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# EMERGENCY OPERATIONS PLAN (EOP)

# Document Number KCE-HSEQ-0004

# **VERSION CONTROL**

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Date: 3/4/2024	Date: 3/5/2024	Date: 3/4/2024

# **EXECUTIVE SUMMARY**

This executive summary describes the contents and policies contained in the Emergency Operations Plan (EOP), including a reference to specific sections and page numbers of the EOP that correspond with the requirements of 16 TAC § 25.53. The summary also includes the record of distribution required under 16 TAC § 25.53(c)(4)(A), and contains the affidavit required under 16 TAC § 25.53(c)(4)(C).

The EOP sets forth the emergency plans and procedures of Key Capture Energy, LLC (KCE). Section I details the contents of the EOP, including approval & implementation, the communication plan, and activation of the EOP. Section II captures the incident-specific Annexes and Section III includes all relevant Appendices.

Table 1 provides an overview of the contents and policies included in KCE's EOP.

Table 1. EOP Reference

CITATION	DESCRIPTION OF REQUIREMENT	APPLICABILITY	EOP SECTION	EOP PAGE#
25.53(d)(1)(A-E)	APPROVAL AND IMPLEMENTATION SECTION	YES	I.E	6
COMMUNICATION PLAN FOR ENTITIES WITH 25.53(d)(2)(A) TRANSMISSION OR DISTRIBUTION SERVICE		NO	N/A	N/A
25.53(d)(2)(B)	COMMUNICATION PLAN FOR GENERATORS	YES	I.F	8
25.53(d)(2)(C-D)	COMMUNICATION PLAN FOR REP AND ERCOT	NO	N/A	N/A
25.53(d)(3)	PLAN TO MAINTAIN PRE-IDENTIFIED SUPPLIES FOR EMERGENCY RESPONSE	YES	I.G	10
25.53(d)(4)	PLAN THAT ADDRESSES STAFFING DURING EMERGENCY RESPONSE	YES	LH	11
25.53(d)(5)	PLAN THAT ADDRESSES HOW AN ENTITY IDENTIFIES WEATHER-RELATED HAZARDS (INCLUDES TORNADOES, HURRICANES, EXTREME COLD/HOT WEATHER, DROUGHT, FLOODING, AND THE PROCESS THE ENTITY FOLLOWS TO ACTIVATE THE EOP.	YES	ш	12
25.53(e)(1)(A-I)	REQUIREMENTS FOR ELECTRIC UTILITIES, TRANSMISSION/DISTRIBUTION/MUNICIPALLY OWNED UTILITIES, AND ELECTRIC COOPERATIVES.	N/A	N/A	N/A
25.53(e)(2)(A)(i-iii)	WEATHER EMERGENCY ANNEX	YES	II.A	19
25.53(e)(2)(B)	WATER SHORTAGE ANNEX	YES	II.B	22
25.53(e)(2)(C) RESTORATION OF SERVICE ANNEX		YES	II.C	23
25.53(e)(2)(D) PANDEMIC/EPIDEMIC ANNEX		YES	II.D	24
25.53(e)(2)(E)	HURRICANE ANNEX	YES	II.E	25
25.53(e)(2)(F)	CYBER SECURITY ANNEX	YES	II.F	26
25.53(e)(2)(G)	PHYSICAL SECURITY ANNEX	YES	II.G	27

	ANY ADDITIONAL ANNEXES AS NEEDED OR APPROPRIATE TO THE ENTITIY'S PARTICULAR			
25.53(e)(2)(H)	CIRCUMSTANCES	YES	II.H-N	28-38
25.53(e)(3)(A-E)	REQUIREMENTS FOR REPS	NO	N/A	N/A
25.53(e)(4)(A-F)	REQUIREMENTS FOR ERCOT	NO	N/A	N/A

# **RECORD OF DISTRIBUTION**

The following table lists the titles and names of KCE personnel who have received access to, and training on, the EOP on the following dates:

Name

Title

Date Received
Access to EOP

Training on EOP

Table 2. Record of Distribution

# **REVISION CONTROL**

Since the EOP's initial filing with the PUCT on August 8, 2022, revisions have been made to the EOP on the following dates:

Table 3. Revision Log

Revision No.	Date Revised	Description of Revision
2	03/14/23	Annual review and updates.
3	03/04/24	Annual review and updates

# **EMERGENCY CONTACTS**

Table 4. Emergency Contact List

Name Title		Contact Information	Can Immediately Address Urgent Requests and Questions from PUCT During an Emergency
	Primary Con	tacts	
Erika Nelson	Head of Project Operations	518-565-6800	х
Colin Tareila	Head of Asset Operations	207-664-8606	х
Rachel Goldwasser Head of Legal & Regulatory		603-748-9851	х
	Backup Cont	tacts	
Jose DeLaFuente	O&M Manager	210-391-3809	
Jose Dominguez O&M Manager		832-571-4163	

AFFIDAVIT FOR EOP UPDATE

J.....

1, Brian Hayes, having been duly sworn, hereby state under penalty of perjury of the laws of Texas that:

- 1. I am the chief executive officer of, and the highest-ranking person with binding authority over,
- 2. The relevant operating personnel of KCE are familiar with and have received training on the applicable contents and execution of the EOP, and such personnel are instructed to follow the applicable portions of the EOP except to the extent deviations are appropriate as a result of specific circumstances during the course of an emergency.
- 3. The EOP has been reviewed and approved by the appropriate executives of KCE.
- 4. The drills required by 16 TAC § 25.53(f) have not yet been, but will be, conducted by KCE during the calendar year 2024. KCE will notify the Commission, pursuant to Commission rules, regarding that drill in due course.
- 5. The EOP or an appropriate summary has been distributed to local jurisdictions as needed.
- KCE maintains a business continuity plan that addresses returning to normal operations after disruptions caused by an incident.
- KCE'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.

Each of the foregoing statements is true, and I would and could testify to the truthfulness of each statement under penalty of perjury in a court of law.

Signature

Date:

Subscribed and sworn before me on this  $2\mathcal{E}$  of  $\mathcal{I}$ 

20 parting 20

Notary Public

Print Name

,

My commission expires: 11/12-/2027

FREDER CY STATE OF NEW YORK NOTARY PUBLIC OUMMING REMINISTER COUNTY OTHER MODIZES



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#### B. EOP SUMMARY

# 1. Overview

This Emergency Operations Plan (EOP) sets forth the emergency operations plans and procedures of Key Capture Energy, LLC (KCE). The following emergency response procedures are provided so that all personnel understand the practices to be followed to prepare for and provide immediate and effective response\* to emergencies that might arise at KCE facilities. Because the safety of employees and the public is of primary concern, the Key Capture Energy (KCE) Emergency Response Coordinator (ERC) and each member of the KCE staff are committed to providing a safe, healthy work environment and are responsible for ensuring implementation of these procedures.

Life safety of personnel shall be the highest priority during any event.

#### 2. Limitations

Responders will coordinate the plan and response according to all applicable laws and standards. Where a conflict exists between this plan and applicable laws and standards, the most conservative and restrictive approach shall be followed.

Response to emergencies, events or disasters shall only be undertaken to the level of the **responders'** training, Personal Protective Equipment (PPE), and resources available. No persons shall place themselves in **harm's** way to respond to an emergency.

Actual site conditions may be different than expected in this plan as there may be little to no warning during specific events to implement operational procedures.

# 3. Management of Change

A review of this Emergency Operation Plan (EOP) shall be conducted and documented at minimum on an annual basis, notionally January of each year. The plan shall also be reviewed and amended whenever there is a change in facility design, construction, operation, or maintenance or mandated regulatory changes that affect emergency response planning. When outside resources are changed or modified the plan shall be reviewed and updated to reflect the changes that may affect this plan. Details on the revision history are provided in Section F.

\*Specific response details for each of the defined emergencies above can be found in the Section II
Annexes.



# C. RECORD OF DISTRIBUTION

The following KCE personnel have received access to, and training on, the EOP on the following dates:

Name	Title	Date Received Access to EOP	Date Received Training on EOP	



# D. EMERGENCY CONTACTS

Name Title		Contact Information	Can Immediately Address Urgent Requests and Questions During an Emergency
	Primary Cor	ntacts	
Erika Nelson	Head of Project Operations	518-565-6800	x
Colin Tareila Head of Asset Operations		207-664-8606	x
Rachel Goldwasser	Rachel Goldwasser Head of Legal & Regulatory		x
	Backup Con	tacts	
Jose DeLaFuente	O&M Manager (TX)	210-391-3809	X
Jose Dominguez O&M Manager (TX)		832-571-4163	х
Kyle Hull O&M Manager (NY)		838-202-7804	х



#### E. APPROVAL AND IMPLEMENTATION

#### Introduction to EOP

This EOP details roles and responsibilities for coordinating emergency response activities before, during, and after any type of emergency or disaster at KCE operational facilities.

The intent of the EOP is to assist with the coordination of emergency response efforts to save lives, reduce injuries, and maintain business continuity with its primary goal being the assembly, mobilization, and coordination of a team of responders and internal coordinators that can deal with any emergency.

This plan is implemented by the individual first identifying an Emergency Condition, either by dialing 911 or by contacting the posted Emergency Contact Number. An emergency response coordinator (ERC) shall be assigned immediately upon identification of an Emergency Condition. The ERC is most often the Operations Manager for the associated facility but can be any KCE employee who has been identified as having a role in the EOP.

