Reeves County, Texas. Rodeo Ranch is expected to commence commercial operations in December 2023 and is interconnected to Texas-New Mexico Power Company at the 138 kV Worsham Substation, located in the Electric Reliability Council of Texas (ERCOT) footprint.

PGC Name	ERCOT Resource Name	Nameplate Rating	Commercial Operations Date (est.)
Rodeo Ranch Energy Storage, LLC	Rodeo Ranch_UNIT1	176MVA	12/2023
Rodeo Ranch Energy Storage, LLC	Rodeo Ranch_UNIT2	176MVA	12/2023

B. Roles and Responsibilities

1.5 Rodeo Ranch Compliance Manager (Compliance Manager)

1.5.1 Role – The compliance manager and owner of this Plan.

1.5.2 Responsibilities include:

- Ensure completion of all required reporting (ERCOT, PUCT, etc.) within the specified timeframes.
- Oversee the development and implementation of this Plan. Ensure the Plan is up-to-date and aligns with Rodeo Ranch's business objectives and addresses requirements.
- Oversee revisions and updates to the Plan as necessary, as well as the implementation of the revised Plan, and a review of supporting documents, as needed.
- Participate in training and drills/exercises, as appropriate.
- Participate in post-incident reviews and direct the updating of appropriate documentation and processes, as needed.
- Ensure the activities documented in this Plan are completed, in concert with the Rodeo Ranch Field Services and Site Manager.
- Review and approve this Plan annually.
- Maintain evidence.

1.6 Rodeo Ranch Field Services Site Manager (Site Manager)

1.6.1 Role – the manager of the team contracted to perform the O&M services at Rodeo Ranch.

1.6.2 Responsibilities include:

- Ensure the requirements and processes laid out in this Plan are followed by site Field Services.
- Lead Field Services in the execution of this Plan and set expectations with Field Service technicians for safe and reliable operational performance of the facility, as detailed in this Plan.

- Participate in the development, administration, execution, and update of the Plan.
- Oversee the day-to-day operation of Rodeo Ranch.
- Ensure annual drill or training requirements are met and submit evidence, or request Field Services, to submit evidence to the Compliance Manager upon completion and request.
- Ensure Plan training is completed by all relevant Field Services and submit, or ensure Field Services submit evidence to the Compliance Manager upon completion and request.
- Participate in training and drills/exercises as requested.
- Provide evidence to the Compliance Manager upon completion and request.

1.7 Rodeo Ranch Field Services (Field Services)

1.7.1 Role – Contracted to perform the O&M services at Rodeo Ranch.

1.7.2 Responsibilities include:

- Follow the requirements and processes documented in the Plan.
- Provide feedback on potential impact(s) to operations of an incident and proposed responses.
- Participate in responses to emergency events at Rodeo Ranch.
- Conduct Plant readiness reviews and provide reports to Site Manager and Compliance Manager.
- Participate in training and drills/exercises as requested.
- Participate in post-incident reviews.

1.8 Rodeo Ranch Operating Personnel (Operating Personnel)

1.8.1 Role – The registered Generator Operator (GOP) for Rodeo Ranch.

1.8.2 Responsibilities include:

- Operates Rodeo Ranch from the GOP operations center in Chandler, Arizona.
- Responsible for responding to and managing emergencies that may impact Control Center functionality, to ensure continuity of operations.
- Coordinate with Field Services and create appropriate log entries for events, incidents, etc.
- Submit evidence to the Compliance Manager upon completion and request.
- Participate in training and drills/exercises.
- Participate in post-incident reviews.

1.9 Emergency Management Personnel

1.9.1 Role – Field Services team member(s) leading the field team response during an emergency, identified as Primary and Alternative Emergency Coordinators.

1.9.2 Responsibilities include:

- Act as a liaison with first responders and Operating Personnel.
- Organize Rodeo Ranch's real-time emergency response.
- Responsible for specific actions detailed in this Plan (as noted). Alternate personnel may serve as the Emergency Management Personnel when necessary.

Rodeo Ranch is required to submit and maintain Emergency Management Personnel information with the PUCT. If the contact information changes, Rodeo Ranch must provide the updated information to the Commission within 30 days by submitting an Emergency Contact Information Update form. See Resources and Related References Section for Emergency Contact Form links.

Rodeo Ranch Emergency Management Personnel	
Primary Emergency Coordinator	Name: Kyle Rabe Title: Area Manager – East Texas Phone number: 903.217.6470
Alternate Emergency Coordinator	Name: TBD Title: Phone number:

C. Revision Control Summary

Version	Effective Date	Author	Description of Changes
1.0		Rodeo Ranch and GridSME	New Plan

D. Approvals

The approval signatures in this section indicate review of the document and approval to publish. Approval signatures below verify that the current EOP supersedes previous EOPs listed in the Revision Control Summary.

Name	Date	Signature
Karl Perman		
Bree Maria		

2.0 PROCESS FOR ACTIVATING THE EOP

Rodeo Ranch's Compliance Manager or the lead Field Services, upon determination that any of the events contained within the EOP are forecasted, imminent or in-progress and pose a risk to facility operations, may activate the EOP and the appropriate annex(s).

Activation of the EOP is within the Compliance Manager's discretion, but will be based on a consideration of the below factors:

- Hot weather over 100 degrees Fahrenheit or cold weather below 35 degrees Fahrenheit.
- Weather forecast with temperatures, wind speeds, wind direction, precipitation, humidity in excess of or below design operational capabilities.
- Weather forecasts that include tornadoes or flooding in the vicinity of the facility.
- Drought conditions that the Site Manager determines could have an impact on the operation of the facility.
- Forecasts of a hurricane or tropical storm that may impact the facility.
- Identification of a suspected or actual cyber security incident or physical security incident.
- Declaration of a Pandemic or epidemic by the CDC or State or Local Government Officials.
- Other localized emergencies such as fire, hazardous material spills, personnel injuries, etc.

3.0 COMMUNICATION PLAN

Rodeo Ranch's Emergency Management Personnel who are designated to interact with local, state, and federal emergency management officials during emergency events must have received the latest IS-100, IS-200, IS-700, and IS-800 National Incident Management System training.

The list below includes entities that Rodeo Ranch, as a PGC, may need to communicate with during an emergency.

- Media
    - All media communications will be referred by Chief Communications Officer or Compliance Manager.
- PUCT
    - Rodeo Ranch will communicate with the PUCT during an emergency in the manner requested by the PUCT. In the absence of any explicit direction, Rodeo

Ranch's emergency contacts as identified in Attachment 1 of this Plan will make themselves available by phone and by email to address any PUCT questions or concerns.

- Office of Public Utility Council (OPUC)
    - Rodeo Ranch will communicate with OPUC during an emergency in the manner as requested by the OPUC. As a PGC, Rodeo Ranch does not directly interface with end-use customers of electricity and does not anticipate a likely need for communications with OPUC during an emergency. However, Rodeo Ranch's emergency contacts as identified in Attachment 1 of this Plan will make themselves available to OPUC by phone and by email as needed.
- Fuel Suppliers – as Rodeo Ranch does not utilize fuel, this is not applicable.
- Local and State Governmental Officials and emergency operations centers (EOC)
    - Rodeo Ranch's emergency contacts as identified in Attachment 1 of this Plan will make themselves available to governmental officials and EOCs by phone and by email as needed.
- ERCOT Reliability Coordinator
    - Operating Personnel will communicate as requested and per ERCOT Nodal Protocols with the Reliability Coordinator.
    - Additionally, Rodeo Ranch's emergency contacts as identified in Section 1.9 of this Plan will make themselves available to ERCOT by phone and by email as needed.

4.0 PLAN FOR PRE-IDENTIFIED SUPPLIES FOR EMERGENCY USE

Each of the annexes applicable to Rodeo Ranch, including the *Cold Weather Annex* and *Hot Weather Annex,* contain a list of supplies, when applicable, that are unique to the content of the annex. Inventories are monitored routinely to ensure their availability.

5.0 PLAN TO ADDRESS STAFFING DURING EMERGENCY RESPONSE

Staffing considerations during emergencies vary on a case-by-case basis and will be evaluated by the Site Manager and Compliance Manager to determine if site staffing is appropriate, safe and warranted. Site Manager may request additional staff be dispatched from other facilities to support emergency operations.

Role	Notes	Remediation
Compliance Manager	Compliance Manager is off-site	Compliance Manager will evaluate and determine site staffing as appropriate.
Site Manager	One remote Site-Manager is assigned to a facility	Site Managers may coordinate with Regional Managers if additional managerial staff is needed.

Role	Notes	Remediation
Field Services	There are typically 3 on-site Plant service technicians.	If all field technicians are unavailable or additional staff is necessary, additional personnel may be dispatched, as approved by the Site Manager, for relocation to supplement facility staffing.
Operating Personnel	Control Center staffed 24/7 with monitoring and control capability.	Additional Control Center Operators are available in the event of additional staffing needs.

6.0 PLAN FOR IDENTIFICATION OF WEATHER-RELATED HAZARDS

Rodeo Ranch identifies weather-related hazards including tornadoes, hurricanes, extreme cold weather, extreme hot weather, drought, and flooding through monitoring of National Weather Service reports and advisories, as well as through monitoring of ERCOT market notices advising of extreme weather that could impact the grid. Rodeo Ranch lead Field Services or Compliance Manager provides advance notice of severe weather events, and Field Services monitor frequently. Each of the weather-related annexes applicable to Rodeo Ranch is built to identify weather-related hazards specific to that weather risk. See each annex for the identification of the sources used to identify hazards specific to the facility). When Rodeo Ranch identifies a weather-related hazard that may impact its Facility, the instructions contained in Section 2.0 *Process for Activating the EOP* are followed.

7.0 REQUIRED EMERGENCY OPERATIONS PLAN DRILL

7.1 Requirement for an Annual Drill and EOP Update

The PUCT requires that Rodeo Ranch conduct or participate in one or more drills each calendar year to test its EOP.

Following an annual drill, they must assess the effectiveness of its emergency response and revise its EOP, as needed. An entity that has activated its EOP in response to an emergency is not required, under this subsection, to conduct or participate in a drill in the calendar year in which the EOP was activated.

7.2 Notification to PUCT and TDEM District Coordinators Prior to Conducting Annual Drill

At least 30 days prior to the date of at least one drill each calendar year the following notifications must be made of the 1) date, 2) time, and 3) location of the drill.

- Commission staff must be notified (using the method and form prescribed on the commission's website)
- Appropriate TDEM District Coordinators, by email or other written form.

7.3 Drill Requirements

7.3.1 The content of each drill will be based on current needs and will be determined by the Site Manager with input from the Compliance Manager, as needed.

7.3.2 A roster of drill attendees and the date the drill was conducted will be filed with this Plan and retained in the Rodeo Ranch document repository.

7.3.3 If the annual drill requirement is fulfilled by an actual event, all event materials must be produced and provided to the Compliance Manager. Evidence should include operating logs, work orders, voice recordings, or other relevant materials.

7.4 EOP Updates

7.4.1 Following the annual drill, the effectiveness of the drill and this Plan will be assessed and the Plan updated, as needed based on feedback received and provided to the Compliance Manager by the Site Manager.

