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1.0 POWER GENERATION COMPANY INFORMATION

PGC Name	Generating Facility Name
Giga Energy Storage LLC	Giga Energy Storage, LLC

2.0 EXECUTIVE SUMMARY - EOP CONTENTS

2.1 Summary of EOP Contents Generally

Giga Energy Storage LLC Site is in **preconstruction with an expected construction date of March 2023 and commercial operations date of May 2023.** The Giga Energy Storage LLC (Giga) Draft Emergency Operations Plan ("EOP") describes the procedures to be followed to promote employee safety and continued operations to the optimal extent possible in a variety of emergency conditions. The EOP includes the following contents and policies: outlines the roles and responsibilities for various employees and entities in emergency circumstances; includes a communications plan during emergencies; includes a plan for pre-identified supplies for emergency use; includes a plan to address staffing during emergency response; includes identification of weather-related hazards; includes the process for activating the EOP; includes a section addressing critical failure points for equipment, staffing and business continuity processes at critical failure points; addresses severe weather planning and identification; includes restoration of service processes; outlines the procedures related to activation of an EOP drill; addresses annual training and reporting; includes emergency contact information; and addresses annual EOP update processes. The EOP also contains various attachments which address designation of emergency coordinators, information on emergency contacts, the Giga Energy Storage LLC general emergency procedure, evacuation procedures, personnel injuries or serious health conditions, a fire response plan, and a plan on chemical or oil spills and releases.

2.2 Summary of EOP Non-Applicability

Giga identifies the following areas of non-applicability with respect to the requirements of 16 Tex. Admin. Code ("TAC") Sec. 25.53 due the facility not having the capabilities, technology or location within a zone which would require certain sections or annexes described by the rule.

Section	Statement of Non-Applicability
(e)(2)(A)(ii) Adequacy and operability of fuel switching equipment	Giga as a battery energy storage system (BESS) facility does not have the capability to utilize alternate fuels or to perform fuel switching.

(e)(2)(B) Water Shortage Annex	Giga as a (BESS) facility does not utilize water in the generation of electricity.
(e)(2)(E) Hurricane Annex	Giga is not in a hurricane evacuation zone as defined by Texas Division of Emergency Management (TDEM)

2.3 Summary of Approval and Implementation

The Giga EOP and all annexes are submitted in draft format intentionally as the site has not started construction and significant changes may be made during construction and prior to commercial operations date. Giga will timely submit any updates to this draft EOP and annexes pursuant to the rule, and will update the revision control summary and record of distribution as necessary. This section documents the applicability of the EOP and its associated annexes, identifies the areas on non-applicability, includes 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. This section also contains a revision control summary for the EOP and includes a dated statement of supersession and indicates the date the EOP was most recently approved by Giga.

2.4 Summary of Communications Plan

This section describes the training necessary for emergency management 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. Giga, being a solar PV facility does not utilize fuel and therefore does not communicate with fuel suppliers.

2.5 Summary of Plan to Maintain Pre-Identified Supplies for Emergency Response

Giga has identified pre-identified supplies required to ensure continuity of operations during an emergency event, and has developed a process for maintaining an adequate supply of these items. Additionally, each of the annexes applicable to the Giga, 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.

2.6 Summary of Plan that Addresses Staffing during Emergency Response

Staffing considerations during emergencies will vary depending on the circumstances of the event. Giga's staffing plan largely relies on the discretion of its Site Manager. Additionally, each of the annexes applicable to the PGC contains a section for consideration of staffing during an event and, as appropriate, contains items to review and confirm staffing availability before (if possible) and during an event.

2.7 Summary of Plan that addresses how Giga Energy Storage Identifies Weather-Related Hazards and the Process for EOP Activation

Giga identifies weather-related hazards through a variety of resources described in this section of the EOP, and ultimately activates the EOP on notification of an impending weather emergency by its Risk Operations Center. Additionally, each of the annexes applicable to Giga is built to identify weather-related hazards specific to Giga. The 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.

2.8 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 Giga facility as well as availability of backup power from the utility feed and anticipated response time from an outage event.

2.9 Summary of Pandemic and Epidemic Annex

The *Pandemic and Epidemic Annex* serves as the annex for maintaining essential functions and services during a pandemic or epidemic. 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.

2.10 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 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.

2.11 Summary of Cold Weather Annex

This annex document 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 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.

2.12 Summary of Cyber and Physical Security Incident Annex

This annex is specific to cyber security and physical security incidents and provides information on 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	Section 1.0 Approval and Implementation (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 (p. 5) • B. Roles and Responsibilities
(1)(C)	Emergency Operations Plan	Section 1.0 Approval and Implementation (p. 7) • C. Revision Control Summary
(1)(D)	Emergency Operations Plan	Section 1.0 Approval and Implementation (p. 7) • D. Statement of Supersession
(1)(E)	Emergency Operations Plan	Section 1.0 Approval and Implementation (p. 7) • A. Approvals
(2)(B)	Emergency Operations Plan	Section 2.0 Communication Plan (p. 7)
(3)	Emergency Operations Plan	• Section 3.0 Plan for Pre-Identified Supplies for Emergency Use (p. 8)
	Cold Weather Annex	5.0 Cold Weather Preparation and Response Processes (p. 8) • 5.1 Cold Weather Equipment Inventory List (p. 8) • 5.4 Post-Event and Annual Review (p. 9) • Attachment 4: Cold Weather Equipment Inventory (p. 19) • Attachment 5: Pre-Winter Checklist (p. 20) • Attachment 7: Extreme Cold Weather Checklist (p. 22)
	Hot Weather Annex	5.0 Hot Weather Preparation and Response Processes (p. 8) • 5.1 Extreme Hot Weather Equipment Inventory List (p. 8) • 5.4 Post-Event and Annual Review (p. 8) • Attachment 4: Extreme Hot Weather Equipment Inventory (p. 19) • Attachment 5: Pre-Summer Checklist (p. 20) • Attachment 7: Extreme Hot Weather Checklist (p. 22)
(4)	Emergency Operations Plan	• Section 4.0 Plan to Address Staffing During Emergency Response (p. 9) • Section 7.0 Business Continuity – Critical Failure Points – Personnel (Staffing) (p. 9)
	Cold Weather Annex	• 5.6 Additional Staffing Considerations for Weather Events (p. 9)

Requirement	Addressed in document	Where it is addressed in the document
		• Section 6.0 Business Continuity – Critical Failure Points – Personnel (Staffing) (p. 9) • Attachment 6: Pre-Event Checklist (p. 21)
	Hot Weather Annex	• 5.6 Additional Staffing Considerations for Weather Events (p. 9) • Section 6.0 Business Continuity – Critical Failure Points – Personnel (Staffing) (p. 9) • Attachment 6: Pre-Event Checklist (p. 21)
		•
	Pandemic and Epidemic Annex	Section 5.0 Essential Roles and Personnel (p. 6)
(5)	Emergency Operations Plan	• Section 5.0 Identification of Weather-Related Hazards (p. 9) • Section 6.0 Process for Activating the EOP (p. 9)
(6)	Cold Weather Annex, Hot Weather Annex, Cyber Security Annex, and Physical Security Incident Annex, Pandemic and Epidemic Annex	• Cold Weather Annex • Hot Weather Annex • Cyber and Physical Security Incident Annex • Pandemic and Epidemic Annex
	Emergency Operations Plan	• 9.0 Restoration of Service Annex
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 Giga Energy Storage LLC does not have fuel switching equipment installed
	Hot Weather Annex	• Not applicable as Giga Energy Storage LLC does not have fuel switching equipment installed
(2)(A)(iii)	Cold Weather Annex	• 5.4 Post-Event and Annual Review • Attachment 5: Pre-Winter Checklist • Attachment 7: Extreme Cold Weather Checklist
	Hot Weather Annex	• 5.4 Post-Event and Annual Review • Attachment 5: Pre-Summer Checklist • Attachment 7: Extreme Hot Weather Checklist
(2)(B)	Water Shortage Annex	Entire document
		Not applicable to Giga Energy Storage LLC as described on page 4 of the EOP
(2)(C)	Restoration of Service Annex	Section 9.0 Restoration of Service • 9.1 Failure to Start or Tripping Off-line

Requirement	Addressed in document	Where it is addressed in the document
		• 9.3 Response Time and Backup Power
(2)(D)	Pandemic and Epidemic Annex	Entire document
(2)(E)	Hurricane Annex	Entire Document – Not applicable, Giga is not in a hurricane evacuation zone
(2)(F)	Cyber and Physical Security Incident Annex	Entire document
(2)(G)	Cyber and Physical Security Incident Annex	Entire document

4.0 RECORD OF DISTRIBUTION AND TRAINING

This table presents information, as required, of the persons in the entity's organization and local jurisdictions receiving distribution, access, and/or training on the EOP, as appropriate.

Organization Name	Individual Name	Title	Date(s) of Distribution, Access, or Training on EOP
Giga Energy Storage LLC	Paul Spracklen	Sr. Project Manager, Industrial Storage	4/14/2022
Giga Energy Storage LLC	Joey Jimenez	Energy Systems Industrial Storage Manager	4/14/2022
Travis County	Tony Callaway	Travis County Fire Marshall	4/15/2022
Travis County Fire Control ESD4	David Bailey	ESD 4 Chief	4/15/2022

5.0 AFFIDAVIT

Giga Energy Storage LLC attaches an affidavit from [JT Boone, President], its highest-ranking representative, official, or officer with binding authority over Giga Energy Storage LLC in accordance with 16 Tex. Admin. Code Sec. 25.53(c)(4)(C).

AFFIDAVIT

STATE OF TEXAS §
§
COUNTY OF TRAVIS §

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

"1. My name is JT Boone. I am over the age of eighteen and am a resident of the State of Texas. I am competent to testify to all the facts stated in this Affidavit, and I have the authority to make this Affidavit on behalf of Giga Energy Storage, LLC ("Giga") as the highest-ranking representative, official, or officer with binding authority over Giga.

2 I swear or affirm that in my capacity as President of Giga, I have personal knowledge of the facts as stated in this Affidavit which is given in support of Giga's Emergency Operations Plan ("EOP") submission to the Public Utility Commission of Texas ("PUCT") and to the Electric Reliability Council of Texas ("ERCOT") as required by 16 Tex. Admin. Code ("TAC") § 25.53. I further swear or affirm that all of the statements and/or representations made in this affidavit are true, complete, and correct to the best of my knowledge.

3. I further swear or affirm that this site has not been constructed or interconnected to the grid yet has an expected construction date of March 2023 and is expected to enter operations in May 2023. A draft EOP has been written in anticipation of construction and operations. Relevant operating personnel will be familiar with and will receive training on the applicable contents and execution of the EOP, and such personnel will be 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.

4. I further swear or affirm that the draft EOP has been reviewed and approved by the appropriate Giga executives.

5. I further swear or affirm that drills are planned to be conducted in May of 2023 prior to entering commercial operations, as required by 16 TAC § 25.53(f).

6. I further swear or affirm that the draft EOP or an appropriate summary has been distributed to local jurisdictions as needed.

7. I further swear or affirm that Giga maintains a business continuity plan that addresses returning to normal operations after disruptions caused by an incident.

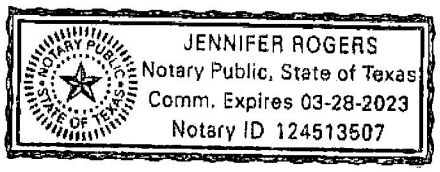
8. I further swear or affirm that Giga's emergency management personnel who are designated to interact with local, state, and federal emergency management officials during emergency events have received the latest IS-100, IS-200, IS-700, and IS-800 National Incident Management System Training."

Further affiant sayeth not.

J.T. Boone 04/18/2022 12:07 PM CDT

JT Boone
President
GIGA ENERGY STORAGE, LLC

SWORN TO AND SUBSCRIBED TO BEFORE ME on the 18th day of April, 2022.