# 2. Personnel with Responsibility for EOP

The following KCE personnel are responsible for maintaining and/or implementing the EOP, and have authority to change the EOP, as indicated:

Na me	Title	Responsible for Maintaining EOP	Responsible for Implementing EOP	Authority to Change EOP	
Erika Nelson	Head of Project Operations	X	X	X	
Jose DeLaFuente	O&M Manager		X		
Jose Dominguez	O&M Manager	_	x	_	
Kyle Hull	O&M Manager		X		

#### 3. Revision Control

Since the EOP's initial preparation, revisions have been made to the EOP on the following dates:

Revision No.	Date Revised	Description of Revision

# 4. Currentness of EOP

KCE hereby affirms, as of March 4, 2024, that this EOP supersedes all previous EOPs. This EOP was most recently approved by KCE on March 4, 2024.



# 5. Training Requirements

KCE has initiated an annual training program for personnel who are expected to have a role or responsibility included in this Emergency Operation Plan. This training program covers all aspects of the EOP. Personnel training will be completed and documented on an annual basis.



#### F. COMMUNICATIONS PLAN

# 1. Purpose & Scope

Key Capture Energy (KCE) is dedicated to safe and responsible operations of all facilities. As such, KCE is responsible for maintaining communications with individuals and organizations affected by an incident, emergency or unforeseen accident involving company operations, projects, or people. This plan applies to all incidents covered by this document.

# 2. Communications Responsibilities

<u>Crisis Communications Team</u>: The Crisis Communications Team will be responsible for formulating a communications response to be utilized in concert with the EOP. The Crisis Communications Team will convene as promptly as possible following the occurrence of the relevant incident or event and shall continue to meet regularly as the incident and the response requires. For further information on the Crisis Communications Team, their roles and responsibilities, KCE employees shall reach out to the Manager, Public Affairs.

<u>Purpose of Meetings</u>: The meetings of the Crisis Communications Team will convene the relevant subject matter experts and managers of KCE required for effective information sharing and response formulation following an incident. The meetings will provide a forum for:

- exchange of information as to the relevant facts and circumstances surrounding the incident, operational actions that KCE is taking in response, and inquiries and other requests from affected stakeholders.
- communications response planning, including ensuring that all required stakeholders are notified and that KCE's messaging is unified and accurate; and
- planning for long-term incident response as needed.

Team Members: The members of the Crisis Communications Team are as follows:

- Head of Asset Operations
- Head of Legal & Regulatory
- Head of HSEQ.
- Head of Public Relations
- Emergency Response Coordinator (ERC) as designated via the EOP for the incident as needed at the discretion of the Crisis Communications Team.

Additionally, incident-specific team members may be added to the Crisis Communications Team (as required by the Crisis Communications Team) for purposes of any specific incident.



# 3. Specific Points of Contact

Specific members of the Crisis Communications Team will serve as the points of contact responsible for communicating with specific stakeholders. Each designated member under this sub-section (3) is responsible for reporting communications with their respective stakeholders back to the rest of the Crisis Communications Team.

<u>Media</u>: Messaging to the media is to be formulated by the Crisis Communications Team and approved by the Manager, Public Affairs. In the immediate aftermath of an incident, The Crisis Communications Team will identify a spokesperson, as required, to speak to media.

<u>State Public Utilities Commission</u>: **KCE's Head of Legal & Regulatory, in consultation with the** Crisis Communications Team, is responsible for communications with the respective state public utilities commissions.

<u>Consumer Advocates</u>: **KCE's** Head of Legal & Regulatory, in consultation with the Crisis Communications Team, is responsible for all communications with consumer advocate groups.

Fuel Suppliers: N/A. KCE does not own or operate assets with fuel suppliers.

Local and State Government Entities, Officials, and Emergency Operations Centers: The Crisis Communications Team is responsible for communications with local and state government entities, officials, and emergency operations centers. The ERC will provide all relevant information to the Crisis Communications team, who will then communicate with local and state officials and emergency operations centers with the information that is immediately required to respond to an ongoing incident. Long-term response (including in respect of any remediation and/or root cause analysis for an incident) shall be developed by the Crisis Communications Team and communicated through the ERC or another designated member of the Crisis Communications Team, as appropriate.

<u>Reliability Coordinator</u>: **KCE's** Crisis Communications team is responsible for all communications with the applicable reliability coordinator. The Crisis Communications team shall keep the applicable reliability coordinator apprised of any incident by telephone or email, as appropriate.



# G. MAINTENANCE OF PRE-IDENTIFIED SUPPLIES FOR EMERGENCY RESPONSE

As BESS facilities are normally unmanned and, except as otherwise referenced herein, do not require the use of consumable supplies, no supplies are expected or necessary to support KCE response to emergencies detailed in this plan.



# H. STAFFING DURING EMERGENCY RESPONSE

As BESS facilities are normally unmanned, no on-site staffing is expected at the onset of an Incident. KCE staff or third-party support will be dispatched to the Site to troubleshoot or address the specific Incident. Except as may be specifically stated otherwise in this EOP, during an emergency the BESS may remain unmanned and, where applicable, personnel will be precluded from accessing the BESS unless / until it is determined safe for an inspection or maintenance activities to be performed. In the case of a weather emergency impacting one of KCE's offices, employees not located in the impacted region shall be knowledgeable in and prepared to support the impacted state's operations. For further information related to staffing during severe weather events, please see Appendix 6.



# I. IDENTIFICATION OF WEATHER-RELATED HAZARDS

See SECTION II: Annex A (WEATHER EMERGENCIES) and Annex E (HURRICANE) for information regarding how KCE identifies weather-related hazards of various types. KCE has developed both Cold and Hot Weather Operations Plans with specific operational instructions to address extreme weather events. These plans are provided in Appendix 6 for reference.



#### J. ACTIVATION OF EOP

# 1. Definition of Emergency

An emergency is defined as 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, including an emergency declared by local, state, or federal government, or Independent System Operator (ISO) or another applicable reliability coordinator. Emergencies can happen before, during or after normal work hours and can be caused by a range of circumstances and hazards involving both equipment, nature, and people. For the purposes of this EOP, "incident", "emergency", and "event" are interchangeable terms. The many different types of emergencies include, but are not limited to:

- Smoke
- Fire
- Toxic Gas Release
- Medical Emergency
- Severe Weather
  - Extreme Heat
  - Winter Storm (Extreme Cold)
  - Hurricanes
  - Tornadoes
  - o Floods
  - Lightning Storms
  - o Drought / Water Shortage
- Seismic Event
- Hazardous Material Spill
- Workplace Violence
- · Cybersecurity Threat
- Bomb Threats
- Pandemic / Epidemic
- Physical Security Breach

# 2. Activation of Emergency Response

In the event of an emergency, calling 911 is the preferred method for initiating emergency response. This should be followed by contacting KCE at the emergency contact phone number provided.

As set forth in Section III: Appendix 5 — Site Information, the KCE emergency contact phone number is clearly marked on informational/warning signs around the perimeter fencing at each facility and may be dialed by any individual, whether an employee or a member of the public. This line is answered 24 hours a day, 365 days per year by personnel instructed in how to initiate emergency response for the facility. The person receiving a call through the emergency contact number shall initiate this EOP by contacting the KCE Emergency Response Coordinator (ERC). As previously stated in Section E, the ERC is typically the Operations Manager for the associated facility/region but can be any individual who has been identified as having a role in the EOP.



# 3. Site-Specific Emergency Response

Responders will coordinate the response efforts identified in the EOP according to all applicable laws and standards. Where a conflict exists between this plan and applicable laws and standards, the most conservative and restrictive approach shall be followed.

Response to emergencies, events or disasters shall only be undertaken to the level of the **responders'** training, availability of necessary Personal Protective Equipment (PPE), and the resources available. No persons shall place themselves in **harm's** way to respond to an emergency.

Actual site conditions may be different than what is expected in this plan as there may be little to no warning during specific events to implement operational procedures.

#### 4. Roles & Responsibilities

All KCE personnel with responsibilities for emergency response management or support shall be trained in the requirements of this plan on an annual basis.

Overall, the primary responsibility for the EOP lies with the Operations and Maintenance (O&M) Manager who executes the duties of the ERC. The ERC, or their designee, is responsible for program implementation, including coordinating severe weather activities, communicating emergency response procedures to personnel including the Crisis Communications Team, and contractor coordination as needed. In addition, the ERC shall conduct routine updates and overviews with Emergency Responders including tabletop exercises, walkthroughs, and drills.

The personnel identified below shall have the corresponding responsibilities described below in connection with activation of the EOP.

#### Operations & Maintenance Manager (or designee)

- Initiate emergency response if not already initiated by the Remote Operations Center (ROC) by dialing 911 or calling local emergency response organizations directly as may be appropriate.
   Information to be provided to 911 operator or local emergency response organizations include:
  - location, type, and current status of the incident;
  - o personnel injury (number, severity, status) if applicable;
  - property damage (type, severity) if applicable;
  - actions taken or in progress;
  - any safety guidance to ensure the safe arrival of response organizations;
  - updated ERC contact information;
  - contact information for the on-scene coordinator (if different than the ERC);
- Establish themselves as the ERC.
- Mobilize to the site, if/when possible, to assume additional responsibility of On-Scene Coordinator.
- Communicate situational updates with all parties during an emergency.
- Direct the isolation of the facility from the grid when required or requested.
- Direct the isolation of electrical equipment to the maximum extent possible.



