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To Whom it May Concern:

Subject: PUCT Chapter 25 Emergency Operations Plan for Solar Generating Facility Brazos Bend operated by Cypress Creek O&M, LLC (CCROM)

This document serves as an "executive summary" of the emergency operations plan for the following facility registered as Power Generating Company with Texas PUCT, in accordance with PUCT Chapter 25 §25.53(c) – **Brazos Bend BESS LLC –PUCT Control Number 55827 (for PGC filing)**

The required emergency operations plan for this site exists as several separate procedures. These procedures are herein summarized as one document, for your convenience.

An executive summary is required in accordance with §25.53(c). Therefore, the applicable sections of Texas Administrative Code §25.53 are utilized as a basis for the summary, with relevant hyperlinks and notations regarding method(s) of compliance.

Affidavit

"I hereby affirm that

(i) relevant operating personnel operating the applicable facilities are familiar with the contents and execution of the EOP and either have or will receive the appropriate training in accordance with CCROM training schedule. Furthermore, such personnel are committed to following 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.

(ii) the EOP has been reviewed and approved by the appropriate executives.;

(iii) drills will be conducted to the extent required by subsection §25.53(f) before 12/15/2024.;

(iv) the EOP or an appropriate summary has been distributed to local jurisdictions as needed.;

(v) the applicable entities maintain business continuity plans that address returning to normal operations after disruptions caused by an incident.; and

(vi) all of the entity's emergency management personnel who are designated to interact with local, state, and federal emergency management officials during emergency events will receive the latest IS-100, IS-200, IS-700, and IS-800 National Incident Management System training before 12/15/2024."

I, Jerome O'Brien (Jerome O'Brien) make this affirmation as the Authorized Person of Brazos Bend, LLC, on 1/19/2024.

DocuSigned by: Jerome O'Brien
CDA588A3274L453...

EOP Summary

In accordance with PUCT §25.53(d) and §25.53(e) the following items have been addressed in the joint EOP program included into this submission:

(1) An approval and implementation section that:

(A) introduces the EOP and outlines its applicability.

(B) lists the individuals responsible for maintaining and implementing the EOP, and those who can change the EOP.

(C) provides a revision control summary that lists the dates of each change made to the EOP since the initial EOP filing pursuant to subsection (c)(1) of this section.

(D) provides a dated statement that the current EOP supersedes previous EOPs

(E) states the date the EOP was most recently approved by the entity.

All items have been addressed on pp 2-3 of the **CCR OM Site Emergency Action Plan**

(2) A communication plan.

All communications during Emergency Operations should be done in accordance with the **Emergency Incident Response Protocol** which outlines routine communication requirements and those requirements where media or other inquiries are present.

(3) A plan to maintain pre-identified supplies for emergency response.

Not Applicable. This BESS facility is typically un-manned. Facilities such as these do not require field personnel to operate or shut down in the event of an emergency. The plant will be operated from a control room staffed 24/7 – this control room has emergency power supply as well as other protocols in place to ensure that is has enhanced resilience to weather events. Field operators are dispatched on an as-needed basis. No consumable material is required to maintain generation. As such, no emergency response supplies are required.

(4) A plan that addresses staffing during emergency response.

Generally, Not Applicable – Because this facility is typically operated remotely, severe weather events will not affect staffing. Access to the sites during severe weather events is in accordance with SOP07 – Inclement Weather Operations. Emergency Operations staffing for the Cypress Creek Control Center should be done in accordance with the C4 Shift Schedule & Pay Policy, and for the avoidance of doubt this control center is staffed 24/7.

(5) A plan that addresses how an entity identifies weather-related hazards, including tornadoes, hurricanes, extreme cold weather, extreme hot weather, drought, and flooding, and the process the entity follows to activate the EOP.

Addressed in **SOP07 – Inclement Weather Operations and the Emergency Incident Response Protocol**

(6) The following annexes as applicable:

(A) A weather emergency annex that includes:

(i) operational plans for responding to a cold or hot weather emergency, distinct from the weather preparations required under §25.55 of this title; These facilities are do not have any cold weather critical components as determined by equipment specifications minimum operating temperatures and design ratings, however, In order to support our technicians and possible future technology types, Cypress creek has published a procedure entitled **Cypress Creek Solar Farm Winterization Policy**, which aims to establish helpful guidelines and considerations for our technicians and which is included

(ii) verification of the adequacy and operability of fuel switching equipment, if installed; These facilities do not require any type of fuel for power generation.

(iii) a checklist for generation resource personnel to use during a cold or hot weather emergency response that includes lessons learned from past weather emergencies to ensure necessary supplies and personnel are available through the weather emergency; BESS facilities are typically un-manned. They do not require field personnel to operate or shut down in the event of cold or hot weather emergencies. The plants are operated from a control room which is staffed 24/7. Field operators are dispatched on an as-needed basis. As such, no emergency response supplies are-required.

(B) A water shortage annex that addresses supply shortages of water used in the generation of electricity; BESS plants require no onsite water supply for cooling or steam generation. Thus, all requirements for water shortage contingencies are deemed not applicable.

(C) A restoration of service annex that identifies plans intended to restore to service a generation resource that failed to start or that tripped offline due to a hazard or threat; Restoration of facilities during Emergency Operations should be done in accordance with **SOP07 – Inclement Weather**, and following all applicable site-specific operating procedures

(D) A pandemic and epidemic annex; Generally, Not Applicable - The applicable photovoltaic facilities are operated remotely. Onsite personnel are not necessary to sustain operations and CCR can utilize alternative regional personnel or subcontractors to address any issues at site in the event of staffing shortages due to a pandemic. The pandemic handling steps applicable to offices and control center are addressed in CCR COVID-19 Policy

(E) A hurricane annex that includes evacuation and re-entry procedures if facilities are located within a hurricane evacuation zone, as defined by TDEM; Hurricane Response is conducted in accordance with **SOP07 – Inclement Weather Operations**

(F) A cyber security annex; Addressed in **Emergency Incident Response Protocol and in G0_GOP CCR Cyber Security Incident Program**

(G) A physical security incident annex; Addressed in **Emergency Incident Response protocol**

CYPRESS CREEK RENEWABLES

EOP Drills and Emergency Management Training

Possible Operational Incident Commander who may need to interact with local, state, and federal emergency management officials (required in PUCT per Texas Admin. Code Rule 25.53) for a site in Texas or ERCOT		REQUIRED FEMA TRAINING MODULE & EXAM Completed?					
Employee Name (Possible Incident Commander)	Register(ed) for a FEMA ID	ICS-100	ICS-200	IS-700	IS-800	EOP DRILL Completed	
Fredericken, Timothy	0008304305	[date]	[date]	[date]	[date]	[date]	All Training and drill(s) must be complete for calendar year 2021 by 12/15/21
Downs, Christopher		[date]	[date]	[date]	[date]	[date]	
Patel, Bhaumik		[date]	[date]	[date]	[date]	[date]	
Yadav, Raginee		[date]	[date]	[date]	[date]	[date]	
Nakhle, Jamie		[date]	[date]	[date]	[date]	[date]	
Bobrinskoy, Kelsey		[date]	[date]	[date]	[date]	[date]	
Purcell, Tye		[date]	[date]	[date]	[date]	[date]	
Kienzle, Jonathan		[date]	[date]	[date]	[date]	[date]	
D'Amore, Nicholas		[date]	[date]	[date]	[date]	[date]	
Bond, Nathan		[date]	[date]	[date]	[date]	[date]	
Self, Steve		[date]	[date]	[date]	[date]	[date]	
[intentionally blank for future use]	[intentionally blank for future use]	[date]	[date]	[date]	[date]	[date]	
[intentionally blank for future use]	[intentionally blank for future use]	[date]	[date]	[date]	[date]	[date]	
[intentionally blank for future use]	[intentionally blank for future use]	[date]	[date]	[date]	[date]	[date]	
[intentionally blank for future use]	[intentionally blank for future use]	[date]	[date]	[date]	[date]	[date]	
[intentionally blank for future use]	[intentionally blank for future use]	[date]	[date]	[date]	[date]	[date]	
[intentionally blank for future use]	[intentionally blank for future use]	[date]	[date]	[date]	[date]	[date]	

CYPRESS CREEK RENEWABLES

OPERATIONAL ROUTINES

4100.005-SOP05

REVISION 5.2

Original Documentation and Owner/Edits: O&M Safety & Procedures

Printed procedures may *not* be up-to-date.

Refer to the procedure published via the MFI for the most current version!

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INTRODUCTION

1. PURPOSE

This document establishes expectations for a variety of routine tasks and operations.

2. SCOPE

This procedure applies to all O&M personnel performing any jobs/tasks at *any* CCR facility.

PROCEDURES

1. GAINING ACCESS TO/FROM SITES

This section standardizes access requirements on CCR sites.

1.1. COMING ONTO A SITE

Personnel, Contractors, and Visitors accessing a site will comply with the following:

1.1.1. GENERAL REQUIREMENTS

1.1.1.1. NO SMOKING allowed on site(s), except in designated area.

1.1.1.2. No pets allowed on sites.

1.1.1.3. No illicit drugs nor related paraphernalia allowed on sites.

1.1.2. PPE REQUIREMENTS

1.1.2.1. The basic PPE requirements for coming onto a site consists of:

- Hardhat (Class E)
- Safety Glasses (ANSI Z87)
- Safety-toe Boots, with ankle support (ASTM F-2412/F-2413 or ANSI Z41)
- No tanktops or shorts
- High-Visibility vest or clothing
  (if construction equipment or vegetation control equipment is in-use)

1.1.2.2. Task-specific PPE requirements are determined during the Job Brief process.

1.1.2.3. Deviation(s) from these requirements shall be authorized by the Safety & Procedures Manager on a case-by-case basis; documented during Job Brief process.

1.1.3. CCR EMPLOYEE(S)

Employees accessing a site shall:

1.1.3.1. Notify C4 upon arrival/accessing a site.

Contact C4 and inform them of your name, names of any co-workers or visitors with you, task(s) that will be performed, and estimated time you predict to be on site.

1.1.3.2. Ensure a Job Brief is completed prior to starting work or task(s).

1.1.4. **CONTRACTORS**

Each contractor shall:

1.1.4.1. Be assigned a Point of Contact (PoC)

1.1.4.2. Notify C4 upon arrival.

1.1.4.3. Be pre-authorized by CCR OM prior to arriving on site; and,

1.1.4.4. Participate in the Job Brief package via Prontoforms.

1.1.5. **VISITORS**

Each visitor shall:

1.1.5.1. Be assigned a Point of Contact (PoC)

1.1.5.2. Complete a Waiver of Liability and Release (ATTACHMENT E) prior to accessing site(s)

1.1.5.3. Participate in the Job Brief with the CCR PoC.

1.1.6. **CCR POINT OF CONTACT (POC)**

The CCR PoC shall:

1.1.6.1. Ensure their assigned Contractor(s) has/have received site-specific orientation prior to accessing site(s).

1.1.6.2. Ensure their assigned Visitor(s) has/have completed a Waiver of Liability and Release, and site-specific orientation prior to accessing site(s).

1.1.6.3. Ensure Contractor(s)/Visitor(s) follow CCR procedures for their relevant task(s).

1.1.6.4. Ensure Contractor(s)/Visitor(s) participate in a Job Brief for their relevant task(s) while accessing site(s)

1.1.6.5. Ensure Contractors contact C4 prior to entering the site and upon leaving the site.

1.1.6.6. Collect contractor's primary and emergency contact information.

1.2. LEAVING A SITE

1.2.1. All employees, contractors, and visitors shall contact C4 upon leaving a site.

1.2.2. The CCR PoC assigned to a contractor/visitor shall ensure all paperwork, permits, Job Briefs, and documentation related to their task(s) are forwarded to the appropriate department(s) or manager(s).

1.2.3. CCR employees shall ensure sites are secured and gates are locked.

2. JOB BRIEF

This process replaced the historical "EPC Site Orientation", which consisted of 70+ slides of information, most of which is not applicable for any single job conducted on an O&M site.

This section standardizes conducting job brief(s) (pre-job and post-job) for any job/task that will be performed on CCR sites.

2.1. PURPOSE

The purpose of a Job Brief is to ensure the Point of Contact (PoC) and related workers for a particular job/task understand the scope of work to be performed by discussing the related steps involved. The discussion will provide an understanding of the hazards, safety, security, and environmental controls related to the job task(s).

2.2. POLICIES

2.2.1. All Job Briefs will be conducted before work commences.

2.2.2. Job Briefs will be reviewed when…

2.2.2.1. Assignments change;

2.2.2.2. New personnel become involved;

2.2.2.3. Work scope changes (LOTO boundaries, environmental, etc.);

2.2.2.4. Work activities will resume after an extended period of inactivity; or,

2.2.2.5. Work extends to a new day or new shift.

2.2.3. Job Briefs shall not be superseded by contractor's job brief, job hazard/safety analysis, etc.

2.2.4. Job Briefs shall not be conducted or established merely as "verbal".

2.3. CONDUCTING A JOB BRIEF

2.3.1. The job's PoC reviews or defines job scope.

2.3.2. PoC establishes means of documenting Job Brief, in order of preference:

2.3.2.1. ProntoForms "Job Brief Package"

a. Utilized when PoC is on site; conducts Job Brief, in-person.

b. Normally, this would apply when PoC or designee is directly supervising the job.

c. PoC uses their own ProntoForms login.

2.3.2.2. ProntoForms "Job Brief Package – Contractor"

a. Utilized when PoC is not on site to conduct the Job Brief, in person.

b. Normally, this would apply when PoC is aware the contractor will be on site without direct supervision by a CCR employee or workgroup.

c. Contractor uses their *own* ProntoForms login, supplied by CCR O&M.

i. Contact Safety & Procedures Manager for contractor login info.

ii. Contractor can install ProntoForms by following Attachment I.

iii. This option does not negate the contractor's ability to utilize their own company's job brief process. Regardless, ProntoForms is still required as it will document the "contractor will be utilize their own process".
A copy of their completed job brief shall be made available upon request.

2.3.2.3. Job Brief form (Attachment A)

a. Utilized when ProntoForms version is absolutely *not* available.

2.3.3. PoC and workers assemble, preferably at the job site, and discuss work activities. A walk-down of the job site/area is encouraged.

2.3.4. Discuss Major Steps and CRITICAL STEPs involved with the job:

2.3.4.1. Review Job Hazard Analysis(es) related to the job. This may be a compilation of several JHA's, depending on job scope. A blank JHA is provided as ATTACHMENT C.

2.3.4.2. The following subjects[1] shall be addressed, at a minimum:

a. Site Layout

b. Hazards associated with the job;

c. Work procedures involved;

d. Special precautions, as applicable;

e. Energy-source controls;

f. Personal protective equipment requirements;

g. Emergency muster points;

h. Contacting emergency services;

i. Directions and contact info for medical treatment (non-emergency);

j. Location of fire extinguisher(s), first aid kit(s), and AED, as applicable;

k. Location of oil/chemical containment kit(s), as applicable;

l. Process for site check-in/out; and,

m. [2]Provide a copy of applicable JHA(s) to contractor(s) upon request. At a minimum, provide a copy of Attachment D "Access to Facility".