Jennifer B. Rogers 04/18/2022 12:10 PM CDT

Notary Public in and for the
State of Texas

Online Notary Public. This notarial act involved the use of online audio/video communication technology.

My Commission Expires: March 28, 2023

Giga 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

The Giga EOP and all annexes are submitted in draft format intentionally as the site has not started construction and significant changes may be made during construction and prior to commercial operations date. Giga will timely submit any updates to this draft EOP and annexes pursuant to the rule, and will update the revision control summary and record of distribution as necessary. This *Emergency Operations Plan* provides guidance and direction to Giga Energy Storage, LLC (Giga) covering the Power Generation Company (PGC) emergency operations plan (EOP) requirements under Chapter 25, Subchapter C, §25.53, of the Public Utility Commission of Texas (PUCT) Electric Substantive Rules.

This EOP addresses the requirements in Subsection (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 Giga Compliance Manager.

1.2 Applicability

This document applies to the PGC registered with the PUCT as Giga Energy Storage, LLC. (PGC#20668)

1.3 Statements of § 25.53 Non-Applicability

Section	Statement of Non-Applicability
(e)(2)(A)(ii) Adequacy and operability of fuel switching equipment	Giga as a battery does not have alternative fuels and has no capability to perform fuel switching.
(e)(2)(B) Water Shortage Annex	Giga does not utilize water in the generation of electricity.

1.4 Facility Information and Location

Giga Energy Storage, LLC (Giga or "Facility"), a 125 MW (at POI) Battery Energy Storage System (BESS) facility located in Travis County, Texas. Giga commenced commercial operations on **TBD** and is interconnected to Lower Colorado River Authority at the 345 kV Hornsby Substation, located in the Electric Reliability Council of Texas (ERCOT) footprint. Tesla Energy Management Systems LLC (TEMS) is the registered Generator Operator (GOP) and Tesla Energy Operations

Inc is the operations and maintenance (O&M) provider for the Giga Facility. The facility is normally un-manned with Field Services personnel assigned for routine checks and maintenance.

B. Roles and Responsibilities for Maintaining and Implementing the EOP

Below is a list of individuals responsible for maintaining and implementing the EOP and those who can change the EOP. Additional responsibilities for Giga personnel follow this list.

Role	Title	Function
Compliance Manager	O&M Project Manager	**Maintains EOP** **Change EOP** **Implements EOP**
Field Services Manager	O&M Project Manager	**Maintains EOP** **Change EOP** **Implements EOP**

1.5 Giga Compliance Manager

1.5.1 Role – The Giga compliance manager and individual with primary responsibility for changing, maintaining and implementing 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 Giga'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 Giga Field Services Site Manager
- Reviews and approves this Plan annually.
- Maintains evidence.

1.6 Giga Field Services Site Manager (Site Manager)

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

1.6.2 Responsibilities include:

- Ensure the requirements and processes laid out in this plan are followed by site Personnel.
- Lead Field Services in the execution of this Plan and set expectations with Field Service Technicians for safe and reliability 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 the Giga facility.
- Ensure annual drill requirements are met and submit evidence to Giga upon completion and request.
- Ensure plan training is completed by all relevant Personnel and submit evidence to Giga upon completion and request.
- Participate in training and drills/exercises as requested.
- Provide evidence to Giga Compliance Manager upon completion and request.

1.7 Tesla Energy Operations Inc Field Services (Field Services)

1.7.1 Role – Contracted to perform the O&M services at the Giga Facility.

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 the Giga facility.
- 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 Tesla Energy Management Systems, LLC (TEMS) Operating Personnel

1.8.1 Role – The registered Generator Operator (GOP) for the Giga facility.

1.8.2 Responsibilities include:

- Operates the Giga site from the TEMS operations center in Freemont, CA.

- Responsible for responding to and managing emergencies that may impact Control Center functionality, to ensure continuity of operations.
- Coordinate with Field Personnel and create appropriate log entries for events, incidents, etc.
- Submit evidence to Giga upon completion and request.
- Participate in training and drills/exercises.
- Participate in post-incident reviews.

C. Revision Control Summary

Version	Effective Date	Author	Description of Changes
1.0(DRAFT)	4/1/2022	GridSME, Giga, Tesla Energy Operations Inc (O&M)	New plan

D. Approvals

The approval signatures in this section indicate the most recent 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
Paul Spracklen	4/14/2022	Paul Spracklen

2.0 COMMUNICATION PLAN

Giga'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 describes the emergency communication procedures with all entities as applicable to Giga (an entity with generation operations), pursuant to subsection (d)(2)(B).

- Media
    - Giga is owned by Tesla Inc., which has sole authority for media interactions on behalf of its subsidiary entities. Tesla, Inc. has not authorized communication with the media by Giga or its supporting personnel. All Media inquiries will be referred to press@tesla.com for responses.

- PUCT
    - Giga will communicate with the PUCT during an emergency in the manner requested by the PUCT. In the absence of any explicit direction, Giga's emergency contact personnel as identified in Section 13.0 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)
    - Giga will communicate with OPUC during an emergency in the manner requested by the OPUC. As a PGC, Giga 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, Giga's emergency contact personnel as identified in Section 13.0 of this plan will make themselves available to OPUC by phone and by email as needed.
- Fuel Suppliers – as Giga does not utilize fuel, this is not applicable.
- Local and State Governmental Entities, Officials and emergency operations centers (EOC) Travis County Fire stations 42 and 48, Emergency Services District 4 and the Travis County Fire Marshall.
- Applicable Reliability Coordinator: Giga's emergency contact personnel as identified in Section 13.0 of this plan will make themselves available to ERCOT by phone and by email as needed. Additionally:
    - TEMS' GOP Operating Personnel will communicate as requested and per ERCOT Nodal Protocols with the Reliability Coordinator.
    - Additionally, Giga's emergency contact personnel as identified in Section 13.0 of this plan will make themselves available to ERCOT by phone and by email as needed.

3.0 PLAN FOR PRE-IDENTIFIED SUPPLIES FOR EMERGENCY USE

Giga has pre-identified the following supplies necessary for continued operations during an emergency:

Tarps
Battery-powered radio with National Oceanic and Atmospheric Administration (NOAA) weather radio with tone alert
Extension cords
Flashlights and batteries
Potable water supply

Fully stocked First Aid kits

Giga will ensure that the pre-identified supplies are continuously stocked and operational. Giga will perform regular testing and auditing throughout the year to ensure adequate supply, and will replenish as needed.

Additionally, each of the annexes applicable to Giga, including the *Cold Weather Annex* and *Hot Weather Annex* contain a list of supplies that are unique to the content of the annex and the specific emergency condition. Checklists in the annexes are completed pre-season and/or pre-event to ensure their availability.

4.0 PLAN TO ADDRESS STAFFING DURING EMERGENCY RESPONSE

Giga's plan to address staffing during an emergency response is as follows:

Staffing considerations during emergencies vary on a case by case basis and will be evaluated by the Site Manager to determine if site staffing is appropriate, safe and warranted.

Tesla Energy Operations Inc and Giga have identified potential site and Operation Control Center critical failure points and has planned remediation for each role, as noted. There will be no additional staffing prior or during a severe weather events/conditions, but Tesla Energy Operations Inc is able to mobilize additional Field Services technicians, managers and/or contractors to supplement site team, as needed.

5.0 IDENTIFICATION OF WEATHER-RELATED HAZARDS

Giga 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. Giga also utilizes a Risk Operation Center which provides advance notice of severe weather events.

Additionally, each of the annexes applicable to Giga is built to identify weather-related hazards specific to Giga. The annexes are built on site-specific data, including weather related information provided by the State, County, and regional emergency managers, as well as a consideration of local conditions as documented and published online (e.g., the review of county or city Hazard Mitigation Plans.) See each annex for the identification of the sources used to identify hazards specific to the PGC.

6.0 PROCESS FOR ACTIVATING THE EOP

Giga's Site Manager, upon determination that any of the events contained within the EOP are forecasted, imminent or in-progress shall activate the EOP and the appropriate annex(s). Activation of the EOP is within the Site Manager's discretion, but will be based on a consideration of local conditions and notification from the Risk Operations Center.

7.0 BUSINESS CONTINUITY - CRITICAL FAILURE POINTS – PERSONNEL (STAFFING)

Tesla Energy Operations Inc and Giga have identified the following potential site and Operation Control Center critical failure points and has planned remediation for each role, as noted. There will be no additional staffing prior or during a severe weather events/conditions, but Tesla Energy Operations Inc is able to mobilize additional Field Services technicians, managers and/or contractors to supplement site team, as needed.

Role	Notes	Remediation
Field Technicians	*There are typically no on-site plant service technicians.*	*If all field technicians are unavailable, additional personnel may be dispatched, as approved by the Site Manager, for relocation to supplement facility staffing.*
TEMS Control Center Operators	Control Center staffed 24/7 with monitoring and control capability.	Additional Control Center Operators are available in the event of additional staffing needs.

8.0 SEVERE WEATHER PLANNING AND IDENTIFICATION

Severe weather can negatively impact the Giga facility. Events and disturbances that can occur in and around the facility include but are not limited to hurricanes, windstorms, severe thunderstorms, flooding, tornadoes, excessive heat, excessive cold, snowstorms, and ice storms. These weather events can be detrimental to the employees and or equipment and structures at the facility. Prior to any severe weather event, Personnel should utilize the plans and checklists contained in the weatherization plans, to ensure the safety of both personnel and equipment. The information contained herein is supplemental and should be used in conjunction with those plans.

Post-event, the Site Manager and Field Services technicians will assess the damage and report the current capability of the site (priority for recovery of charge and discharge capacity) to TEMS Operating Personnel.

8.1 Pre-season planning

Ahead of each summer and winter season, the Giga Site Manager ensures that the appropriate weatherization plan is reviewed, and the pre-season preparedness checklists are completed, signed, and provided to the Regional Lead Manager. Annual review of the checklists is documented and stored in specified database or information repository. This activity coincides

with the required ERCOT reporting, per the Nodal Protocols. Checklists specific to Winter and Summer Weatherization Plans are contained within those specific documents. For event response checklists for other scenarios, see the appropriate Attachment included in this Plan.

8.2 Seasonal events

Warnings about developing weather emergencies are issued by local radio stations or tracked by onsite weather systems. These warnings should provide adequate information of the approach of weather-related emergency conditions. The Site Manager and Operating Personnel are responsible for keeping abreast of forecasted severe weather events and reporting potential issues to the Site Manager and has several means to monitor these weather-related emergencies, including:

- Internet access to weather-related websites;
- Onsite weather and telemetry systems;
- AM/FM radio to monitor local news;
- National Weather Service; and
- National Oceanic and Atmospheric Administration (NOAA)

Field technicians have weather applications on their phones that are used for lightening and weather alerts. Additionally, site personnel will have two-way radios that receive NOAA weather alerts.

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

1. The on-site Field Technicians should notify the Site Manager.
2. The Site Manager or Operating Personnel shall make a determination whether or not the plant should be shut down due to the potential weather event(s).

The *Winter Weatherization Plan* and *Summer Weatherization Plan* contain the inventory of pre-arranged supplies needed for emergencies. These plans are separate documents from this Plan.

8.3 Personnel Safety

If shelter-in-place is necessary, on-site personnel should seek indoor shelter in the plant Control Building, or other reinforced structure. Personnel should remain indoors if the severe weather is affecting the immediate area of the facility and maintain communications with the Site Manager, Operating Personnel, and others.

8.4 Evacuation Zone

Per the Texas Department of Emergency Management (TDEM), the Giga facility is not in a TDEM evacuation zone.[1]

9.0 RESTORATION OF SERVICE ANNEX

9.1 Failure to Start or Tripping Off-line

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

- Communicating with facility management, compliance personnel and TEMS 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 Personnel will coordinate with TEMS Operating Personnel to receive permission to come back online.