- Monitor local news channels for critical information from the National Weather Service (NWS)
  including watches, warnings, and advisories for winter storms, tropical storms, and hurricanes
  issued by local NWS Forecast offices.
- Responsible for implementing and ensuring personnel familiarity with this EOP.

The Operations & Maintenance (O&M) Manager, or their designee acting as the ERC or On-Scene Coordinator, shall be responsible for reporting the incident throughout KCE using the process included in the KCE HSEQ Manual. Specifically, the ERC shall initiate an e-mail via

for informing relevant operations and administrative contacts within KCE, to initiate corporate awareness and public communications activities in accordance with company structure and policies.

The e-mail shall be formatted:

- Subject: Initial Report Location Initial Classification Date
- Body: Brief description of the event to include WHO, WHAT, WHEN, WHERE

# On-Scene Coordinator (Operations & Maintenance (O&M) Manager employee; if on-site)

- If there are employees on-site, the senior-most of such on-site employees will act as the On-Scene Coordinator and shall assist in the implementation of this plan by:
  - calling 911 (if not already done);
  - evacuating all personnel and securing the scene;
  - accounting for all personnel at a muster area;
  - assisting the evacuation of injured personnel if necessary;
  - communicating with the ERC during the emergency;
  - o reporting the status of the facility to include evacuation of all on-site personnel;
  - liaising with any on-scene emergency responders\*;
  - o maintaining a written log and timeline of all response activities undertaken;
  - directing all media inquiries to the Communications Team.

\*The On-Scene Coordinator, or the designated ERC when no KCE representative is on-site, will act as the liaison to the Fire Department and any other first responders until the ERC arrives on-site.

# All On-site Personnel

- Immediately report emergency situations to the senior KCE representative on-site;
- Call 911 to inform local emergency first responder personnel\*\*;
- Notify the ERC of the situation using the KCE emergency contact phone number posted onsite.

\*\*There shall be no delay to report emergency events that require local emergency responders. The senior KCE representative, if on-site, will call 911 and then immediately notify the ERC using the emergency contact phone number posted on-site.



# Chief Operating Officer (COO) or Head of Operations

- Act as the liaison to the Management Team and Crisis Communications Team
- Affirm, through endorsement of this EOP that all relevant operating personnel are familiar with this EOP and committed to following the plan, except to the extent where deviations are appropriate under the circumstances during the course of an emergency
- Provide resources necessary to expeditiously restore BESS facilities to operation after an emergency event
- Prioritize the recovery of BESS capacity (restoration) after an emergency once determined safe to do so

# **Market Operations**

 Monitor conditions and liaise as required with market stakeholders and the reliability coordinator as may be required during an emergency and detailed throughout this plan

# Legal and Government Relations

- Support in risk mitigation throughout the duration of the emergency
- Be prepared to assist or perform outreach and reporting to the appropriate State and Federal Government agencies as may be required

#### Crisis Communications Team

• Be prepared to implement the Crisis Communications Plan consistent with the emergency event.

# 5. Preparation & Planning

Pre-planning for emergencies is a crucial element of this plan. The following steps will be taken:

- Consistent with KCE's Public Awareness Manual, fire departments and other first responders will receive a copy of this plan, participate in an on-site familiarization meeting, and be updated annually on any changes in equipment or operations
- A copy of this plan shall be located at each facility
- Buildings and property surrounded by fencing will be marked by signage that identifies specific hazards (such as the NFPA diamond, and all applicable Danger, Caution, Warning signal words)
- On-site personnel shall receive a directive to keep vehicles not actively in use for maintenance or repair activities out of the BESS fence perimeter to facilitate and ensure emergency egress when necessary
- Safe approach distances are established for **equipment's** different failure modes and personnel are trained in these distances
- Safety Data Sheets (SDS) provided by manufacturers shall, where possible, be maintained on- site and Page | 16



provided to first responders.

NOTE: As BESS facilities are normally unmanned, no supplies are expected or necessary to support KCE response to emergencies detailed in this plan. During extreme weather, BESS will remain unmanned, and personnel will be precluded from accessing the BESS until determined safe for inspection / maintenance activities.

NOTE: BESS facilities do not utilize alternative fuels and therefore do not require on-site fuel storage or fuel testing requirements

6. As previously discussed, when an incident occurs at any level, members of KCE's Crisis Communications Team will be notified. The Team will then convene and initiate the steps for evaluating and determining the severity of the event. Warning Systems & Alarms

Audible and visual (e.g., flashing lights) alarm systems have been established that reflect specific on-site hazard analyses. Personnel shall be trained on the significance of different alarms and the corresponding actions as outlined elsewhere in this plan.

Warning systems and alarms are tested at least every six months or more frequently per manufacturer specifications or code requirements are documented as completed. All site personnel, as well as those offsite at remote operations control centers shall be made aware of tests so as not to cause undue concern.

7. Emergency Response & Evacuation

No employee is required or permitted to place themself in harm's way in order to facilitate extinguishment, evacuation, or rescue. All rescue operations will be performed by trained professionals upon their arrival. Rescue operations will only be conducted after a risk-reward analysis is done and proper PPE is used to protect against any adverse hazards that may be encountered.

Only personnel who are properly trained in accordance with 29 CFR Part 1910.120(q)(6) may respond to hazardous chemical releases.

If personnel are onsite, they shall be required to evacuate to the designated muster areas for:

- Smoke
- Fire
- Toxic Gas Release
- · Severe Weather
- Hurricanes
- Tornadoes



- Floods
- Lightning Storms
- Seismic Event
- Hazardous Material Spill
- Bomb Threats
- The general procedure for evacuation shall be to:
- Stop all work activities as quickly as can be done so safely
- Follow the emergency response flowchart
- Secure the work area to prevent additional hazards
- Calmly leave the work area and meet at a designated muster area
- Provide egress assistance to other personnel if needed
- Standby for instructions from the On-Scene Coordinator or ERC



#### A. ANNEX A – WEATHER EMERGENCIES

#### 1. Extreme Heat

BESS are normally unmanned facilities designed with dedicated climate control and therefore have minimal exposure to hazards associated with extreme heat. The KCE HSE Manual provides direction for personnel protection from extreme heat. KCE will deem there to be an extreme heat event when the temperatures are forecasted to go above the design limits of the BESS or upon notification of an extreme heat event by the ISO or other regulatory entity.

When a summer weather threat exists, the facility's O&M Manager shall monitor local news channels for critical information from the National Weather Service (NWS) including warnings and advisories issued by local NWS Forecast offices.

For more information related to KCE's extreme weather response, please see the Hot Weather Operations Plan, provided in Appendix 6.

# 2. Winter Storm (Extreme Cold)

BESS are normally unmanned facilities designed with dedicated climate control and are therefore minimally susceptible to issues associated with extreme cold. The KCE HSE Manual provides direction for personnel protection from extreme cold. KCE will deem there to be an extreme cold event when the temperatures are forecasted to go below the design limits of the BESS or upon notification of an extreme cold event by the ISO or other regulatory entity.

When a winter weather threat exists, the facility's O&M Manager shall monitor local news channels for critical information from the National Weather Service (NWS) including winter storm watches, warnings, and advisories issued by local NWS Forecast offices.

For more information related to KCE's extreme weather response, please see the Cold Weather Operations Plan, provided in Appendix 6.

#### 3. Hurricane

See Annex E (HURRICANE) below.



#### 4. Tornado

BESS are normally unmanned facilities designed to local codes and standards and therefore have limited exposure to hazards associated with tornadoes.

When a tornado threat exists, the facility's O&M Manager shall monitor local news channels for critical information from the NWS including watches, warnings, and advisories issued by local NWS Forecast offices.

If personnel are on-site when the potential for a tornado exists, and prior to experiencing sustained winds >25 miles per hour, material shall be secured, and any aerial work stopped upon the issuance of a tornado warning. The facility shall be evacuated, and all personnel will report to the nearest shelter area, to be determined prior by O&M personnel during daily safety briefs. In the event O&M personnel are outside and unable to evacuate to the shelter, the following guidance is provided to personnel on-site:

- lie flat in a nearby ditch or depression, covering their head with their hands, being aware of the potential for flooding;
- find shelter in a low, flat location;
- avoid sheltering under an overpass or bridge;
- do not try to outrun a tornado in congested areas in a vehicle;
- leave their vehicle to find safe shelter;
- be aware of the potential for flying debris.

Following tornado or high wind events, the facility will be evaluated by the O&M personnel for damage. All repairs will be performed under standard operational procedures.

# 5. Flooding and Flash Flood

BESS are normally unmanned facilities designed to local codes and standards and therefore have limited exposure to hazards associated with flooding.

When a flooding threat exists, the facility's O&M Manager shall monitor local news channels for critical information from the NWS including watches, warnings, and advisories issued by local NWS Forecast offices.