7.4.2 Any improvements to the EOP that are identified following an event or drill will be made and documented (via appropriate update to the version history of this Plan) and filed with the Rodeo Ranch EOP evidence.

8.0 TRAINING AND REPORTING

The PUCT requires that all 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 that deviations are appropriate because of specific circumstance during the course of the emergency.

Prior to the Winter and Summer Season, the Site Manager will notify the Compliance Manager, in writing and per the format requirements, that all relevant Operating Personnel have completed training. The following format will be used to report completion of training:

1. Titles and names of persons in the organization receiving access to and training on the EOP; and
2. Dates of access to or training on the EOP, as appropriate.
3. Location of the training. (Per 7.2 above)

9.0 ANNUAL PLAN UPDATE AND REPORTING

9.1 Requirement to update EOP Information no later than March 15 Annually

The Filing Requirements in §25.53 require that information in this EOP and all supporting documents must be updated annually, and no later than March 15, for various circumstances, including, but not limited to the following:

- Changes were made in the previous calendar year that will materially affect how Rodeo Ranch would respond in an emergency.

- An entity that, in the previous calendar year, did not make a change that materially impacts how Rodeo Ranch would respond, must also file with the PUCT.

9.2 Reporting Requirements

9.2.1 If EOP changes were made in the previous calendar year that materially affects how Rodeo Ranch would respond to an emergency, Rodeo Ranch must file with the commission an executive summary that:

- Describes the changes to the contents or policies contained in the EOP.
- Includes an updated reference to specific sections and page numbers of the entity's EOP that correspond with the requirements of this rule.
- Includes the record of distribution required that contains the following information in table format:
  - Titles and names of persons in the entity's organization receiving access to and training on the EOP; and
  - Dates of access to or training on the EOP, as appropriate.
- Contains the affidavit from Rodeo Ranch's highest-ranking representative, official or officer with binding authority over Rodeo Ranch, affirming the following:
  - Relevant Operating Personnel are familiar with and have received training on the applicable contents and execution of the EOP, and such personnel are instructed to follow the applicable portions of the EOP except to the extent deviations are appropriate as a result of specific circumstances during the course of an emergency.
  - The EOP has been reviewed and approved by the appropriate executives.
  - Drills have been conducted to the extent required.
  - The EOP or an appropriate summary has been distributed to local jurisdictions, as needed.
  - Rodeo Ranch maintains a business continuity Plan that addresses returning to normal operations after disruptions caused by an incident.
  - 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.

9.2.2 If no EOP changes were made in the previous calendar year that materially affect how it would respond to an emergency, the following must be completed:

- A pleading that documents any changes to the list of emergency contacts, as required.
- An attestation stating that no changes were made to the EOP that material affects how it would respond to an emergency.
- The required affidavit.

If commission staff determines that the EOP or other documents do not contain sufficient information to determine whether the Rodeo Ranch can provide adequate electric service through an emergency, Rodeo Ranch will update the EOP and, if directed by commission staff, file its revised EOP or other documentation, or a portion thereof, with the commission and with ERCOT.

9.3 Reporting During Activation of the State Operations Center by TDEM

Upon request by commission staff during an activation of the State Operations Center by TDEM, Rodeo Ranch Emergency Management Personnel provide updates on the status of operations, outages, and restoration efforts. Updates must continue until all incident-related outages of customers able to take service are restored or unless otherwise notified by commission staff. After an emergency, commission staff may require an affected entity to provide an after action or lessons learned report and file it with the commission by a date specified by commission staff.

9.4 ERCOT Requirement for Annual Weatherization Declaration Submittals

Rodeo Ranch is required to submit declarations for both Summer and Winter weatherization preparations, per ERCOT's direction.

Summary Table of Annual Weatherization Declaration Filing Requirements	
What must be filed:	**Filing due date:**
Summer Declaration	No earlier than May 1 and no later than June 1
Winter Declaration	No earlier than November 1 and no later than December 1

10.0 RESOURCES AND RELATED REFERENCES

Cyber and Physical Security Incident Annex

Rodeo Ranch Pandemic and Epidemic Annex

Rodeo Ranch Hot Weather Annex

Rodeo Ranch Cold Weather Annex

ERCOT

Resource Entities webpage: http://www.ercot.com/services/rq/re

Current Protocols – Nodal: http://www.ercot.com/mktrules/nprotocols/current

- Section 3: Management Activities for the ERCOT System

GE Checklists Updated: https://www.ercot.com/files/docs/2023/04/21/GE-and-TSP-Checklists-2023-04-20.pdf

PUCT

Electric Substantive Rules: Chapter 25 Rules webpage:

https://www.puc.texas.gov/agency/rulesnlaws/subrules/electric/Electric.aspx

- Subchapter C, §25.53 - Electric Service Emergency Operations Plans
  - Emergency Contact Form (posted under Emergency Management section):

    Form: http://puc.texas.gov/storm/contents/media/Contacts_Form.pdf
- Subchapter C, §25.55 - Weather Emergency Preparedness
- Weatherization Checklist developed in accordance with PUCT 16 TAC §25.55 Weather Emergency Preparedness; predominantly per subsection (c)(2) and (f)(2): https://puc.texas.gov/agency/rulesnlaws/subrules/electric/25.55/25.55.pdf

National Oceanic and Atmospheric Administration (NOAA) webpage: https://www.noaa.gov/

National Weather Service website: https://www.weather.gov/

Ready.gov – Disasters and Emergencies webpage: list of event type and response actions (e.g. hurricane, tornado, flood, etc.): https://www.ready.gov/be-informed

11.0 SECTION 25.53 DEFINITIONS

Term	Definition
Annex	A section of an emergency operations Plan that addresses how an entity Plans to respond in an emergency involving a specified type of hazard or threat.
Drill	An operations-based exercise that is a coordinated, supervised activity employed to test an entity's EOP or a portion of an entity's EOP. A drill may be used to develop or test new policies or procedures or to practice and maintain current skills.
Emergency	A situation in which the known, potential consequences of a hazard or threat are sufficiently imminent and severe that an entity should take prompt action to prepare for and reduce the impact of harm that may result from the hazard or threat. The term includes an emergency declared by local, state, or federal government, or ERCOT or another reliability coordinator designated by the North American Electric Reliability Corporation and that is applicable to the entity.
Entity	An electric utility, transmission and distribution utility, PGC, municipally owned utility, electric cooperative, REP, or ERCOT.
Hazard	A natural, technological, or human-caused condition that is potentially dangerous or harmful to life, information, operations, the environment, or property, including a condition that is potentially harmful to the continuity of electric service.
Threat	The intention and capability of an individual or organization to harm life, information, operations, the environment, or property, including harm to the continuity of electric service.

12.0 Section 25.55 Definitions

Term	Definition
Energy Storage Resource	An energy storage system registered with ERCOT as an energy storage resource for the purpose of providing energy or ancillary services to the ERCOT grid and associated facilities controlled by the generation entity that are behind the system's point of interconnection, necessary for the operation of the system, and not party of a manufacturing process that is separate from the generation of electricity.
Generation Entity	An ERCOT-registered resource entity acting on behalf of an ERCOT-registered generation resource or energy storage resource.
Generation Resource	A generator registered with ERCOT as a generation resource and capable of providing energy or ancillary services to the ERCOT grid, as well as associated facilities controlled by the generation entity that are behind the generator's point of interconnection, necessary for the operation of the generator, and not part of a manufacturing process that is separate from the generation of electricity.

Term	Definition
Inspection	Activities that ERCOT employees, commission staff, and designated contractors engage in to determine whether a generation entity is in compliance with all or parts of subsection (c) of this section or whether a TSP is in compliance with all or parts of subsection (f) of this section. An inspection may include site visits, assessments of procedures, interviews, and review of information provided by a generation entity or TSP in response to a request by ERCOT, including review of evaluations conducted by the generation entity or TSP or its contractor.
Major Weather-related Forced Interruption of service of a resource	(A) The failure of a resource to start, following one or more attempts, for 12 or more continuous hours as a result of a weather emergency; or (B) The loss of 50% or more of the capacity reflected in a resource's seasonal net maximum sustainable rating for 12 or more continuous hours as a result of a weather emergency.
Repeated Weather-related Forced Interruption of Service	Three or more of any combination of the following occurrences as a result of separate weather emergencies within any three-year period: (A) The failure of a resource to start; (B) The loss of 50% or more of the capacity reflected in a resource's seasonal net maximum sustainable rating for 30 minutes or more; or (C) The loss or derate of 50% or more of a transmission facility's rating.
Resource	A generation resource.
Summer Season	June 1 to September 30 each year.
Weather Critical Component	Any component of a resource or transmission facility that is susceptible to fail as a result of a weather emergency, the occurrence of which failure is likely to significantly hinder the ability of the resource or transmission facility to function as intended or, for a resource, is likely to lead to a trip, derate of more than five percent of the capacity represented in the resource's seasonal net maximum sustainable rating or of the transmission facility's rating, or failure to start.
Weather Emergency	A situation resulting from a summer or winter weather event that produces significant risk for a TSP that firm load must be shed or a situation for which ERCOT issues an Emergency Notice to market participants involving an operating condition in which the safety or reliability of the ERCOT system is compromised or threatened by summer or winter weather.
Weather Emergency Preparation Measures	Measures that a generation entity or TSP takes to support the function of a resource or transmission facility during a weather emergency.
Winter Season	December 1 to February 28 of the following year.

DOCUMENT OWNERS

Title	Name
Compliance Manager	Karl Perman
Director of Asset Management	Bree Maria

DISTRIBUTION LIST

Title	Name
Compliance Manager	Karl Perman
Sr. Director of Asset Management	Bree Maria
Sr. Asset Manager	Keith Merkel
Site Manager	Kyle Rabe
Chief Communications Officer	Polly Shaw
Commercial Asset Manager	Carolyn Pino
NovaSource Control Room Lead Operators	Via distribution to NSCR-LeadOPS@novasourcepower.com
NovaSource Electric Regulatory Compliance	Via distribution to ERC@novasourcepower.com
NovaSource Account Managers	Via distribution to nspsam@novasourcepower.com

ATTACHMENT 1: EMERGENCY CONTACTS

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

Title	Name	Phone Number
Rodeo Ranch Compliance Manager	Karl Perman	917-605-2480
Rodeo Ranch Asset Manager	Keith Merkel	407-758-5898
Rodeo Ranch Operations Manager	NovaSource NSPS	1-877-375-7662
Site Manager	Kyle Rabe	903-217-6470

ATTACHMENT 2: RESTORATION OF SERVICE ANNEX

RESTORATION OF SERVICE

Failure to Start or Tripping Off-line

Upon generation facility failure to start or tripping off-line due to a hazard or threat, Field Services will begin the restoration by:

- Communicating with facility management, compliance personnel and Operating Personnel to ensure all reporting requirements are being met;
- Determining the cause of the interruption generation output;
- Evaluating if the cause still exists or has subsided. If the cause still exists, then determining if it can be mitigated, isolated, or contained, so as to not impact generating facility operation.

Upon the determination that it is safe to reenergize the facility and commence generating power to the grid, Field Services will coordinate with Operating Personnel to receive permission to come back online.