2.3.5. Determine permits to be involved, if any. Complete permit(s) and route for review.

2.3.6. Examples of Questions to Ask:

2.3.6.1. Do you understand your roles, responsibilities, and your work scope?

2.3.6.2. What are the PPE requirements?

2.3.6.3. Are there any related environmental permit limits or bounding conditions?

2.3.6.4. Are there any ERROR PRECURSORS that may be present for this job?

2.3.6.5. Do you know the Critical Steps in this activity as they relate to your assignment?

2.3.6.6. What is the worst thing that can go wrong, and how will we respond?

2.3.6.7. Are you aware of any related activities and/or hazards that can interfere?

2.3.6.8. Are there any errors/lessons learned have you observed in past, similar tasks?

2.3.6.9. AVOID asking undirected questions, which can be "acknowledged" all too easily, such as "Do you have any questions, Steve?", or "Steve, are you comfortable with what you heard?"

2.3.6.10. Challenge assumptions – Everyone involved with the brief must be allowed to participate, ask questions, and let participants finish their sentences prior to responding.

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[1] 1910.269(c)(2) "Job Briefing"

[2] 1910.269(a)(3) "Information Transfer"

2.3.7. Determine if any endorsements (i.e. authorizations) must be acquired prior to starting job. Generally, an endorsement is required for any of the following:

2.3.7.1. Regional Manager approval is required if job scope involves any permit.

2.3.7.2. Safety Manager approval is required if job scope involves any permit *except* LOTO.

2.3.7.3. No approval is required if job scope does not contain permits or contractors.

NOTE: In cases where the actual signature of the Regional Manager is not feasible (internet connection, unavailable, etc.), specifying how the Regional Manager was notified and their acknowledgement was received will suffice. For instance, "RM acknowledged via text/phone".

2.3.8. COMPLETE JOB – Once all required permits are established, all endorsements are obtained, and Pre-Job Brief is complete, the job can commence.

2.3.9. Once job is complete, conduct a Post-Job Brief; document on Job Brief form.

2.3.10. Compile all related document with the Job Brief, and forward package to the Safety & Procedures Manager.

3. COMMUNICATIONS

This section explains aspects of communication that are to be utilized to ensure mutual understanding between two or more personnel, especially during communication involving technical information or equipment changes or realignments.

3.1. THREE-PART COMMUNICATION

Three-part communication, also known as the "repeat back" method of communications, is used to communicate changes to site equipment during work activities via face-to-face, telephone, or radio communications. This communication protocol requires three oral exchanges between a sender and a receiver to promote a reliable transfer of information and understanding. The person originating the communication is the sender and is responsible for verifying that the receiver understands the message, as intended. The receiver makes sure he or she understands what the sender is saying and repeats back the message to the sender.

3.1.1. STEPS FOR THREE-PART COMMUNICATION

Generally, this is how the protocol works:

First - The sender orally transmits information (face-to-face, telephonic or other electronic equivalent) clearly and concisely to the receiver directing them to interface with and alter equipment conditions.

Second - The receiver orally acknowledges the communication by repeating the message back to the sender. The receiver does not need to repeat every part of the communication verbatim, but he/she must restate the equipment-related information exactly as spoken by the sender. If the receiver does not understand the message, he/she must ask for clarification.

Third - The sender acknowledges the reply and confirms to the receiver that the message is correct and properly understood by stating the communication was correct. If the sender does not understand the receiver's reply, the sender must then respond by saying, "That is wrong," (or words to that effect) and then restate the original message. If corrected, the receiver must acknowledge the corrected message and repeat back the message to the sender.

3.1.2. REQUIREMENTS FOR USE

3.1.2.1. Personnel must utilize three-part communication during the operation or alteration of site equipment when performing steps or actions using an approved procedure that impact equipment or activities, the safety of personnel, the environment, or the site.

3.1.2.2. Personnel must utilize three-part communication for tasks where the consequences of a mishap are unacceptable and could lead to instability, uncontrolled separation, or cascading of generation-related relays, reclosers, etc.

3.2. Phonetic Alphabet.

Several letters in the English language sound alike and can be confused in stressful or noisy situations. For example, some letters sound alike when spoken, and can easily be confused; such as "D" and "B." The phonetic alphabet specifies a common word for each letter of the English

alphabet. By using a word for each letter, there is less chance that the person listening will confuse the letters. Using the phonetic alphabet, "Delta" and "Bravo" are more easily differentiated. The effects of noise, weak telephone or radio signals, and an individual's accent are reduced using the phonetic alphabet.

3.2.1. TABLE OF THE PHONETIC ALPHABET

A – Alpha	H – Hotel	O – Oscar	V – Victor
B – Bravo	I – India	P – Papa	W – Whiskey
C – Charlie	J – Juliet	Q – Quebec	X – X-ray
D – Delta	K – Kilo	R – Romeo	Y – Yankee
E – Echo	L – Lima	S – Sierra	Z – Zulu
F – Foxtrot	M – Mike	T – Tango	
G – Golf	N – November	U – Uniform	

3.2.2. USING NUMBERS WITH THE PHONETIC ALPHABET

- Pronounce numbers 1-8, normally.
- Pronounce "9" as "nine-er" to differentiate between "5" and "9".
- Pronounce "0" as "zero" to differentiate between "0" and "O".

3.2.3. REQUIREMENTS FOR USE

3.2.3.1. Use the phonetic alphabet, and/or the correct numeric pronunciation/clarifier, and unit designators when describing unique identifiers for specific components.

3.2.3.2. Use the phonetic alphabet and/or the correct numeric pronunciation/clarifier, for any communication or instruction to change or maintain the state, status, output, or input of an element of a site's generating equipment.

3.2.4. Example

When the only distinguishing difference between two component labels is a single letter, then the phonetic alphabet form of the letter should be substituted for the distinguishing character.

For instance, **2UL-18L** and **2UL-18F** would be stated:

- "two Uniform Lima dash one eight Lima"; and,
- "two Uniform Lima dash one eight Foxtrot."

4. SAFETY OBSERVATIONS

An active safety program can only be deemed "productive" if a level of contribution is afforded to all personnel; employees and contractors. Contributions and/or concerns must be followed through to resolution, which includes notifying the originator of the report.

4.1. A Safety Observation is a means by which *any* issue regarding Safety may be addressed by *any* employee(s) or contractor(s).

4.2. Safety Observations are periodically reviewed for content and resolution by Operational Excellence.

4.3. A Safety Observation should involve the following information:

4.3.1. Description of the operation/process – Identify what is being done correctly in terms of *safety*. These observations should be based on best practices.

4.3.2. Critical Item(s) – Identify areas which pose risk of injury or harm to workers. These items should be addressed immediately and communicated directly to the group leader or PoC.

4.3.3. List people/department involved

4.3.4. Review of related permit(s)

4.3.5. Work conditions

4.3.6. Procedure(s) used

4.3.7. Improvement Opportunity – Identify any perceived problem(s), including potential solutions.

4.4. A Safety Observation should *not* include generically nondescriptive statements like "all safe" or "no problems".

5. SAFETY MOMENTS

Guidance and requirements for conducting Safety Moments will be added, here, at a later date.

6. INSPECTIONS

6.1. EVERY SITE VISIT CHECKLIST

Complete the "Every Site Visit Checklist" (Attachment F) every time a site is visited by a technician, regardless of reason for the visit. The checklist is attached to the Job Brief form in Procore and includes the following items to check off on every site visit:

6.1.1. Inspect site perimeter for signs of forced entry or other damage.

6.1.2. Clean pyranometers with a soft cloth and verify tilt.

6.1.3. Inspect inverter air filters and clean, if applicable.

6.1.4. Inspect MV transformers for signs of oil leaks, damage, and general housekeeping per SPCC plan.

7. OUTAGE REQUESTS

If a site has planned maintenance that will require site/inverter de-energization, C4 switching, or utility support, submit an Outage Request:

7.1. Outage Requests should be made five days prior to the outage, or as soon as practicable.

7.2. Visit the Scheduled Maintenance Notification/Request Smartsheet and fill out the required information.

8. STOP-WORK AUTHORITY

The Stop-Work Authority (SWA) program is designed to provide employees and contract workers with the responsibility and obligation to stop work when a *perceived* unsafe condition or behavior *may* result in an unwanted event. The basic steps (**S-A-F-E-R**) are as follows:

8.1. **S**top the work

When an employee or contractor perceives condition(s) or behaviour(s) that pose or otherwise could lead to imminent danger to person(s), equipment, or environment, they must immediately initiate a "Stop-Work" intervention with the personnel potentially at risk.

If the supervisor is readily available and affected personnel, equipment, or environment is not in imminent danger, coordinate the stop-work action through the supervisor.

8.2. **A**ssess the situation

Affected personnel will discuss the situation and come to an agreement on the stop-work action. If all parties are in agreement the condition or behavior is safe to proceed without modifications, (e.g. initiator was unaware of certain info or circumstances), the initiator should consider submitting a Safety Observation (§4) to document the occurrence.
No further documentation is *required.*

If it is determined and agreed the stop-work action is valid, A Stop Work Observation report will be completed. The condition(s) or behavior(s) that pose threats or imminent danger to person(s), equipment or the environment must be resolved before restarting work. Work will be suspended until a proper resolution is achieved.

8.3. **F**ile a report (Attachment H)

If it is determined and agreed upon that the stop-work is valid, then complete a Stop-Work Observation form which steps you through the process.

The Stop-Work Observation document will help to clearly identify the stop-work action in a non-combative manner. It also serves as documentation that can be used to help justify investing resources toward potential solutions to prevent recurrence.

8.4. **E**radicate the hazard(s)

Make modifications to the affected area(s) or remove hazard(s) altogether; document on Stop-Work Observation form.

8.5. **R**esume work

Work can resume once protective measures have been taken to remediate the hazard(s).

APPENDIX A – REVISION HISTORY

Rev. #	Date	Major Changes
0	15Jan2019	Original
1.0	20Jan2019	• New Attachments - Blank JHA and JHA for Site Access • Corrected page numbering • Modified Table of Contents (ToC) • Appended Job Brief process graphic
1.1	25Jan2019	• Added process graphic • Clarified parts of Job Brief • Updated JHA for Site Access
2.0	04Mar2019	• Added requirements for Contractor(s)/Visitor(s) • Added Waiver document as an Attachment
3.0	18Mar2019	• Added "Communications" section • Carved out section for "Safety Observations", "Safety Moments", and "Inspections"
3.1	29Mar2019	• Merged Job Brief with additional sign-on/off pages.
3.2	06Jun2019	• Added "General Requirements" for site access • Added walking/working surface inspection to Job Brief
4.0	15Jul2019	• Added Attachment F "Every Site Visit Checklist"
4.1	14Aug2019	Expounded on JSA section of Job Brief, only.
4.2	22Nov2019	Clarified Contractor interface/documentation of Job Brief.
4.3	07Feb2020	• Added Outage Request info • Added "Contractor" and "Safety Observation" sections
5.0	26Feb2020	• Added "Stop-Work Observation" guidance and documentation
5.1	26Sep2020	• Updated policies to include contractor and verbal JSA's. • Updated Job Brief section to include ProntoForms
5.2	22Jan2021	Added clarification to PoC and Contractor requirements.

APPENDIX B – REFERENCES

1) Human Performance Handbook (2009), Department of Energy

2) HASP – Health and Safety Procedures, corporate CCR

3) NFPA 70E (2018)

APPENDIX C – DEFINITIONS

CCR – Cypress Creek Renewables

Contractor – Anyone who accesses a CCR-managed O&M site with the intent of performing *any* work. The term *work* can include visual inspections, surveys, audits, etc.

Critical Step – An action in a process that, if performed incorrectly or skipped, can trigger immediate, irreversible, and intolerable harm to personnel or asset(s).

Error Precursor – (a.k.a. "error traps") An unfavorable prior-condition at a job site that increases the probability for error during a specific action; that is, error-likely situations. An error-likely situation (error about to happen) typically exists when the demands of the task exceed the capabilities of the individual, or when work conditions aggravate the limitations of human nature.
These include, but are not limited to:

- Time Pressure
- Heavy Workload
- Multi-tasking
- Repetitive tasks
- Assumptions
- Vague/Confusing Job
- Unfamiliarity w/ task(s)
- Stress (home/work)
- Unclear Communication
- Lack of Proficiency
- Personality Conflicts
- Illness, Fatigue, or Injury
- Changes from "routine"
- Complacency
- Mind-set (see what you *want* to)
- Unexpected Equipment Condition

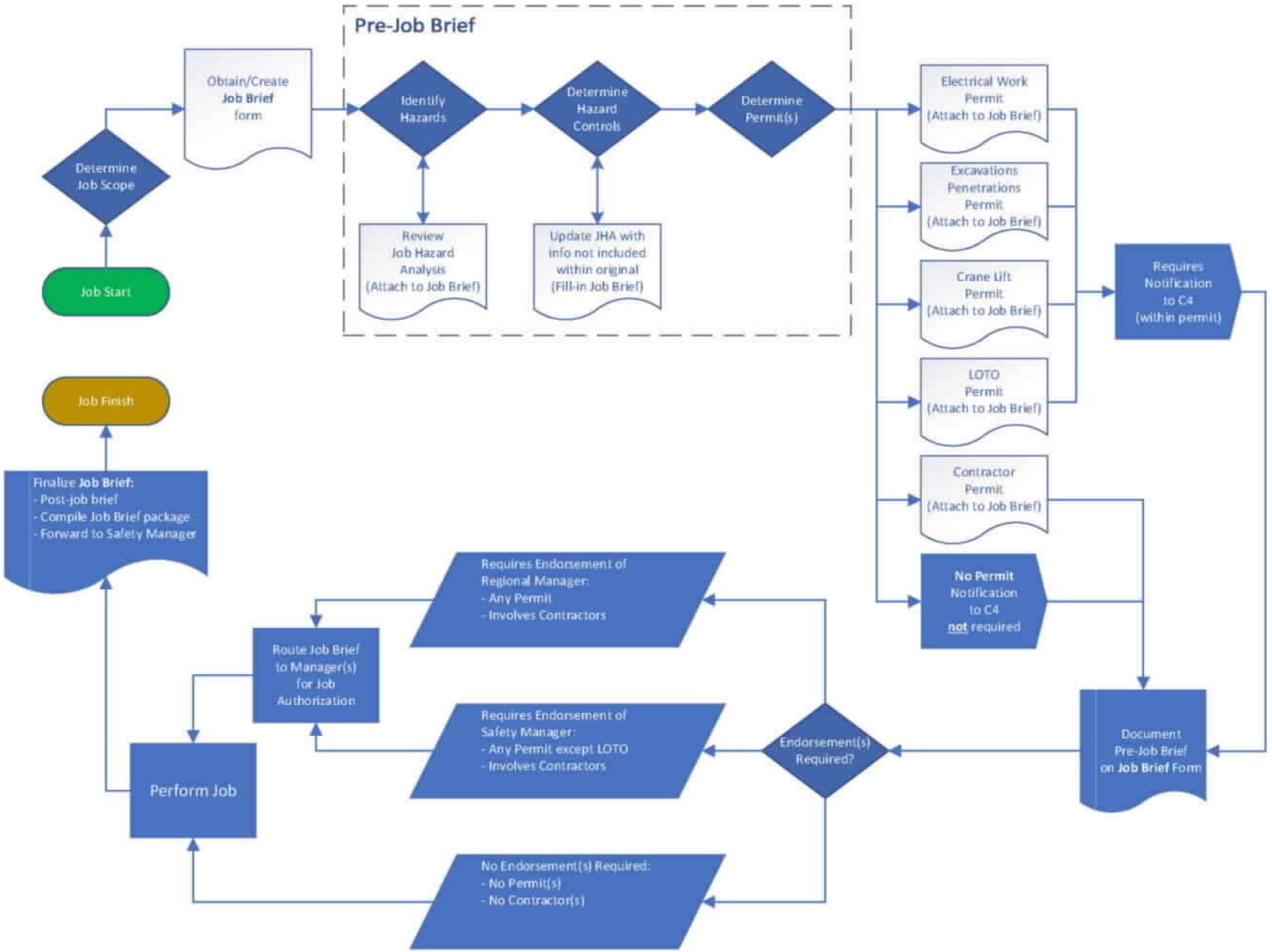
JHA – Job Hazard Analysis

PoC – Point of Contact; person who is designated as the main contact for a given task, document, process, etc.