Flash flooding is a result of heavy localized rainfall such as that from slow moving, intense thunderstorms. Flash floods often result from small creeks and streams overflowing during heavy rainfall. These floods often become raging torrents of water which rip through riverbeds or canyons, sweeping everything with them. Flash flooding can occur within 30-minutes to six hours of a heavy rain event. In hilly terrain, flash floods can strike with little or no advance warning. Distant rain may be channeled into gullies and ravines causing flash flooding in minutes. In the event of a flash flood, the following guidance is provided to personnel onsite:



NOTE: It does not have to be raining for flash flooding to occur.

- do not drive through flooded areas, even if it looks shallow enough to cross;
- person leading work shall make a judgement to either shelter in place, or immediately secure the work and travel to safe refuge;
- do not cross flowing streams on foot where water is above your ankles;
- be especially cautious at night as it is harder to recognize water danger then;
- do not attempt to outrace a flood on foot if flooding is seen or heard, move to higher ground immediately;
- be familiar with nearby land features where you work;
- wait 15 to 30 minutes, or until high water recedes, prior to leaving shelter.

# 6. Lightning Storms

BESS are normally unmanned facilities designed to local codes and standards and therefore have limited exposure to personnel hazards associated with lightning.

If personnel are onsite and a lightning storm is within 10 - 30 miles and approaching the site, the following guidance is provided:

- notify facility's O&M Manager and all on-site employees;
- stop work safely and head to company or personal vehicles if storm/lighting is still approaching the site, get in and stay in vehicles that have rubber tires only;
- once storm passes, remain in vehicle for at least 30 minutes depending on passing storm severity, and wait for an "OK" from the O&M Manager in charge of monitoring the storm.

Market Operations Responsibilities

In the case of any inclement weather, the Market Operations Team shall:

- monitor all communications from Independent System Operators (ISOs) including, but not limited to Operating Condition Notices (OCN), Advisories, and other communications;
- ensure site operations are aware of all ISO notices regarding impending winter weather;
- communicate with ERC regarding any such communications;
- ensure KCE representative is on-call 24/7 to receive and respond to notices and to communicate internally (including ERC) and with site operator / ROC during periods when ISOs have issued a weather notice;
- ensure local Transmission Distribution Service Provider (TDSP) has KCE/ROC contact info
  heading into any period when ISO has issued a weather notice.



# B. ANNEX B – WATER SHORTAGE

BESS are normally unmanned facilities that do not require water or access to a water source and are unaffected by water shortages.



# C. ANNEX C – RESTORATION OF SERVICE

Once emergency response is complete and locations are determined to be safe for personnel access, where required, Head of Operations and Head of Project Operations, with advice from the ERC, Head of Market Development, and General Counsel, shall determine whether restoration of service is safe and appropriate. Restoration of service shall be performed in coordination with the applicable Qualified Scheduling Entity and with the appropriate approvals (if required) from the Independent System Operators (ISO).



# D. ANNEX D – PANDEMIC AND EPIDEMIC

BESS are normally unmanned facilities therefore have limited exposure to personnel hazards associated with outbreaks and pandemics. Guidance associated with pandemic response shall be included in the KCE Safety Manual or provided as a standalone pandemic guideline. KCE is able to operate under workfrom-home conditions if required due to a pandemic or epidemic.



#### E. ANNEX E – HURRICANE

BESS are normally unmanned facilities designed to local codes and standards and therefore have limited exposure to hazards associated with hurricanes.

When a hurricane threat exists, regardless of Category, the facility's O&M Manager shall monitor media outlets for critical information from the NWS including watches, warnings, and advisories issued by local NWS Forecast offices and shall be cognizant that conditions can change rapidly.

Evacuation and re-entry planning for assets located in Hurricane Evacuation Zones shall follow the guidance provided by local authorities.

The following are the general guidelines for hurricane conditions.

#### **CONDITION 4**

- hurricane within 72-hours of arrival, and possible movement towards facility
- brief all personnel
- avoid on-site work and travel
- · start clean-up and securing operations, if required
- plan for next condition

#### **CONDITION 3**

- hurricane within 48-hours of arrival
- intensify clean-up and securing operations, if required
- evaluate starting some Condition 2 activity

# **CONDITION 2**

- hurricane within 24-hours of arrival
- complete all clean-up and securing operations, if required

# **CONDITION 1**

- hurricane within 12-hours of arrival
- shutdown all on site activities, if any
- complete all items above
- ensure complete evacuation of facility if any personnel onsite
- ensure ROC monitoring until hurricane passes

#### POST HURRICANE

- once practical to visit site, a walkdown shall be conducted starting with a perimeter walk outside the fence, re-entering inside the fence after visually confirming conditions are safe to continue
- take pictures from all sides of the facility for documentation

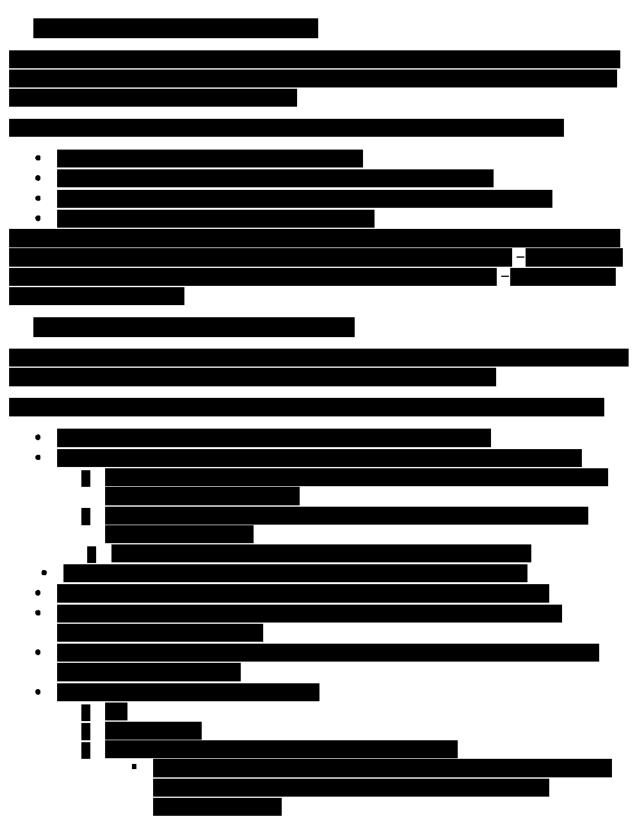


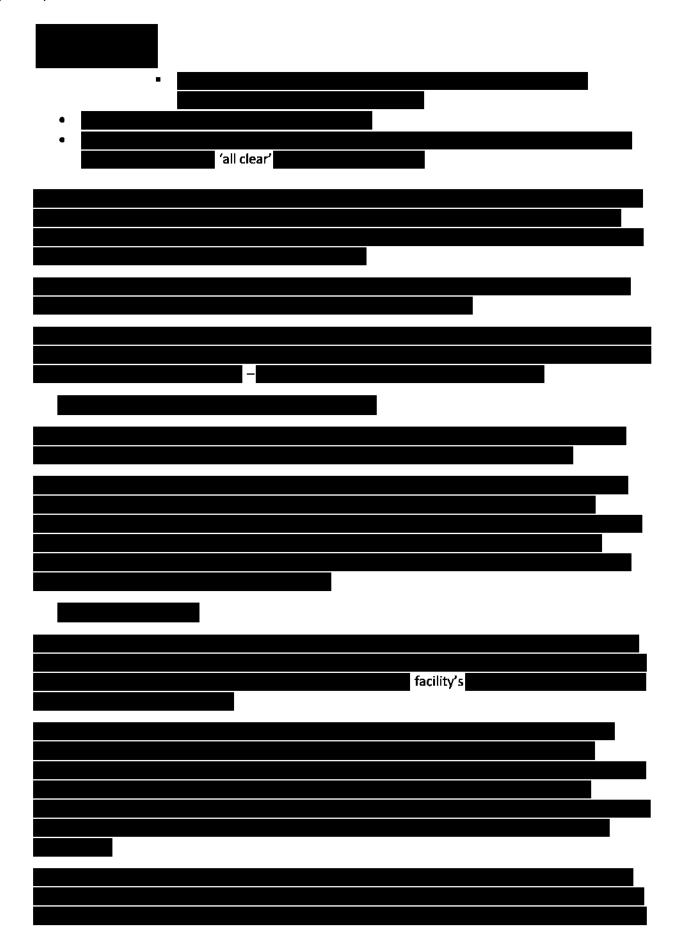
# F. ANNEX F – CYBERSECURITY

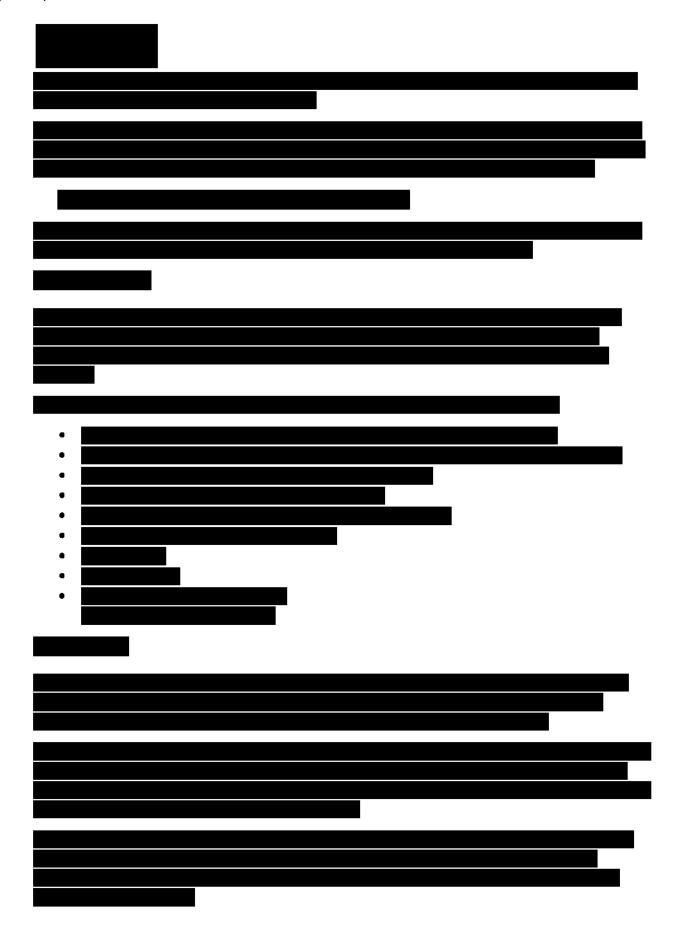
Below is KCE's Cybersecurity Incident Response Plan. KCE maintains additional cybersecurity-related plans and procedures not submitted herein.