9.2 Restoration of site service will be via Giga's normal switching plan.

Schematics:

[1] https://media.click2houston.com/document_dev/2019/05/31/2019-zip-zone-map-small_1559318295359_21921635_ver1.0.pdf

[redacted]

1. To energize substation:

a. [redacted]

2. To energize 25kV Switchgear

a. [redacted]

[redacted]

3. To energize strings of MVT for BESS

[redacted]

4. To energize a single set of MPs

[redacted]

9.3 Response Time and Backup Power

The facility is constructed with an automatic transfer switch that connects normal stations service power to a backup utility feed at the Giga facility that initiates when station service is lost. The site substation will have automatic failover power to the equipment in the substation via battery supplied DC power.

In the event of a power outage, the site will not be able to charge or generate power, until a field service 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.

10.0 REQUIRED EMERGENCY OPERATIONS PLAN DRILL

10.1 Requirement for an Annual Drill and EOP Update

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

Following an annual drill the entity 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.

10.2 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.

10.3 Drill Requirements

10.3.1 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.

10.3.1.1 The annual drill must include a documented evacuation of the O&M/Substation control building .

10.3.2 A roster of drill attendees and the date the drill was conducted will be filed with this plan and retained in the Giga document repository.

10.3.3 If the annual drill requirement is fulfilled by an actual event, all event materials must be produced and provide to the Compliance Manager. Evidence should

include operating logs, work orders, voice recordings, or other relevant materials.

10.4 EOP Updates

10.4.1 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.

10.4.2 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 Giga EOP evidence.

11.0 ANNUAL TRAINING AND REPORTING REQUIREMENT

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 as a result of specific circumstance during the course of the emergency.

At the end of each calendar year, the Giga O&M 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.

12.0 EMERGENCY CONTACT INFORMATION[2]

Giga is required to submit and maintain emergency contact information with the PUCT. If the contact information changes, Giga 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 Annual Report and Form links.

The following individuals are the primary emergency contacts for Giga Energy Storage LLC who can immediately address urgent requests and questions from the PUCT during an emergency:

1. Paul Spracklen O&M Project Manager [redacted]

[2] §25.53, Subchapter C, Item (e), page 3

2. Joey Jimenz, Energy Systems Industrial Storage Manager, [redacted]

13.0 REQUIRED ANNUAL PLAN UPDATE

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

- Changes were made in the previous calendar year that will materially affect how Giga would respond in an emergency.
- An entity that in the previous calendar year did not make a change that materially impacts how Short would respond must also file with the PUCT.

14.0 REQUIRED ANNUAL REPORTING

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

Giga is required to continuously maintain its EOP and must annually updated information within the EOP no later than March 15.

14.1.1 If EOP changes were made in the previous calendar year that materially affects how Giga would respond to an emergency, the following items must be completed:

14.1.1.1 File an executive summary with the commission;

14.1.1.2 File a complete, revised copy of the EOP with all confidential portions removed;

14.1.1.3 Submit to ERCOT the revised unredacted EOP it its entirety.

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

14.1.2.1 A pleading that documents any changes to the list of emergency contacts, as required;

14.1.2.2 An attestation stating that no changes were made to the EOP that material affects how it would respond to an emergency; and

14.1.2.3 The required affidavit.

If commission staff determines that the entity's EOP or other documents do not contain sufficient information to determine whether the entity can provide adequate electric service

through an emergency, Giga 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, for entities with operations in the ERCOT power region, with ERCOT.

14.2 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, an affected entity must 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.

14.3 ERCOT Requirement for Annual Weatherization Declaration Submittals

Giga is required to submit declarations for both summer and winter weatherization preparations, per the Nodal Protocols, Section 22 (Attachment K and Attachment O).

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

15.0 RESOURCES AND RELATED REFERENCES

Cyber and Physical Security Incident Annex

Giga Pandemic and Epidemic Annex

Giga Hot Weather Annex

Giga 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**
- **Section 22 Attachment K: Declaration of Completion of Generation Resource Summer Weatherization Preparations and Natural Gas Pipeline Coordination for Resource Entities with Natural Gas Generation Resources**

- **Section 22 Attachment O: Declaration of Completion of Generation Resource Winter Weatherization Preparations**

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

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. tornado, flood, etc.): https://www.ready.gov/be-informed

16.0 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.

DOCUMENT OWNERS

Title	Name
Sr. Project Manager, Industrial Storage	Paul Spracklen
Commercial Field Manager	Paul Spracklen
Territory Manager	Keith Merkel

DISTRIBUTION LIST

Title	Name
Sr. Project Manager, Industrial Storage	Paul Spracklen
Commercial Field Manager	Paul Spracklen
Territory Manager	Keith Merkel
Site Lead	TBD
Tesla Giga Factory Texas EHS	Kassidy Stock

APPROVALS

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

Name	Date	Signature
Paul Spracklen	4/14/2022	Paul Spracklen

ATTACHMENT 1: DESIGNATION OF EMERGENCY COORDINATORS

The Giga Emergency Coordinator is responsible for specific actions detailed in this plan (as noted). Alternate personnel may serve as the Facility Emergency Coordinator when necessary.

Giga Emergency Coordinators	
Primary Emergency Coordinator	Name: Paul Spracklen Title: Field Services Site Manager Phone number: [redacted]
Alternate Emergency Coordinator	Name: Keith Merkel Title: Territory Manager Phone number: [redacted]
TEMS Control Room Emergency Coordinators	
Primary Emergency Coordinator	Phone number: [redacted]
Alternate Emergency Coordinator	Phone number: [redacted]

ATTACHMENT 2: 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
Giga Compliance Manager	Paul Spracklen	[redacted]
Tesla Energy Operations Inc Site Manager	Paul Spracklen	[redacted]
TEMS Control Center Manager	Joey Jimenez	[redacted]
TEMS Control Center	TEMS Operator On-Duty	[redacted]
Field Services Manager or Site Lead	TBD	

ATTACHMENT 3: GIGA GENERAL EMERGENCY PROCEDURE

Giga Location for Outside Emergency Responders

Giga Energy Storage, LLC is located at:	1 Tesla Road, Austin, TX 78725

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 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. 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 permits in affect shall be immediately voided, 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 Plant Lead Technician should assess whether an evacuation should be initiated. The following criteria should be considered in rendering a decision to conduct an evacuation of the facility:

    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 Site Technician determines that a facility evacuation is necessary, they must determine which type of evacuation to direct. The following sections describe the types of evacuations that can be performed:

a) Immediate Site Evacuation

This type of evacuation would be used only in the event of an emergency grave enough to warrant immediate evacuation of all personnel. ***In this type of evacuation, operating area personnel should evacuate without regard for shutdown of plant systems or for placing plant systems in the safest mode possible.*** This type of evacuation should only be utilized if the safety of personnel in operating areas is in immediate and severe danger, such that any delay in evacuating could result in deaths or injuries to personnel.

b) Delayed Site Evacuation

This type of evacuation would be used in a serious emergency situation where non-essential personnel (those not involved in plant operations or emergency coordination) are immediately evacuated as a precaution, and essential personnel remain in operating areas to perform a controlled shutdown of the facility prior to evacuating. It is anticipated that this would be the primary type of evacuation used in response to serious emergencies at the facility. The Site Manager and/or Facility Emergency Coordinator must assess whether the prevailing circumstances warrant keeping essential personnel in plant operating areas to perform a controlled shutdown of the facility. ***If personnel will not be exposed to unnecessary danger to perform facility shutdown and/or place the facility into a safe condition, then this is the preferred type of evacuation, as opposed to an Immediate Site Evacuation.***

***NOTE**: Although the Site Manager or lead Site Technician (or Facility Emergency Coordinator) may initially designate an evacuation to be a Delayed Site Evacuation, s/he should always keep in mind that conditions may change rapidly and result in the need to call for an Immediate Site Evacuation.

5. The Site Manager or lead Site Technician onsite will determine if an evacuation is necessary.

6. Evacuation will be coordinated via the two-way radios. Teams will be alerted is an evacuation has been directed. If an evacuation has been directed, the Site Manager or lead Site Technician shall ensure that instructions for evacuation are communicated to personnel over the plant radio system or hand-held radios. These instructions should include the following items at a minimum:

a. The type of evacuation to be performed

b. Immediate Site Evacuation

c. Delayed Site Evacuation

d. The nature of the emergency

e. The location(s) of the emergency

f. Any egress routes that should not be used by evacuating personnel (if known and applicable)

7. If an evacuation has been ordered, personnel shall follow either the **Immediate Site Evacuation Procedures** or **Delayed Site Evacuation Procedures** contained in **Attachment 4**, as appropriate, and based upon the direction of the Site Manager, lead Site Technician and/or Facility Emergency Coordinator.

8. Perform the appropriate follow-up procedure(s) below, based upon the type of emergency that is occurring:

   - Personnel Injuries/Health Conditions (Attachment 5)
   - Fire (Attachment 6)
   - Chemical/Oil Spills and Releases (Attachment 7)
   - Weather-related Emergencies (Section 8.0 and the appropriate Summer or Winter Weatherization Plan)

ATTACHMENT 4: EVACUATION PROCEDURES

Immediate Site Evacuation Procedure

1. Personnel present on-site at the Control Building 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 Plant Lead Technician that no other personnel are present in the area.

3. Personnel not in the operating areas of the plant (to include the Control Building and parking areas) shall immediately perform the following actions:

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

   b) Proceed to the designated muster area.

   c) A Person-in-Charge shall be designated for the muster area. In many cases, this will be the Emergency Coordinator. 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.

   d) 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 that 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 at the Control Building 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 Administrative Building for egress instructions.

d) When all visitors, contractors and non-essential operating personnel have been accounted for and are present in the Control Building, the Plant Lead Technician (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 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. Personnel present in the field/substation area (other than the Control Building) shall immediately perform the following actions:

   a) Continuously monitor the radio system for information and instructions.

   b) Perform immediate response actions, as appropriate, to place the facility in the most stable condition, based upon the type of emergency.

   c) Locate and direct non-essential personnel to proceed to the Control Building immediately.

   d) Perform facility shutdown instructions as directed by the Plant Lead Technician.

   e) Upon completion of shutdown, or upon direction by the Emergency Coordinator, proceed to the muster point for instructions.

3. Personnel not in the operating areas of the facility (to include the Control Building and parking areas) shall immediately perform the following actions:

   a) Locate and obtain all immediately accessible hand-held radios. (b) Proceed to the designated muster area (see Site Map).

   b) A Person-in-Charge shall be designated for the muster 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.

c) The Person-in-Charge at the designated muster area will coordinate with outside responding agency activities, and provide assistance (to include personnel, resources, and administrative functions) to the Control Building as directed by the Emergency Coordinator and/or Plant Lead Technician/Lead technician.

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

   a) Proceed to the Control Building 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.

5. 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	Giga Factory Texas front entrance

ATTACHMENT 5: PERSONNEL INJURIES OR SERIOUS HEALTH CONDITIONS

The following sections provide basic guidelines for response actions to be taken in the event of emergencies related to personnel health. Although facility personnel 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 to 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.

ATTACHMENT 6: FIRE RESPONSE PLAN

Giga Energy Storage, LLC maintains this fire response plan which 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 plant personnel and minimize damages 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 Site Technician, 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 over the radio 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/plant personnel 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 locations of key fire hydrants near or on the facility.)

4. In response to the fire, the Plant Lead Technician/Lead Technician 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 (if applicable) were activated as a result of the fire, when to secure such systems.

Fire Extinguisher Deployment Plot – Admin/Water Treatment Areas

- Giga has the following Fire Extinguishers onsite:
  - Two (2) CO2 fire extinguishers located in the substation control building
  - Two (2) Dry Chemical type fire extinguishers
    - One (1) Northeast corner of substation control house
    - One (1) South side of MegaPack yard

ATTACHMENT 7: CHEMICAL OR OIL SPILLS AND RELEASES

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 by any means available of the event that has occurred. The Site Manager or lead Site Technician should be notified immediately over the radio. 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) 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 Site Technician shall evaluate 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 Site Technician 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 Site Technician shall use the Spill Prevention Control and Countermeasure Plan (SPCC). The Site Manager or lead Site Technician 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 Site Technician 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 Site Technician 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 Site Technician shall notify/inform the Facility Emergency Coordinator of the status of the emergency.