Response Time and Backup Power

The facility is constructed with an automatic transfer switch that connects station service loads to a backup utility feed at the Rodeo Ranch facility, that initiates when station service power is lost. This provides automatic failover power to all AC- and DC-powered substation equipment.

In the event of a power outage, the site will not be able to charge or generate power, until a Field Service's representative performs a site assessment and manually closes breakers. The target response time for this scenario is two (2) hours after weather or safety conditions permit.

ATTACHMENT 3: GENERAL EMERGENCY PROCEDURE

Rodeo Ranch Location for Outside Emergency Responders

Rodeo Ranch Energy Storage, LLC is located at:	Approximate address 1398 FM 1450 Pecos, TX 79772

General Emergency Procedures

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

1. Personnel injuries and serious health conditions
2. Fires
3. Chemical releases
4. Weather-related causes
5. Threats to the facility that warn of danger to personnel
6. Pandemics
7. Sabotage Reporting
8. Other unanticipated events

It will be the responsibility of the Site Manager or lead Field Services to assess a developing emergency and initiate the appropriate actions in this Plan to protect personnel, the surrounding environment, and Plant equipment from adverse damages. In the event of an emergency, the following actions will be immediately performed:

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

General Emergency Protocols

1. Any work-related orders in progress shall be suspended, and personnel involved in such work shall cease all activities onsite.

2. All sources of ignition, including hot work, burning cigarettes, portable tools and motor vehicles shall be immediately secured.

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

    a. The affected parts of the facility and severity of the emergency.

    b. Restrictions in egress routes caused by the emergency.

    c. Wind direction (if the emergency involves gases/vapors)

d. People currently located at the facility (employees, visitors/contractors, etc.)

4. If the Site Manager or lead Field Services determines that a facility evacuation is necessary, they must determine which type of evacuation to direct. Refer to Attachment 4 *Evacuation Procedures Annex*

ATTACHMENT 4: EVACUATION PROCEDURES ANNEX

Immediate Site Evacuation Procedure

1. Personnel present on-site shall immediately take the following actions:

    a) Locate and obtain the visitor/contractor sign-in sheet.

    b) Locate and obtain all immediately accessible hand-held radios.

    c) Locate air horn and sound five short blasts of airhorn, wait ten seconds and sound five short blasts of the airhorn, if the airhorn is not available go to any nearby vehicle and sound five short blasts of the vehicle horn, wait ten seconds and repeat five short blasts.

    d) Gather at the front entrance gate at facility, and determine the safest muster area to proceed to, depending upon the known circumstances of the emergency (as indicated on Attachment 3).

    ***NOTE:** The primary muster area must be a predetermined location, with any alternate muster areas selected only when egress routes to the primary muster area are unsafe to proceed along.

    e) Pass the following information over the Plant radio system:

        1) The muster area the employees will be proceeding to.

        2) Visitors/contractors known to be in the operating areas (as indicated by the visitor/contractor sign-in sheet).

    f) Once emergency personnel have completed the preceding steps, they shall immediately proceed to their designated muster area. Personnel on-site should not delay in evacuating or wait on other personnel that they anticipate may arrive.

    g) Upon arriving at the designated muster area, the group shall designate a Person-in-Charge and take a head count of all personnel who are at the muster area, including contractors and visitors.

    h) After a roll call of all personnel present at the muster area is taken, the Person-in-Charge shall identify which operating area personnel are not accounted for. The Person-in-Charge will then query by radio for personnel who are unaccounted for. The Person-in-Charge shall then establish radio communication or cell phone communication with the Emergency Coordinator (if applicable) and relay information on personnel who are not accounted for.

    i) All personnel at the muster location shall remain at the muster location until an "ALL CLEAR" signal is sounded, or if directed by the Emergency Coordinator (if applicable)

to leave the muster location. The "ALL CLEAR" signal will be communicated by radio or cellular telephone.

j) The Person-in-Charge shall continuously monitor the Plant radio system when at the muster location.

2. Personnel present in the field/substation area (other than the control building) shall immediately perform the following actions:

a) If not monitoring the Plant radio system, immediately turn on hand-held radios.

b) Proceed to the designated muster area unless the egress route to the muster area is not safe for travel. In such a case, proceed to an alternate muster area.

c) Instruct any personnel (including visitors and contractors) who are seen along the way to proceed to the designated muster area.

d) Upon reaching the appropriate muster area, report to the Person-in-Charge and continue to monitor the Plant radio system. If no other personnel are present at the muster area upon arrival, communicate to the lead Field Services that no other personnel are present in the area. The Person-in-Charge shall establish radio communications with operating area personnel and compare roll call lists to determine if any personnel are unaccounted for in the facility.

a) If the Emergency Coordinator is not present at the muster area, the Person-in-Charge at the muster area will coordinate outside responding agency activities until the Emergency Coordinator arrives. In the event the Emergency Coordinator is in Plant operating areas or has proceeded to the alternate muster area, he/she may elect to designate the muster area Person-in-Charge to act in the capacity of Emergency Coordinator during the emergency.

Delayed Site Evacuation Procedures

1. Personnel present on-site shall immediately take the following actions:

a) Take necessary operating actions to place the facility in the most stable condition, based upon the type of emergency.

b) Locate and obtain the visitor/contractor sign-in sheet

c) Communicate names of visitors/contractors currently in the operating areas to outside operating personnel. Instruct outside operating personnel to locate and direct all visitors/contractors to proceed to the O&M trailer for egress instructions.

d) When all visitors, contractors and non-essential operating personnel have been accounted for and are present in the O&M trailer, the lead Field Services (or Emergency Coordinator, as appropriate) shall designate a trained person to escort all non-essential personnel to the designated muster area along the safest egress route.

e) Notify the Emergency Coordinator of the current facility status, and evacuation details.

f) Perform a controlled shutdown in accordance with appropriate procedures and directions from the Emergency Coordinator.

g) Once the shutdown has been completed, all essential personnel shall gather in the O&M trailer and take roll call. When all essential operating personnel are present and accounted for, evacuation to the designated muster area shall be performed, unless the egress route is not safe for travel. In such a case, proceed to the alternate muster area.

2. The Emergency Coordinator shall immediately perform the following actions:

   a) Proceed to the O&M trailer or to the location on the facility most appropriate for directing response actions for the emergency.

   b) Coordinate actions related to the emergency and provide directions to muster area.

3. Persons-in-Charge

   a) If the emergency escalates in severity or if there is immediate danger to personnel, direct immediate evacuation of all essential operating personnel involved in Plant shutdown activities.

Designated Egress Routes and Muster Areas for Evacuations

- The Designated Muster Area is the primary gathering point for personnel and should be used during evacuations unless the emergency has rendered egress routes to the Muster Area unsafe for travel.
- The Alternate Muster Area is the alternate gathering point for such circumstances.
- Alternate muster location will be communicated at the time of evacuation and will take into consideration the event occurring that is causing the evacuation.

Designated Muster Area	Main Facility Gate
Alternate Muster Area	Substation Facility Gate

ATTACHMENT 5: PERSONNEL INJURIES OR SERIOUS HEALTH CONDITIONS ANNEX

The following sections provide basic guidelines for response actions to be taken in the event of emergencies related to personnel health. Although Field Services should take the most aggressive response actions that are prudent in an emergency, the first and foremost action will be to call 911 to initiate the response of trained outside medical responders. To prepare Facility personnel for such contingencies, it will be the facility policy that all Operating Personnel and as many other personnel as possible should be trained in CPR (Cardiopulmonary Resuscitation) and in the use of an AED (Automated External Defibrillator) if one is available. If present on site, the AED will be maintained at the facility at the designated location in the Control Building.

Note: Severe weather condition-related injuries are covered in the appropriate (Summer or Winter) Weatherization Plan.

Basic First Response Actions

- Check for unresponsiveness. Unresponsiveness is when the person is unconscious and does not respond when you call their name or touch them.
- *If the person is unresponsive, immediately call 911 for outside medical assistance and ask other personnel to bring the AED to the scene*. Other personnel should assist with 911 notifications and expediting the delivery of the AED to the scene.
- Next check to see if the victim is breathing normally. If no signs of breathing are observed, the responder should initiate two rescue breaths into the victim. After the rescue breaths, a pulse should be checked for on neck. If a pulse is present, continue with recovery breathing, but do not initiate chest compressions.
- If no pulse is observed, complete CPR, with assisted breathing and chest compressions should be commenced.
- If CPR is being performed and the AED arrives at the scene, direct an assistant to begin setting up the AED for operation on the victim. CPR should be continued during the time that the AED is being set up.
- If the AED is placed into operation, remain near the victim, and follow all AED instructions to ensure safety and proper victim monitoring. Maintain the victim with AED monitoring until trained medical responders arrive at the scene.
- If the victim is responsive but shows signs of shock or has an obvious severe injury, call 911 immediately and take additional actions as described in the sections below.
- If the victim has obvious broken bones or is bleeding profusely or may have neck or spine injuries, *do not attempt to move the victim*. Make the victim as comfortable as possible and

apply pressure to mitigate areas of profuse bleeding until trained medical personnel arrive at the scene.

- Immobilize all injured parts of the victim.
- Prepare victim for transportation if the victim can be safely moved.

Physical Shock

Symptoms

- Pallid face.
- Cool and moist skin.
- Shallow and irregular breathing.
- Perspiration appearing on the victim's upper lip and forehead.
- Increased, but faint pulse rate.
- Nausea.
- Detached semi-conscious attitude towards what is occurring around him/her.

Treatment

- Request professional medical aid immediately.
- Remain with and attempt to calm the victim.

Electric Shock

Symptoms

- Pale bluish skin that is clammy and mottled in appearance.
- Unconsciousness. No indications that the victim is breathing.

Treatment

- Turn off electricity if possible.
- Call for professional medical assistance and an ambulance immediately.
- Remove electric contact from victim with non-conducting material.
- Perform CPR and call for an AED, if required.

Burns

Symptoms

- Deep red color; or
- Blisters; or

- Exposed flesh.

Treatment

- Cooled immediately if possible, and
- Free of any jewelry or metal if it is safe to remove it.
- Do not pull away clothing from burned skin tissue.
- Do not apply any ointment to burn area.
- Seek professional medical assistance as soon as possible.

First Aid and Emergency Medical Supplies Inventory and Location

Supply	Location
Fire extinguisher (2)	Substation (1) O&M Trailer (1)
First Aid / Medical Supplies (2)	Substation (1) O&M Trailer (1)

ATTACHMENT 6: FIRE RESPONSE PLAN ANNEX

This fire response Plan describes measures taken at the facility to prevent, minimize the severity of, and proactively prepare for the event of a fire emergency. Safe and expedient response actions are essential to protect the health and safety of Field Services and minimize damage to Plant equipment and the surrounding environment.

1. Any person who discovers a fire in the facility should immediately make radio/phone contact with the Site Manager or lead Field Services, and provide the following information:

    a) That a fire has been discovered.

    b) The location and source of the fire.

    c) Any injuries that have occurred.

    d) The cause of the fire (if known).

    e) Actions he/she will be taking to extinguish the fire (if appropriate, in accordance with step 2 of this procedure).