#### H. ANNEX H – FIRE



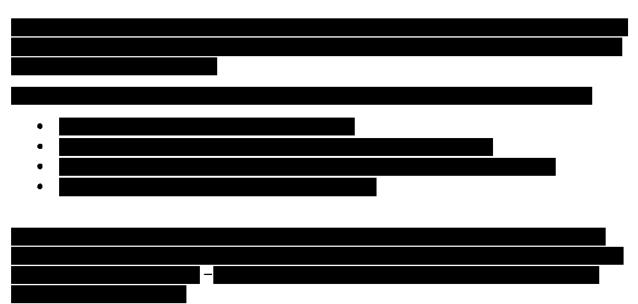








I. ANNEX I – TOXIC GAS RELEASE





#### J. ANNEX J – MEDICAL EMERGENCY

If an employee is injured, or an accident has occurred on site and first aid is not enough treatment for the emergency, 911 must be called. The call to 911 can be made by phone by any available personnel.

A second notification will be made to Contact the KCE emergency contact phone number posted onsite to inform the ERC.

#### 1. Serious Injury

The following procedures apply for serious medical injuries such as unresponsive subject, bite / sting for personnel who are allergic, bone fractures, neck trauma, or severe burns after 911 has been called.

- On-site personnel shall meet EMS responders at site entrance and direct them to incident location
- Do not leave or move the injured unless directed to by emergency medical service personnel
- Administer first aid if necessary
- The ERC shall inform Human Resources to contact employee's personal emergency contact
- Follow the incident reporting guidelines included in KCE Health, Safety, and Environmental (HSE)
   Manual
- 2. Non-Emergency Safety Incident

In the event a safety incident occurs where emergency response is not required (first aid treatment, near miss, etc.) work is to be stopped immediately and reported to the Operations Manager. Risk will be reassessed, adequate controls implemented, and the situation made safe before resuming the task. The Operations Manager shall follow the incident reporting guidelines included in the KCE HSE Manual.



#### K. ANNEX K – SEISMIC EVENT

BESS are normally unmanned facilities designed to local codes and standards and therefore have limited exposure to hazards associated with earthquakes.

Earthquakes may strike with little to no advance warning. As such, when an earthquake does occur, it is important to stay as safe as possible. Be aware that some earthquakes are actually fore-shocks, and a larger earthquake may subsequently occur. Also, be aware that many earthquakes are accompanied by aftershocks after the main event has occurred. If an earthquake occurs minimize your movements to a few steps to a nearby safe place until the shaking has stopped. Move away from the enclosures, structures, light poles, and utility wires. If safe to do so, personnel shall take the First Aid kit with them.

Once in the open stay there until the shaking stops to prevent being hit by falling debris.

Following seismic events, the facility will be evaluated by O&M personnel for damage. All repairs will be performed under standard operational procedures.



#### L. ANNEX L – HAZARDOUS MATERIAL SPILL

The KCE HSE Manual provides guidance for pollution prevention and spill response. The SDS shall be reviewed, and the area evacuated if necessary. Only properly trained personnel with appropriate PPE shall clean up a spill.

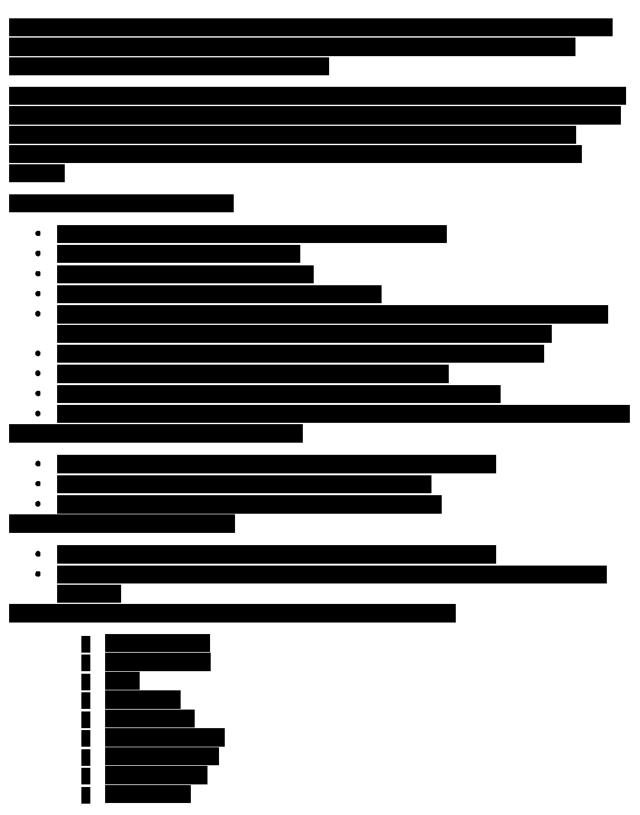


#### M. ANNEX M – WORKPLACE VIOLENCE

To ensure a safe work environment for all employees, KCE expressly prohibits any acts or threats of violence by any employee against any other employee, client, vendor, or visitor, or self-inflicted violence, except in extreme cases where self-defense may become necessary. If any behavior is noticed that could be perceived as an act or threat of violence, inform the O&M Manager, who will contact the authorities.



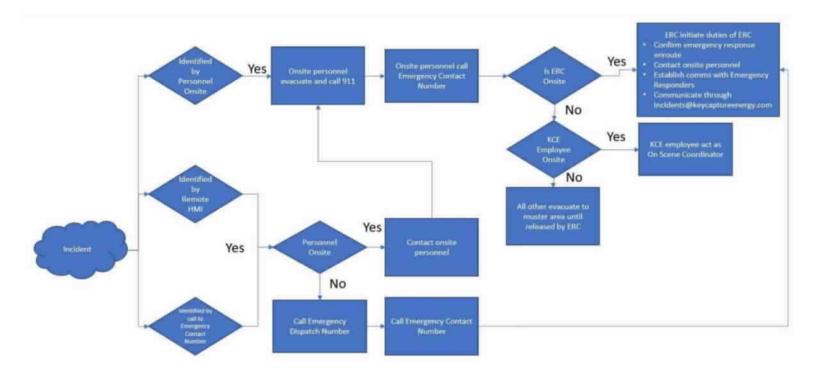
#### N. ANNEX N – BOMB THREAT







#### APPENDIX 1 - RESPONSE FLOWCHART





## APPENDIX 1 – RESPONSE CHECKLIST

<u>Incid</u>	ent	Identified by KCE Personnel
	1)	The Incident occurs and is identified by On-Site KCE Personnel.
	2)	The on-Site KCE Personnel will evacuate the Site and call 9-1-1.
	3)	The on-Site KCE Personnel will call all relevant Emergency Contacts listed in the Site-
		Specific EOP.
	4)	An Emergency Response Coordinator (ERC) will be established.
	5)	If the ERC is on-Site, they will fulfill the duties of an ERC, which include the following:
		<ul> <li>Establish communications with emergency responders and confirm if they are enroute to the Site.</li> </ul>
		b. Remain in contact with any other on-Site Personnel.
		c. Communicate updates through the <u>Incidents@keycaptureenergy.com</u> e-mail.
	6)	If the ERC is NOT on-Site, but other KCE Personnel are on-Site, that individual will act on
		behalf of the ERC as the On-Scene Coordinator (OSC).
<u>Incid</u>	ent	Identified by 3 <sup>rd</sup> Party (KCE Personnel On-Site)
Ш	1)	The Incident occurs and is identified by an outside party or 3 <sup>rd</sup> Party Monitoring (i.e. ROCC)
	2)	KCE will determine if there are any Personnel On-Site.
	3)	If KCE Personnel are present on-Site, they will be notified immediately of the Incident.
	4)	The on-Site Personnel will evacuate the Site (if necessary) and call 9-1-1.
	5)	The on-Site KCE Personnel will call all relevant Emergency Contacts listed in the Site-
_		Specific EOP.
Ц	6)	An Emergency Response Coordinator (ERC) will be established.
	7)	Follow steps 5 & 6 listed above.
<u>Incid</u>	<u>ent</u>	identified by 3 <sup>rd</sup> Party (no KCE Personnel On-Site)
	1)	The Incident occurs and is identified by an outside party or 3 <sup>rd</sup> Party Monitoring (i.e. ROCC)
	2)	KCE Personnel are NOT present on-Site, the Emergency Dispatch number will be called.
	3)	The list of KCE Emergency Contacts will then be notified via Emergency Dispatch.
	4)	An ERC will be established by KCE's Emergency Contacts.
	5)	The ERC will then fulfill the duties as outlined above (Steps 5 & 6).