PPE – Personal Protective Equipment

Visitor – Anyone who accesses a CCR-managed O&M site with the intent of *not* performing work. These are normally tours, as in the interest of local emergency response (fire/police), schools, interns, etc.

APPENDIX D – JOB BRIEF PROCESS



ATTACHMENT A – JOB BRIEF

Job Scope: _____ **WO#:** _____ **Plant/Site:** _____

A. Purpose – Use this form, or equivalent form, to establish and document a Job Brief for each job/task. This Job Brief must be reviewed by all personnel involved with the job scope. All personnel involved with the job scope must review this Job Brief and related documentation on a daily/shiftly basis, prior to resuming work (after breaks, interruptions, etc.), or if job scope/conditions change.

B. Conduct Pre-Job Brief

Person Conducting Brief: _____ Date & Time: _____

Referenced JHA(s) and Procedures

- ☐ SOP-02 "GOAB Ops"
- ☐ SOP-03 "Transformers"
- ☐ SOP-05 "Site Access"

Job Safety Analysis – Review of Actions and Potential Hazards	☑ Complete?
1. Review established JHA(s) for this job scope; record referenced JHA(s), above.	☐ Complete
2. Confirm all necessary PPE is available, inspected, and ready for use.	☐ Complete
3. Specify emergency muster location(s) relevant to immediate job scope and location(s).	☐ Complete
4. Location of *relevant* fire extinguisher(s); available, inspected, and ready for use.	☐ Complete ☐ n/a
5. Location of *relevant* spill kit(s); available, inspected, and ready for use.	☐ Complete ☐ n/a
6. Verify emergency and non-emergency medical info/location(s) immediately available![1]	☐ Complete
7. Verify personnel have signed-in to the site with C4. *Reminder:* Sign-out upon leaving.	☐ Complete
8. Walking-working surfaces have been inspected and maintained in a safe condition.	☐ Complete
9. Verify "Stop Work Authority" is clearly understood and agreed upon.	☐ Complete

10. List any additional hazards or clarifications that were not listed on the JHA(s) (can append Attachment C):

Basic Action(s) or Hazard(s)	Hazard Description(s)	Safety Measure(s) Needed

[1] Hospital, Urgent Care, etc.; normally listed in PowerFactors for the specific site.

C. Determine Permits – Specify permit(s) to be used for this job/task(s)…maintain with this Job Brief:

☐ Lock-Out Tag-Out (LOTO) ☐ Excavation (Dig)/Penetration ☐ Contractor Permit

☐ Energized Electrical Work ☐ Crane Operations Contractor's CCR O&M PoC: _____

D. Sign-on to this Job Brief – Personnel involved with this job must sign-on to this document on page 3.

☐ Contractors will utilize their own JHA. If feasible, attach copy of their JHA to this Job Brief.

E. Perform Operation – Complete steps in accordance with applicable procedure(s).

F. Checklist(s) – Specify completed Checklist(s) that are relevant to this Job Brief, if any.

G. Conduct Post-Job Brief – Discuss job with participants; note any steps/items that were identified as needing review or updated within procedure/JHA.

1. Person Conducting Brief: _____ Date & Time: _____
2. ☐ **Submit Observation** via MS Forms for any steps/items that were identified as needing review or updated within procedures/JHA.
3. ☐ **Submit Wildlife Encounter** via MS Forms (to be added at a later date) to document any wildlife encounters.

H. Sign-off of this Job Brief – Personnel involved with this job must sign-on to this document on page 4.

I. Submit – Save this form within Procore for the respective project/site.

Acknowledgement of Pre-Job Brief – All personnel involved with this job must sign below:

"I participated in, or was otherwise briefed on, the hazards involved with this job, as defined on relevant JHA(s). I was given an opportunity to ask questions or express concerns during the brief. Any questions/concerns were addressed to my satisfaction prior to starting work."

Note: This page is *Not Applicable* if contractor uses their own Job Brief.

Print Name	Signature	Time (24-hour)

Acknowledgement of Post-Job Brief – All personnel involved with this job must sign below:

"I participated in the Post-Job Brief for this job's scope. I was given an opportunity to submit concerns related to the job's tasks during the brief. I acknowledge that any injury or near-miss related to the job was reported to management."

Note: This page is *Not Applicable* if contractor uses their own Job Brief.

Print Name	Signature	Time (24-hour)

ATTACHMENT B – ADDITIONAL SIGN-ON, JOB BRIEF

Append this page to Job Brief

Acknowledgement of Pre-Job Brief – All personnel involved with this job must sign below:
"I participated in, or was otherwise briefed on, the hazards involved with this job. I was given an opportunity to ask questions or express concerns during the brief. Any questions/concerns were addressed to my satisfaction prior to starting work."

Print Name	Signature	Time (24-hour)

Acknowledgement of Post-Job Brief – All personnel involved with this job must sign below:
"I participated in the Post-Job Brief for this job's scope. I was given an opportunity to submit concerns during the brief. I acknowledge that any injury or near-miss related to the job was reported to management."

Print Name	Signature	Time (24-hour)

ATTACHMENT C – JOB HAZARD ANALYSIS

Job(s) or Task(s): _____

Basic Action(s) or Hazard(s)	Hazard Description(s)	Safety Measure(s) Needed
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

ATTACHMENT D – JOB HAZARD ANALYSIS

Job(s) or Task(s): **Facility Tour / Walk-thru / Access to Facility**

Basic Action(s) or Hazard(s)	Hazard Description(s)	Safety Measure(s) Needed
1. Access to/from site	• Electrocution, Electric Shock • Unfamiliarity to site-specific hazards • Access to PV-modules and associated tables/racks can expose personnel to head-bump hazards.	• Ensure personnel involved actively participate in job-specific Job Brief prior to starting work. • Determine PPE based on task(s) hardhat, safety glasses/shoes, at min.
2. Remote Location	• Limited access to means of emergency communication • Delayed access to emergency equipment (1st aid, AED, Fire Extinguisher, etc.). • Delayed arrival of Emergency Response personnel	• Ensure C4 is aware of your location. • Ensure directions to and means of contact with emergency services is readily available. • Determine availability of closest First Aid Kit and AED. • Ensure Fire Extinguisher immediately available; pre-use inspection • Ensure route to/from jobsite is navigable by emergency response services.
3. Environmental Factors	• Cold weather • Hot weather • Windy conditions can pose dust hazards to eyes • Snakes, bees, ticks, chiggers, spiders, etc. • Potential Oil Spill	• Acclimate to cold/hot temperatures while outdoors and dress accordingly. • Stay hydrated • Wear safety glasses (Z87) • Beware of snakes! • Recommend use of insect repellant with DEET. • Utilize containment for potential oil spill.
4. Walking/Travelling to job site or equipment.	• Uneven walking surfaces • Hidden hazards (grass, weeds) such as holes, ditches, loose soil, debris • Poor traction (ice/snow, mud) • Poor visibility to others • Terrain can vary in elevation, composition, slope, etc., and can cause footing to slip/trip, leading to a fall. • Rain or Wintery conditions can cause walking surfaces to be very slick; slip, trip, and fall hazard.	• Wear boots with good tread • Wear boots with ankle support • Consider high-vis vest or clothes • Inspect path to/from worksite. • Beware of hidden hazards such as dips, loose soil/rock, holes, etc. • Wear boots with a defined tread; not slick.
5. Access to Equipment	• Electrocution, Electric Shock • Job scope may involve accessing other equipment. • Other equipment incorporates their own particular hazards, which may be outside the scope of this JHA.	• Stay at least 15-20 feet away from active jobs/tasks. • Research JHA(s) for additional equipment or jobs that you want to be involved with. • If JHA(s) are not available, update JSA to include assessed hazards. Ensure an initial JHA is submitted to Safety and Procedures Manager.

ATTACHMENT E – WAIVER OF LIABILITY AND RELEASE

For O&M-related

Power Plant Tours by Visitors

Site: _____ (name) _____ (CCR Point of Contact for visit)

_____ (physical address) _____ (city, State, ZIP)

Visitor: _____ (name) _____ (visitor's phone #)

_____ (physical address) _____ (city, State, ZIP)

_____ (emergency contact person) _____ (contact's phone #)

_____ (emergency contact's relation to visitor)

The Visitor has requested to be permitted access to the Site referenced above. The Visitor acknowledges and represents that he/she is aware that there are ongoing operation/construction activities at the Site. The Visitor further acknowledges and agrees that the Site and the operations conducted at the Site create a dangerous environment, despite the safety precautions taken by Cypress Creek O&M, LLC ("Operator"), Cypress Creek Renewables, LLC (the "Developer"), Cypress Creek EPC, LLC (the "Contractor"), the owner or landlord of the Site (the "Owner"), and any of each of their subcontractors, vendors, suppliers, or any others performing work at the Site.

In consideration for receiving permission to access and enter the property and facilities located at and constituting the Site, the Visitor hereby RELEASES, WAIVES, DISCHARGES, AND COVENANTS NOT TO SUE Operator, Developer, Contractor, Owner, their respective members or affiliates, or any member, officer, agent, subcontractor, vendor, supplier or employee of any of them (collectively, "Releasees") from any and all liability, claims, demands, actions and causes of action whatsoever arising out of or related to any loss, damage (including damage to property), or injury or bodily harm, including death, that may be sustained by Visitor or its employees, agents, assigns and invitees while accessing, attending, investigating or working at the Site, or while in, on or upon the Site; provided however, that notwithstanding anything in this Waiver of Liabilities and Release, or otherwise, to the contrary (i) this Waiver of Liabilities and Release shall in no manner whatsoever release any Releasee from any liability to the extent arising out of the Releasee's gross negligence or willful misconduct, or that of its agents, contractors, employees, members, officers, or vendors (the "Retained Liability"), and (ii) the Visitor reserves and retains all rights and remedies with respect to the Retained Liabilities, including, without limitation, the right to sue any Releasee.

1. The Visitor hereby acknowledges that construction and other activities at the Site, including without limitation construction, loading and unloading, operation of heavy machinery and equipment, presence of electrical current (collectively, the "Activities") are ongoing at the Site and that such proximity to such ongoing Activities can expose the Visitor to the risk of serious injury, death, and/or property damage, and that by accessing the Site to observe the Activities that he/she will be at risk of injury or even death. Further, the Visitor acknowledges that the Site may be located at significant distance from the nearest hospital or other medical facility and that emergency response teams may require additional time to reach the Site if called to address an emergency.

2. The Visitor acknowledges that the Site may not be controlled or supervised by Developer or Owner, or any of their respective affiliates, but rather may be under the direct control and supervision of the Operator or the Contractor.

3. The Visitor acknowledges that he/she has sole responsibility to evaluate carefully the risks inherent in accessing the Site and to come into proximity with the Activities underway thereon, and that he/she has fully considered those risks, including, without limitation, dangers posed by willful or negligent conduct of himself/herself and/or by others.

4. The Visitor VOLUNTARILY ASSUMES THE RISK OF, AND FULL RESPONSIBILITY FOR, ANY LOSS, PROPERTY DAMAGE, OR PERSONAL INJURY, INCLUDING DEATH, that may be sustained by the Visitor or its employees, agents, assigns, and invitees, or any loss or damage of property owned by the Visitor or its employees, agents, assigns, and invitees and arising in connection with his/her presence at the Site.

Visitor Initials: _____

Parent or Guardian's Initials: _____

5. The Visitor further hereby AGREES TO DEFEND, INDEMNIFY, and otherwise HOLD HARMLESS the RELEASEES, to the fullest extent of the law, with regard to any loss, liability, damage, or costs, including court costs and attorney fees, that they may be incurred during or due to the Visitor's presence at the Site, however caused. This indemnity shall not be construed to negate, or abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist under law except to the extent that it is caused by the sole negligence of any party indemnified hereunder in which case this obligation shall not apply relative to such indemnified party.

6. It is the Visitor's express intent that this Waiver of Liability and Hold Harmless Agreement shall bind its successors and assigns and shall be deemed as a RELEASE, WAIVER, DISCHARGE, AND COVENANT NOT TO SUE the above-named RELEASEES for any claim or cause of action released or waived hereby for any injury, death, loss or damage to myself or my property arising out of my presence on the Site or participation in or observation of any Activities. The Visitor hereby further agrees that this Waiver of Liability and Release shall be construed in accordance with the laws of the State of [Site location]. The Visitor further expressly agrees that the foregoing waiver and hold harmless agreement is intended to be as broad and inclusive as is permitted by the law of the State of [Site location] and that if any portion thereof is held invalid, it is agreed that the balance shall, notwithstanding, continue in full legal force and effect to the fullest extent permitted by applicable law. This instrument does not, however, release any claims for workers' compensation benefits (if any) that Visitor or his/her heirs, personal representatives, administrators, executors, successors and assigns (collectively, "Heirs and Assigns") may have, or any claims that Visitor or his/her Heirs and Assigns may have under or against any benefit plans sponsored by Visitor's employer, including claims under disability or life insurance plans, resulting from Visitor's engaging in or observing the Activities.

7. By signing below, and in consideration of the grant of permission to observe the activities at the Site, the Visitor, on his/her own behalf and on behalf of his/her Heirs and Assigns does hereby WAIVE AND RELEASE any and all claims, demands, causes of action, suits and rights that Visitor, or any of his/her Heirs and Assigns, now have or later may have against the Releasees for personal injury (including death) or for loss or damage to Visitor's property resulting from or arising out of my accessing the Site and taking part in and/or observing any one or more of the Activities.