11. Once the Site Manager, lead Site Technician, 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.

12. Follow actions specified in the "Spill Prevention, Control and Countermeasure Plan"

ATTACHMENT 8: TORNADO & STRAIGHT LINE WINDS

Tornados & Straight-Line Winds

1. Site supervision and EHS&S personnel will monitor local weather stations and apps (Weather.com, WeatherBug, NOAA Weather Radio, etc.) to detect and respond to site tornados or dangerous high wind events. This work is supported by the EMROC who monitor regional impacts. If able, Everbridge will be used to send alerts to GFTX employees.
2. Site-wide Response:
    a. If there is sufficient warning time before tornado strikes site, site work will be paused and personnel will proceed to the designated safe zones inside the factory.
        i. Any time a **tornado warning** issued, the site should take immediate protective action, as a tornado warning means that a tornado has been spotted or is indicated by radar. If a tornado is detected within 10 miles, associates outside and those in trailers will move to the factory. If a tornado is detected within 5 miles, associates will be moved to tornado safe zones.
        ii. A **tornado watch** indicates that tornado conditions are likely. While immediate protective action is not necessary, sites should be prepared to act with little to no notice.
    b. If there is not sufficient time to safely evacuate site or reach a designated safe zone from an approaching tornado, instructions will be given to site population to take cover in areas below ground level (basements, low lying flat areas, etc.)
        i. The safest place during a windstorm of any kind is inside.
            1. Go to a designated safe zone inside the factory.
        ii. Stay away from windows, doors, and outside walls.
        iii. If you cannot move inside, look for a low, flat location and lay down.
            1. Do not get under an overpass or bridge. You are safer in a low, flat location.
            2. Watch out for flying debris that can cause injury or death.
        iv. Use your arms to protect your head and neck
        v. NEVER SEEK SHELTER FROM TORNADOES IN VEHICLES OR TEMPORARY STRUCTURES (TRAILERS, CONNEXES, ETC.)

Giga Energy Storage LLC

Pandemic and Epidemic Annex

Revision 1.0

TABLE OF CONTENTS

1.0 APPROVAL AND IMPLEMENTATION SECTION

A. Introduction and Applicability

1.1 Introduction

This annex provides guidance and direction to Giga Energy Storage LLC (Giga)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 Giga Compliance Manager.

1.2 Applicability

This document applies to the power generating company registered with the PUCT as Giga Energy Storage, LLC (PGC#20668).

1.3 Generation Resource Information and Location

Giga Energy Storage, LLC (Giga or "Facility"), a 125 MW (at POI) Battery Energy Storage System (BESS) facility located in Travis County, Texas. Giga commenced commercial operations on TBD and is interconnected to Lower Colorado River Authority at the 345 kV Hornsby Substation, located in the Electric Reliability Council of Texas (ERCOT) footprint. Tesla Energy Management Systems LLC (TEMS) is the registered Generator Operator (GOP) and Tesla Energy Operations Inc is the operations and maintenance (O&M) provider for the Giga Facility. The facility is normally un-manned with Field Services personnel assigned for routine checks and maintenance.

B. Roles and Responsibilities

1.4 Giga Compliance Manager

1.4.1 Role – The Giga compliance manager and owner of the EOP.

1.4.2 Responsibilities include:

- Ensure completion of all required reporting (ERCOT, PUCT, etc.) within the specified timeframes.
- Oversee revisions and updates to the EOP as necessary, as well as the implementation of the revised Plan, and a review of supporting documents, as needed.

- Ensure the EOP is up-to-date and aligns with Giga's business objectives and addresses requirements. The PUCT requires that the EOP and all supporting documents is continuously maintained.
- Participate in training and drills, as appropriate.
- Participate in post-incident reviews and direct the updating of appropriate documentation and processes, as needed.
- Ensure the activities documented in this annex are completed, in concert with the Site Manager.
- Maintains evidence.

1.5 Giga Field Services Site Manager

1.5.1 Role – the manager of the team contracted to perform the O&M services at the Giga Facility.

1.5.2 Responsibilities include:

- Ensure the processes documented in the EOP are followed by all site personnel.
- Lead Field Services in the execution of the EOP and set expectations for the safe and reliability operational performance of the facility.
- Oversee the day-to-day operation of the Giga facility.
- Participate in the development and update of the EOP, under the leadership of the Compliance Manager.
- Ensure annual drill requirements are met and submit evidence to Giga upon completion and request.
- Schedule training and drills for relevant operating personnel, keep records of training and drills, and provide to the Compliance Manager.
- Ensure EOP training is completed by all relevant operating personnel and submit evidence to Giga upon completion and by the end of each calendar year.
- Provide evidence to Giga Compliance Manager upon completion and request.

1.6 Tesla Energy Operations Inc Field Services (Field Services)

1.6.1 Role – Contracted to perform the O&M services at the Giga Facility.

1.6.2 Responsibilities include:

- Follow the requirements and processes documented in the EOP.
- Assist in evaluation and escalation of potential incidents as requested.
- Participate in training, drills, and post-incident reviews as requested.

1.7 Tesla Energy Management Systems LLC (TEMS) Operating Personnel

1.7.1 Role – The registered Generator Operator (GOP) for the Giga facility.

1.7.2 Responsibilities include:

- Operates the Giga site from the TEMS operations center in Fremont, Ca.
- Assist in evaluation and escalation of potential incidents as requested.
- Participate in training, drills, and post-incident reviews as requested.

2.0 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 Giga. 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. Giga 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.

3.0 CRISIS TEAM

To facilitate Giga's response to a pandemic, Giga will establish a cross-functional crisis team comprised of representatives of Human Resources, Giga, Field Service Site Manager and Maintenance personnel, and others, as needed. The Giga Manager of Compliance and Field Service Site Manager will jointly lead the team, which is charged with evaluating the outbreak information, assessing impact to Giga operations, developing appropriate responses to actual and potential developing threat, and communicating per established periodicities with staff.

4.0 PANDEMIC AND EPIDEMIC DISEASE CONTAINMENT/CONTROL STRATEGIES

Government and health departments will publish the actions they're taking to implement disease containment strategies. Giga will use this published information and factor the potential impacts on both business and Bulk Power System operations. Giga 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.

5.0 ESSENTIAL ROLES AND PERSONNEL

Given the expected duration and potential multiple waves of pandemic and epidemic outbreaks and the extended toll it may take on personnel and their families (which may reduce Giga personnel availability), the crisis team must review the processes involved in carrying out essential roles and services in order 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	Personnel Name	Continuously critical or event-driven critical?
Field Service Site Manager	Paul Spracklen	Continuously
Field Service Technician	Dale Huff	Event Driven
Field Service Technician	Clifford Flatt	Event Driven

Role	Personnel Name	Continuously critical or event-driven critical?
Field Service Technician	Marvis Mitchell	Event Driven

6.0 PLANNING ASSUMPTIONS

Listed below are the overarching organizational planning assumptions.

- Federal, State, and Local government will provide guidance and/or direction regarding current pandemic/epidemic status.
- Giga will evaluate all available information published during a pandemic or epidemic to determine appropriate response and actions.
- The Giga 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.

7.0 RESOURCES AND RELATED REFERENCES

Giga Emergency Operations Plan

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

8.0 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.

DOCUMENT OWNERS

Title	Name
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Commercial Field Manager	Paul Spracklen
Territory Manager	Keith Merkel

DISTRIBUTION LIST

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Commercial Field Manager	Paul Spracklen
Territory Manager	Keith Merkel

APPROVALS

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

Name	Date	Signature
Paul Spracklen	4/14/2022	Paul Spracklen

VERSION HISTORY

Version	Effective Date	Author	Description of Changes
1.0 (DRAFT)	4/1/2022	GridSME, Giga, Tesla Energy Operations Inc (O&M)	New plan

ATTACHMENT 1: WHO PHASES AND GOVERNMENT RESPONSE STAGES

Taken from *Pandemic Influenza: Preparedness, Response, and Recovery; Guide for Critical Infrastructure and Key Resources* (*https://www.dhs.gov/sites/default/files/publications/cikrpandemicinfluenzaguide.pdf*)

WHO Phases		Federal Government Response Stages	
INTER-PANDEMIC PERIOD			
1	No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused a human infection may be present in animals. If present in animals, the risk of human disease is considered to be low.	0	New domestic animal outbreak in at-risk country
2	No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza subtype poses a substantial risk of human disease.		
PANDEMIC ALERT PERIOD			
3	Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.	0	New domestic animal outbreak in at-risk country
		1	Suspected human outbreak overseas
4	Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.	2	Confirmed human outbreak overseas
5	Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk).		
PANDEMIC PERIOD			
6	Pandemic phase: increased and sustained transmission in general population.	3	Widespread human outbreaks in multiple locations overseas
		4	First human case in North America
		5	Spread throughout United States
		6	Recovery and preparation for subsequent waves

ATTACHMENT 2: PANDEMIC AND EPIDEMIC PLANNING CHECKLIST

Instructions: Use this checklist to start the planning and response processes. Add items, as needed.

Evaluate	
Check when complete	**Item**
	Identify and gather members of the Pandemic Crisis Team
	Collect information on the status of pandemic from trusted and verified sources.
	Evaluate the need to obtain and distribute additional Personal Protective Equipment (PPE)
	Determine potential impacts to staffing

Communicate	
Check when complete	**Item**
	Provide guidance to personnel on personal contact policy and protective measures
	Communicate staffing changes for pre-determined period to prevent spread, contain infection, etc.
	Establish a set schedule for communications

Giga Energy Storage LLC

Hot Weather Annex

Revision 1.0

TABLE OF CONTENTS

1.0 APPROVAL AND IMPLEMENTATION SECTION

A. Introduction and Applicability

1.1 Introduction

This annex provides guidance and direction to Giga Energy Storage (Giga) 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 Giga Compliance Manager.

1.2 Applicability

This document applies to the power generating company registered with the PUCT as Giga Energy Storage LLC (PGC#20668).

1.3 Generation Resource Information

Giga Energy Storage, LLC (Giga or "Facility"), a 125 MW (at POI) Battery Energy Storage System (BESS) facility located in Travis County, Texas. Giga commenced commercial operations on ***TBD*** and is interconnected to Lower Colorado River Authority at the 345 kV Hornsby Substation, located in the Electric Reliability Council of Texas (ERCOT) footprint. Tesla Energy Management Systems LLC (TEMS) is the registered Generator Operator (GOP) and Tesla Energy Operations Inc is the operations and maintenance (O&M) provider for the Giga Facility. The facility is normally un-manned with Field Services personnel assigned for routine checks and maintenance.

See the Giga Solar Site Map and Location Map in **Attachment 1 and 2**.

B. Roles And Responsibilities

1.4 Giga Compliance Manager

1.4.1 Role – The Giga compliance manager and owner of this plan.

1.4.2 Responsibilities include:

- Ensure completion of all required reporting (ERCOT, PUCT, etc.) within the specified timeframes.
- Oversee revisions and updates to the EOP as necessary, as well as the implementation of the revised EOP, and a review of supporting documents, as needed.

- Ensure the EOP is up-to-date and aligns with Giga's business objectives and addresses requirements. The PUCT requires that the EOP and all supporting documents is continuously maintained.
- Participate in training and drills, as appropriate.
- Participate in post-incident reviews and direct the updating of appropriate documentation and processes, as needed.
- Ensure the activities documented in this annex are completed, in concert with the Site Manager.
- Reviews and approves this annex annually.
- Maintains evidence.