    NOTE: Notifying others of the emergency and getting trained responders on the way is the most important step in minimizing injuries to personnel and damage to equipment. However, if the person discovering a fire would be significantly delayed in attempting to extinguish it in its incipient stage by first getting to a radio to report it, the priority would be to extinguish the fire in the incipient stage. Example: A fire commences in the immediate vicinity of a person who does not have immediate access to a Plant radio. If the person can quickly extinguish the fire, he/she should do so first, then get to a radio to report the fire as soon as possible thereafter. If a fire progresses to or is discovered in a state beyond the incipient stage, the **immediate action is to notify others via radio or cellphone and get help**.

2. Any person discovering a fire in its incipient stage should act as quickly as possible to extinguish the fire. In general, a fire is in its incipient stage if it meets two primary criteria:

    a) The fire can be extinguished or controlled with a single portable fire extinguisher; and

    b) The person discovering the fire perceives an adequate level of safety in attempting to extinguish the fire.

3. As long as the fire is in its incipient stage, as defined above, the person discovering the fire should utilize all appropriate and readily available fire extinguishing equipment to extinguish the fire. ***Fire-fighting efforts beyond the incipient stage will be performed by trained outside responders only***. (Note: All Field Services will be provided with initial and periodic refresher training on the types and locations of fire-fighting equipment at the facility. The *Fire Extinguisher Plot*, detailing the location of portable fire extinguishing equipment deployed at the facility, is provided at the end of this attachment. Additionally,

the *Fire Hydrant/System Plot* details the locations of key fire hydrants near or on the facility.)

4. Upon determination that the fire has progressed or will progress beyond its incipient stage, notify via 911, the local fire department of the situation.

5. In response to the fire, the lead Field Services will need to make the following determinations:

   a) The equipment or activities that need to be shut down and/or ceased.

   b) If any automatic fire suppression systems were activated because of the fire, when to secure such systems.

Fire Fighting Equipment Inventory and Location

- Rodeo Ranch has the following Fire Extinguishers onsite:
  - One (1) fire extinguisher located in the substation Control Building
  - One (1) fire extinguisher located in the O&M trailer
- All Extinguishers are fire extinguishers.

ATTACHMENT 7: CHEMICAL OR OIL SPILLS AND RELEASES ANNEX

NSPS Health and Safety Plan (HASP)

NSPS maintains a Power Plant O&M Health and Safety Plan (HASP) for Rodeo Ranch. The HASP should be utilized by site personnel to identify and respond to general emergencies as well as specific types of incidents covered within that document.

Hazardous Materials, Job Hazard Analysis, Personal Protective Equipment, Hazardous Energy Control, Electrical, Outdoor Safety, Evacuation Procedures, and Generation, Transmission, and Distribution Work Practices are all covered in the HASP.

It will be the responsibility of the Site Manager or lead Site Technician to assess a developing emergency situation and initiate the appropriate actions in this plan to protect personnel, the surrounding environment, and plant equipment from adverse damages.

The site personnel will also use the Operations Spill Prevention Countermeasure and Control (SPCC) Plan to assess and respond to hazardous materials.

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

The spill or release of any chemical is a potentially serious event, and appropriate response actions must be taken to minimize health hazards to personnel, as well as potential impacts to the environment. It is the policy of the facility that Plant personnel will not respond to spills/releases but will instead call for trained outside responders to perform this function. For the purpose of clarification to Plant personnel, the term "respond" in this context refers to actions taken to perform cleanup operations of spilled substances, and in some cases may even take the meaning of stopping the source of a spill. Taking basic response actions to a spill such as setting up barricades, placing containment media and stopping spills in situations such as the step 1 example below should not be construed to be acting in the role of a "responder", as it is defined in OSHA HAZWOPER regulations.

The basic actions to be taken in response to a chemical spill or release are the following:

1. If the spill or release is the direct result of an operational action performed on the system from which the release has originated, the person who performed the action should attempt to stop the release (if possible) ***if it can be stopped without incurring additional personal exposure to the substance***. An example of this might be the following:

   Example: A person opens the drain valve on a line that results in an unexpected release. If the person can immediately stop the release by closing the valve, this action should be taken if no additional exposure to the chemical will occur by doing so.

2. The person discovering a spill/release should immediately move to a location that is a safe distance from the affected area, but still allows for observation of the affected area (if remaining within observation distance is safe under prevailing conditions; if in doubt, do not risk exposure – leave the area).

3. The person discovering the spill should look for other personnel in the area and warn them of the event that has occurred. The Site Manager or lead Field Services should be notified immediately over the radio or by cellphone. Information provided should include all the following that are known:

   a) What type of chemical has been spilled/released?
   b) The location(s) of the spill/release.
   c) If the source of the spill/release has been stopped.
   d) If any injuries or chemical exposure has occurred to personnel.
   e) Boundaries describing the area of the spill.
   f) Whether or not the spill is contained.
   g) Approximate quantity released.
   h) Environmental impacts (water bodies, streams, ground, roadways).

4. Based upon the report from the person discovering the spill, the Site Manager or lead Field Services shall evaluate, through the Spill Prevention and Control and Countermeasure Plan (SPCC), whether the circumstances pose a threat to the surrounding community or the environment. ***If a threat is imposed to the community or environment, 911 should be notified immediately.***

5. The Site Manager or lead Field Services shall decide as to whether the spill/release is of a quantity that must be reported to agencies, and if so, which agencies to notify. To perform this step, the Site Manager or lead Field Services shall use the Spill Prevention Control and Countermeasure Plan (SPCC). The Site Manager or lead Field Services shall ensure that all required notifications are made.

6. While remaining at a safe distance from the spill/release, the person discovering the spill should locate and place temporary containment around the outer boundaries of the spill, and place absorbent mats over any Plant drains that are near the location of the spill. ***This should be performed only if it is safe to do so without risking chemical exposure***.

7. The person discovering the spill should attempt to barricade, restrict access, or otherwise mark off safe boundaries around the spill to avert others from inadvertently approaching the spill area. ***This should be performed only if it is safe to do so without risking chemical exposure.***

8. The person discovering the spill should remain at a safe distance from the source of the spill/release until additional assistance or instructions are received.

9. Unless the person discovering the spill has reported unsafe conditions for approach of the area, the Site Manager or lead Field Services shall immediately proceed to the spill area to evaluate the severity of the incident. **NOTE: IF ANY PERSONNEL ARE DISCOVERED TO BE UNCONSCIOUS OR OTHERWISE INCAPACITATED UPON APPROACH TO THE SPILL SCENE, ALL PERSONNEL MUST IMMEDIATELY BACK AWAY TO A SAFE DISTANCE FROM THE UNKNOWN THREAT.**

10. The Site Manager or lead Field Services shall evaluate the adequacy of containment, barricades, and any other efforts that have been taken to prevent the spill from migrating to any additional areas or systems, and direct additional actions to be performed (unless it is deemed that any additional actions are unsafe to perform). The adequacy or need for PPE should also be assessed. Upon completing this assessment, the Site Manager or lead Field Services shall notify/inform the Emergency Coordinator of the status of the emergency.

11. Once the Site Manager, lead Field Services, or Emergency Coordinator, as appropriate, has determined that adequate containment and barricading of the spill area exists, he/she shall ensure that an adequately trained observer remains positioned a safe distance from the scene to observe the status of the spill. This observer shall perform radio status checks a minimum of once every three minutes until outside responders arrive for cleanup/mitigation actions.

ATTACHMENT 8: PANDEMIC PREPAREDNESS ANNEX

This annex to the Rodeo Ranch Emergency Operations Procedure (EOP) provides guidance and direction to Rodeo Ranch Energy Storage, LLC (Rodeo Ranch) specific to pandemic and epidemic Planning to address continuity and maintain essential functions and services during those events.

This annex addresses the requirements in §25.53 under *(d) Information to be included in the emergency operations Plan.* Within this annex and all other EOP documents, the use of "EOP" refers to the entire suite of documents that address the PUCT requirements, which includes relevant annexes, as listed in the Resources and Related References section.

Any questions regarding the EOP should be directed to the Rodeo Ranch Compliance Manager.

Pandemic Threat Levels

The World Health Organization (WHO) defines a pandemic as a "worldwide spread of a new disease" where "the impact or severity tends to be higher…in part because of the much larger number of people…who lack pre-existing immunity to a new virus." Examples of recent pandemic events include the H1N1 pandemic in 2009-2010, the Zika virus pandemic in 2016, and the COVID-19-Coronavirus pandemic starting in 2019.

The pandemic threat levels are based on the World Health Organization (WHO) and US National Alert Stages and have been modified to fit Rodeo Ranch. The pandemic threat levels are based on the level of person-to-person transmission and how widespread the disease is in humans, as measured in the US transmittal rates. Planning and response measures are based on the pandemic threat level. Rodeo Ranch will consult with WHO, the Center for Disease Control (CDC), and the local and state health departments. Attachment 1 contains the Federal Government Response Stages matrix.

Level 0 – Awareness	No documented cases of person-to-person transmission.
Level 1 – Cautionary	Documented person-to-person transmission is rare.
Level 2 – Serious	Limited documented person-to-person transmission (Small Cluster).
Level 3 – Severe	Evidence of widespread person-to-person spread (larger or multiple clusters identified in the US) **AND** Limited person-to-person spread within city.
Level 4 – Critical	Increasing and sustained person-to-person transmission **AND** Multiple clusters of cases identified in two (2) or more countries or regions.

Crisis Team

To facilitate Rodeo Ranch's response to a pandemic, Rodeo Ranch will establish a cross-functional crisis team comprised of representatives of Human Resources, Rodeo Ranch, Site Manager and Field Services, and others, as needed. The Rodeo Ranch Compliance Manager and

Site Manager will jointly lead the team, which is charged with evaluating the outbreak information, assessing impact to Rodeo Ranch operations, developing appropriate responses to actual and potential developing threat, and communicating per established periodicities with staff.

Pandemic Disease Containment/Control Strategies

Government and health departments will publish the actions they're taking to implement disease containment strategies. Rodeo Ranch will use this published information and factor the potential impacts on both business and Bulk Power System operations. Rodeo Ranch may choose to implement any number of containment strategies and to recommend these strategies to their personnel, as appropriate. Strategies may include the following:

- **Isolation** - Separation of persons with specific infectious illnesses in their homes, in hospitals, or in designated healthcare facilities.
- **Quarantine** - Separation and restriction of the movement while not yet ill, have potentially been exposed to an infectious agent.
- **Social Distancing** - Social distancing measures could take the form of: modifying the frequency and type of face-to-face employee encounters (e.g., placing moratoriums on hand-shaking, substituting teleconferences for face-to-face meetings, staggering breaks, posting infection control guidelines); establishing flexible work hours or worksite; and implementing strategies that request and enable infected employees to stay home at the first sign of symptoms.

The use of these strategies, along with enhanced hygiene etiquette and the cancellation of non-essential activities to reduce the potential for transmission rates, will be evaluated for use throughout the duration of the pandemic event.

Essential Roles and Personnel

Given the expected duration and potential multiple waves of pandemic outbreaks and the extended toll it may take on personnel and their families (which may reduce Rodeo Ranch personnel availability), the crisis team must review the processes involved in carrying out essential roles and services to develop Plans that mitigate the effects of the pandemic, while simultaneously allowing the continuation of operations which support essential functions. The following essential roles and services have been identified as needed to sustain operations during a pandemic, which may span multiple months. Other Roles may be added to this table as necessary during an event.