8. IN SIGNING THIS RELEASE, THE VISITOR ACKNOWLEDGES AND REPRESENTS THAT the Visitor and/or its legal representatives has fully read the foregoing Waiver of Liability and Release, understands it and signs it voluntarily as a free act and deed; no oral representations, statements, or inducements, apart from the foregoing written agreement, have been made; the Visitor is at least eighteen (18) years of age, fully competent and authorized to sign on behalf of its entity; and the Visitor executes this Waiver of Liability and Release for full, adequate, and complete consideration fully intending to be bound by same.

9. The Visitor acknowledges that he/she has been afforded the right and opportunity to negotiate the terms of this instrument, and that Visitor hereby waives such right. The Visitor understands that by choosing voluntarily to sign below, he/she is giving up important legal rights. By signing below, the Visitor certifies that he/she has been given the opportunity and sufficient time to read and ask questions regarding this instrument, and to seek independent legal counsel with respect to this instrument, and that the Visitor is signing this instrument voluntarily.

THIS IS A WAIVER, RELEASE, AND COVENANT NOT TO SUE—PLEASE READ CAREFULLY BEFORE SIGNING

I, the Visitor, have read this Waiver of Liability and Release carefully, understand its significance, and voluntarily agree to all of its terms.

If Signed by Parent or Guardian (if Visitor is under 18 years of Age): I verify that the dangers of the activities and the significance of this Release and Waiver were explained to the Visitor and that the Visitor understood them.

Acknowledged and Agreed:

Visitor		**Parent or Guardian**	
Signature:	_____	Signature:	_____
Name (Please print):	_____	Name (Please print):	_____
Date:	_____	Date:	_____

Archive completed form in Master File "1100 Visitor Waivers".

ATTACHMENT F – EVERY SITE VISIT CHECKLIST

This checklist is to be completed by a Technician every time a site is visited. If any issues are found while conducting these checks, report them to your manager and ensure a follow up work order is created.

- ☐ Inspect site perimeter for signs of forced entry or other damage.
- ☐ Clean pyranometers with a soft cloth and verify tilt.
- ☐ Inspect inverter air filters and clean, if applicable.
- ☐ Inspect MV transformers for signs of oil leaks, damage, and general housekeeping per SPCC plan.

Applicable WO #(s): _____

ATTACHMENT G – CONTRACTOR PERMIT

We look forward to working with your personnel at Cypress Creek Renewables (CCR) facilities. We believe that the "safety culture" at each facility is further enhanced if we ensure our contractors can communicate and understand our facility's policies and procedures, which are based on OSHA's regulatory standards. Personnel who have received (remain current in) OSHA-required training are better aware of:

a. The types of hazards that may be present;
b. The procedures or measures they need to use to avoid or control their exposure to these hazards;
c. How to contact CCR to report an injury, illness, incident, or safety concern; and,
d. What to do in case of emergency.

This agreement is to be filled out any time a contractor is performing work on a Cypress Creek Renewables site and ensures that the Contractor's Pre-Job Brief meets or exceeds that of Cypress Creek Renewables.

	Contractor Initials
1. "A copy of the relevant Job Brief, which contains applicable Job Hazard Analysis(es) for the site/job(s), has been offered to me".	
2. Prior to starting job(s), all personnel involved with the task will participate in a Job Brief, including subsequent daily/shiftly reviews, which covers applicable Job Hazard Analysis(es).	
3. A written procedure is being followed for the task. If there is no written procedure, steps will be listed on the Job Brief and/or JHA.	
4. Acknowledgement of OSHA-required Training – Certify as the Foreman for personnel you will bring on CCR property that they have received *at least* the basic training required by OSHA, which is explained in OSHA Publication #2254, and that their training is relevant to work they will perform at CCR. For most services at CCR-managed facilities, these topics *may* include but are not limited to: • Fall Protection • Electrical Safety • First Aid • Control of Hazardous Energy (LOTO) • Emergency Response • Personal Protective Equipment • Hazard Communication • Hazardous Materials • Fire Prevention • Ladders • Trenching & Excavating • *etc.*	
5. Work will be in compliance with applicable regulations (OSHA, EPA, NEC/NFPA, etc.)	

Certification – *"I certify that personnel we bring to work on CCR sites have received the proper training as outlined, above. Furthermore, our workers possess both training and experience relevant to the work we will perform."*

(Company)	(PRINT Name)	(Signature)	(Date)

≒Keep this document with the relevant Job Brief≒

ATTACHMENT H – STOP-WORK OBSERVATION

When an unsafe condition, hazard, or behavior is perceived on the job site, *you* have an obligation and appropriately supported authority to intervene on behalf of person(s) at potential risk.
Continue with the **S-A-F-E-R** sequence:

1. **S**top Work – Ask person(s) to temporarily stop work and explain you've identified one or more potential hazards related to the job site.
2. **A**ssess the Situation – Once work activities have ceased and workers are removed from the immediate area, discuss the work site conditions and the hazard(s) you observed. Solicit ways the job can be done with fewer/no hazards.
3. **F**ile this Report – Gather the following information:

Submitted by: _____ Department: _____

Site/Location: _____ Date/Time: _____

Work Description (incl. WO#): _____

_____

Potential Hazard(s): _____

_____

Personnel/Contractor(s) Involved: _____

_____

4. **E**radicate the Hazard(s) – Make the area as safe as possible by implementing measure(s) discussed during the Assessment. Remove hazard(s) or develop defenses against remaining hazard(s). Document what was accomplished.

How Hazard(s) eliminated: _____

_____

_____

5. **R**esume Work – After hazards have been eliminated or otherwise avoided/minimized, and all workers agree to resolution(s), then work can resume.

Forward this documentation to Shared Services (SS), who will consider it for further review/publication.

ATTACHMENT I – JOB BRIEF PACKAGE FOR CONTRACTORS

As part of our ongoing efforts to ensure all employees and contractors of CCR Operations and Maintenance (O&M) are able to do their job safely and efficiently, we recognize that *communication* is a **major** factor in successfully reaching that goal.

We would like to include your company in our inspections and documentation platform, ProntoForms. The primary benefit to using ProntoForms is improving the day-to-day accountability and Job Brief reviews for all users; CCR personnel and contractors alike.

Here's how to access ProntoForms:

1. Install the app from one of the links, below:

   Link to useful app info
2. Use the login credentials we will email to you. Contact luke.wyatt@ccrenew.com if you do not have it.
3. Once installed, open the app!
4. Select "Forms" to access the Job Brief Package.
5. Click on "Job Brief Package – Contractor".
6. Follow the directions on the form.
7. Once complete, send the form by clicking  , normally in the upper-right of the app.

The form is intuitive, but don't hesitate to ask questions. I'd be more than happy to go over the form with you, and we welcome feedback on how to better use this tool.

Note: Be sure to leave the app running in the background until it has uploaded your submissions. It will automatically do so once it is in-range to a cell/internet connection.

CYPRESS CREEK RENEWABLES

INCLEMENT WEATHER OPERATIONS

4100.007-SOP07

Revision 1.2

Original Documentation and Owner/Edits: CCR Shared Services

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INTRODUCTION

1. PURPOSE

This procedure provides guidance and direction to Cypress Creek Renewables O&M (CCR OM), in operating generating facilities during inclement weather periods. It shall be referenced as soon as practical, after learning of an inclement weather threat to CCR property and/or operating facility.

The CCR Shared Services group is responsible for updating this procedure, based on actions taken during actual periods of inclement weather.

2. SCOPE

This procedure applies to personnel associated with CCR OM, as well as vendors and contractors who may be completing work on sites where CCR OM is the Operations and Maintenance provider.

3. RESPONSIBILITIES

3.1 O&M MANAGEMENT

3.1.1. Serve as C4 Incident Commander and/or Chief of Staff.

3.1.2. Provide guidance to response teams.

3.1.3. Ensure Emergency and Incident response plans are maintained.

3.1.4. Provide oversight and ensure response teams are trained and prepared to provide support during emergencies or incidents.

3.2 INCIDENT COMMANDER

3.2.1. Performs initial notification of storms, such as a hurricane, via the Incident Report Portal and Emergency Incident Response protocol.

3.3 HURRICANE RESPONSE COORDINATOR

3.3.1. Serves as the primary Point of Contact (PoC) for coordinating hurricane-related response.

3.3.2. Ensure that appropriate follow-up notifications or actions are completed.

3.3.3. Ensure all actions within this procedure are delegated and completed.

3.3.4. Ensures resources are available for continued C4 operation during Hurricane response actions.

1.1 C4 Operators and Engineers

1.1.1. Provide remote response to on-site conditions

1.1.2. Execute this procedure as written to ensure immediate steps of an incident or emergency response plan are met

1.1.3. Notify Incident Commander to begin coordination of event notifications and follow-up actions.

1.1.4. Ensure each facility is placed in a safe and stable condition in accordance with available SOPs. These actions are required to facilitate response and remove hazards.

1.1.5. Ensure any applicable notification is made to other real-time operations entities (TOP, BA, RC, scheduling coordinator, etc…).

1.1.6. Maintain accurate logs during an event; facilitates reconstruction of event(s) at a later date.

1.1.7. Setup alternate operation location during a C4 Emergency.

1.2 O&M Field Personnel

1.2.1. Provide onsite inspections prior to and following a Hurricane or similar event.

1.2.2. Notify local first responders as necessary.

1.2.3. Notify C4 to perform actions in this procedure.

SPECIFIC WEATHER EVENTS

1. HURRICANE

This type of storm is normally predicted well in advance, affording personnel the benefit of prescribed checklists and action items. Completing these procedural steps will help ensure personnel safety, as well as prevent or minimize effects brought about by the hurricane.

1.1. GENERAL

1.1.1. Reference facility-specific SOPs for actions required to secure facility operations as may be deemed necessary by this procedure

1.1.2. Steps in this procedure are intended for use as *guidance*. C4 management, Hurricane Response Coordinator, and O&M management may take additional actions and omit or change the order of the actions at their discretion.

1.1.3. An incident lessons learned should be conducted following the hurricane event to analyze the response(s) and give feedback to improve this procedure.

1.1.4. Actions to be taken in response to this procedure must be communicated to the site's owner, beforehand.

1.1.5. Hurricane Resources

1.1.5.1. Weather Underground – Provides current and historical information.

1.1.5.2. National Hurricane Center

1.1.5.3. The following links provide info such as evacuation orders/routes, shelters, road conditions, hurricane guide, and other useful information. Other States may have similar resources.

a. ReadyNC

b. TX Hurricane Center

c. TX Emergency Management Plan (2020)

d. Beecher Carlson Hurricane Preparation Guide

1.2. POTENTIAL HURRICANE IMPACT ISSUED BY NWS

At this point, the NWS will normally have a defined zone of probability regarding the hurricane's anticipated landfall. When a Hurricane Impact Zone has been issued by the NWS, and the storm can reasonably be expected to negatively impact one or more sites:

1.2.1. The Incident Commander will:

1.2.1.1. Perform initial notification of the hurricane via the Incident Report Portal;

1.2.1.2. Notify management via the Emergency Incident Response protocol; and,

1.2.1.3. Identify the Hurricane Response Coordinator.

Track progress of Hurricane Response within the Hurricane Response Workspace (SmartSheet). The Hurricane Response Coordinator assumes responsibility for ensuring the remainder of this Hurricane procedure is completed.

1.2.2. The Hurricane Response Coordinator will:

1.2.2.1. Track progress of Hurricane Response in SmartSheet in the Hurricane Response Workspace

1.2.2.2. Review path of hurricane and identify all facilities impacted by the Hurricane Watch.

a. Overlay 34kt wind speed probabilities from the NHC GIS website:

b. Create a copy of the latest O&M Google Map and downloading the respective files, creating new layers, and uploading the files into the map.

c. Sites that fall into >10% probability for tropical-storm-force winds will be considered as *affected* for the purposes of this process.

d. Ensure that the map is available to anyone with the link.

e. Notify CCR OM management of the affected facilities by sending an email to hurricane.response@ccrenew.com.

1.2.2.3. Generate WO for each tracker site and site not visited in the last 4 weeks by CCR personnel (does not include contractors) to prepare for storm season.

a. This action may be performed through SalesForce "FSM Automation"; Fernando Rodriguez SME. If not aware of how to accomplish this, please request that PowerFactors support create work orders basis an affected site list.

b. Tracker sites shall have a specific tracker stow work orders that are separate from the site pre-inspection work orders to effectively manage stow-related activities and repairs and to document performance questions in monthly O&M reporting.

c. Review logs for inspections that have occurred within the last month.

d. If a recent onsite inspection has not been performed, create WOs for pre-storm inspection and preparation.

e. If a recent onsite inspection has been performed AND potential hazards have been identified, create WO for pre-storm preparation activities.

1.2.2.4. Schedule daily teleconference(s) with Managers, including Special Projects, for planning:

a. Morning meeting agenda: Discuss safety issues/concerns or tips, current weather conditions, any adjustments to the site list, updates from the prior day, priorities, and demobilization plans as the storm approaches our staff.

b. Evening meeting agenda: Safety of technicians, progress for the day, barriers encountered during the day, and priorities for the next day.

c. Update the O&M Google Map with the latest GIS data from the NHC GIS website before the meeting

d. Suggest 0830 and/or 1730 meeting times.

e. Distribute morning and evening updates to hurricane.response@ccrenew.com.

1.2.3. The Field Directors and C4 Management Team will:

1.2.3.1. Reference facility-specific SOPs for actions required to secure facility operations.

1.2.4. The Field Directors will ensure that the following are completed:

1.2.4.1. Visit and photograph all sites that have not been visited in the last 4 weeks as identified in the affected site list and documented in the Hurricane Response Smartsheet.

1.2.4.2. Secure all loose materials on site.

1.2.4.3. Clear any blockages or debris in water drainage paths.

1.2.5. Engineering will:

1.2.5.1. Coordinate with tracker manufacturers to obtain or confirm their recommended stow positions or coordinate remote stows if access/control is not yet available.

1.3. 48-72 HOURS PRIOR TO HURRICANE'S ARRIVAL

1.3.1. The Third Party (3P) team will:

1.3.1.1. Notify Owner(s) of potential impacts to facility. Determine if owner requests any specific facility actions in addition to the following pre-storm preparation activities (i.e. site shutdown).

1.3.1.2. Gain Owner approval for any tracker stows activities and update the Hurricane Tracker Smartsheet as they are granted.

1.3.1.3. See Appendix C

1.3.2. The Maintenance Planner & Scheduler will:

1.3.2.1. Coordinate with appropriate utility to determine following information:

a. Communication protocol during storm

b. Operational restrictions during storm

c. Restoration protocols following storm

d. Upload contact information into Salesforce once it is obtained

e. Communicate protocols to the O&M team as necessary

1.3.3. The Hurricane Response Coordinator will, with the support of the Field Directors:

1.3.3.1. Consider dewatering equipment for flood-prone sites.

Quincy, Shoe Creek, Texas sites

1.3.3.2. Ensure the following have been performed for all facilities that will be impacted by Hurricane conditions and document in Hurricane Tracker and preparation WO:

1.3.3.3. Inspection of the following conditions

a. Drainage paths clear

b. Potential air-borne hazards are removed or secured

c. If the site has trackers, ensure trackers are stowed and the stows are documented in the Hurricane Smartsheet and open Operational Log entries.

d. Any tracker stow issues shall be communicated to the field team for resolution.