1.5 Tesla Energy Operations Inc Field Services Site Manager

1.5.1 Role – the manager of the team contracted to perform the O&M services at the Giga Facility.

1.5.2 Responsibilities include:

- Ensure the processes documented in the EOP are followed by all site personnel.
- Lead Field Services in the execution of the EOP and set expectations for the safe and reliability operational performance of the facility.
- Provide annual written affirmation to the Compliance Manager that pre-hot weather checks and summer season review activities have been complete.
- Oversee the day-to-day operations of the Giga facility.
- Ensure the execution of weatherization tasks, procurement of inventory, completion of checklists, and overall preparation and readiness for seasonal operations is performed within the timeframes required.
- Document remediation activities in the work management system that are required to address hot weather preparation needs or deficiencies.
- Notify the Compliance Manager of weatherization tasks progress, scheduling, or concerns with meeting deadlines
- Participate in the development and update of the EOP, under the leadership of the Compliance Manager.
- Ensure annual drill requirements are met and submit evidence to Giga Compliance Manager upon completion and request.
- Schedule training and drills for relevant operating personnel, keep records of training and drills, and provide to the Compliance Manager.
- Ensure EOP training is completed by all relevant operating personnel and submit evidence to Giga upon completion and by the end of each calendar year.
- Provide evidence to Giga Compliance Manager upon completion and request.

1.6 Tesla Energy Operations Inc Field Services

1.6.1 Role – Contracted to perform the O&M services at the Giga Facility.

1.6.2 Responsibilities include:

- Follow the requirements and processes documented in the EOP.
- Conduct facility readiness reviews and provide reports to Field Services Site Manager and Compliance Manager upon completion and request.
- Coordinate with and report facility weather-related information to Field Services Site Manager and TEMS Operating Personnel.
- Identify potential risk areas due to hot weather conditions and report opportunities to improve readiness and response to the Field Services Site Manager.
- Participate in responses to incidents and provide feedback on potential impact(s) to operations of an incident and proposed responses.
- Participate in training and drills as requested.
- Participate in post-summer evaluations to assess the effectiveness of this plan and provide feedback.

1.7 Tesla Energy Management Systems LLC (TEMS) Operating Personnel

1.7.1 Role – The registered Generator Operator (GOP) for the Giga facility

1.7.2 Responsibilities include:

- Operates the Giga site from the TEMS operations center in Fremont, Ca.
- Communicate with QSE and other entities, as appropriate, of weather conditions leading to a Giga outage, shutdown, or curtailment.
- Coordinate with Field Personnel and create appropriate log entries for events, incidents, etc.
- Submit evidence to Compliance Manager upon completion and request.
- Participate in training and drills as requested.
- Participate in post-incident reviews.

2.0 LOCAL CONDITIONS

2.1 Local Conditions

Austin, TX is used for comparison of the local Facility conditions. The average high temperature during extended summer months of June through September is 97 degrees Fahrenheit, with recorded temperatures as high as 112 degrees Fahrenheit.

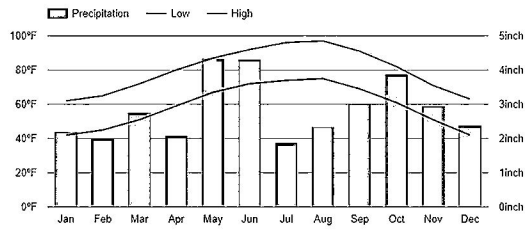

Figure 1: https://www.usclimatedata.com/climate/austin/texas/united-states/ustx2742

3.0 REQUIRED TIMELINES FOR HOT WEATHER/SUMMER PREPARATIONS

3.1 Pre-Summer Season Checks

Prior to **April 1** of each calendar year, Field Services will complete a *Pre-Summer Checklist*.

3.2 Pre-Event and Extreme Hot Weather Checks

Field Services will complete the *Pre-Event Checklist* and *Extreme Hot Weather Checklist* prior to the forecasted temperature reaching 85°F and/or the possibility of extreme hot weather event. This temperature reflects the people and heat stress planning needed. The majority of our preparation is people based in lieu of equipment based due to the design operating temperature of the equipment.

4.0 GIGA CRITICAL COMPONENTS AND EQUIPMENT

As part of its extreme hot weather readiness and preparation, Field Services personnel 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 has the potential to cause a trip, de-rate, or failure to start due to extreme hot weather event).

The **Critical Equipment Matrix** attachment 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 any manufacturer-provided weather design limits.

Field Services personnel 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.

4.1 Equipment Design Parameters and Weather Design Limits

The Giga 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 personnel will utilize, as part of the implementation of this plan, manufacturers recommendations to determine at what ambient temperature the facility and any critical equipment will be able to operate.

5.0 EXTREME HOT WEATHER PREPARTION AND RESPONSE PROCESSES

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

5.1 Extreme Hot Weather Equipment Inventory List

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

5.2 Pre-Summer Checklist

The *Pre-Summer Checklist* and *Summer Season Review Checklist* includes verifications of Field Services personnel readiness and review of this Plan. These checklists are due within specified timeframes as they connect directly to required reporting to ERCOT and the PUCT.

5.3 Extreme Hot Weather Checklist

The *Extreme Hot Weather Checklist* will be completed by Field Services personnel to verify that the facility's critical equipment is protected and functioning properly in advance of each forecasted extreme hot weather event.

5.4 Post-Event and Annual Review

After each extreme hot weather event and before the kickoff of the summer season preparations, Field Services personnel will utilize a review process to formally recognize procedural strengths, evaluate improvement opportunities, corrective actions needed, and lessons learned, which will be incorporated into this plan going forward.

Any work orders arising from this review process will also be implemented. All changes to these procedures and the plan must be communicated to all appropriate personnel and regulators. In addition, the Field Services Site Manager will identify and communicate to the Compliance Manager any weatherization improvements that should be included for the subsequent year's budget.

5.5 Documenting Summer Preparedness Activities via Work Order Management

Field Services personnel will review its work management system to ensure adequate annual preventative work orders exist for extreme hot weather preparedness. Field Services personnel will also ensure: (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, are completed prior to the onset of the summer season.

5.6 Additional Staffing Consideration for Extreme Hot Weather Events

The Field Services Site Manager will consider the need for staffing at the facility (including on a 24x7 basis) during anticipated extreme hot weather events. Planning for this staffing should include arrangements for transportation, lodging/meals, and in-house food inventories, as appropriate.

6.0 BUSINESS CONTINUITY - CRITICAL FAILURE POINTS – PERSONNEL (STAFFING)

Giga has identified the following potential site personnel critical failure points and has planned remediation for each role, as noted. There will be no additional staffing prior or during extreme hot weather events, but Giga is able to mobilize additional Field Services technicians, managers and/or contractors to supplement site team, as needed.

Role	Notes	Remediation
Field Technicians	There are typically three (3) off-site field services technicians available.	If all field technicians are unavailable, additional personnel may be dispatched, as approved by the Site Manager, for relocation to supplement facility staffing.
TEMS Control Center Operators	Control Center staffed 24/7 with monitoring and control capability.	Additional Control Center Operators are available in the event of additional staffing needs.

7.0 HEAT-RELATED SAFETY INFORMATION

7.1 Personnel Safety

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

Giga Personnel will stay informed of potential extreme hot 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 hot weather events.

7.2 Heat Exhaustion

7.2.1 Signs of heat exhaustion include:

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

7.2.2 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.

7.3 Heat Stroke

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

7.3.1 Signs of heat stroke include:

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

7.3.2 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.

7.4 Safety Procedures

7.4.1 During extreme hot weather events, facility Personnel should adhere to the following procedures.

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

7.4.1.2 Take breaks in air-conditioned spaces

7.4.1.3 Wear loose, lightweight, light-colored clothing.

7.4.1.4 Wear hats when working outdoors.

7.4.1.5 Wear and reapply sunscreen as indicated on the package.

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

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

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

8.0 EXTREME HOT WEATHER EVENT COMMUNICATIONS

8.1 Communication Protocols

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

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

8.1.2.1 Communicate with Field Services, TEMS Operating Personnel, and the Giga 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 Field Services personnel will notify TEMS Operating Personnel (who is required to notify the QSE and other entities) of instances of weather conditions leading to a plant outage, shutdown, or curtailment.

8.1.4 Conduct job safety briefings during extreme hot weather events will include the availability of interpersonal communication capability and available back-up communications options. To that end, Field Services personnel will identify and verify the operations of all back-up communications options in case the primary system is not available.

9.0 ANNUAL TRAINING AND ANNEX REVIEW

It is imperative that all relevant all personnel are familiar with and follow this annex, except to the extent that deviations are appropriate under the circumstances during an extreme hot weather event.

To that end, annual review and training will be conducted on hot weather and facility-specific awareness topics to support readiness for executing and implementing this Plan. Training must use this Plan and may include the following topics:

- Identification of the checks required on critical facility components and equipment most affected by hot conditions.
- A review of extreme hot weather health and safety precautions.
- A review of possible site-specific weather-related concerns.
- Procedures for troubleshooting, inspections, and repairs.
- ERCOT extended weather outlook.

All records of attendance for the annual training, drills, or exercises involving this annex will be retained in the Giga evidence repository.

10.0 ERCOT ANNUAL SUMMER WEATHER DECLARATION SUBMITTAL

10.1 ERCOT Requirement to File Annual Summer Weatherization Declaration Submittal

10.1.1 Giga 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 time period (June through September).

10.1.2 Giga will follow all other requirements in ERCOT Protocols 3.21(3) concerning the submission of the declaration, as applicable.

11.0 RESOURCES AND RELATED DOCUMENTS

Giga Emergency Operations Plan

Giga Hurricane Annex

Giga Pandemic and Epidemic Annex

Giga Cold Weather Annex

Giga 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

ERCOT Nodal Protocols webpage:

http://www.ercot.com/mktrules/nprotocols/current

- Relevant document**: Section 3: Management Activities for the ERCOT System**
- Relevant document: **Section 22 Attachment K: Declaration of Completion of Generation Resource Summer Weatherization Preparations and Natural Gas Pipeline Coordination for Resource Entities with Natural Gas Generation Resources**

12.0 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.

Term	Definition
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.

DOCUMENT OWNERS

Title	Name
Sr. Project Manager, Industrial Storage	Paul Spracklen
Commercial Field Manager	Paul Spracklen
Territory Manager	Keith Merkel

DISTRIBUTION LIST

Title	Name
Sr. Project Manager, Industrial Storage	Paul Spracklen
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Territory Manager	Keith Merkel

APPROVALS

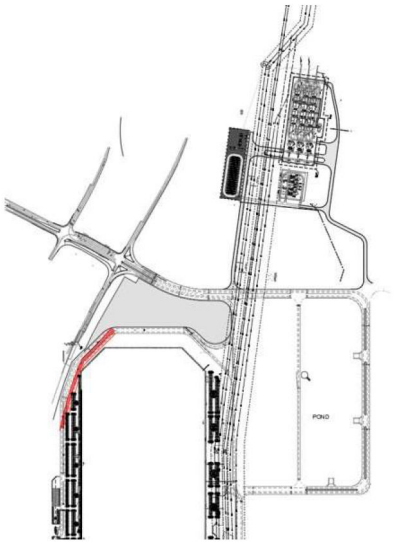
The approval signatures in this section indicate review of the document and approval to publish.