Role	Continuously critical or event-driven critical?
Site Manager	Continuously

Role	Continuously critical or event-driven critical?
Field Service Technician(s)	Event Driven
Operating Personnel	Event Driven

Planning Assumptions

Listed below are the overarching organizational Planning assumptions.

- Federal, State, and Local government will provide guidance and/or direction regarding current pandemic status.
- Rodeo Ranch will evaluate all available information published during a pandemic to determine appropriate response and actions.
- The Facility will be accessible, but right of entry may be limited to essential personnel.
- Essential functions, operations, and support requirements will continue to be people dependent. However, human interactions may be remote or virtual, resulting in the employment of appropriate teleworking and other approved social distancing protocols.
- Travel restrictions, such as limitations on mass transit, implemented at the Federal, State, tribal, territorial, and local levels may affect the ability of some staff to report to work.
- Additional funding will be budgeted for the acquisition of additional equipment, whether Personal Protective Equipment (PPE) or other equipment identified during an event.

Resources And Related References

Centers for Disease Control

Pandemic Influenza webpage: https://www.cdc.gov/flu/pandemic-resources/index.htm

National Strategy Planning webpage:

https://www.cdc.gov/flu/pandemic-resources/Planning-preparedness/national-strategy-Planning.html

NERC COVID-19 webpage: https://www.nerc.com/news/Pages/COVID-19.aspx

World Health Organization

https://www.who.int/emergencies/diseases/en/

Texas Health and Human Services – Health Alerts & Advisories webpage:
https://dshs.texas.gov/news/alerts.aspx

Brazoria County Public Health Department webpage

https://www.brazoriacountytx.gov/departments/health-department

ATTACHMENT 9: CYBER AND PHYSICAL SECURITY INCIDENT ANNEX

This annex provides guidance and direction to Rodeo Ranch Energy Storage, LLC (Rodeo Ranch) specific to cyber security and physical security incidents and provides information on identification and escalation of potential or actual cyber or physical security incidents.

This annex addresses the requirements in §25.53 under *(d) Information to be included in the emergency operations Plan*. Within this annex and all other EOP documents, the use of "EOP" refers to the entire suite of documents that address the PUCT requirements, which includes relevant annexes, as listed in the Resources and Related References section.

Any questions regarding the EOP should be directed to the Rodeo Ranch Compliance Manager.

INCIDENT IDENTIFICATION

Threats to the Facility

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

Actions by the person receiving the threat:

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

The Site Manager or lead Field Services may consider any or all the following actions to take in response to the threat situation, depending upon the circumstances of the threat:

1. Order an evacuation of the facility.
2. Call 911 for Police or Fire Assistance.
3. Arrange for additional security personnel for the facility.
4. Direct Plant personnel to commence a controlled shutdown of the facility.
5. Direct searches to be performed on vehicles entering the facility.

Identification of Abnormal Conditions and Potential Indicators of a Cyber Security or Physical Security Incident

The first person to become aware of an abnormal condition will report to their appropriate internal contact (e.g., Site Manager, IT, etc.) for review, identification, and for determining if the incident warrants escalation.

The primary activities in the incident identification phase are the following:

1. Review events, alarms, and indicators of compromise;
2. Gather evidence, interview involved parties (if needed); and
3. Analyze information gathered to determine if an incident has occurred, and if further evaluation is needed.

It is important to be aware that seemingly unrelated cyber and physical events may be related; be cautious to not draw conclusions before analysis and communications have been conducted.

The information below is intended to provide guidance for determining if an incident warrants further evaluation.

Physical indicators of a potential Cyber Security or Physical Security Incident

12.1.1 Indicators include, but are not limited to:

- Physical security alarms or obvious signs of intrusion (e.g., cut fencing, broken locks, pry marks, etc.);
- Unescorted, unauthorized visitors within a BES Cyber Systems perimeter;
- Unusual vehicles at the perimeter of or in the Facility;
- Any suspicious packaging, unknown equipment, unexplainable changes to wiring; or
- Loosened fasteners found in patterns or in high numbers.

Cyber indicators of a potential Cyber Security Incident

12.1.2 Indicators include, but are not limited to:

- Unexplained changes in the availability or unavailability of a service;
- Software performance, increased command latency;
- Software crashes and data-base corruptions;
- Changes in software behavior (such as reset commands performing an alarm test);
- Line, bus, or transformer relay actions with no indicated fault targets or unusual combinations of fault targets;
- Remote Terminal Unit (RTU) or other abnormal communications failures;
- Social engineering efforts directed at Personnel;
- Unexplained use of privileged accounts;
- Accounting discrepancies;
- Suspicious, unusual, or excessive unsuccessful login attempts;
- Unexplained new user accounts;
- Unstable systems or system crashes;
- Poor or inconsistent system response time;
- USB sticks, drives, or devices found connected to BES Cyber Systems;
- Changes in wiring; and
- Physical disturbances (e.g., open panels, broken tamper tape).

INCIDENT ESCALATION, INVESTIGATION AND REPORTING

Escalation

Upon receipt of notification from Field Services or Operating Personnel, the Compliance Manager and notifying personnel will coordinate the investigation and reporting of the suspected incident to the appropriate stakeholders in the reporting process.

Investigation

The Compliance Manager, along with subject matter experts, Operating Personnel, Field Services, and other support staff, will ensure that the potential event is investigated and reported within all required timelines (e.g. NERC, ERCOT, Federal).

Reporting

12.1.3 In coordination with Operating Personnel and subject matter experts, the Compliance Manager or their designee will determine if there is any reporting required for the incident.

- Personnel involved in the response to an incident will be notified by the Compliance Manger or their designee of any submittals that were made.

12.1.4 Operating Personnel will notify and coordinate with Field Services until the end of the Reportable Event.

12.1.5 If the event is determined to not meet the reporting threshold, Operating Personnel will coordinate the collection of all appropriate evidence with Field Services and submit to the Compliance Manager for evidence retention.

12.1.6 If it is determined that a Reportable Cyber Security Incident has occurred or is ongoing, the incident must be reported to the NERC Electricity Information Sharing and Analysis Center (E-ISAC) and other entities, as required.

12.1.7 If it is determined that a Reportable physical Event has occurred or is ongoing, it must be reported to the Department of Energy and other entities, as required.

Resources And Related Documents

Rodeo Ranch Cyber Security Incident Response Plan

Rodeo Ranch Event Reporting Operating Plan

Department of Energy (DOE)

Office of Cybersecurity, Energy Security & Emergency Response web page:
https://www.oe.netl.doe.gov/oe417.aspx

- DOE-417 Online Submissions and DOE-417 Form and Instructions are located on this web page.
- The Online Submissions link allows a user to include NERC System Awareness and the E-ISAC on the submittal; if the user has a login account, they can include additional recipients as well as retrieve and update past forms.

NERC

https://www.nerc.com/pa/rrm/bpsa/Pages/default.aspx

ERCOT

Current Protocols - Nodal: https://www.ercot.com/mktrules/nprotocols/current

- Section 16: Registration and Qualification of Market Participants
- Section 23 Form E, Notice of Change of Information:
- Section 23 Form O, Notice of Cybersecurity Incident

Current Nodal Operating Guides: https://www.ercot.com/mktrules/guides/noperating/current

- Section 3: ERCOT and Market Participant Responsibilities

Texas RE

Texas RE Event Analysis webpage: https://www.texasre.org/reliabilityservices

- See "Event Contact Information" section under Event Analysis

PUCT

Electric Substantive Rules: Chapter 25 Rules webpage:
https://www.puc.texas.gov/agency/rulesnlaws/subrules/electric/Electric.aspx

- Subchapter C, §25.53 - Electric Service Emergency Operations Plans

Emergency Contact Update Form (posted under Emergency Management section):
https://www.puc.texas.gov/industry/electric/forms/

ATTACHMENT 10: RODEO RANCH CRITICAL COMPONENT MATRIX

Rodeo Ranch Critical Equipment				
Item #	Description (Manufacturer and Model)	Quantity	Weather Protections	Weather Design Limits
1.	VTL-1 - CVT Kuhlman DDB-145 Capacitive Voltage Transformer	Three (3)	Mineral oil filled equipment	Operating temperature range -50 °C (-58 °F) to +50 °C (122 °F)[1]
2.	52-L1/52-T1/52-T2 - Siemens SPS2S-145-40-1 Circuit Breaker	Three (3)	SF_6 Gas Filled Equipment	Operating temperature range -30 °C (-22 °F) to +55 °C (131 °F)[2]
3.	T1/T2 - Virginia-Georgia Transformer Main Power Transformers 138-34.5 kV, 97/129/161 MVA (ONAN/ONAF/ONAF), with multi-ratio bushing current transformers	Two (2)	Mineral oil filled equipment	65 °C rise above ambient temperature.[3]
4.	52-F1/F2/F3/F4/F5/F6/C1/C2 - EMA VDH 34.5kV Feeder Circuit Breakers	Eight (8)	Vacuum	Operating temperature range -20 °C (-4 °F) to +50 °C (122 °F)[4]
5.	Substation Control House HVAC – 3 Ton Bard 11EER WA Series Wall Mount	Two (2)	"Low Ambient Control" option selected, allowing for operation to 0°F	Operating temperature range -18 °C (0 °F) to +40 °C (105 °F)[5]
6.	4,000 kVA, 34.5 kV Delta / 0.800 kV Delta-Wye, Pad-Mount Transformers supplied as part of Sungrow skid units	Eighty Eight (88)	Mineral oil filled equipment	60 °C rise above ambient temperature[6]
7.	Sungrow SC4000UD-MV-US PCS Unit (Inverters)	Eighty Eight (88)	NEMA 3R Enclosure. Independent Force Air Cooling. Installed additional capacity to account for derates.	Ambient operating temperature range -35°C (-31 °F) to +60 °C (140 °F). Derate above +45 °C (113 °F)[7]
8.	Sungrow ST2752UX-US ESS Battery Modules	Eighty Eight (88)	Liquid Cooling	Operating temperature range -30°C (-22 °F) to +50°C (122 °F). Derates for module operating temperatures above +45 °C (113 °F)[8]

Rodeo Ranch Energy Storage, LLC

Emergency Operations Plan – Executive Summary

Revision 1.0

1.0 POWER GENERATION COMPANY INFORMATION

Rodeo Ranch Energy Storage, LLC (Rodeo Ranch or "Facility"), a 300 MW (at POI) BESS facility located in Reeves County, Texas. Rodeo Ranch is expected to commence commercial operations in December 2023 and is interconnected to Texas-New Mexico Power Company at the 138 kV Worsham Substation, located in the Electric Reliability Council of Texas (ERCOT) footprint.