1.3.3.4. If requested by the utility or owner, perform controlled shutdown of the facility.

1.3.4. C4 Management will:

1.3.4.1. Develop a staffing and location for continued operation of C4

1.3.4.2. Test all backup equipment (typ. By PM on the weekends)

1.3.4.3. Ensure backup food, water, bedding, handheld lights, hygiene supplies are available for at least 1 week of isolated operations.

1.4. DURING THE HURRICANE

1.4.1. C4 or backup control center will maintain continuous operations throughout the event.

1.4.2. Do *not* dispatch field personnel once storm has met/exceeded "tropical storm" status, or if there have been official reports of flooding.

1.4.3. Work Orders and Operations Logs will be created by the Operations personnel during the event to record observations of on-site issues.

1.4.4. If a facility or a portion of the facility trips during the event, the equipment should not be attempted to be reset remotely.

1.4.4.1. Equipment that auto-recloses shall be inspected on a separate basis; however, these systems do not operate unless they determine it is safe to re-energize and lock out after several attempts. Thus, it is not necessary to disable them for hurricane preparation.

1.4.5. Site outages should be reported to the utility based on protocols established in 7.5.2.

1.4.6. The Hurricane Response Coordinator shall distribute no less than daily communications with the following information to hurricane.response@ccrenew.com.

1.4.6.1. Location of the storm.

1.4.6.2. Operational status of impacted facilities.

1.4.6.3. Operational status of C4.

1.4.6.4. Restoration plan.

1.4.6.5. The Third-Party Account Management team shall be responsible for distributing the above in a way that is presentable to these customers.

1.5. SPECIFIC INSTRUCTIONS FOR C4

The C4 Manager shall ensure that the following items are completed:

1.5.1. Test backup generator if not already tested within last 7 days.

1.5.2. Create staffing plan for continuous operations coverage for duration of the storm.

1.5.3. Test all backup communications devices:

1.5.3.1. Go-Bag laptop

1.5.3.2. Hot-spot

1.5.3.3. Failover network

1.5.3.4. Cell phone

1.5.4. Determine if backup control center activation is required

1.5.5. If backup control center activation is required, ensure appropriate procedures are executed.

1.6. HURRICANE RESTORATION

1.6.1. Hurricane restoration actions shall not commence without review and approval from the Hurricane Response Coordinator, supported by the Field Directors in the affected regions.

1.6.2. The Hurricane Response Coordinator shall:

1.6.2.1. Distribute no less than daily reports of restoration activities to hurricane.response@ccrenew.com.

1.6.2.2. Schedule and hold Hurricane Restoration conference call briefing.
Agenda shall include at a minimum:

a. Safety brief for dealing with post-Hurricane conditions including flooding, power outages, downed and energized lines, delayed first responders;

b. Identification of local points of contact; and,

c. Appointment of accountable parties for restoration activities.

1.6.2.3. If the C4 was impacted or backup control center was activated, commence restoration of normal C4 operations

1.6.3. For impacted facilities:

1.6.3.1. The Hurricane Response Coordinator or designee shall:

a. Create WOs for post-storm inspections

b. Inspect all facilities impacted by Hurricane

1) Prioritize inspections for facilities where equipment was impacted during storm (i.e. site or inverter outages)

2) Inspections shall note the following, at minimum:

a) Erosion concerns

b) Fence integrity

c) Fallen trees or other foreign material

d) Damage to any facility equipment

1.6.3.2. The site Operations Engineer and Account Managers (if to a third-party) shall

a. Notify owner of all findings during on-site inspection

b. Create child work orders for individual items found during the post-storm inspections that need remediation

1.6.3.3. C4 shall complete the following items if deemed safe to re-energize equipment post-inspection

a. Follow utility protocols for facility energization

b. Restore impacted equipment with facility or equipment specific procedures

c. Ensure all stowed trackers are returned to normal operation

d. Close out post-storm inspection WO and create/close relevant logs for remote actions

1.6.3.4. For items that are deemed unsafe to energize

a. Perform any actions that may be needed to ensure continued safety of site or personnel

b. Create WO documenting remaining conditions

c. Coordinate with owner for insurance claim if necessary

1.6.4. The Hurricane Response Coordinator, with support from Field Directors and Safety may determine that it is advisable to exit this procedure and resume normal work management protocols.

1.6.4.1. The Incident Commander shall de-activate the incident once a decision has been made by the Hurricane Response Coordinator.

1.6.5. Operations Engineers and Account Managers shall notify all Owners.

2. THUNDERSTORMS

2.1. Lightning Detection and Warning

Commercially available systems can provide advance warning of lightning hazards. However, no system can detect the "first strike", detect all lightning, or predict lightning strikes. Therefore, the most reliable means of lightning prevention is to rely on *weather reports*.

2.2. Work policies specific to this section

2.2.1. When work *may* be affected by thunderstorms, this procedure and related JHA shall be reviewed/referenced during the Job Brief process.

2.2.2. All employees will stand down and seek shelter when lightning reaches a range of eight miles.

Determination of distance can be accomplished with these methods:

2.2.2.1. 40/30 rule (adapted from 30/30 thumb-rule)

Count the time from the *flash* to the *bang* – for each five seconds between, the lightning is approximately one mile away. A count of 40 seconds means the thunderstorm is about eight miles away.

2.2.2.2. Meteorological maps via live online or TV/radio broadcasts.

2.2.3. During storms or high winds, OSHA prohibits activities such as work on/from scaffolds; work involving crane hoists; and work on top of walls

2.3. Notifications to Affected Employee(s)

2.3.1. Determine location of appropriate shelter and evacuation routes:

Shelter Examples

- Substantial building w/ electricity or plumbing
- Enclosed metal-topped vehicles with windows up

Shelter Alternatives, if none of the Shelter Examples are available:

- Avoid all water, metal objects, electrical wires, machinery, motors, trees, poles, etc.
- Avoid being on higher ground

2.3.2. Determine distance from the storm and maintain updates.

2.3.3. Determine whether/when to seek shelter in accordance.

2.3.4. Upon hearing thunder, seeing lightning, or perceiving any other warning sign(s) of an approaching thunderstorm, the work supervisor shall:

2.3.4.1. Immediately notify workers of the approaching storm; determine need for shelter.

2.3.4.2. Account for employees at the shelter(s), as necessary.

3. WINTER WEATHER

Snow, Ice, Freezing-Rain, Sleet… it's all very pretty until someone gets hurt, at the worksite or at home, due to conditions related to the weather season. Slips, trips, and falls can quickly affect employees unless precautions are taken to minimize the precursors that lead up to such an event.

The following information should be considered during seasons that can produce wintery precipitation and conditions:

3.1. PERSONAL PRECAUTIONS AND CONSIDERATIONS

3.1.1. When work *may* be affected by thunderstorms, this procedure and related JHA shall be reviewed/referenced during the Job Brief process.

3.1.2. Wear appropriate shoes during icy/snowy conditions.
DO wear boots or shoes with good treads.
DO ***NOT*** wear heels or shoes with slick soles that increase the risk of slipping.

3.1.3. Take the time to travel safely.
DO ***NOT*** walk across ice or snow-covered ground when cleared paths are available.

3.1.4. The potential for falls is high when outside temperatures are near freezing. Be aware of changing conditions.

3.1.5. Use caution when walking in lots. It is difficult to remove snow and apply ice-melt agents between parked cars.

3.1.6. Use care when entering or exiting vehicles and use the vehicle for support.

3.1.7. Don't carry or swing heavy loads such as large boxes, cases, or purses that may cause you to lose balance when walking.

3.1.8. Don't walk with your hands in your pockets, as it reduces the ability to use your arms for balance if you slip. Your hands may feel warm in your pockets, but they'll feel tied when your body instinctively tries to use them to stop a fall!

3.1.9. Bending your knees and taking slower steps can reduce your chances of falling.

3.1.10. Drivers should use extra caution and always give pedestrians the right-of-way during inclement weather and extreme temperature conditions.

3.1.11. While every attempt should be made to come to work if roads are open, use your best judgment as to the appropriateness of driving in inclement weather and act accordingly.

3.1.12. Consider having personnel work from home, giving them ample time to travel.

3.2. PREVENTIVE MEASURES

3.2.1. Clear excessive snow and ice in common roadways, walkways, and thoroughfares by shoveling and applying ice-melt.

3.2.2. Ensure cleared snow/ice does not hinder operation of array table-tilt mechanisms.

3.2.3. Aside from adverse effects of road clearing measures, winter weather is not expected to cause unplanned outages at solar facilities.

4. FLOODING

Flooding is a coast-to-coast threat to some part of the United States and its territories nearly every day of the year. If you know what to do before, during, and after a flood you can increase your chances of survival and better protect property. For instance, it is vital to know what to do if you are driving and hit a flooded road.

Flooding typically occurs when prolonged rain falls over several days, when intense rain falls over a short period of time, or when an ice or debris jam causes a river or stream to overflow onto the surrounding area. Flooding can also result from the failure of a water control structure, such as a levee or dam. The most common cause of flooding is water due to rain/snowmelt that accumulates faster than soils can absorb it or rivers can carry it away. Approximately 75% of all Presidential disaster declarations are associated with flooding.

4.1. Types of Flooding[1]

4.1.1. Flash Flood

Flash floods are exactly what the name suggests: floods that happen in a flash! Causes of flash flooding include heavy rain, ice or debris jams, and levee or dam failure. The most common is simply the result of copious amounts of rainfall from thunderstorms. These floods exhibit a rapid rise of water over low-lying areas. In some cases, flooding may even occur well away from where heavy rain initially fell. This is especially common in the western United States where low lying areas may be very dry one minute and filled with rushing water from upstream the next.

4.1.2. River Flood

River flooding occurs when river levels rise and overflow their banks or the edges of their main channel and inundate areas that are normally dry. River flooding can be caused by heavy rainfall, dam failures, rapid snowmelt and ice jams.

River flooding is classified as Minor, Moderate, or Major based on water height and impacts along the river. Minor river flooding means that low-lying areas adjacent to the stream or river, mainly rural areas and farmland and secondary roadways near the river flood. Moderate flooding means water levels rise high enough to impact homes and businesses near the river and some evacuations may be needed. Larger roads and highways may also be impacted. Major flooding means that extensive rural and/or urban flooding is expected.

4.1.3. Dam/Levee Failure

Dam failure or levee breaches can occur with little warning. Intense storms may produce a flash flood in a few minutes or hours while other failures and breaches can take much longer to occur, from days to weeks.

[1] Adapted from National Weather Service

4.1.4. Storm Surge

The highest percentage of all hurricane and tropical cyclone deaths are due to flooding. Coastal flooding generally occurs with a land-falling or near-land system such as a Tropical Storm or Hurricane. The destructive power of storm surge and large battering waves can result in loss of life and/or destruction of buildings.

Tropical systems and coastal storms can affect more than just the states lining the coasts. Storms that strike the coast of the Gulf of Mexico often track northward into the eastern half of the U.S. before being caught by the easterly flow and pushed off into the Atlantic. As a storm moves inland, away from its primary moisture source (the oceans or Gulf), precipitation amounts will begin to diminish; however, depending on the strength of the storm, the amount of moisture being carried with it can take heavy rainfall well into the interior states.

4.1.5. Burn Scars/Debris Flows

In areas where wildfires have occurred, vegetation may have been burned away and soil properties may have been altered, leaving behind bare ground that tends to repel water. This is called a burn scar. When rain falls over a burn scar, the ground is unable to absorb the moisture, leaving the water to collect or run across the surface of the ground towards the lowest point. This type of flooding is possible anywhere.

Without vegetation to hold the soil in place, flooding can produce mud and debris flows. Areas where ground cover has recently changed dramatically, such as an area impacted by a wildfire, can be at a higher risk for mudflows.

4.1.6. Ice/Debris Jams

Ice jams are common during the winter and spring along rivers, streams and creeks in the higher latitudes of the continental U.S. as well as in Alaska. As ice or debris moves downstream, it may get caught on any sort of obstruction to the water flow. When this occurs, water can be held back, causing upstream flooding. When the jam finally breaks, flash flooding can occur downstream.

4.1.7. Snowmelt

As the name implies, this type of flooding occurs when the major source of floodwater is from melting snow. A snowpack can store water for an extended amount of time until temperatures rise above freezing and the snow melts. This frozen storage delays the arrival of water to the soil for days, weeks, or even months. Flooding can occur when there is more water than the soil can absorb or can be contained in storage capacities in the soil, rivers, lakes and reservoirs. Most often, snowmelt is a relatively slow phenomenon. Snowmelt rates are usually comparable to light or moderate rainfall.

4.1.8. Dry-Wash

In dry areas of the U.S. significant rainfall can quickly cause flooding. For example, much of the year the desert southwest is very dry. Because of the heat and arid climate, the ground is quite hard and unable to absorb much of the precipitation that does fall. A thunderstorm could take place several miles away, but eventually that water will arrive downstream, which can cause water to rise to flood stages.

4.2. Flood Alerts – These are established by the National Weather Service.

4.2.1. Flood Advisory – Issued when a specific weather event that is forecast to occur may become a nuisance. A Flood Advisory is issued when flooding is not expected to be bad enough to issue a warning. However, it may cause significant inconvenience, and if caution is not exercised, it could lead to situations that may threaten life and/or property.

4.2.2. Flood Watch – Issued when conditions are favorable for a specific hazardous weather event to occur. A Flood Watch is issued when conditions are favorable for flooding. It does not mean flooding will occur, but it is possible.

4.2.3. Flood Warning – Issued when the hazardous weather event is imminent or already happening; flooding is imminent or occurring.

4.2.4. Flash Flood Warning – Issued when a flash flood is imminent or occurring. A flash flood is a sudden violent flood that can take from minutes to hours to develop. It is even possible to experience a flash flood in areas not immediately receiving rain.

4.3. Actions and Precautions

4.3.1. When work *may* be affected by flooding, this procedure and related JHA shall be reviewed/referenced during the Job Brief process.

4.3.2. Before a Flood

4.3.2.1. Pay attention to weather forecasts.

4.3.2.2. Ensure a means of communication will be available; charge phones.

4.3.2.3. Inspect First Aid kits and AED's.

4.3.2.4. Inventory prescription medications. Prepare for the potential lack of supply.

4.3.2.5. Inventory fuel supplies, especially for generators and dewatering pumps.

4.3.2.6. Consider storage/inventory of food and water in case of isolation.

4.3.2.7. Ensure an ample supply of batteries are available (radios, phones, etc.).

4.3.2.8. Consider utilizing alternate routes of evacuation for your area.

4.3.3. When a Flood is Imminent

4.3.3.1. Seek continual updates of weather forecast.

4.3.3.2. Assemble an emergency kit
- ✓ First Aid kit and AED
- ✓ Food, Water, and Prescription Medications
- ✓ Batteries, Flashlights, etc.

4.3.3.3. Pay attention to changing access to various routes of evacuation. If *any* route may be threatened by rising water, evacuation is highly suggested!