#### APPENDIX 2 - CHECKLISTS

#### For each checklist item:

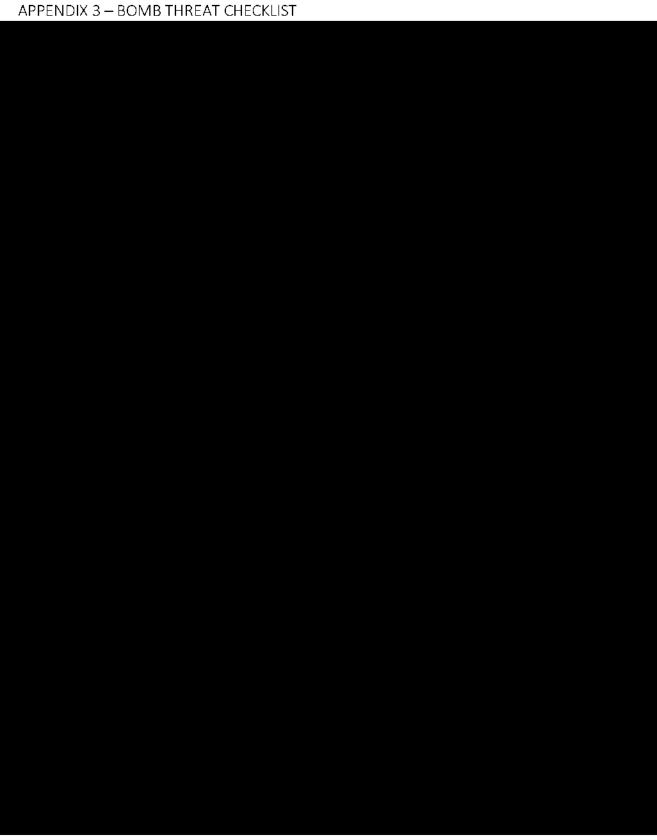
- If the item inspected is satisfactory, check the OK box
- If a deficiency is identified, complete the Comments section and indicate the Action Taken
- If the item does not apply, check the N/A box

Emergency Response	ОК	N/A	Action Taken / Comments
Facility evacuated, if required			
Emergency responders are enroute, if required	$\neg$		
Communications established with emergency responders	$\neg$		
BESS disconnected from grid, if required	$\neg$		
Crisis communications plan initiated, if required			
Other			

Emergency Response Planning	ОК	N/A	Action Taken / Comments
Emergency response plans (including important phone numbers) written and available			
Training provided and drills performed for persons required to implement emergency response			
Housekeeping maintained to ensure egress paths are clear and no missile hazards exist in periods of high winds			
Site work cancelled in advance of extreme weather			
ROC informed of potential for extreme weather			

Fire & Explosion Prevention	ОК	N/A	Action Taken / Comments
Fire extinguishers inspected monthly and serviced by contractor annually			
Emergency telephone number posted in clear and conspicuous locations			
Trash is removed at least daily from building			
Fire, smoke, H2 detection systems and HVAC inspected and serviced			
Exterior locations free of trash and combustible debris			







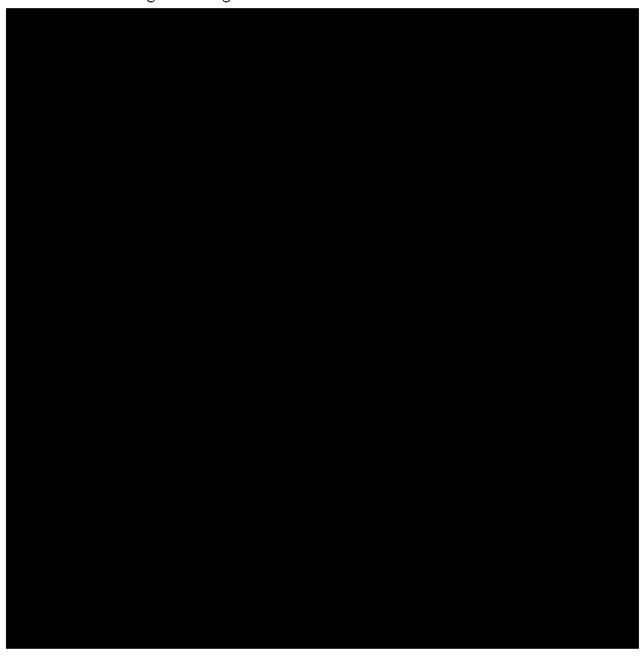
#### APPENDIX 4 - CONTACT INFORMATION

Organization	Contact	Phone	Description
			-
			-
			-



## APPENDIX 5 – SITE SPECIFIC INFORMATION

TX 10 Hummingbird Storage





## \*\*\* 911 should be used during an emergency \*\*\*

#### TX 10 Hummingbird Storage



#### **Denton County Emergency Services Dispatch**

Fire Marshall

Phone 940-349-2840

#### Fire Department

Krum Fire Department

400 N. First St. Krum, TX 76249

Phone 940-482-6257

#### Police

Krum Police Department

P.O. Box 847 Krum, TX 76249

Phone 940-482-3491

#### <u>Medical</u>

Texas Health Presbyterian Hospital

3000 I-35 Denton, TX

Phone 940-898-7000

#### Directions from site entrance:

#### KCE / TX 10 Emergency Operations Line

Phone 516-619-9459

#### Poison Control Center

Phone 800-222-1222



APPENDIX 6 – HOT/COLD WEATHER OPERATIONS PLANS

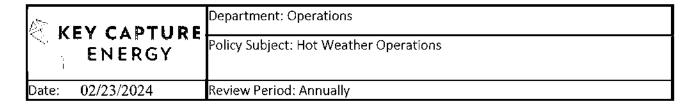
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""	IERGY	Policy Subject: Hot Weather Operations
Date: 02/2	3/2024	Review Period: Annually

# TX 10 Hummingbird Hot Weather Operations Plan

#### **VERSION CONTROL**

Rev	Date of Issue	Reason for Issue	Prepared By:	Reviewed By:	Approved By:
0	03/01/2024	Initial Document	B. Garrett	J. Dominguez	E. Nelson

Prepared By:	Reviewed By:	Approved By:
Bob Garrett	Jose Dominguez	Erika Nelson
Title: Manager, Compliance	Title: Manager, Operations & Maintenance	Title: Director, Project Operations
Bob Garrett 37197F1077CD430	Jose Domingues 8061BBA65D7F42A	Enka AUSON 5BDA3D94941040C
Dept: Compliance	Dept: Operations	Dept: Operations
Date: 2/26/2024	Date: 3/4/2024	Date: 2/26/2024



## Contents

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- 9. Attachments
  - A. Declaration of Preparedness
  - B. Hot Weather Critical Component Checklist
  - C. Training Roster

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#### 1. ACRONYMS

BA: Balancing Authority

BESS: Battery Energy Storage System

ERCOT: Electric Reliability Council of Texas

HVAC: Heating, Ventilation, and Air Conditioning

NERC: North American Electric Reliability Corporation

PUCT: Public Utility Commission of Texas

ROC: Remote Operations Center

### 2. Purpose

The purpose of this Hot Weather Operations Plan is to provide an effective summer weather readiness program in response to regulatory requirements established due to recent extreme weather events. The focus and primary driver behind these new regulations is on maintaining individual unit reliability and preventing future extreme weather-related events from detrimentally impacting the power grid. This document addresses requirements as outlined in the Public Utility Commission of Texas (PUCT) Phase II Weather Preparedness Standards (§25.55 Section C). This plan will be reviewed on an annual basis to address any regulatory updates or new requirements and to evaluate the effectiveness of hot weather preparation procedures to incorporate any lessons learned.

#### 3. Site Information

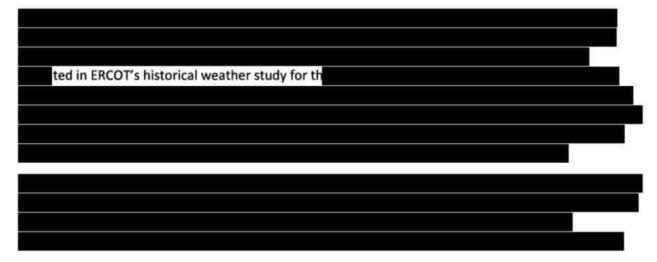
The Battery Energy Storage System (BESS) facility (Resource) described in this document is a containerized battery storage facility that houses glycol-cooled battery cells in a weather-resistant insulated metal enclosure. The glycol-cooled batteries operate within a manufacturer-specified nominal minimum and maximum temperature range across the full range of the Resource's anticipated ambient temperatures. The internal ambient temperature of the Resource is monitored via an advanced Remote Operations Control (ROC) center with 24 hour/365 day observation capability. If the Resource's internal temperature increases, the system is remotely adjusted to ensure continued stable operations.