PGC Name	ERCOT Resource Name	Nameplate Rating	Commercial Operations Date (est.)
Rodeo Ranch Energy Storage, LLC	Rodeo Ranch_UNIT1	176MVA	12/2023
Rodeo Ranch Energy Storage, LLC	Rodeo Ranch_UNIT2	176MVA	12/2023

2.0 EXECUTIVE SUMMARY - EOP CONTENTS

2.1 Summary of Approval and Implementation

This section documents the applicability of the EOP and its associated annexes, identifies the areas of non-applicability due to the Facility not having the capabilities, technology or location within a zone that would require an annex, and general information about the facilities included within the EOP as well as the Roles and Responsibilities of the personnel responsible for developing, implementing and updating the EOP. Due to non-applicability, Rodeo Ranch does not maintain Annexes for the following;

Section	Statement of Non-Applicability
(e)(2)(A)(ii) Adequacy and operability of fuel switching equipment	Rodeo Ranch as an energy store facility does not have the capability to utilize alternate fuels or to perform fuel switching.
(e)(2)(B) Water Shortage Annex	Rodeo Ranch does not utilize water in the generation of electricity.
(e)(2)(E) Hurricane Annex	Rodeo Ranch is not located in a hurricane evacuation zone (as defined by the Texas Division of Emergency Management (TDEM) [1]

2.1 Summary of Emergency Operations Plan

The *Emergency Operations Plan* is the over-arching document that sets the policies for emergency conditions that could impact the operation of the Facility as well as the safety of personnel at the Facility. It includes applicability and non-applicability statements, information about the Facility, a process for activating the EOP as well as establishes the roles and responsibilities of site personnel and Rodeo Ranch's Emergency Management Personnel. In addition to the various Plans and Annexes, The EOP also contains the general emergency site procedures (e.g. evacuation, personnel injuries and treatment, fire and hazardous material response). The EOP lays out requirements for training to relevant personnel and annual drill requirements.

2.2 Summary of Communications Plan

This section describes the training necessary for facility personnel who will interface with Media, the PUCT, the OPUC, local and State government officials and Emergency Operations Centers, the ERCOT Reliability Coordinator, and fuel suppliers. Rodeo Ranch, being an energy storage facility, does not utilize fuel and therefore does not communicate with fuel suppliers.

2.3 Summary of Plan for Pre-Identified Supplies for Emergency Use

Each of the annexes applicable to the PGC, including the Cold Weather Annex and Hot Weather Annex contain a list of supplies that are unique to the content of the annex and are completed pre-season and/or pre-event.

2.4 Summary of Plan that Addresses Staffing during Emergency Response

The EOP includes a plan for consideration of staffing during an event and, as appropriate, contains items to review and confirm staffing availability as well as request additional staffing before (if possible) and during an event.

2.5 Summary of Plan for Identification of Weather–Related Hazards

The EOP includes a plan built to identify weather-related hazards specific to Rodeo Ranch. The weather-related annexes are built on site-specific data, including information provided by the State, County, and regional emergency managers, as well as a consideration of local conditions as documented and published online.

2.6 Summary of Restoration of Service Annex

Includes a summary of the process for restoration of generation due to a failure to start or tripping off-line of the Rodeo Ranch facility as well as the availability of backup power from the utility feed and anticipated response time from an outage event.

2.7 Summary of General Emergency Procedure

Includes role and responsibilities for developing emergency situations, general emergency protocols for response, and management of in-progress site activities during an emergency.

2.8 Summary of Evacuation Procedures Annex

Provides guidance for notification to Field Services of a decision to evacuate, designated muster areas, roll calls to ensure all personnel are accounted for, and designated egress routes to post-evacuation muster area.

2.9 Summary of Personnel Injuries or Serious Health Conditions Annex

Provides guidance for basic First Response Actions when personnel are injured or experience a serious health condition at the job site and provides a list of first aid and emergency medical supplies and their locations.

2.10 Summary of Fire Response Plan Annex

Provides guidance for initial response and communications when a fire is discovered, incipient stage fire-fighting efforts, escalation to the local fire department, and an inventory and location of on-site fire-fighting equipment.

2.11 Summary of Chemical or Oil Spills and Releases Annex

Provides guidance for the handling of any chemical, oil, or hazardous material release at the facility including an inventory and location of mitigation and containment equipment at the facility.

2.12 Summary of Pandemic and Epidemic Preparedness Annex

The *Pandemic and Epidemic Annex* serves as the annex for maintaining essential functions and services during a pandemic. This document addresses the specialized continuity planning required by addressing considerations, challenges, and elements specific to the dynamic nature of a pandemic or epidemic. The Annex defines a crisis team that is responsible for evaluation and assessment, as well as the development of response actions and communications.

2.13 Summary of Hot Weather Annex

This annex documents the programs in place to maintain the Facility's reliability and to prevent extreme hot weather-related events from having adverse impacts to reliability or operations. The annex documents the actions that will be taken in advance of each season and in accordance with requirements to safeguard personnel and the Facility's critical components from weather-related impacts. Included in the annex are checklists to document equipment and inventory reviews, pre-season assessments and communications (which include the review of best practices and lessons learned), as well as during-season reviews and communications.

2.14 Summary of Cold Weather Annex

This annex documents the programs in place to maintain the Facility's reliability and to prevent extreme cold weather-related events from having adverse impacts to reliability or operations. The annex documents the actions that will be taken in advance of each season and in accordance with requirements to safeguard personnel and the Facility's critical components from weather-related impacts. Included in the annex are checklists to document equipment

and inventory reviews, pre-season assessments and communications (which include the review of best practices and lessons learned), as well as during-season reviews and communications.

2.15 Summary of Cyber and Physical Security Incident Annex

This annex is specific to cyber security and physical security incidents and provides information on the identification and escalation of potential or actual cyber or physical security incidents. The annex addresses how to identify potential physical or cyber indicators of an incident, and how to escalate, investigate, and report a potential or actual incident.

3.0 EXECUTIVE SUMMARY – DOCUMENT AND REQUIREMENTS MAPPING

Requirement	Addressed in document	Where it is addressed in the document
16 TAC Sec. 25.53 (d) Information to be included in the emergency operations plan		
(1)(A)	Emergency Operations Plan and Section 25.53 Executive Summary	Section 1.0 Approval and Implementation (EOP p.4) • 1.1 Introduction • 1.2 Applicability • 1.3 Statements of §25.53 Non-Applicability
(1)(B)	Emergency Operations Plan	Section 1.0 Approval and Implementation • B. Roles and Responsibilities (EOP p.5)
(1)(C)	Emergency Operations Plan	Section 1.0 Approval and Implementation • C. Revision Control Summary (EOP p.7)
(1)(D)	Emergency Operations Plan	Section 1.0 Approval and Implementation • C. Revision Control Summary (EOP p.7)
(1)(E)	Emergency Operations Plan	Section 1.0 Approval and Implementation • D. Approvals (EOP p.7)
(2)(B)	Emergency Operations Plan	Section 3.0 Communication Plan (EOP p.8)
(3)	Emergency Operations Plan	• Section 4.0 Plan for Pre-Identified Supplies for Emergency Use (EOP p.9)
	Cold Weather Annex	5.0 Cold Weather Preparation and Response Processes (Annex p.6) • 5.2 Cold Weather Equipment Inventory List (Annex p.6) • Attachment 2: Cold Weather Equipment Inventory (Annex p.14)
	Hot Weather Annex	5.0 Hot Weather Preparation and Response Processes (Annex p.6) • 5.2 Hot Weather Equipment Inventory List (Annex p.6) • Attachment 2: Hot Weather Equipment Inventory (p.14)
	Fire Response Plan Annex	• Fire Fighting Equipment Inventory and Location (EOP p.29)

Requirement	Addressed in document	Where it is addressed in the document
	Chemical or Oil Spills and Releases Annex	• Chemical and Oil Spill Mitigation and Containment Equipment Guidance (EOP p.30)
	Personnel Injuries and Serious Health Conditions Annex	• First Aid and Emergency Medical Supplies Inventory and Location (EOP p.27)
(4)	Emergency Operations Plan	• Section 5.0 Plan to Address Staffing During Emergency Response (EOP p.9)
(5)	Emergency Operations Plan	• Section 6.0 Identification of Weather-Related Hazards (EOP p.10) • Section 2.0 Process for Activating the EOP (EOP p.8)
16 TAC Sec. 25.53 (e) Annexes to be included in the emergency operations plan		
(2)(A)(i)	Cold Weather Annex	Entire document
	Hot Weather Annex	Entire document
(2)(A)(ii)	Cold Weather Annex	• Not applicable as Rodeo Ranch does not have fuel switching equipment installed
	Hot Weather Annex	• Not applicable as Rodeo Ranch does not have fuel switching equipment installed
(2)(A)(iii)	Cold Weather Annex	• 5.4 Post-Event and Annual Review • Attachment 3: Pre-Winter Checklist • Attachment 5: Pre-Event and Extreme Cold Checklist
	Hot Weather Annex	• 5.4 Post-Event and Annual Review • Attachment 3: Pre-Summer Checklist • Attachment 5: Pre-Event and Extreme Heat Checklist
(2)(B)	Water Shortage Annex	Not applicable as Rodeo Ranch does not utilize water in the generation of electricity
(2)(C)	Emergency Operations Plan	Attachment 2 Restoration of Service Annex • Failure to Start or Tipping Off-line (EOP p19) • Response Time and Backup Power (EOP p19) • Generation Facility Startup Procedure (EOP p19)
(2)(D)	Pandemic and Epidemic Annex	Attachment 8. Pandemic Preparedness Annex Entire document
(2)(E)	Hurricane Annex	Not applicable as Rodeo Ranch is not located in a hurricane evacuation zone (as defined by the Texas Division of Emergency management (TDEM)
(2)(F)	Cyber and Physical Security Incident Annex	Attachment 9. Entire document
(2)(G)	Cyber and Physical Security Incident Annex	Attachment 9. Entire document

Requirement	Addressed in document	Where it is addressed in the document
(2)(H)	Additional Annexes	Not applicable as Rodeo Ranch does not have any additional annexes

4.0 RECORD OF DISTRIBUTION AND TRAINING

This table presents information, as required, of the persons in the entity's organization receiving access to and training on the EOP, as appropriate.

Organization Name	Title	Individual	Date(s) of Distribution and Training EOP

5.0 AFFIDAVIT

Rodeo Ranch attaches an affidavit from [OFFICER NAME, TITLE], its highest-ranking representative, official, or officer with binding authority over Rodeo Ranch in accordance with 16 Tex. Admin. Code Sec. 25.53(c)(4)(C).

SEE NEXT PAGE

Rodeo Ranch Energy Storage, LLC

Hot Weather Annex

Revision 1.0

TABLE OF CONTENTS

1.0 INTRODUCTION

This annex to the Rodeo Ranch Emergency Operations Procedure (EOP) provides guidance and direction to Rodeo Ranch Energy Storage, LLC (Rodeo Ranch) specific to hot weather operations, planning and emergency response.

This annex addresses the requirements in §25.53 under *(d) Information to be included in the emergency operations plan.* Within this annex and all other EOP documents, the use of "EOP" refers to the entire suite of documents that address the PUCT requirements, which includes relevant annexes, as listed in the Resources and Related References section.

Any questions regarding the EOP should be directed to the Rodeo Ranch Compliance Manager.