4.3.3.4. Heed local evacuation warnings!

4.3.3.5. Consider test-starting generators and dewatering pumps.

4.3.3.6. Consider placing tilt-arrays in 'stow' position.

4.3.3.7. Consider powering down sites that have historically been adversely affected by flood waters.

4.3.4. During a Flood

4.3.4.1. Do not walk through flooded areas. It can be difficult to tell how deep the water is and it hides what lies underneath. Even shallow, moving water can make you fall.

4.3.4.2. If you *have* to walk in water, wherever possible, walk where the water is not moving. Use a stick/probe to check the ground's firmness.

4.3.4.3. Do not drive into flooded areas. If floodwaters rise around your vehicle, abandon the vehicle and move to higher ground, if you can do so safely.

4.3.4.4. Monitor operation of dewatering pumps.

4.3.4.5. Monitor operation of Storm Water Management (SWM) ponds.

4.3.4.6. Monitor containment dikes, and empty in accordance with operating procedures.

4.3.4.7. Do ***not*** touch or approach electrical equipment if you are wet or standing in water!

4.3.4.8. **Beware of wild animals!**
Flooding displaces them from their natural habitat such that they can encroach upon your living/working spaces. They can be very agitated and more apt to panic at even the sight of a human; liable to fight or even chase you. Certain animals can pose serious danger to humans such as snakes and alligators.

4.3.5. After a Flood

4.3.5.1. Avoid floodwaters – May be contaminated by oil, gas, or raw sewage. It may also be electrically charged from underground or downed powerlines.

4.3.5.2. Beware of roads where floodwaters have receded as roadbeds may have weakened and could collapse under a vehicle's weight.

4.3.5.3. Stay away from downed powerlines.

4.3.5.4. Stay away from flooded electrical generation equipment and related gear. Grounded energized connections can discharge to surrounding soil. The difference in potential between your feet while walking can be enough to electrocute you!

4.3.5.5. Arrange to service damaged sewage systems as soon as possible.

4.3.5.6. Clean and disinfect everything that was in flooded waters. Discard foodstuffs that came in contact with floodwaters.

4.3.5.7. Avoid mud left from floodwater as it can contain sewage or hazardous chemicals.

4.3.5.8. Consider post-storm aerial surveys to assist in recovery.

5. TORNADO

Once the National Weather Service issues a tornado watch for the geographic area where the facility is located, this procedure will be implemented.

The purpose of this procedure is to ensure personnel safety, as well as preventing or minimizing damage to plant equipment in the event of a tornado.

Because tornadoes often emerge from powerful thunderstorms with accompanying rain and lightning, they are often difficult to see until it is too late to take cover. It is essential to listen to local Emergency Alert System stations or to a NOAA weather radio during thunderstorms.

5.1. What is a Tornado?

A tornado is a violently rotating column of air extending from a thunderstorm to the ground. Strong tornadoes can reach an awesome intensity, with wind speeds exceeding 200 mph and sometimes even approaching 300 mph. Tornadoes are highly unpredictable, appearing separately or in clusters and varying greatly in lengthy, width, direction of travel and speed.

Tornadoes commonly develop from severe thunderstorms but can also accompany tropical storms and hurricanes as they move onto land.

North Carolina has an average of 29 tornadoes per year, with the most active months being April and May.

5.2. Duties and Responsibilities

5.2.1. Regional Managers are responsible for the implementation of this procedure and shall ensure the procedures are promptly carried out by the respective personnel.

5.2.2. The Incident Commander shall be immediately notified of any discrepancies in the implementation of this procedure.

5.2.3. Regional Managers should continually monitor weather-related venues for updated information and communicate updates to affected personnel and Directors.

5.3. Tornado Intensity Ratings

The Enhanced Fujita Scale, or EF Scale, is used to rate the intensity of tornadoes. A tornado's EF rating is determined by the damage it causes to a man-made structure. It is important to remember that any tornado is potentially dangerous, and that a tornado's strength can only be determined after it has dissipated. Therefore, it is essential that every tornado be met with every safety precaution.

The Enhanced Fujita Scale of Tornado Intensity

EF0: Light Damage (65-85 MPH)
Peels surface off some roofs; some damage to gutters or siding; branches broken off trees; shallow rooted trees pushed over.

EF1: Moderate Damage (86-110 MPH)
Roofs severely stripped; mobile homes overturned or badly damaged; loss of exterior doors; windows and other glass broken.

EF2: Considerable Damage (111-135 MPH)
Roofs torn off well-constructed houses; foundations of frame homes shifted; mobile homes completely destroyed; large trees snapped or uprooted; light object missiles generated; cars lifted off ground.

EF3: Severe Damage (136-165 MPH)
Entire stories of well-constructed houses destroyed; severe damage to large buildings such as shopping malls; trains overturned; trees debarked; heavy cars lifted off the ground and thrown; structures with weak foundations blown away some distance.

EF4: Devastating Damage (166-200 MPH)
Well-constructed houses and whole frame houses completely leveled; cars thrown and small missiles generated.

EF5: Incredible Damage (>200 MPH)
Strong frame houses leveled off foundations and swept away; automobile-sized missiles fly through the air in excess of 100 meters; high-rise buildings have significant structural deformation; incredible phenomena will occur.

5.4. Tornado Watch versus Tornado Warning

In general, there are no means available to give an advanced warning of a tornado due to their very nature and make-up. Stay tuned to local radio stations or internet links for weather reports, or listen to a NOAA weather radio for more detailed information regarding when weather conditions are favorable for the formation of tornadoes.

Literal case-by-case pre-planning is not feasible with tornado preparedness due to their sudden and unpredictable nature. However, here are some things to consider when local weather conditions favor the formation of tornadoes:

5.4.1. When a Tornado Watch is issued:

5.4.1.1. Tornadoes could develop in your area.

5.4.1.2. Stay tuned to your local radio, TV, internet, or NOAA weather radio for further information and possible warnings.

5.4.1.3. Ensure all departments are notified of the "tornado watch". This will help departments account for personnel.

5.4.1.4. Conduct a department-specific review of this procedure.

5.4.1.5. Pre-plan activities to accommodate rapidly ceasing work.

5.4.1.6. Gather communications equipment; ready for rapid deployment.

5.4.1.7. Consider minimizing personnel making exterior rounds. Ensure that a "buddy system" (two or more persons) is used for personnel performing duties outside or in outlying areas, where necessary.

5.4.1.8. No personnel should consider working outdoors, or in outlying areas, if wind speeds are in excess of 50 MPH.

5.4.1.9. Be prepared to quickly seek cover!

5.4.2. When a Tornado Warning is issued:

5.4.2.1. Steps for a *Tornado Watch* should have already been carried out.

5.4.2.2. A tornado has been sighted, or has been indicated, by NWS Doppler radar.

5.4.2.3. Warnings are given to individual counties or cities and include the tornado's location, direction and speed.

5.4.2.4. Ensure all departments are notified of the "tornado warning". This will help departments account for personnel.

5.4.2.5. Be prepared to immediately take cover!

5.4.2.6. Evaluate further actions according to the tornado's anticipated location, speed, track, etc.

5.5. When a tornado is actually spotted near or threatens the facility:

5.5.1. Attempt to communicate this to all departments, via as many means as practical and as rapidly as possible!

5.5.2. Immediately seek shelter.

5.6. If a Tornado is Headed Your Way

5.6.1. Immediately seek shelter in the nearest substantial building. Move to a small, windowless interior office, closet, bathroom, or interior hall on the lowest level of the building. Be sure to use the stairs to reach the lowest level, not an elevator. Protect your body from the possibility of flying debris.

5.6.2. Take precautions if you *cannot* get to a substantial building. If you are (in):

5.6.2.1. Open Buildings (sheds, lean-to's, etc.)

Try to get into an interior room or hallway. If there is no time to go anywhere else, seek shelter right where you are. Try to get up against something that will support or deflect falling debris. Protect your head by covering it with your arms.

5.6.2.2. Trucks and Automobiles:

Get out of the vehicle and try to find shelter inside a sturdy building. A culvert or ditch can provide shelter if a substantial building is not nearby – lie down flat and cover your head with your hands. Do not take shelter under a structure such that debris could get blown under them or the structures themselves could be destroyed. Be aware of flash flooding that could occur in the culvert or ditch.

5.6.2.3. Outdoors

Try to find shelter immediately in the nearest substantial building. If no buildings are close, lie down flat in a ditch or depression and cover your head with your hands.

5.6.2.4. Mobile and Semi-Mobile Structures (Connexes, substation control houses, etc.)

Do *not* seek shelter in such structures. You should leave immediately and seek shelter inside a nearby sturdy building or lie down in a ditch away from the structure, covering your head with your hands. These types of structures are extremely unsafe during tornadoes.

5.7. After the Tornado Event

5.7.1. Be aware that hazardous debris and various hidden dangers will likely be present as a result of localized damage.

5.7.2. Conduct a site-wide tour and report any damage.

5.7.3. Return equipment and plant operations to normal.

6. EARTHQUAKE

6.1. Earthquake-related Safety Concerns

Safety Hazards that emanate from an earthquake are too numerous to list in a helpful format. Nothing is 100% safe from the effects of an earthquake, which often spawns additional destruction sources like fires, floods, tsunamis, etc. Similar to a tornado, earthquakes give very little to no warning before they strike. In such cases, it is more important to "train to react", as is the basis for this section.

6.2. Earthquake Preparedness (ENS, Local News, Field Techs, etc.)

6.2.1. Seismic Hazard Maps

Utilize this site from the USGS as a guide for gaging the potential for earthquake hazards and related risks for specific areas/regions of the country. Whether steps from this section are implemented or not will likely depend on information from these maps.

6.2.1.1. **Hazard** – naturally-occurring phenomena capable of causing loss or damage.

6.2.1.2. **Risk** – The potential that exposure to the hazard will lead to a negative consequence such as loss of life or economic loss.

6.2.2. Secure Your Space

Earthquake shaking can move almost anything, even large or heavy items. Imagine your home or workplace being picked up and shaken sideways – what would be thrown around? How can you prevent it? Secure your space by identifying hazards and securing moveable items. This list provides general guidance on how to secure items prior to an earthquake. Some steps can be taken care of far in advance, while others could be taken care of within moments.

a. Move heavy or large items, such as potted plants or large speakers to the floor or low shelves.

b. Move things that can fall on you away from anywhere you spend a lot of time, such as your desk or workbench.

c. Move heavy unstable objects away from doors and escape routes.

d. Secure (or brace) electronic items such as computers and TVs with straps.

e. Hang mirrors and pictures on closed hooks.

f. Secure top-heavy furniture, cabinets, and appliances to wall studs.

g. Install latches on kitchen cabinets.

h. Secure overhead light fixtures.

6.2.3. **Plan**

a. Identify safe spots in every room you can easily reach in just a few steps, such as under sturdy desks or tables.

b. Keep flashlights and extra batteries in several places.

c. Review locations and operation of fire extinguishers

d. Ensure personnel with a disability or need extra help are accounted for with applicable help/guidance. More specific information can be found at this website.

e. If you live, work, or play in a tsunami zone, make sure everyone knows how to get to higher ground if necessary. More specific information can be found at this website.

f. Review the location of electrical circuit breakers in case rapid disconnection of power sources is required.

6.2.4. **Organize Disaster Supplies**

a. Consider assembly of a grab-and-go bag/pack: medications, first aid kit, food, etc.

b. Store emergency supplies in a secure area: clothing, blankets, gloves, tools, personal care items, etc.

c. Store an ample supply of water (~1 gallon/person/day) for at least three days, and ideally for up to a two-week span.

d. Ensure you have access to an emergency weather radio with a *public alert* feature as cellular phones and related internet connections will likely be adversely affected.

6.3. Notifications (ENS, Local News, Field Techs, etc.)

6.3.1. Since earthquakes are extremely difficult to predict, most notifications will likely come from our own employees. In addition, local news would broadcast alerts.

6.3.2. Earthquake Notification Service

6.3.3. Notify Incident Commander

6.3.3.1. Incident Commander will send out an Incident Report.

6.4. During an Earthquake

6.4.1. Drop, Cover, and Hold-On!

6.4.1.1. **DROP** down onto your hands and knees. This position protects you from falling while still allowing you to move, if necessary.

6.4.1.2. **COVER** your head and neck with your hands and arms and take shelter under a sturdy table or desk, if possible. If there is no shelter nearby, then get down near an interior wall and cover your head and neck with your arms and hands.

6.4.1.3. **HOLD ON** to your shelter until the shaking stops. Be prepared to move with your shelter if the shaking shifts it around.

6.4.2. If you are outside

6.4.2.1. Drop then crawl towards open space if you can – stay away from building exteriors, overhead powerlines, and trees.

6.4.2.2. If you are unable to Drop, brace yourself and protect your head and neck.

6.4.3. If you are near the shore

6.4.3.1. If you feel a strong or long-lasting earthquake, or the water suddenly draws back from the beach, tsunami waves may arrive within minutes.

6.4.3.2. As soon as it is safe to move, immediately go to higher ground or inland, away from the coast.

6.5. After an Earthquake

6.5.1. When should I evacuate?

6.5.1.1. If you are near a large body of water (the ocean or a large lake), move to higher ground as soon as you can safely move. Tsunami waves can arrive within minutes.

a. Go on foot, especially considering if roads and bridges may be damaged.

b. If evacuation is impossible, go to the third or higher floor of a sturdy building or climb a tree. This should only be used as a last resort.

c. Stay away from the coast until officials tell you it is safe to return. The danger may last for days.

6.5.1.2. If you are not in a tsunami zone, evacuate your home or office only if there is damage to the building. You will be safest at home, even if the power is out.

6.5.1.3. If you need to evacuate to a shelter, take your grab-and-go bag as shelters have limited space.

6.5.2. Help the Injured

6.5.2.1. Administer First Aid as needed

6.5.2.2. Be prepared to transport severely injured personnel to a local hospital or clinic as 911 services may be inundated or overwhelmed.

6.5.3. Prevent Further Damage

6.5.3.1. Be prepared to put out small fires with fire extinguishers.

6.5.3.2. Be prepared to disconnect power sources.

6.5.3.3. Be very careful with candles and sources of light/heat as aftershocks may cause them to turn over.

6.5.4. Let People Know if you are okay

6.5.4.1. Encourage the use of Simple Messaging Service (SMS – a.k.a. "texting") and minimize phone use, which will maintain circuits for emergency use.

6.5.4.2. Consider registering for the American Red Cross Safe & Well website.

6.6. Post-Earthquake Inspections

6.6.1. **UAV Surveys**

6.6.1.1. Consider post-earthquake surveys.

6.6.2. **Visual Inspection of Sites**

6.6.2.1. Racking

6.6.2.2. Inverter/Transformer Pads

6.6.2.3. Transmission Lines (including Substation)

6.6.2.4. Walking/Working Surfaces

6.6.3. Refer to Post-Earthquake Inspection form

6.7. After-Shock(s)

6.7.1. Monitor USGS and news outlets for anticipated after-shock(s) and magnitude of potential damage.

7. SINKHOLES

(TO BE UPDATED AT A LATER DATE)

7.1. Areas prone for sinkholes:

7.1.1. Proximity to mining operations (current or historical)

7.1.2. Geological locations where limestone is known to be predominantly underneath subsoils.

7.1.3. Underground piping

8. WILDFIRES

Fire prevention and response actions are covered in HS10 – Fire Protection and Prevention. However, since wildfires are largely seasonal and can propagate in a fashion that's *similar* to "weather", actions for monitoring wildfires are outlined, here.