A checklist for all hot weather critical components within the Resource is provided in Attachment B. A weather critical component is defined as any component of a generating Resource that is susceptible to fail as a result of a weather emergency, the occurrence of which failure is likely to significantly hinder the ability of the Resource to function as intended or, for the Resource, is likely to lead to a trip, derate of more than 5% of the capacity represented in the Resource's seasonal net maximum sustainable rating, or failure to start. All hot weather critical component sensors are located within the weather-resistant insulated metal enclosures of the battery containers. Similarly, the hot weather protection

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components of the Resource are located within or adjacent to the insulated battery container enclosures or at the substation to the facility.

## 4. Temperature/Weather Information



## 5. Scope of Plan

The Hot Weather Operations Plan goes into effect annually on June 1<sup>st</sup> and remains in effect throughout the summer season. Operations personnel will take the following steps to ensure compliance with regulatory requirements:

- Inspection and maintenance of thermal insulation protective measures for all battery enclosures. These inspections will be completed prior to June 1<sup>st</sup> on an annual basis.
- Inspection and maintenance of waterproofing for damage or degradation, and repair of any identified damage or degraded insulation or other associated forms of waterproofing. These inspections will be completed prior to June 1<sup>st</sup> on an annual basis.
- Inspection and maintenance hot weather critical components, primarily consisting of the battery stacks. These inspections will be completed prior to June 1<sup>st</sup> on an annual basis.
- Testing or verification of the hot weather critical components prior to June 1<sup>st</sup> and monthly throughout the summer season.
- Review on an annual basis the list of hot weather critical components and update as necessary.This will be completed prior to the submission of the Declaration of Preparedness.
- Submit a Declaration of Preparedness to ERCOT once the plan has been enacted and all the necessary inspections/maintenance activities have been performed. This will be completed prior to June 1<sup>st</sup> on an annual basis.

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The PUCT Phase 2 Weatherization Standards included other requirements that are not applicable to KCE's BESS Resources. This includes:

- Identification of regulatory and legal limitations of cooling capacity, water withdrawal, maximum discharge temperatures, and rights for additional water supply (Cooling water is not required for operation of the Resource)
- Arrange and plan for the provision and storage of adequate water supplies for cooling towers, reservoirs, heat exchangers, and adequate cooling capacity of the water supplies used in the cooling towers, reservoirs, and heat exchanges (Cooling water is not required for operation of the Resource)
- Arrange and provide for the availability and appropriate safekeeping of sufficient chemicals, auxiliary fuels, and other materials necessary for sustained operations during a summer weather emergency (No chemicals or auxiliary fuels are necessary for sustained operations during a summer weather emergency)

## 6. Summer Weather Emergency

A weather emergency is defined as a situation resulting from a summer or winter weather event that produces significant risk for a Resource that firm load must be shed or a situation for which an Emergency Notice is issued to market participants involving an operating condition in which the safety or reliability of the power grid is compromised or threatened by the weather event. If a summer weather event is anticipated to impact the Resource, KCE personnel will take the following steps:

- 1. Conduct a Resource "readiness" review prior to anticipated severe summer weather event.
- 2. Ensure the proper inspections have been completed.
- 3. Ensure that all maintenance that is required has been completed.
- Identify the proper resource contacts are available, up-to-date, and ready to respond for any questions or Operations-related inquiries.
- Before and during a severe summer weather event, the GOP will keep the Balancing Authority (BA) updated on changes to plant availability, capacity, or other operating limitations.
- In the event of the Resource coming offline, experiencing a derate, or failure to start due to the severe summer weather, Management shall conduct an analysis, develop lessons learned, and incorporate any additional practices into a revised Operating Plan.

# 7. Staffing

KCE staff involved with the general operations and maintenance at the BESS Resource consist of the Operations & Maintenance Managers and Operations & Maintenance Associates who are responsible for maintaining the overall health and efficiency of the Resource. KCE employees are available on a 5-

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day, weekly basis with certain employees designated for "on call" roles during the weekends and holidays. In the event of a Weather Emergency, KCE will ensure that staff are available and ready to respond as outlined in Section 6.

In addition to the KCE personnel, KCE contracts the operation of the Site through third-party vendors. The third-party vendors are responsible for performing on-site inspections and maintenance at the Resource. The third-party vendors are also responsible for operation of the Resource. KCE's staff communicate through various methods, including Outlook, Teams, and Slack (a messaging service) enabling frequent and immediate communication. The vendors staff their ROC on a 24 hour/7 days a week basis and are available at any time should any immediate actions need to be taken to address summer weather emergency events.

## 8. Personnel Training

KCE has initiated an annual training program for personnel who are expected to have a role or responsibility included in this Hot Weather Operations Plan. KCE maintains an Emergency Operations Plan (EOP) for the Resource which includes both the Hot Weather and Cold Weather Operations Plans. Training on the EOP provides a review of all response plans and provide a background on the regulatory requirements that necessitate these plans. Personnel training is completed and documented annually.

#### 9. Attachments

7

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# Attachment A

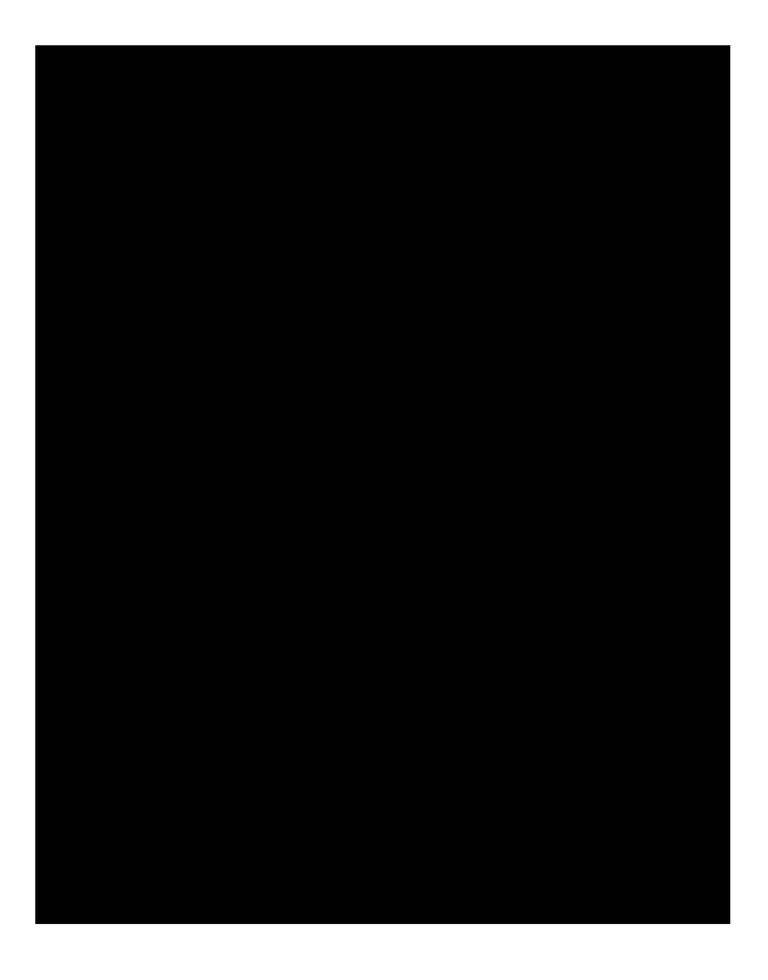
**Declaration of Preparedness** 

8

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# **Attachment B**

**Hot Weather Critical Components Checklist** 





KEY CAPTURE	Department: Operations
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Date: 02/23/2024	Review Period: Annually

# Attachment C

# **Training Roster**



#### TRAINING ATTENDANCE SHEET

DEPARTMENT:	Compliance
TRAINER:	Bob Garrett
TOPIC:	"Introduction to NERC" & "NERC EOP Training"
DATE:	September 19, 2023
TIME	12:00 pm EST

**Training Details:** Operations & Maintenance personnel received "Introduction to NERC" basic training as well as training focused on Standards EOP-004 & EOP-011 (Emergency Operations Response and Cold Weather Preparedness). Cold weather preparedness training included a review of the Cold Weather Operations Plans.