2.0 LOCAL CONDITIONS

2.1 Local Conditions

Monahans, Texas (the closest National Oceanic and Atmospheric Administration (NOAA) Station for historical data) is used for comparison of the local Facility conditions. The average high temperature during extended Summer months of June through September is 83 degrees Fahrenheit, with a maximum high of 107 degrees Fahrenheit in 2007.

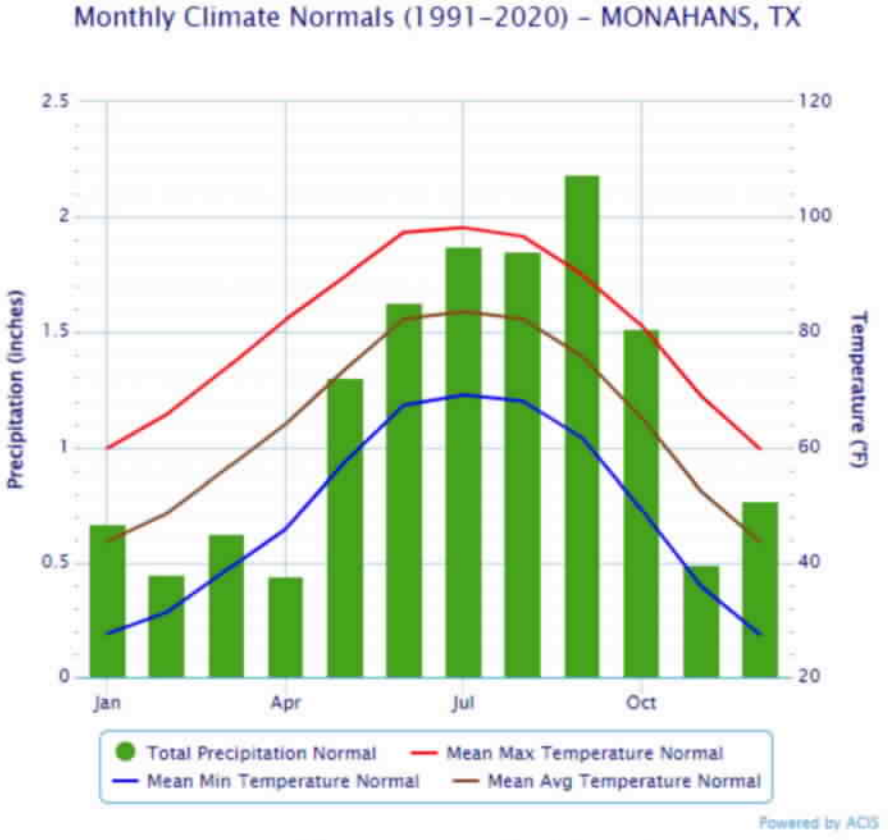

Figure 1 : https ://www.weathe r.gov/wrh/Climate ?wfo=maf

Month	Total Precipitation Normal (inches)	Mean Max Temperature Normal (°F)	Mean Min Temperature Normal (°F)	Mean Avg Temperature Normal (°F)
January	0.67	59.8	27.6	43.7
February	0.45	65.7	31.3	48.5
March	0.63	73.7	38.6	56.2
April	0.44	82.2	45.8	64.0
May	1.30	89.7	57.4	73.5
June	1.63	97.3	67.3	82.3
July	1.87	98.1	69.1	83.6
August	1.85	96.6	68.0	82.3
September	2.19	90.0	61.6	75.8
October	1.52	81.2	49.2	65.2
November	0.49	68.9	35.9	52.4
December	0.77	59.7	27.4	43.6
Annual	13.81	80.2	48.3	64.3

Figure 2 : https ://www.weather.gov/wrh/Climate?wfo=maf

3.0 REQUIRED TIMELINES FOR HOT
4.0 WEATHER/SUMMER PREPARATIONS

4.1 Pre-Summer Season Checks

Prior to **May 1** of each calendar year, Field Services will complete a *Pre-Summer Checklist* (Attachment 3).

4.2 Pre-Event Checks

Field Services will complete the *Pre-Event and Extreme Heat Checklist* (Attachment 5) prior to the forecasted temperature reaching 100°F and/or the possibility of extreme summer weather events. The majority of our preparation is people-based, in lieu of equipment-based, due to the design operating temperature of the equipment.

5.0 RODEO RANCH CRITICAL COMPONENTS AND EQUIPMENT

As part of its extreme heat weather readiness and preparation, the Site Manager and Field Services will identify and prioritize critical components, equipment, and other areas of vulnerability which may experience extreme hot weather operational issues (i.e., critical equipment or components that have the potential to cause a trip, de-rate, or failure to start due to extreme hot weather event).

The *Rodeo Ranch Critical Component Matrix* (Attachment 1) identifies the critical components and equipment at the facility that perform or support significant reliability or operating functions, including any existing type(s) of weather protection and weather design limits.

Field Services will ensure all critical site-specific equipment and components have adequate protection to ensure operability during extreme hot weather events, including but not limited to performing maintenance prior to the beginning of Summer and increasing surveillance during extreme hot weather events.

5.1 Equipment Design Parameters and Weather Design Limits

Rodeo Ranch has a design maximum ambient temperature (maximum operating temperature) of 140 degrees Fahrenheit (temperature >122 degrees Fahrenheit results in equipment derations) and a design minimum ambient temperature (minimum operating temperature) of -22 degrees Fahrenheit.

Field Services will utilize, as part of the implementation of this annex, manufacturers recommendations to determine at what ambient temperature the facility and any critical equipment will be able to operate.

6.0 HOT WEATHER PREPARATION AND RESPONSE PROCESSES

To support the Facility's seasonal extreme hot weather preparedness, address potential critical failure points, and address equipment and facility weather design limitations, checklists are provided to prepare and safeguard the Facility. Field Services will utilize these checklists to prepare for Summer and respond to extreme hot weather events.

6.1 Pre-Hot Weather Season Annual Review

Prior to the beginning of the Hot Weather Season, Field Services will;

- Review previous Hot Weather Season operations and lessons learned;
- Review the *Rodeo Ranch Critical Component Matrix* (Attachment 1) and update the list as necessary,
- Review the adequacy of staffing plans to be used during a summer weather emergency and revise the staffing plans, as appropriate, and,
- Train relevant operational personnel on summer preparations and operations.

Field Services will document and archive each of the above activities in meeting minutes or confirmation emails to the Site Manager and Compliance Manager.

6.2 Hot Weather Equipment Inventory

Prior to the onset of the summer season and/or an extreme hot weather event, Field Services will ensure there are adequate inventories of all critical supplies, spare parts, and consumables that would aid in keeping the facility operational during extreme hot weather events and in responding to these events. Field Services will complete the *Hot Weather Equipment Inventory* (Attachment 2) and provide the dated checklist to the Site Manager and Compliance Manager as evidence that the inventory review was performed.

6.3 Pre-Summer Checklist

The *Pre-Summer Checklist* (Attachment 3) includes verifications of Field Services readiness and review of this Plan. These checklists are due within the specified timeframes, per Section 3.0 of this Annex, as they are required reporting to ERCOT and the PUCT.

6.4 Monthly Verification of Critical Component Hot Weather Protections.

The *Monthly Verification of Hot Weather Protection Checklist* (Attachment 4) will be completed by Field Services each calendar month to test or verify the functionality of hot weather protection equipment for all hot weather critical components.

6.5 Pre-Event Checklist

The *Pre-Event and Extreme Heat Checklist* (Attachment 5) will be completed by Field Services to verify that the Facility's critical equipment is protected and functioning properly in advance of a forecasted extreme hot weather event.

6.6 Post-Event and Annual Review

After each summer season, Field Services will review hot weather protection performance and determine if any improvements need to be made.

6.7 Documenting Summer Preparedness Activities via Work Order Management

Field Services will review its work management system to ensure adequate annual preventative maintenance work orders exist for extreme hot weather preparedness. Field Services will also prioritize: (i) all open corrective maintenance items that could affect plant operation and reliability in extreme hot weather; and (ii) all extreme hot weather preparedness preventative work orders.

7.0 HEAT-RELATED SAFETY INFORMATION

6.1 Personnel Safety

Personnel safety during extreme hot weather events is a priority. The information in this section is aimed at reducing or preventing operating personnel weather-related risks.

Field Services will stay informed of potential summer weather events and utilize the information in this plan to respond. Job safety briefings will be conducted as needed during preparation for, and in response to, extreme summer weather events.

6.2 Heat Exhaustion

7.1.1 Signs of heat exhaustion include:

- Heavy sweating.
- Weakness.
- Cold, pale, clammy skin.
- Fast, weak pulse.
- Nausea or vomiting.
- Fainting.

7.1.2 Response to a heat exhaustion illness should include the following actions:

- Move to a cooler location.
- Lie down and loosen clothing.
- Apply cool, wet clothes to as much of your body as possible.
- Sip water.

Seek immediate medical attention by calling 911 if you experience vomiting or if your symptoms get worse or last longer than an hour.

6.3 Heat Stroke

Heat stroke is a condition in which your body is unable to adequately cool any longer.

7.1.3 Signs of heat stroke include:

- High body temperature (103oF or higher).
- Hot, red, dry, or damp skin.
- Headache.
- Dizziness.
- Nausea.
- Confusion.
- Loss of Consciousness.

7.1.4 Response to heat stroke should include the following actions:

- Contact Emergency Services by calling 911 if you suspect heat stroke.
- Move person to a cooler place.
- Help lower the person's temperature with cool cloths or a cool bath.
- DO NOT give the person anything to drink.

6.4 Safety Procedures

7.1.5 During extreme hot weather events, Field Services should adhere to the following procedures.

7.1.5.1 Review heat stress training and related illness signs and symptoms with all Field Services on at least a monthly basis during the summer months and prior to anticipated extreme hot weather events.

7.1.5.2 Take breaks in air-conditioned spaces.

7.1.5.3 Wear loose, lightweight, light-colored clothing.

7.1.5.4 Wear hats when working outdoors.

7.1.5.5 Wear and reapply sunscreen as indicated on the package.

7.1.5.6 Regularly drink water to remain hydrated (two to four 8-ounce cups of water every hour while working).

7.1.5.7 Where possible, schedule outdoor work for earlier or later in the day to avoid the hottest part of the day.

7.1.5.8 Seek medical care immediately if you or a co-worker shows symptoms of heat-related illness.

8.0 EXTREME HOT WEATHER EVENT COMMUNICATIONS

7.1 Communication Protocols

8.1.1 The Site Manager or lead Field Services will communicate all extreme hot weather preparation and response activities to the Compliance Manager.

8.1.2 Before anticipated extreme hot weather event, the Site Manager will:

8.1.2.1 Communicate with Field Services, Operating Personnel, and the Compliance Manager that the site-specific hot weather readiness activities and preparation procedures, checklists, and reviews have been completed.

8.1.2.2 Communicate with all personnel about changing conditions and potential areas of concern to heighten awareness around safe and reliable operations.

8.1.3 Operating Personnel will notify the Compliance Manager, QSE and other entities of instances of weather conditions leading to a plant outage, shutdown, or curtailment.

8.1.4 Field Services will conduct job safety briefings during extreme hot weather events will include interpersonal communication capabilities and available back-up communications options. Field Services will identify and verify the operations of all back-up communications systems in case the primary system is not available.