Name	Date	Signature
Paul Spracklen	4/14/2022	Paul Spracklen

VERSION HISTORY

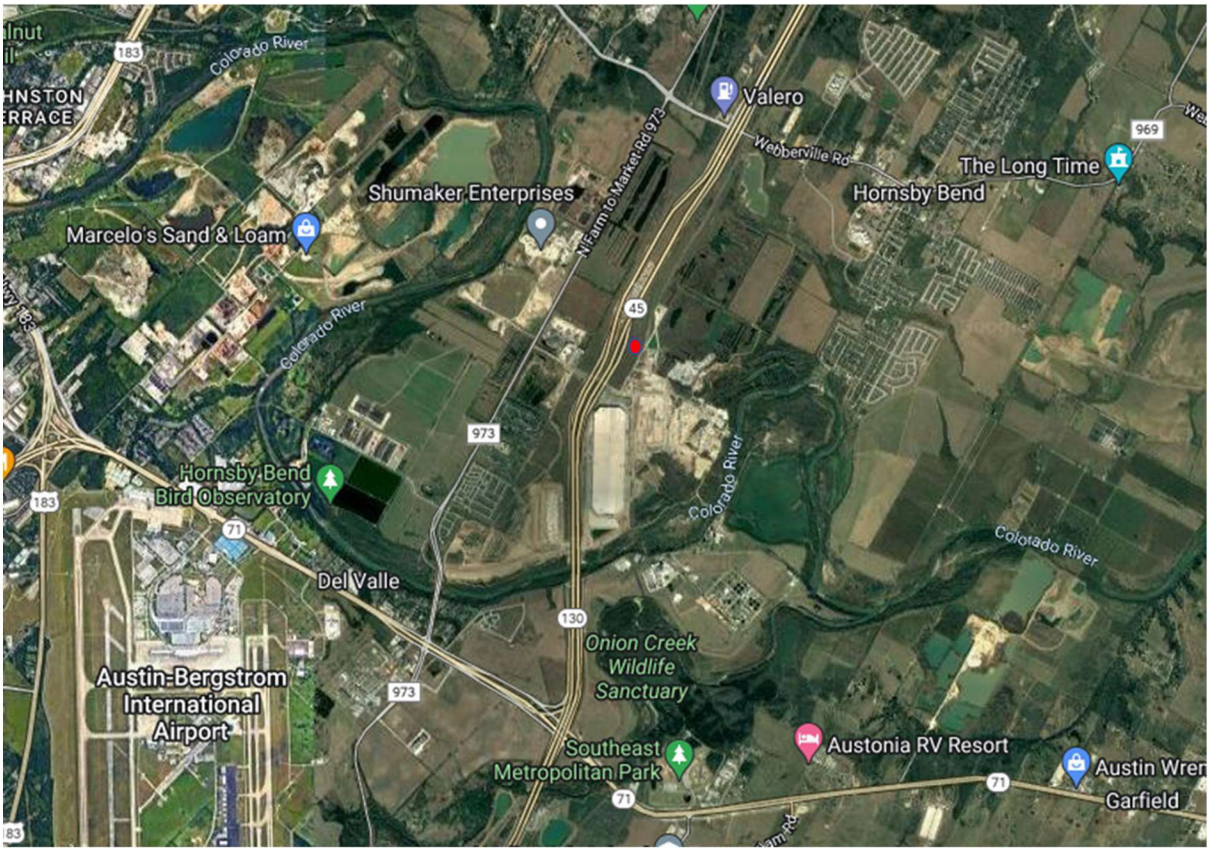
Version	Effective Date	Author	Description of Changes
1.0 Draft	4/1/2022	GridSME, Giga, Tesla Energy Operations Inc (O&M)	New plan

ATTACHMENT 1: GIGA SITE MAP



Giga Energy BESS Project
Austin, TX

ATTACHMENT 2: GIGA LOCATION MAP



ATTACHMENT 3: GIGA CRITICAL EQUIPMENT MATRIX

Extreme hot weather conditions can impact performance of BESS facilities. Extended periods of temperature over 108°F can place stress on the modules and could limit the capabilities of plant production. The inverters can produce the maximum power output at temperatures up to 116 degrees Fahrenheit before they de-rate. However, it is unlikely that Megapacks will fail as a result of extreme heat conditions. In addition to the effect of temperature on the Giga Energy Storage, LLC, these extreme heat events tend to be accompanied by high wind events or extreme thunderstorms that can adversely impact operations of the plant. This critical equipment matrix identifies all components necessary to operate the plant during severe weather conditions.

Item	Quantity	Remediation
Tesla Megapack XL	*68*	Ensure that Preventative Maintenance tasks (PMs) – are performed and spare parts are available

ATTACHMENT 4: EXTREME 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			
9.				

ATTACHMENT 5: PRE-SUMMER CHECKLIST – DUE BY APRIL 1 ANNUALLY

Date performed	
Completed by (name)	

	Pre-Summer Checks **Instructions**: Check each item when complete and provide completed checklist to Field Services Site Manager and Compliance Manger. Use blank lines to add items as needed.
☐	Complete and submit the *Extreme Hot Weather Equipment Inventory.*
☐	Review the *Hurricane Annex* and update.
☐	Review any industry best practices or lessons learned from the previous summer season.
☐	Conduct annual extreme hot weather readiness training, *Hurricane Annex* and EOP drill with relevant operating personnel. Utilize and follow the annex(es) during the training and drill. Collect Field Services feedback on EOP (if any) and, without unnecessary delay, provide Compliance Manager.
☐	Collect Field Services feedback on the EOP, *Hot Weather Annex and Hurricane Annex* (if any) and, without unnecessary delay, provide Compliance Manager so they can update and submit the Plan to ERCOT within the required timeframe (by June 1).
☐	Ensure all critical site-specific equipment and components have adequate protection to ensure operability during extreme hot weather event, including but not limited to scheduling and performing maintenance prior to the beginning of summer and increasing surveillance during extreme hot weather events by scheduling tasks in the work management system.
☐	Review work orders for hot weather preparedness preventative work to confirm they are scheduled for completion, as needed, prior to the onset of the summer season.
☐	Ensure all persons coming to site have PPE consistent with expected weather conditions. (e.g., moisture wicking FR gear, cooling vests if required, FR bandanas)
☐	Notify the Compliance Manager in writing that weatherization work has been completed work and/or identify any exceptions and scheduled work to be performed to complete summer weatherization.

ATTACHMENT 6: PRE-EVENT 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. Use blank lines to add items as needed.	
☐	Monitor weather and weather alerts. Note in shift logs when a summer weather advisory has been issued, and subsequently recalled or released.
☐	For forecasted hurricane and tropical storm events, refer to the *Hurricane Annex*.
☐	Place severe weather protections in service where extreme hot weather could adversely impact Personnel, operations, or forced outage recovery (can include severe thunderstorms or monsoonal flooding).
☐	Establish communications with TEMS Operating Personnel on weather event conditions and discuss appropriate restrictions on maintenance to maximize generation capability.
☐	Review staffing plan (including supplemental coverage) and review/update emergency callout list as needed.
☐	Monitor temperatures and take action to limit or prevent impact to instrumentation and equipment due to extreme heat.
☐	Field Services Site Manager to schedule and conduct meeting with field personnel to discuss the weather forecast to keep all personnel alerted to possible weather conditions.
☐	
☐	

ATTACHMENT 7: EXTREME HOT WEATHER CHECKLIST

ESCALATE AND REPORT KNOWN CRITICAL EQUIPMENT DEFICIENCIES IMMEDIATELY FOR ASSESSMENT

Date performed	
Completed by (name)	

Extreme Hot Weather Checklist **Instructions:** Answer each item and provide completed checklist to Field Services Site Manager and Compliance Manger. Use blank lines to add items as needed			
Item #	**Item**	**Complete? Yes, No, or N/A**	**Notes** Include any follow-up activity required.
1.	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).		
2.	Establish staff responsibilities to monitor weather and weather alerts.		
3.	Establish a communications plan with the TEMS Operating Personnel including notification to Operating Personnel of potential plan outage, shutdown, or curtailment.		
4.	Check that all critical equipment is operating and protected per the manufacturer's recommendations during extreme hot weather events. Emphasize the points at the facility where weed abatement and fire safety are necessary to protect critical equipment.		
5.	Refer to **Critical Equipment Matrix** (Attachment 3) and plan preventative and response actions based on forecasted conditions, which should include notifications to Personnel.		
6.	Monitor and address any bird or animal nesting in or around the high voltage substation.		

Extreme Hot Weather Checklist **Instructions:** Answer each item and provide completed checklist to Field Services Site Manager and Compliance Manger. Use blank lines to add items as needed			
Item #	**Item**	**Complete? Yes, No, or N/A**	**Notes Include any follow-up activity required.**
7.	Conduct site inspection. Check for extra precautions or outfitting of site components and/or critical equipment that may be impacted by exposure to elements checking insulation thickness, quality, and proper installation, building entrances, windows, etc.).		
8.	Check 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.		
9.			

Giga Energy Storage LLC

Cold Weather Annex (DRAFT)

Revision 1.0

TABLE OF CONTENTS

1.0 APPROVAL AND IMPLEMENTATION SECTION

A. Introduction and Applicability

1.1 Introduction

This annex provides guidance and direction to Giga Energy Storage LLC (Giga) 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 Giga Compliance Manager.

1.2 Applicability

This document applies to the power generating company registered with the PUCT as Giga Energy Storage, LLC (PGC#20668).

1.3 Generation Resource Information

Giga Energy Storage, LLC (Giga or "Facility"), a 125 MW (at POI) Battery Energy Storage System (BESS) facility located in Travis County, Texas. Giga commenced commercial operations on ***TBD*** and is interconnected to Lower Colorado River Authority at the 345 kV Hornsby Substation, located in the Electric Reliability Council of Texas (ERCOT) footprint. Tesla Energy Management Systems LLC (TEMS) is the registered Generator Operator (GOP) and Tesla Energy Operations Inc is the operations and maintenance (O&M) provider for the Giga Facility. The facility is normally un-manned with Field Services personnel assigned for routine checks and maintenance.

See the Giga Solar Site Map and Location Map in **Attachment 1 and 2.**

B. ROLES AND RESPONSIBILITIES

1.4 Giga Compliance Manager

1.4.1 Role – The Giga compliance manager and owner of this plan.

1.4.2 Responsibilities include:

- Ensure completion of all required reporting (ERCOT, PUCT, etc.) within the specified timeframes.
- Oversee the revisions and updates to the EOP as necessary as well as the implementation of the revised EOP, and a review of supporting documents, as needed.

- Ensure the plan is up-to-date and aligns with Giga's business objectives and addresses requirements. The PUCT requires that the EOP and all supporting documents are continuously maintained.
- Participate in training and drills, as appropriate.
- Participate in post-incident reviews and direct the updating of appropriate documentation and processes, as needed.
- Ensure the activities documented in this EOP are completed, in concert with the Tesla Energy Operations Inc Field Services Site Manager.
- Reviews and approves this EOP annually.
- Maintains evidence.

1.5 Tesla Energy Operations Inc Field Services Site Manager

1.5.1 Role – the manager of the team contracted to perform the O&M services at the Giga Facility.

1.5.2 Responsibilities include:

- Ensure the processes documented in the EOP are followed by all site personnel.
- Lead Field Services in the execution of this EOP and set expectations with Field Service Technicians for safe and reliability operational performance of the facility.
- Provide annual written affirmation to the Compliance Manager that pre-cold weather checks and Winter season review activities have been complete.
- Oversee the day-to-day operations of the Giga facility.
- Ensure the execution of weatherization tasks, procurement of inventory, completion of checklists, and overall preparation and readiness for seasonal operations is performed within the timeframes required.
- Document remediation activities in the work management system that are required to address Winter preparation needs or deficiencies.
- Notify the Compliance Manager of weatherization tasks progress, scheduling, or concerns with meeting deadlines.
- Participate in the development and update of the EOP, under the leadership of the Compliance Manager.
- Ensure annual drill requirements are met and submit evidence to the Compliance Manager upon completion.
- Schedule training and drills for relevant operating personnel, keep records of training and drills, and provide to the Compliance Manager.

1.6 Tesla Energy Operations Inc Field Services

1.6.1 Role – Contracted to perform the O&M services at the Giga Facility.

1.6.2 Responsibilities include:

- Follow the requirements and processes documented in the EOP.
- Conduct facility readiness reviews and provide reports to Field Services Site Manager and Compliance Manager upon completion and request.
- Coordinate with and report facility weather-related information to Field Services Site Manager and TEMS Operating Personnel.
- Identify potential risk areas due to Winter weather conditions and report opportunities to improve readiness and response to the Field Services Site Manager.
- Participate in training and drills.
- Participate in post-Winter evaluations to assess the effectiveness of this annex and provide feedback.