Notes: Annual Training Completion

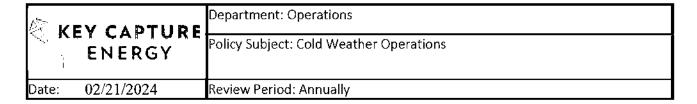
Ø KI		Department: Operations
	KEY CAPTURE ENERGY	Policy Subject: Cold Weather Operations
Date:	02/21/2024	Review Period: Annually

# TX 10 Hummingbird Cold Weather Operations Plan

#### **VERSION CONTROL**

Rev	Date of Issue	Reason for Issue	Prepared By:	Reviewed By:	Approved By:
0	03/01/2024	Initial Document	B. Garrett	J. Dominguez	E. Nelson

Prepared By:	Reviewed By:	Approved By:
B. Garrett	J. Dominguez	E. Nelson
Title: Manager, Compliance	Title: Manager, Operations & Maintenance	Title: Director, Project Operations
Bob Garrett 37197F1077CD430	JOSE DOMINGUES 8051BBA65D7F42A	Docusigned by: ENKA NUSON 58DA3D34941040C
Dept: Compliance	Dept: Operations	Dept: Operations
Date: 2/22/2024	Date: 3/4/2024	Date: <sup>2/22/2024</sup>



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#### 9. Attachments

- A. Declaration of Preparedness
- B. Cold Weather Critical Component Checklist
- C. Training Roster
- D. Specifications
- E. Wind Chill Calculations

KEY CAPTURE	Department: Operations Policy Subject: Cold Weather Operations
Date: 02/21/2024	Review Period: Annually

#### 1. ACRONYMS

BA: Balancing Authority

BESS: Battery Energy Storage System

ERCOT: Electric Reliability Council of Texas

HVAC: Heating, Ventilation, and Air Conditioning

NERC: North American Electric Reliability Corporation

PUCT: Public Utility Commission of Texas

ROC: Remote Operations Center

### 2. Purpose

The purpose of this Cold Weather Operating Plan is to provide an effective winter weather readiness program in response to regulatory requirements established at both the Federal and State level, established due to recent extreme weather events. The focus and primary driver behind these new regulations is on maintaining individual unit reliability and preventing future extreme weather-related events from detrimentally impacting the power grid. This document addresses requirements as outlined in the North American Electric Reliability Corporation (NERC) EOP-012 standard (R1-R8) and the Public Utility Commission of Texas (PUCT) Phase II Weather Preparedness Standards (§25.55 Section C). This plan will be reviewed on an annual basis to address any regulatory updates or new requirements and to evaluate the effectiveness of cold weather preparation procedures to incorporate any lessons learned.

#### 3. Site Information

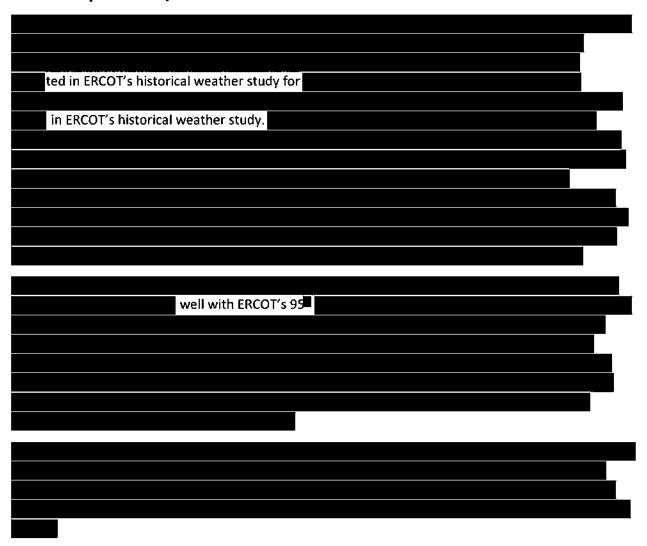
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A checklist for all cold weather critical components within the Resource is provided in Attachment B. A weather critical component is defined as any component of a generating Resource that is susceptible to fail as a result of a weather emergency, the occurrence of which failure is likely to significantly hinder the ability of the Resource to function as intended or, for the Resource, is likely to lead to a trip, derate of more than 5% of the capacity represented in the Resource's seasonal net maximum sustainable rating, or failure to start. All cold weather critical component sensors are located within or adjacent to the weather-resistant insulated metal enclosures of the battery containers. Similarly, the freeze

Ø KI	EY CAPTURE	Department: Operations
	ENERGY	Policy Subject: Cold Weather Operations
Date:	02/21/2024	Review Period: Annually

protection components of the Resource are located within the insulated battery container enclosures or at the substation to the facility.

## 4. Temperature/Weather Information



## 5. Scope of Plan

The Cold Weather Operations Plan goes into effect annually on December 1<sup>st</sup> and remains in effect until February 28<sup>th</sup> of the following year. Operations personnel will take the following steps to ensure compliance with regulatory requirements:

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- Inspection and maintenance of thermal insulation protective measures for all battery enclosures. These inspections will be completed prior to December 1<sup>st</sup> on an annual basis.
- Inspection and maintenance of waterproofing for damage or degradation, and repair of any identified damage or degraded insulation or other associated forms of waterproofing. These inspections will be completed prior to December 1<sup>st</sup> on an annual basis.
- Inspection and maintenance of freeze protection equipment, primarily consisting of the battery stacks. These inspections will be completed prior to December 1<sup>st</sup> on an annual basis.
- Testing or verification of the freeze protection equipment prior to December 1<sup>st</sup> and monthly throughout the winter season.
- Review on an annual basis the list of cold weather critical components and update as necessary.This will be completed prior to the submission of the Declaration of Preparedness.
- Submit a Declaration of Preparedness to ERCOT once the plan has been enacted and all the necessary inspections/maintenance activities have been performed. This will be completed prior to December 1<sup>st</sup> on an annual basis.

The PUCT Phase 2 Weatherization Standards included other requirements that are not applicable to KCE's BESS Resources. This includes:

- Installation and maintenance of adequate wind breaks for resources susceptible to outages
  or derates caused by wind (There is no equipment at the Resource which is susceptible to
  outages or derates caused by wind)
- Arrange and provide for the availability and appropriate safekeeping of sufficient chemicals, auxiliary fuels, and other materials necessary for sustained operations during a winter weather emergency (No chemicals or auxiliary fuels are necessary for sustained operations during a winter weather emergency)

## 6. Winter Weather Emergency

A weather emergency is defined as a situation resulting from a summer or winter weather event that produces significant risk for a Resource that firm load must be shed or a situation for which an Emergency Notice is issued to market participants involving an operating condition in which the safety or reliability of the power grid is compromised or threatened by the weather event. If a winter weather event is anticipated to impact the Resource, KCE personnel will take the following steps:

- Conduct a Resource "readiness" review prior to an anticipated severe winter weather event.
- Ensure the proper inspections have been completed.
- Ensure that all maintenance that is required has been completed.
- Identify the proper resource contacts are available, up-to-date, and ready to respond for any questions or Operations-related inquiries.

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- Before and during a severe winter weather event, the GOP will keep the Balancing Authority (BA) updated on changes to plant availability, capacity, or other operating limitations.
- In the event of the Resource coming offline, experiencing a derate, or failure to start due to the severe winter weather, Management shall conduct an analysis, develop lessons learned, and incorporate any additional practices into a revised Operating Plan.
- 7. Per EOP-012, in the event that the Resource experiences a Cold Weather Reliability Event, a Corrective Action Plan (CAP) will be developed within 150 days or by July 1<sup>st</sup> following the Winter season. The CAP will provide a summary of the event (causes, associated data), a review of applicability to similar equipment at other generating units owned by KCE, and identification of any temporary operating limitations or impacts to the cold weather preparedness plan that would apply until the corrective actions are completed.

## 7. Staffing

KCE staff involved with the general operations and maintenance at the BESS Resource consist of the Operations & Maintenance Managers and Operations & Maintenance Associates who are responsible for maintaining the overall health and efficiency of the Resource. KCE employees are available on a 5-day, weekly basis with certain employees designated for "on call" roles during the weekends and holidays. In the event of a Weather Emergency, KCE will ensure that staff are available and ready to respond as outlined in Section 6.

In addition to the KCE personnel, KCE contracts the operation of the Site through third-party vendors. The third-party vendors are responsible for performing on-site inspections and maintenance at the Resource. The third-party vendors are also responsible for operation of the Resource. KCE's staff communicate through various methods, including Outlook, Teams, and Slack (a messaging service) enabling frequent and immediate communication. The vendors staff their ROC on a 24 hour/7 days a week basis and are available at any time should any immediate actions need to be taken to address winter weather emergency events.

## 8. Personnel Training

KCE has initiated an annual training program for personnel who are expected to have a role or responsibility included in this Cold Weather Operations Plan. KCE maintains an Emergency Operations Plan (EOP) for the Resource which includes both the Hot Weather and Cold Weather Operations Plans. Training on the EOP provides a review of all response plans and a background on the regulatory requirements that necessitate these plans. Personnel training is completed and documented annually.

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## 9. Attachments

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## Attachment A

# **Declaration of Preparedness**

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## **Attachment B**

**Cold Weather Critical Components Checklist** 





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# Attachment C

# **Training Roster**



#### TRAINING ATTENDANCE SHEET

DEPARTMENT:	Compliance
TRAINER:	Bob Garrett
TOPIC:	"Introduction to NERC" & "NERC EOP Training"
DATE:	September 19, 2023
TIME	12:00 pm EST

**Training Details:** Operations & Maintenance personnel received "Introduction to NERC" basic training as well as training focused on Standards EOP-004 & EOP-011 (Emergency Operations Response and Cold Weather Preparedness). Cold weather preparedness training included a review of the Cold Weather Operations Plans.



Notes: Annual Training Completion

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Attachment D

**Specifications** 







Ø KF	KEY CAPTURE	Department: Operations
		Policy Subject: Cold Weather Operations
Date:	01/29/2024	Review Period: Annually

# Attachment E

# **Wind Chill Calculations**

TX 10 HUMMINGBIRD (HMNG\_ESS\_BESS1)

$$WindChill = 35.74 + (0.6215 \times T) - (35.75 \times Wind_{sfc}^{0.16}) + (0.4275 \times T \times Wind_{sfc}^{0.16})$$