8.1. Wildfire Prevention at Power Generating Facilities

8.1.1. The construction of firebreaks at facilities in wildfire-prone locales should be considered.

8.2. Potential Hazards to Consider

8.2.1. Local air quality (breathing) can become hazardous due to particulate concentration of smoke. Additionally, depending on what/where the fire is located, residential and industrial complexes can become engulfed, adding adverse toxicity levels in the air.

8.2.2. Direction of fire propagation, especially merging fire-fronts, can trap personnel due to road closures and terrain obstacles.

8.2.3. Speed of fire propagation can change as quickly as a change in wind gust speed/direction. This can accelerate/decelerate prevention, escape, and rescue efforts.

8.3. Once Wildfire(s) is(are) Identified

8.3.1. Consider establishing a Wildfire Response Coordinator (WRC) who will ensure periodic meetings are established to review response measures with Management.

8.3.2. Ensure personnel in affected areas are well aware of the fires and have plans for potential evacuation based on local news and public information outlets.

8.3.3. Overlay fire events onto CCR Plant map

8.3.3.1. CCR O&M Wildfire Map

8.3.3.2. Fire Information for Resource Management System (FIRMS)

8.3.3.3. ArcGIS Living Atlas (link points to page specifically for fires)

8.3.3.4. Land Fire

8.3.4. Consider establishing periodic meetings to discuss response actions.

8.3.5. Periodically review magnitude and propagation of fires.

8.3.6. Contact local utilities for operational guidance that may be unique to their area.

8.4. Action Levels

Due to the wide variability of fire propagation, it's difficult to establish reliable threshold triggers for response measures. Therefore, these are suggested triggers:

8.4.1. Fire(s) within 30-mile radius of plant
Establish initial and recurring meetings, based on current conditions.

8.4.2. Fire(s) within 15-mile radius of plant
Stow trackers; preferably by remote operations.

8.4.3. Fire(s) within 5-mile radius of plant
De-energize facility output; preferably by remote operations.

APPENDIX A – REVISION HISTORY

Rev. #	Date	Major Changes
0.0	24Jul2019	• Original • Migrated C4's "Hurricane" procedure into this procedure
0.1	11Aug2019	Expounded on "Thunderstorms" to include requirements for seeking shelter.
0.2	21Aug2019	Added information to section 5 "Tornado"
0.3	28Aug2019	Updated information regarding "Hurricane"
1.0	20May2020	Added to "Thunderstorms". Added "Flooding".
1.1	21Aug2020	Updated info for "Hurricane" and "Earthquake" sections.
1.2	15Sep2020	Added "Wildfires"

APPENDIX B – DEFINITIONS

CCR – Cypress Creek Renewables

NWS – National Weather Service

OC Team – The CCR Operational Compliance Team

OM – Operations and Maintenance

SS – Refers to the "CCR Shared Services" group

APPENDIX C – HURRICANE RESPONSE PROCESS

ATTACHMENT A – JOB HAZARD ANALYSIS

Job(s) or Task(s): **Inclement Weather Operations**

Basic Action(s) or Hazard(s)	Hazard Description(s)	Safety Measure(s) Needed
1. Access to/from site	• (various)	• Append JHA for "Access to Facility" SOP-05, Attachment D.
2. Unexpected Conditions due to effects of inclement weather 3. Electrical grounds due to flooding or other damage.	• Flooding; especially in locations that seldom flood. • Trees/Limbs on power lines • Blocked access road(s) • Delayed arrival of Emergency Response • Perimeter fencing may become energized to varying degrees. • Electrical shock hazard • Electrocution	• Ensure route to/from your location is navigable by emergency response services. • Do not wade into water over the outsole of your safety shoes. • Beware that electricity can flow through trees/limbs and be conducted through wet ground, or even standing water. • Beware of flooded equipment Do not enter or work inside: ✓ Cabinets ✓ Enclosures ✓ Transformers ✓ Inverters ✓ etc.
4. Displaced animals	Alligators, reptiles, small animals, and insects are often ousted from their normal habitat to places we normally would *not* encounter them, like inside the confines of switchyards, or even inside cabinets. Snakes are notorious for crawling inside electrical gear! If smaller animals that were ousted 'decide' to stay, they can attract snakes to these areas long *after* the storm has passed.	• Beware of snakes and alligators! • Small animals/insects can compromise protected circuits inside cabinets. • Be careful when opening cabinets! A surprised animal can make electrical contact with you in the firing line! • Frightened animals are unpredictable; never approach animals, especially inside confinements.
5. Sinkholes	• Engulfment • Collapse	• Rain-soaked soil or earthquakes can cause a pre-existing sinkhole to collapse, which engulfs whatever's around/over it. • Beware of 'floating turf' which can be indicative of a sinkhole, underneath.
6. Contaminated drinking water 7. Contaminated pooled water	• Poisoned drinking water supplies due to contamination by surface waters. • Pooled water and watersheds can become contaminated with overwhelmed sanitary sewer systems.	• Beware of water sources from local municipalities. • Beware of well-water supplies that have become flooded as this can seep into the vents of established wellheads. • Do not wade into pooled water.

CYPRESS CREEK RENEWABLES

CYPRESS CREEK RENEWABLES O&M, SITE EMERGENCY ACTIONS PLAN

REVISION 1.0

Original Documentation and Owner/Edits: CCR Shared Services

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INTRODUCTION

1. REVISION HISTORY

Rev. #	Date	Major Changes
1	15Apr2022	Original

2. APPROVAL

Current executed plan version supersedes all previous versions.

Name	Title	Signature	Date
Jared Kirk	VP, Operations & Maintenance	DocuSigned by: Jared Kirk 85F9F6C3EBF94CF...	4/15/2022

3. PURPOSE

This plan establishes the Emergency Action Plan (EAP), which is in conjunction with standard CCR O&M SOP's. The Plan applies to all sites operated by Cypress Creek O&M in ERCOT region.

4. SCOPE

This plan applies to all Cypress Creek Renewables O&M staff, subcontractors, and visiting parties.

5. POLICIES

3.1. USE OF THIS PLAN

3.1.1. This plan is to be used in conjunction with standard Cypress Creek Renewables O&M health, safety, security, and environmental policies and procedures.

3.1.2. Requirements set forth in this plan will supersede those of other general documents.

3.2. ROLES AND RESPONSIBILITIES

3.2.1. **Plant Manager**

3.2.1.1 Oversees day-to-day operations of the farm.

3.2.1.2 Ensures all site obligations are fulfilled.

3.2.1.3 Has the authority to commit facility resources in the event of an emergency.

3.2.2. **Technicians**

3.2.2.1 Accomplishes day-to-day operations of the farm.

3.2.2.2 Responds to site-related dispatches (PM/CM/Emergency) from C4 or Management.

3.2.2.3 Provide on-site support and actions during an incident.

3.2.3. **Shared Services Team**

3.2.3.1 Maintains and updates this plan.

3.2.3.2 Ensures most up-to-date revision is published to the MFI.

3.2.4. **Emergency Response Coordinator** (per SPCCP, if applicable)

3.2.4.1 Has the authority to commit facility resources in the event of an emergency.

3.2.4.2 Recommends and/or provides updates to this plan.

3.2.5. **Regional Director**

3.2.5.1 Has the authority to commit facility resources in the event of an emergency.

PLAN

1. GENERAL

1.1. CCR PERSONNEL CONTACT LIST

1.1.1. All up to date personnel lists are maintained in CMMS along with contact information.

1.1.2. A current hardcopy shall be kept in a conspicuous location in the onsite O&M office.

1.1.3. A sign on the main gate(s) also lists contact information.

1.2. EMERGENCY CONTRACTOR CONTACT LIST

1.2.1. The CMMS automatically emails notifications to key site-specific contacts once an emergency or pertinent Work Order is created/assigned.

1.2.2. Emergency contractor(s) (i.e. spill response) are specified within the site's SPCCP.

2. HEALTH AND SAFETY

2.1. CONTRACTORS AND VISITORS

2.1.1. A Point of Contact (PoC), assigned to contractor(s) and visitor(s), will ensure site-specific information such as emergency contact info, medical facility locations, etc., are conveyed and understood.

2.1.2. See Reference #1 regarding Contractors and Visitors.

2.2. SAFETY DATA SHEETS

2.2.1. SDS documents will be kept in a binder in the on-site O&M office.

2.2.2. SDS documents shall be updated when any new chemicals are introduced to the site.

2.2.3. Records will be audited on a yearly basis to ensure all necessary documentation is up to date.

2.3. PANDEMIC AND EPIDEMIC CONDITIONS

2.3.1. The applicable photovoltaic facilities are operated remotely. On-site personnel are not necessary to sustain operations and CCR can utilize alternative regional personnel or subcontractors to address any issues at site in the event of staffing shortages due to a pandemic.

2.4. EMERGENCY RESPONSE

2.4.1. In case of medical emergency

2.4.1.1 Call **9-1-1**!

2.4.1.2 Bring a First Aid Kit and AED (if available) to the scene.

2.4.1.3 First Aid and/or CPR shall be administered by qualified personnel until Emergency Medical Service personnel arrive.

2.4.1.4 Direct Emergency Response personnel to the scene:

a. Have someone meet them at the gate; or,

b. Direct them by using the maps in Attachment B – **Facility Map**
Refer to §2.4.4 "Responding Agencies", below.

2.4.1.5 Notify C4 as soon as practical. C4 shall initiate the Emergency Incident Response procedure.

2.4.2. Other Emergencies:

2.4.2.1 Fire

It is important to remember that facility personnel are only qualified to attempt extinguishing a fire that is in its *incipient* stage. An incipient stage fire[1] means "…a fire which is in the initial or beginning stage and which can be controlled or extinguished by portable fire extinguishers, Class II standpipe or small hose systems without the need for protective clothing or breathing apparatus…".

The following steps, some of which may be performed simultaneously, should be carried out for a fire (may be prefaced by an explosion):

a. An employee who initially discovers the fire assumes the responsibility of Incident Commander and shall assume this responsibility until relieved by senior authority.

b. Assess conditions of the fire.

Prior to investigating further, the Incident Commander should quickly assess the area for additional hazards that might hinder rapid extinguishing. These hazards may include the potential for surrounding fuel sources, electrical hazards, conditions above/below the fire, etc.

[1] 1910.155(c)(26)

c. Determine feasibility of immediately extinguishing.

If the fire is discovered in its incipient stage, then the Incident Commander should attempt to assess whether or not they can quickly extinguish the flames with a local fire extinguisher.

If there is *any* doubt, whatsoever, that the fire can be quickly extinguished, then immediately summon help prior to attempting to extinguish the fire.

1). If feasible, extinguish the fire.

Once it has been determined that the fire can be quickly extinguished, and the fire is not a Class-C fire, then the Incident Commander shall do so.

If this extinguishes the fire, then a Fire Watch should be stationed for at least 30 minutes to prevent recurrence. Skip to step e, below.

2). If not feasible, call for HELP by dialing ***9-1-1***.

d. Direct personnel to pre-arranged assembly area(s).

The Incident Commander shall immediately call 911 and direct personnel to pre-designated assembly area(s).

e. Contact C4 and alert them of the situation.

f. Assist emergency response personnel.

g. Communicate "All Clear" once declared by Incident Commander or emergency response agency(ies).

2.4.2.2 Violence Threat

A "violence threat" is meant to potentially harm personnel or equipment. These can be in the form of directly threatening employees, public riots, passive/aggressive protestors, vandalism, etc.

a. Report all incidents of perceived violence against themselves or the facility to C4.

b. If violence escalates to a level that employees may be harmed, then consider directly contacting the local authorities by dialing ***9-1-1***.

c. Seek shelter away from the threat.

d. Contact C4, who will initiate the Emergency Response procedure.

2.4.2.3 Oil or Chemical Spill

a. If a Hazardous Material (HazMat) spill occurs, employees shall evacuate the danger area and not assist in handling the emergency[1] beyond blocking or "diking" the flow.

b. Facility personnel are only qualified to respond to a spill in a "defensive" fashion from outside the immediate danger-zone.

c. An employee who initially discovers the spill assumes the responsibility of Incident Commander and shall assume this responsibility until relieved by senior authority.

d. Assess the Spill

1). Prior to investigating further, the Incident Commander shall quickly assess the area for additional hazards that might hinder spill response. These hazards may include surrounding fuel sources, electrical hazards, conditions downstream of the spill that might accelerate its flow to navigable waters, etc.

2). If the spill is discovered early, and no other hazards exist, then the Incident Commander will assess whether or not they can quickly stop or redirect the spill, without additional help.

A helpful acronym to use in evaluating a spill is **T-R-A-C-E-M**. Determine if there are hazards associated with any of the following:

T – Thermal

R – Radiation

A – Asphyxiation

C – Chemical

E – Etiological (i.e. concerning cause(s) of medical condition(s))

M – Mechanical

3). If there is any doubt, whatsoever, that the spill can be quickly stopped or redirected, then immediately call for help prior to attempting to resolve the spill.

[1] In accordance with 1910.120(q)(1)

c. Stop the Spill

1). If it has been determined that the spill *can* be quickly stopped (valve shut-off) or redirected, the Incident Commander shall do so. If this resolves the spill, and no oil was spilled to ground, then no further immediate action is necessary, and the incident is treated as "non-emergency".

2). If it has been determined that the spill *cannot* be quickly stopped or redirected, it has reached (or could reach) ground outside of containment, and the spill will not reach navigable waters, then…

a). Call for HELP!

The Incident Commander shall contact C4, who will then initiate the Emergency Incident Response protocol.

b). The Incident Commander shall direct responding agencies to the incident scene.

3). When the spill has been stopped and flows have been redirected and contained, then the incident is treated as "non-emergency".

4). Once the spill is declared a "non-emergency", the Incident Commander can be relieved by personnel competent in cleaning up the spill.

5). Once clean-up efforts are complete, normal operations can resume, and this procedure can be terminated.

f. Refer to Environmental section for more information and subsequent steps.

2.5. EMERGENCY MANAGEMENT

2.5.1. Incident Response

2.5.1.1 Incidents and associated communications are managed in accordance with Reference #2 Emergency Incident Response protocol.

2.5.2. Emergency muster locations

These are assigned during the Job Brief process, which is conducted for every task/job scope, since task/job locations can change from one day to the next.

2.5.3. Medical Facilities

2.5.3.1 The location of relevant medical facilities is reviewed during the Job Brief process, which is conducted for *every* task/job scope. Medical facilities are noted within the CMMS.

2.5.3.2 In case of emergency, personnel will *not* be transported to a medical facility. Instead, the local Emergency Management System (a.k.a. ***911***) will be utilized to summon emergency response services, such as EMS.