1.7 Tesla Energy Management Systems, LLC (TEMS) Operating Personnel

1.7.1 Role – The registered Generator Operator (GOP) for the Giga facility

1.7.2 Responsibilities include:

- Operates the Giga site from the TEMS operations center in Freemont, CA.
- Communicate with QSE and other entities, as appropriate, of weather conditions leading to a Giga outage, shutdown, or curtailment.
- Coordinate with Field Personnel and create appropriate log entries for events, incidents, etc.
- Participate in training and drills as requested.
- Participate in post-incident reviews as requested.
- Submit evidence to Giga upon completion and request.

2.0 LOCAL CONDITIONS

2.1 Local Conditions

Austin, TX is used for comparison of the local Facility conditions. The lowest average low temperature during extended Winter months of November through February is 42 degrees Fahrenheit, with recorded temperatures as low as -2 degrees Fahrenheit.

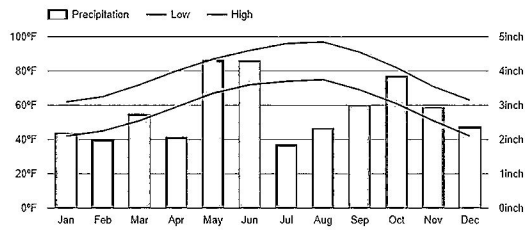


Figure 1: https://www.usclimatedata.com/climate/austin/texas/united-states/ustx2742

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*.

3.2 Winter Season Review

By **November 1**[1] of each calendar year, Field Services will commence Winter season review by completing the *Winter Season Review Checklist*.

3.3 Pre-Event and Extreme Cold Weather Checks

Field Services will complete the *Pre-Event Checklist* prior to the forecasted temperature reaching 30°F and/or the possibility of extreme cold or severe winter weather event.

4.0 GIGA CRITICAL COMPONENTS AND EQUIPMENT

As part of its Winter weather readiness and preparation, Field Services personnel 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 has the potential to cause a trip, de-rate, or failure to start due to extreme cold or a severe Winter weather event).

The *Critical Equipment Matrix* (Attachment 3) 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 any manufacturer-provided weather design limits.

Field Services personnel 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 and increasing surveillance during extreme cold or severe Winter weather events.

4.1 Equipment Design Parameters and Weather Design Limits

The Giga 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 personnel 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.

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

5.0 COLD WEATHER PREPARTION 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 personnel will utilize these checklists to prepare for Winter and respond to winter weather events.

5.1 Cold Weather Equipment Inventory List

Prior to the onset of the winter season and/or a severe winter weather event, Field Services personnel 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 personnel will use a complete the *Winter Weather Equipment Inventory* and provide the dated checklist as evidence that the inventory review was performed.

5.2 Pre-Winter Checklist and Winter Season Review Checklist

The *Pre-Winter Checklist* and *Winter Season Review Checklist* includes verifications of Field Services personnel readiness and review of this annex. These checklists are due within specified timeframes as they connect directly to required reporting to ERCOT and the PUCT.

5.3 Extreme Cold and Severe Weather Checklist

The *Extreme Cold or Severe Weather Checklist* will be completed by Field Services personnel 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.

5.4 Post-Event and Annual Review

After each severe cold weather event and before the kickoff of the winter season preparations, Field Services personnel will utilize a review process to formally recognize procedural strengths, evaluate improvement opportunities, corrective actions needed, and lessons learned, which will be incorporated into this EOP going forward.

Any work orders arising from this review process will also be implemented. All changes to these procedures and the EOP must be communicated to all appropriate personnel and regulators. In addition, the Field Services Site Manager will identify and communicate to the Compliance Manager any weatherization improvements that should be included for the subsequent year's budget.

5.5 Documenting Cold Weather Preparedness Activities via Work Order Management

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

reliability in cold weather; and (ii) all cold weather preparedness preventative work orders, are completed prior to the onset of the winter season.

5.6 Additional Staffing Consideration for Weather Events

The Field Services Site Manager will consider the need for staffing at the facility (including on a 24x7 basis) during anticipated severe weather events. Planning for this staffing should include arrangements for transportation, lodging/meals, and in-house food inventories, as appropriate.

6.0 BUSINESS CONTINUITY - CRITICAL FAILURE POINTS – PERSONNEL (STAFFING)

Giga has identified the following potential site critical failure points and has planned remediation as noted. There will be no additional staffing prior or during a severe weather events/conditions, but Giga is able to mobilize additional Field Services technicians, managers and/or contractors to supplement site team, as needed.

Role	Notes	Remediation
Field Technicians	There are typically three (3) off-site field services technicians available to service the facility	If all field technicians are unavailable, additional personnel may be dispatched, as approved by the Site Manager, for relocation to supplement facility staffing.
TEMS Control Center Operators	Control Center staffed 24/7 with monitoring and control capability.	Additional Control Center Operators are available in the event of additional staffing needs.

7.0 COLD-RELATED SAFETY INFORMATION

7.1 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 Personnel weather-related risks.

Giga 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.

7.2 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.

7.2.1 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

7.2.2 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.

7.3 Hypothermia

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

7.3.1 Signs of hypothermia include:

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

7.4 Safety Procedures

7.4.1 During extreme cold or severe winter weather events, facility Personnel should adhere to the following procedures.

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

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

7.4.1.3 Change out of wet clothing as soon as possible.

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

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

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

8.0 COLD WEATHER EVENT COMMUNICATIONS

8.1 Communication Protocols

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

8.1.2 Before anticipated extreme cold or severe cold weather event, the Field Services Site Manager will:

8.1.2.1 Communicate with Field Services, TEMS Operating Personnel, and the Compliance Manager that the site-specific cold 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 Field Services personnel will notify TEMS LLC Operating Personnel (who is required to notify the QSE and other entities) of instances of weather conditions leading to a facility outage, shutdown, or curtailment.

8.1.4 Conduct job safety briefings during extreme cold or severe cold weather events will include the availability of interpersonal communication capability and available back-up communications options. To that end, Field Services personnel will identify and verify the operations of all back-up communications options in case the primary system is not available.

9.0 ANNUAL TRAINING AND ANNEX REVIEW

It is imperative that all relevant personnel are familiar with and follow this annex, except to the extent that deviations are appropriate under the circumstances during an extreme cold or severe cold weather event.

To that end, annual review and training will be conducted on cold weather and facility-specific awareness topics to support readiness for executing and implementing this annex. Training must use this annex and may include the following topics:

- Identification of the checks required on critical facility components and equipment most affected by cold conditions.
- A review of cold weather health and safety precautions.
- A review of possible site-specific weather-related concerns.

- Procedures for troubleshooting, inspections, and repairs.
- ERCOT extended weather outlook.

All records of attendance for the annual training, drills, or exercises involving this Cold Weather Annex will be retained in the Giga evidence repository.

10.0 ERCOT ANNUAL WINTER WEATHER DECLARATION SUBMITTAL

10.1 ERCOT Requirement for Annual Winter Weatherization Declaration Submittal

10.1.1 Giga 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).

10.1.1.1 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, the Giga 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 the Giga.

10.1.2 Giga will follow all other requirements in ERCOT Protocols 3.21(3) concerning the submission of the declaration, as applicable.

11.0 RESOURCES AND RELATED DOCUMENTS

Giga Emergency Operations Plan

Giga Pandemic Annex

Giga Hurricane Annex

Giga Hot Weather Annex

Giga Cyber and Physical Security Incident Annex

PUCT

Electric Substantive Rules: Chapter 25 Rules webpage:
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Subchapter C, §25.53 - Electric Service Emergency Operations Plans:
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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**
- **Section 22 Attachment O: Declaration of Completion of Generation Resource Winter Weatherization Preparations**

DOCUMENT OWNERS

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Commercial Field Manager	Paul Spracklen
Territory Manager	Keith Merkel

DISTRIBUTION LIST

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APPROVALS

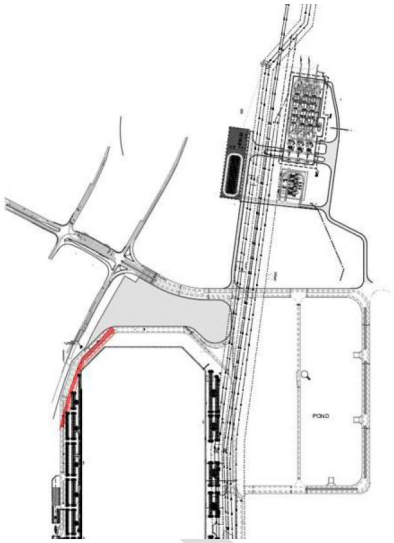
The approval signatures in this section indicate review of the document and approval to publish.

Name	Date	Signature
Paul Spracklen – Draft Approval	4/13/2022	Paul Spracklen

VERSION HISTORY

Version	Effective Date	Author	Description of Changes
1.0 DRAFT	4/1/2022	GridSME, Giga, Tesla Energy Operations Inc (O&M)	New plan

ATTACHMENT 1: GIGA SITE MAP



Giga Energy BESS Project
Austin, TX

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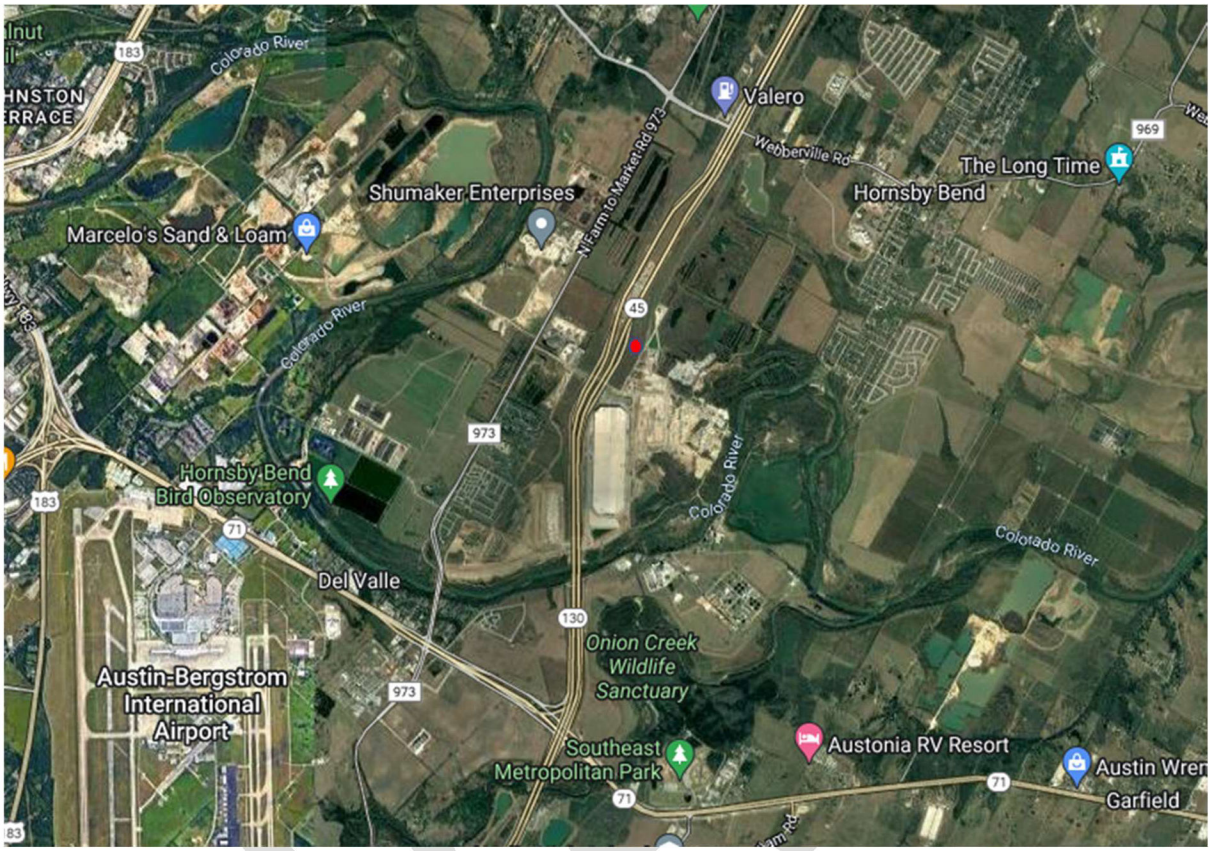


ATTACHMENT 3: GIGA CRITICAL EQUIPMENT MATRIX

Extreme cold or severe winter weather conditions can impact performance of solar generation facilities. Freezing temperatures can have an adverse impact on electronic and oil-filled equipment, as they are highly impacted by ambient temperatures. Voltage, current, and temperature readings can drift when sensitive equipment attempts to function outside of their normal operating range. Snow accumulation may place stress on the BESS system's structures.