9.0 ERCOT ANNUAL SUMMER WEATHER DECLARATION SUBMITTAL

8.1 ERCOT Requirement to File Annual Summer Weatherization Declaration Submittal

9.1.1 Rodeo Ranch must submit a declaration between **May 1 and June 1** that it has completed or will complete all weather preparations required by this Plan for

equipment critical to the reliable operation of the Generation Resource during the Summer period (June through September).

9.1.2 Rodeo Ranch will follow all other requirements per ERCOT's direction concerning the submission of the declaration, as applicable.

10.0 RESOURCES AND RELATED DOCUMENTS

Rodeo Ranch Emergency Operations Plan

Rodeo Ranch Pandemic and Epidemic Annex

Rodeo Ranch Cold Weather Annex

Rodeo Ranch Cyber and Physical Security Incident Annex

PUCT

Electric Substantive Rules: Chapter 25 Rules webpage:
https://www.puc.texas.gov/agency/rulesnlaws/subrules/electric/25.53/25.53ei.aspx

- Subchapter C, §25.53 - Electric Service Emergency Operations Plans:
  https://www.puc.texas.gov/agency/rulesnlaws/subrules/electric/25.53/25.53.pdf
- Subchapter A, §25.5 – Definitions:
  https://www.puc.texas.gov/agency/rulesnlaws/subrules/electric/25.5/25.5.pdf

ERCOT

Current Protocols - Nodal: http://www.ercot.com/mktrules/nprotocols/current

- Section 3: Management Activities for the ERCOT System

DOCUMENT OWNERS

Title	Name
Compliance Manager	Karl Perman
Sr Director of Asset Management	Bree Maria

DISTRIBUTION LIST

Title	Name
Compliance Manager	Karl Perman
Sr. Director of Asset Management	Bree Maria
Sr. Asset Manager	Keith Merkel
Site Manager	Kyle Rabe
Chief Communications Officer	Polly Shaw
Commercial Asset Manager	Carolyn Pino
NovaSource Control Room Lead Operators	Via distribution to NSCR-LeadOPS@novasourcepower.com
NovaSource Electric Regulatory Compliance	Via distribution to ERC@novasourcepower.com
NovaSource Account Managers	Via distribution to nspsam@novasourcepower.com

APPROVALS

The approval signatures in this section indicate review of the document and approval to publish.

Name	Date	Signature
Karl Perman		
Bree Maria		

VERSION HISTORY

Version	Effective Date	Author	Description of Changes
1.0		Rodeo Ranch and GridSME	New plan

ATTACHMENT 1: RODEO RANCH CRITICAL COMPONENT MATRIX

This critical component matrix identifies all components necessary to operate the facility during extreme hot weather conditions.

Rodeo Ranch Critical Equipment				
Item #	**Description (Manufacturer and Model)**	**Quantity**	**Weather Protections**	**Weather Design Limits**
1.	VTL-1 - CVT Kuhlman DDB-145 Capacitive Voltage Transformer	Three (3)	Mineral oil filled equipment	Operating temperature range -50 °C (-58 °F) to +50 °C (122 °F)[1]
2.	52-L1/52-T1/52-T2 - Siemens SPS2S-145-40-1 Circuit Breaker	Three (3)	SF_6 Gas Filled Equipment	Operating temperature range -30 °C (-22 °F) to +55 °C (131 °F)[2]
3.	T1/T2 - Virginia-Georgia Transformer Main Power Transformers 138-34.5 kV, 97/129/161 MVA (ONAN/ONAF/ONAF), with multi-ratio bushing current transformers	Two (2)	Mineral oil filled equipment	65 °C rise above ambient temperature.[3]
4.	52-F1/F2/F3/F4/F5/F6/C1/C2 - EMA VDH 34.5kV Feeder Circuit Breakers	Eight (8)	Vacuum	Operating temperature range -20 °C (-4 °F) to +50 °C (122 °F)[4]
5.	Substation Control House HVAC – 3 Ton Bard 11EER WA Series Wall Mount	Two (2)	"Low Ambient Control" option selected, allowing for operation to 0°F	Operating temperature range -18 °C (0 °F) to +40 °C (105 °F)[5]
6.	4,000 kVA, 34.5 kV Delta / 0.800 kV Delta-Wye, Pad-Mount Transformers supplied as part of Sungrow skid units	Eighty Eight (88)	Mineral oil filled equipment	60 °C rise above ambient temperature[6]
7.	Sungrow SC4000UD-MV-US PCS Unit (Inverters)	Eighty Eight (88)	NEMA 3R Enclosure. Independent Force Air Cooling. Installed additional capacity to account for derates.	Ambient operating temperature range -35°C (-31 °F) to +60 °C (140 °F). Derate above +45 °C (113 °F)[7]
8.	Sungrow ST2752UX-US ESS Battery Modules	Eighty Eight (88)	Liquid Cooling	Operating temperature range -30°C (-22 °F) to +50°C (122 °F). Derates for module operating temperatures above +45 °C (113 °F)[8]

ATTACHMENT 2: HOT WEATHER EQUIPMENT INVENTORY

Date inventory completed	
Completed by Field Services, Site Manager or Designee	

Item #	Description	Qty. Required	Qty. On Hand	Notes
1.	Tarps			
2.	Battery-powered radio with National Oceanic and Atmospheric Administration (NOAA) weather radio with tone alert			
3.	Extension cords			
4.	Flashlights and batteries			
5.	Potable water supply			
6.	Hot weather gear that is compatible with PPE (e.g. sunscreen, PPE is covered in Attachment 5).			
7.	Fully stocked First Aid kits			
8.	Verify adequate inventory of spare parts for reliable operation of the plant during summer season			

ATTACHMENT 3: PRE-SUMMER CHECKLIST – DUE BY MAY 1 ANNUALLY

Date performed	
Completed by (name)	

	Pre-Summer Checks **Instructions**: Check each item when complete and provide completed checklist to Site Manager and Compliance Manger.
☐	Complete and submit to the Site Manager and Compliance Manager the *Hot Weather Equipment Inventory* (Attachment 2).
☐	Review any industry best practices or lessons learned from the previous Summer season.
☐	Conduct annual extreme hot weather readiness training or drills with relevant operating personnel. Utilize and follow this annex. Collect Field Services' feedback on EOP and, without unnecessary delay, provide to Compliance Manager.
☐	Ensure all critical site-specific equipment and components have adequate protection to ensure operability during extreme hot weather events.
☐	Schedule and perform corrective and preventative maintenance prior to the beginning of Summer and increase surveillance during extreme hot weather events. Schedule tasks in the work management system and review existing maintenance work orders for completion prior to Summer.
☐	Notify the Rodeo Ranch Compliance Manager in writing that weatherization work has been completed and/or identify any exceptions and scheduled work to be performed to complete summer weatherization.

ATTACHMENT 4: MONTHLY VEIFICATION OF HOT WEATHER PROTECTION CHECKLIST

Item#	Description (Manufacturer and Model)	Quantity	Verify/ Test	Protection Measure Details	Monthly Check Satisfactory?
1	MPT Transformer, Virginia Transformer, 345 kV, Three-Phase, 60 Hz (Serial Number: GA456B)	2	Verify	Verify employment and accurate function: • Wind breaks • Cabinet doors, opening covers • Heaters and thermostats • Oil levels	☐ Yes ☐ No WO #
2	HV Breakers, Siemens, 145 kV, 2000A, SF6 Circuit breaker (Serial Number: SPS2S-145-40-1, 75007943-3)	3	Verify	Verify employment and accurate function: • Wind breaks • Cabinet doors, opening covers • Heaters and thermostats • Oil levels	☐ Yes ☐ No WO #
3	Disconnect Switch, Southern States, 138 kV, Aluminum Vertical Break (Serial Number: EV-2)	3	Verify	Verify employment and accurate function: • Proper seatings of switches • Doors, windows, ventilation louvers • Lubricants • Add any other preparations not listed	☐ Yes ☐ No WO #
4	MV Breakers, EMA, 38 kV, Vacuum Substation Circuit Breaker (Serial Number: 3484...3489)	8	Verify	Verify employment and accurate function: • Wind breaks • Cabinet doors, opening covers • Heaters and thermostats • Oil levels	☐ Yes ☐ No WO #
5	Medium Voltage Transformer, JHSP (Sungrow)		Verify	Verify employment and accurate function: • Wind breaks • Cabinet doors, opening covers • Heaters and thermostats • Oil levels	☐ Yes ☐ No WO #
6	Power Conversion System (Inverter), Sungrow, ST4000UD-MV-US		Verify	Verify employment and accurate function: • Cabinet doors, opening covers, louvers • Inverter cooling fans • Cabinet heaters and thermostats • Inverter transformer oil levels • Inverter circuit breakers lubricants Add any other preparations not listed	☐ Yes ☐ No WO #
7	Storage System (Battery Unit), Sungrow, ST2752UX-US-V11		Verify	Verify employment and accurate function: • Cabinet doors, opening covers, louvers • Inverter cooling fans • Cabinet heaters and thermostats	☐ Yes ☐ No WO #

				• Inverter transformer oil levels • Inverter circuit breakers lubricants • Add any other preparations not listed	

ATTACHMENT 5: PRE-EVENT AND EXTREME HEAT CHECKLIST

Date performed	
Completed by (name)	

Pre-Event Checklist **Instructions**: Check each item when complete and provide completed checklist to Field Services Site Manager and Compliance Manger.	
☐	Monitor weather and weather alerts. Note in shift logs when a summer weather advisory has been issued, and subsequently recalled or released. Establish staff responsibilities to monitor weather and weather alerts.
☐	Place any required severe weather protections in service where extreme hot weather could adversely impact personnel, operations, equipment, or forced outage recovery (can include severe thunderstorms, flooding, high winds).
☐	Establish and document communications with Operating Personnel on weather event conditions and discuss appropriate restrictions on maintenance to maximize generation capability.
☐	Establish staffing plan (including supplemental coverage) and review/update emergency callout list as needed.
☐	Site Manager to schedule and conduct meeting with field personnel to discuss the weather forecast to keep all personnel alerted to possible weather conditions.
☐	Take action to prevent impact to facility and equipment due to extreme heat.
☐	Review outstanding preventative work orders and perform necessary and immediate work needed to protect the facility (e.g. weed abatement, fire prevention activities, flood preparation, securing loose equipment).
☐	Refer to **Critical Equipment Matrix** (Attachment 3), check that all critical equipment is operating and protected per the manufacturer's recommendations during extreme heat, emphasize the points at the facility where fire safety is necessary to protect critical equipment (can be performed remotely through data). Plan preventative and response actions based on forecasted conditions, which should include notifications to Personnel.

Pre-Event Checklist **Instructions**: Check each item when complete and provide completed checklist to Field Services Site Manager and Compliance Manger.	
☐	Conduct site inspection. Check for extra precautions or outfitting of critical equipment that may be impacted by exposure to elements (proper installation, container door closures, parts not inappropriately exposed, cooling systems running, loose equipment is secured, fire alarms are working, drainage cleared, etc.).
☐	Check safety equipment inventory and replenish all quantities. Refer to Extreme **Hot Weather Equipment Inventory** attachment. Be sure to check all First Aid kits and confirm PPE "in use" dates.