This critical equipment matrix identifies all components necessary to operate the facility during severe weather conditions.

Item	Quantity	Remediation
Tesla Megapack XL	*68*	Ensure that Preventative Maintenance tasks (PMs) – are performed and spare parts are available

ATTACHMENT 4: 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.					
9.					
10.					
11.					

ATTACHMENT 5: 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 Field Services Site Manager and Compliance Manger. Use blank lines to add items as needed.	
☐	Complete and submit the *Winter Weather Equipment Inventory.*
☐	Review any industry best practices or lessons learned from the previous winter season. Make updates to this annex, as needed.
☐	Conduct annual winter readiness training and drill with all Field Services personnel. Utilize and follow the annex during the training and drill.
☐	Collect Field Services feedback on the EOP (if any) and, without unnecessary delay, provide Compliance Manager so they can update and submit the Plan to ERCOT within the required timeframe (by October 1).
☐	Ensure all 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 (e.g. check SF-6 gas pressure levels, transformer oil levels) maintenance prior to the beginning of winter and increasing surveillance during extreme cold or severe winter weather events by scheduling tasks in the work management system.
☐	Ensure all persons coming to site have PPE consistent with expected weather conditions. (e.g. gators, rain gear, thermal layers, baklavas etc.)
☐	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 Giga Compliance Manager in writing that weatherization work has been completed work and/or identify any exceptions and scheduled work to be performed to complete winter weatherization.

ATTACHMENT 6: PRE-EVENT 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. Use blank lines to add items as needed.	
☐	Monitor weather and weather alerts. Note in shift logs when a winter weather advisory has been issued, and subsequently recalled or released.
☐	For forecasted hurricane and tropical storm events, refer to the *Hurricane Annex*.
☐	Place severe weather protections in service where extreme cold or severe or freezing winter weather could adversely impact Personnel, operations, or forced outage recovery.
☐	Establish communications with Operating Personnel on weather event conditions and discuss appropriate restrictions on maintenance to maximize generation capability.
☐	Verify appropriate cold weather PPE for field personnel.
☐	Establish staffing plan (including supplemental coverage) and review/update emergency callout list as needed.
☐	Monitor temperatures and take action to limit or prevent impact reliability impacts to instrumentation and equipment due to extreme cold.
☐	Field Services Site Manager to schedule and conduct meeting to discuss the weather forecast at the beginning of each shift during shift turnover and to keep all personnel alerted to possible weather conditions.
☐	
☐	

ATTACHMENT 8: EXTREME COLD OR SEVERE WEATHER CHECKLIST

Date performed	
Completed by (name)	

ESCALATE AND REPORT KNOWN CRITICAL EQUIPMENT DEFICIENCIES

Extreme Cold or Severe Winter Weather Checklist **Instructions:** Answer each item and provide completed checklist to Field Services Site Manager and Compliance Manger. Use blank lines to add items as needed			
Item #	**Item**	**Complete? Yes, No, or N/A**	**Notes Include any follow-up activity required.**
1.	Review work order system to ensure adequate annual preventative work orders exist for freeze protection and winter weather preparations.		
2.	Perform necessary and immediate work needed to protect the facility.		
3.	Establish and document staff responsibilities to monitor weather and weather alerts.		
4.	Establish and document a communications plan with the TEMS Operating Personnel.		
5.	Ensure all critical equipment is operating and protected per the manufacturer's recommendations during extreme cold or severe winter weather events. Emphasize the points at the facility where freezing can occur (e.g. building piping, heat tracer piping).		
6.	Develop a list of critical equipment and transmitters that require increased surveillance during extreme cold or severe Winter weather events. Refer to **Critical Equipment Matrix** attachment.		
7.	Consider the effect of wind chill when applying freeze protection, including checking insulation thickness, quality, and proper installation.		
8.	Inspect building entrances, windows, fan louvers, and other openings for potential exposure of critical equipment to the elements.		
9.	Check equipment inventory and replenish all quantities. Refer to **Winter Weather Equipment Inventory** attachment. Be sure to check all First Aid kits and confirm PPE "in use" dates.		

Giga Energy Storage LLC

Cyber and Physical Security Annex

Revision 1.0

TABLE OF CONTENTS

1.0 APPROVAL AND IMPLEMENTATION SECTION

A. Introduction and Applicability

1.1 Introduction

This annex provides guidance and direction to Giga Energy Storage LLC (Giga) 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 Giga Compliance Manager.

1.2 Applicability

This document applies to the power generating company registered with the PUCT as Giga Energy Storage, LLC (PGC#20668).

1.3 Generation Resource Information

Giga Energy Storage, LLC (Giga or "Facility"), a 125 MW (at POI) Battery Energy Storage System (BESS) facility located in Travis County, Texas. Giga commenced commercial operations on TBD and is interconnected to Lower Colorado River Authority at the 345 kV Hornsby Substation, located in the Electric Reliability Council of Texas (ERCOT) footprint. Tesla Energy Management Systems LLC (TEMS) is the registered Generator Operator (GOP) and Tesla Energy Operations Inc is the operations and maintenance (O&M) provider for the Giga Facility. The facility is normally un-manned with Field Services personnel assigned for routine checks and maintenance.

B. Roles and Responsibilities

1.4 Giga Compliance Manager

1.4.1 Role – The Giga compliance manager and owner of the EOP.

1.4.2 Responsibilities include:

- Ensure completion of all required reporting (ERCOT, PUCT, etc.) within the specified timeframes.
- Oversee revisions and updates to the EOP as necessary, as well as the implementation of the revised EOP, and a review of supporting documents, as needed.

- Ensure the EOP is up-to-date and aligns with Giga's business objectives and addresses requirements. The PUCT requires that the EOP and all supporting documents is continuously maintained.
- Participate in training and drills, as appropriate.
- Participate in post-incident reviews and direct the updating of appropriate documentation and processes, as needed.
- Ensure the activities documented in this annex are completed, in concert with the Site Manager.
- Reviews and approves this annex annually
- Maintains evidence.

1.5 Tesla Energy Operations Inc Field Services Site Manager

1.5.1 Role – the manager of the team contracted to perform the O&M services at the Giga Facility.

1.5.2 Responsibilities include:

- Ensure the requirements and processes laid out in the EOP are followed by site Personnel.
- Lead Field Services in the execution of the EOP and set expectations for the safe and reliable operational performance of the Facility.
- Oversee the day-to-day operation of the Giga facility.
- Participate in the development and update of the EOP, under the leadership of the Compliance Manager.
- Ensure annual drill requirements are met and submit evidence to Giga upon completion and request.
- Schedule training and drills for relevant operating personnel, keep records of training and drills, and provide to the Compliance Manager.
- Ensure EOP training is completed by all relevant operating personnel and submit evidence to Giga upon completion and by the end of each calendar year.
- Assist in evaluation and escalation of potential incidents.
- Provide evidence to Giga Compliance Manager upon completion and request.

1.6 Tesla Energy Operations Inc Field Services (Field Services)

1.6.1 Role – Contracted to perform the O&M services at the Giga Facility.

1.6.2 Responsibilities include:

- Follow the requirements and processes documented in the EOP.
- Provide feedback on potential impact(s) to operations of an incident and proposed responses.

- Participate in responses to emergency events at the Giga facility.
- Assist in evaluation and escalation of potential incidents.
- Participate in training, and drills, and post-incident reviews as requested.

1.7 Tesla Energy Management Systems, LLC (TEMS) Operating Personnel

1.7.1 Role – The registered Generator Operator (GOP) for the Giga facility.

1.7.2 Responsibilities include:

- Operates the Giga site from the OP Name operations center in City, State.
- Report to the Reliability Coordinator, QSE, and other identified entities, as necessary.
- Coordinate with Field Personnel and create appropriate log entries for events, incidents, etc.
- Assist in evaluation and escalation of potential incidents.
- Monitor SCADA, alerts, and communications from Field Services personnel, and security cameras (when present), for suspected Reportable Events.
- Submit evidence to Giga Compliance Manager upon completion and request.
- Participate in training, and drills, and post-incident reviews as requested.

2.0 INCIDENT IDENTIFICATION

2.1 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 Site Technician of the situation.

The Site Manager or lead Site Technician 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.

[redacted].

[redacted]

2.2 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.

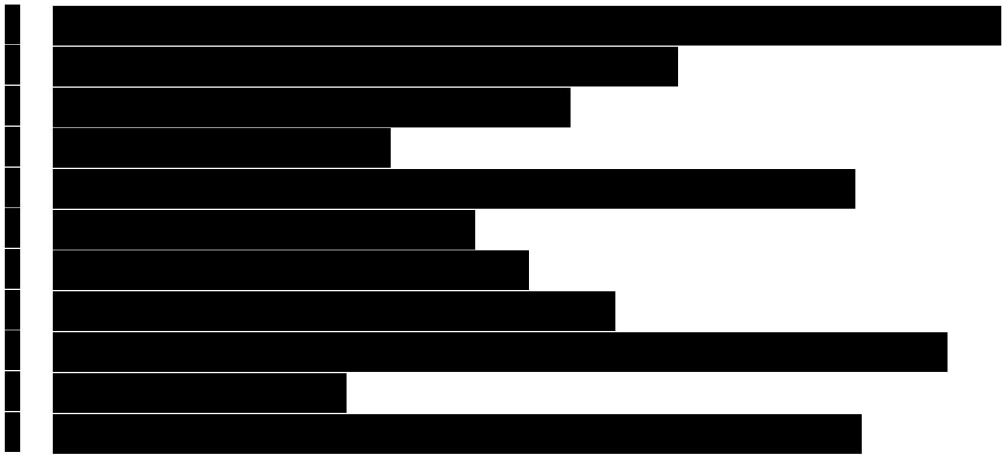
The information below is intended to provide guidance for determining if an incident warrants further evaluation.

A. Physical indicators of a potential Cyber Security or Physical Security Incident

2.2.1 Indicators include, but are not limited to:

B. Cyber indicators of a potential Cyber Security Incident

2.2.2 Indicators include, but are not limited to:



3.0 INCIDENT ESCALATION, INVESTIGATION AND REPORTING

3.1 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.

3.2 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).

3.3 Reporting

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

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

3.3.2 Operating Personnel will notify and coordinate with Field Technician until the end of the Reportable Event.

3.3.3 If the event is determined to not meet the reporting threshold, Operating Personnel will coordinate the collection of all appropriate evidence with Field Technician and submit to Giga for evidence retention.

3.3.4 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.

3.3.5 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.

4.0 RESOURCES AND RELATED DOCUMENTS

Giga Emergency Operations Plan

Giga Cyber Security Incident Response Plan

Giga 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/

5.0 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.

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APPROVALS

The approval signatures in this section indicate review of the document and approval to publish. With the approvals below, this version supersedes all previous versions.

Name	Date	Signature
Paul Spracklen	4/14/2022	Paul Spracklen

REVISION CONTROL SUMMARY

Version	Effective Date	Author	Description of Changes
1.0	4/1/2022	GridSME, Giga Energy Storage LLC	New document