2.5.4. Responding Agencies

This section describes how site information will be conveyed to emergency service agencies, for pre-emergency planning and upon arrival to the site.

2.5.4.1 The location of local fire and police departments are outlined within the CMMS, of which is referenced during the Job Brief process.

2.5.4.2 A copy of this plan…

a. Shall be provided to local emergency response agencies.
It's recommended that the Account Manager provide updated versions, annually.

b. Shall be provided at main access gate(s); printed on weatherproof media and kept in a readily accessible document holder.

2.5.4.3 Provide Attachment A – **In Case of Emergency** as a cover-page to the plan(s), above.

2.5.4.4 Post Attachment B – **Facility Map** as a permanent sign at main access gate(s).

Each map is specific to a public-access gate and includes a Letter-to-Number grid in the margins which will facilitate rapid communication of incident location(s) to emergency response personnel, who are not familiar with solar generating station vernacular.

2.5.5. Inclement Weather conditions, associated hazards and generation restoration are managed as outlined in Reference #5 (SOP07 – Inclement Weather Operations).

2.5.6. Readiness Drills

2.5.6.1 These should be conducted at least annually to assess preparedness of on-site personnel to effectively communicate emergencies to C4.

2.5.6.2 The local Fire Department should be invited to participate in these drills.

This may be difficult to schedule with a volunteer fire department (VFD) since they are not manned during normal business hours. However, a VFD may have at least one person on staff who could participate in a tabletop drill/discussion.

2.6. AUDITS

2.6.1. Safety specific HSE audits will be conducted at least once per month by Technicians and/or Management.

2.6.2. Safety audits of contractors and subcontractors shall be performed at least once per quarter for each contractor/subcontractor.

2.6.3. A minimum of two safety audits per year will be performed by a member of CCR Corporate Management or by an Operations Director.

2.7. READINESS DRILLS

2.7.1. Facility personnel will participate in at least one readiness drill per calendar year to ensure site-specific plans remain relevant and current to best practices.

2.7.2. At least one of the drills must be related to hurricane storm planning and recovery.

2.7.3. Drill completions and related follow-up actions will be tracked with the corporate CMMS.

2.8. LONE WORKER

2.8.1. All personnel shall check-in to the site with C4 as part of the Job Brief process.

2.8.2. All personnel shall check-out of the site with C4 as part of the Job Brief process.

2.8.3. At the end of each day, C4 reconciles check-in/out for sites that are not manned on a regular basis. Failure to check-out of a non-manned site is investigated in accordance with Reference #2.

Note: *This section is in the process of being updated (15Apr2022).*

3. ENVIRONMENTAL

3.1. GENERAL

3.1.1. General environmental inspections of the site will take place at a minimum of once per month. Any deficiencies found through the inspection will be tracked and converted to a Work Order.

3.2. SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN (SPCCP)

3.2.1. Refer to Reference #3 for the SPCCP; archived in the O&M MFI.

3.2.2. A hard copy of the SPCCP will be kept in a binder in the on-site O&M office.

3.3. STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

Post construction phase stormwater requirements are met by changing the land use of the project area from pasture/range to nearly 100% vegetated ground cover.

4. SECURITY

4.1. SITE ACCESS

4.1.1. General site access shall be restricted to only authorized personnel and will comply with Reference #7.

4.1.2. All person's entering the site do so in accordance with Reference #1; Contractors and Visitors.

4.2. CYBER SECURITY

4.2.1. Cyber Security incidents should be handled as outlined in Reference #2.

4.3. SITE PHYSICAL SECURITY

4.3.1. Physical site security shall comply with section 5.0 of Reference #1.

4.3.2. All keys to access the site will be maintained in accordance with Reference #4.

4.3.3. Physical security incidents should be handled as outlined in Reference #2.

4.4. SUBSTATION AND CONTROL HOUSE SECURITY

4.4.1. Only authorized persons will be permitted access to the substation and control house.

4.4.2. All keys to access the substation and control house will be maintained through a key management system and shall be audited on a monthly basis.

5. CRITICAL FAILURES AND LOSS OF GENERATION CAPACITY

5.1. KNOWN CRITICAL FAILURE POINTS

5.1.1. Critical failure points may result in complete loss of generation. Any failures of this equipment should be addressed immediately.

5.1.2. If the failure is caused by an emergency incident, ensure that C4 is notified to initiate the emergency incident response procedure.

5.1.3. If the equipment is deemed safe to re-energize, the equipment may be returned to service

5.1.4. Re-energization of the facility must be coordinated by C4, who will make the appropriate notifications to the Transmission Operator (TOP) and Balancing Authority (BA). A list of known critical failure points, below:

5.1.4.1 GSU Transformer

5.1.4.2 Substation Battery Charger

5.1.4.3 High Side SF6 Breaker

5.1.4.4 Substation Auxiliary Transformer

5.2. PRIORITIES FOR RESTORATION OF GENERATION CAPACITY

5.2.1. The solar sites within the scope of this plan are generation resource entities that own single generation facilities. As such, these single facilities are the sole priority for restoration of generation capacity.

5.2.2. Solar sites are a facilities consisting of multiple inverters which aggregate at the collector bus in the substation.

5.2.3. Most losses of generation capacity will affect individual inverters. Equipment failures in the substation, including critical failure points listed above, may result in loss of generation capacity for the entire facility.

5.2.4. Upon loss of generation capacity, the C4 will coordinate with the TOP and BA as well as field personnel to restore generation capacity in a controlled manner.

5.2.5. Field personnel should not remove or restore generation capacity (at the inverter level or higher) without prior notification to C4, except in the case of emergency which could compromise safety or equipment reliability.

APPENDIX A – REFERENCES

1. 4100.005-SOP05 Operational Routines
2. Emergency Incident Response Protocol
3. SPCC Plan
4. 4400.005-SAP05 Key Management
5. SOP07 – Inclement Weather Operations

APPENDIX B – ADDITIONAL INFORMATION

5.3. THE FOLLOWING ANNEXES ARE DEEMED UNAPPLICABLE:

5.3.1. A plan to maintain pre-identified supplies for emergency response.

Solar generating facilities are typically un-manned. They do not require field personnel to operate or shut down in the event of an emergency. The plants are operated from a control room staffed 24/7. Field operators are dispatched on an as-needed basis. No consumable material is required to maintain generation. As such, no emergency response supplies are required.

5.3.2. A weather emergency annex that includes:

5.3.2.1 Operational plans for responding to a cold or hot weather distinct from items addressed in Reference #5

These facilities are photovoltaic solar farms and do not have any cold weather critical components as determined by equipment specifications minimum operating temperatures and design ratings. No cold weather critical components have been identified. They do not have components for freeze protection or fuel delivery. Thus, all requirements are deemed not applicable. As such, no preparation measures to ensure operation of cold weather critical components were applicable for these facilities.

5.3.2.2 Verification of the adequacy and operability of fuel switching equipment, if installed

These facilities do not require any type of fuel for power generation.

5.3.2.3 A checklist for generation resource personnel to use during a cold or hot weather emergency response that includes lessons learned from past weather emergencies to ensure necessary supplies and personnel are available through the weather emergency;"

Solar generating facilities are typically un-manned. They do not require field personnel to operate or shut down in the event of cold or hot weather emergencies. The plants are operated from a control room staffed 24/7. Field operators are dispatched on an as-needed basis. As such, no emergency response supplies are required.

5.3.2.4 A water shortage annex that addresses supply shortages of water used in the generation of electricity;"

Photovoltaic plants require no onsite water supply for cooling or steam generation. Thus, all requirements for water shortage contingencies are deemed not applicable.

5.3.2.5 A pandemic and epidemic annex

The applicable photovoltaic facilities are operated remotely. On-site personnel are not necessary to sustain operations. and CCR can utilize alternative regional personnel or subcontractors to address any issues at site in the event of staffing shortages due to a pandemic.

The pandemic handling steps applicable to offices and control center are addressed in CCR COVID-19 Policy

APPENDIX C – DEFINITIONS

CCR – Cypress Creek Renewables

CM – Corrective Maintenance

CMMS – Computerized Maintenance Management System. CCR utilizes SalesForce with PowerFactors.

EAP – Emergency Action Plan

GSU – Generator Step-Up, as in transformer references

HSSE – Health, Safety, Security, and Environmental

LMS – Learning Management System – A computerized system of creating, managing, and delivering training content

MFI – Master File Index

O&M or OM – Operations and Maintenance

PM – Preventative Maintenance

SOP – Standard Operating Procedure

SPCCP – Spill Prevention Controls and Countermeasures Plan (a.k.a. "SPCC plan")

SWPPP – Storm Water Pollution Prevention Plan (a.k.a. "SWPP plan").

ATTACHMENT A – IN CASE OF EMERGENCY

In case of

Fire or Emergency

Immediately call

Cypress Creek Control Center (C4)

919-391-3683

- Follow instructions from C4
- Do **not** attempt to extinguish equipment
- Use only non-conducting nozzles/spray on site acreages
- Refer to Emergency Response Map(#) for location/orientation
- Responding Field Technician(s) will assist further

ATTACHMENT B – FACILITY MAPS

Note: These are still in development

(maps after this page)

CYPRESS CREEK
CONTROL CENTER

Cypress Creek O&M, LLC
Control Center Operations
Incident Response Protocol

Version No. 5.4

Effective June 16, 2023

REVISION HISTORY

Version	Effective Date	Author	Description of Changes
1.0	2018-05-24	Kyle Cooper	New document
1.1	2018-07-20	Sean McCormick	Added TOC, associated formatting changes.
2.0	2019-06-04	Sean McCormick	Annual review. Updated roles and responsibilities, incident report form, flow chart, incident response checklist. Clarified scope, added references to associated supporting documents.
3.0	2021-01-15	Julien Glover	Annual review. Transferred to newest document template, new section added to cover missing checkouts
4.0	2022-02-17	Julien Glover	Annual review. Updated incident categories, Roles & Responsibilities, response steps, added new reference matrices, added new work order and email templates
5.0	2022-06-23	Julien Glover	Major update; revised to align with the new Incident Response Program
5.1	2022-07-27	Julien Glover	Minor revisions; Published document
5.2	2022-07-28	Julien Glover	Updated 5.1.8 per recommendation from Operational Compliance; Added step in §5.2 and updated email template in Attachment 7; minor edits in §3.0; Corrected attachment references in §4.0; Updated Attachment 8 steps
5.3	2022-08-03	Julien Glover	Minor changes to §5.1 per feedback from C4 Operator
5.4	2022-06-14	Dustin Wambeke	Updated Attachment list, Attachment 2 process flow chart; combined IC checklist into IC steps; eliminated IC RACI matrix; updated incident response email template to include WO#, IC name, and suggested content for status updates

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PURPOSE

This document guides as to the actions that CCR Personnel are expected to follow in response to an incident at a facility for which CCR O&M, LLC provides Maintenance Services or is owned by CCR.

The procedure is not intended to be all-inclusive. Instead, it will provide guidelines establishing protocols for initial response and actions during an Emergency or incident. The CCR management and technical support team will be required to develop recovery plans and provide additional support as required by the specific circumstances of any potential event.

SCOPE

This document applies to the Cypress Creek Control Center and any facility for which CCR O&M, LLC provides Maintenance Services.

The document provides protocols for responding to incidents to ensure that proper actions are taken, and notifications are made. However, this document may not be the only document needed to reference during an event. For certain situations, additional procedures or response plans may need to be referenced. Examples include situations that require the evacuation of C4, implementation of contingency plans for C4 functions, and incidents that may involve notification to regulatory entities. This procedure is developed such that following the action steps will trigger the appropriate parties to utilize additional documents needed to respond to the incident.

ROLES, RESPONSIBILITIES, & ACCOUNTABILITIES

Incident Commander

1. Serve as the primary point of contact for incident response
2. Ensure that appropriate follow-up notifications or actions are completed

Control Center Operators

1. Perform initial notification of the incident to the Incident Commander, IRC, and applicable personnel
2. Provide remote response to on-site conditions
3. Execute this procedure as written to ensure immediate steps of an incident or emergency response plan are met
4. Maintain accurate logs during an event
5. Setup alternate operation location during a C4 Emergency

CCR OM Field Technicians

1. Provide local response to on-site conditions
2. Notify the Control Center of any incident
3. Provide detailed information for the event

CCR Personnel

1. Notify the Control Center of any incident
2. Provide detailed information for the event

GENERAL

Notification requirements in this procedure shall not impede the ability of the operating staff to place facilities in a safe position or to ensure the health and safety of staff are maintained. In emergency incidents, no approval is required for C4 Operators to de-energize equipment.

Steps in the document are intended for use as guidance. The Incident Commander and Incident Response Committee may take additional actions or omit or change the order of the actions at their discretion. Incident lessons learned may be conducted following the incident to analyze the response and give feedback to improve this procedure.

Facility SOPs should be referenced for specific actions required to secure facility operations as may be deemed necessary by this procedure.

An illustration of the event communication flow path for the site and C4 events are shown in ATTACHMENT 2: INCIDENT RESPONSE FLOW CHART.

ATTACHMENT 3: CONTROL CENTER INCIDENT SCRIPTS should be used by Control Center Operators to aid in responding to initial phone notifications.

Accurate and detailed logs should be maintained by Control Center Personnel so that events can be reconstructed at a later date.

For events that do not meet specific criteria defined by this document but rise above normal work management thresholds, a clear description of the event should be distributed to the Incident Response Committee. Also, Control Center Management and/or O&M Leadership should be immediately notified for guidance.

STEPS

CONTROL CENTER OPERATOR STEPS

1. Coordinate actions with other on-duty operators, as necessary.
2. If possible, place the facility and/or affected equipment in a safe state.
3. If necessary, dispatch first responders.
4. Perform the initial classification of the reported incident in accordance with ATTACHMENT 1: INCIDENT CATEGORY & SEVERITY MATRIX
5. If applicable, review logs to determine if any CCR personnel may be affected by the event and call personnel to ensure their safety.
6. Notify the appropriate Incident Commander by phone first or other direct means of communication and receive positive confirmation from this person.
    a. The IC will always be the Super Regional Director for that site or for the employee. If not site specific, the IC will be Control Center Management escalated through O&M Management.
    b. Contact information can be found by referencing the IRP Contact Roles Spreadsheet.
    c. If you are unable to receive positive confirmation after two phone calls, backup IC's will be any CCS senior staff member (Sr. Director level) listed in the IRP Contact Roles Spreadsheet.
7. Create an EH&S Event work order in Salesforce per ATTACHMENT 4: EH&S WORK ORDER TEMPLATE. Avoid including personal identification information of CCR personnel.
8. Distribute incident activation email, utilizing the template found in ATTACHMENT 5: INCIDENT RESPONSE EMAIL TEMPLATE.
    a. Ensure all relevant log entries are attached to the EH&S work order for the incident.
9. Ensure any applicable notifications are made to applicable Reliability Entities (E.g., TOP, BA, RC, QSE, etc…) and compliance@ccrenew.com, if required.
10. Perform any support actions requested by Incident Commander.

INCIDENT COMMANDER STEPS

1. When notified by C4, acknowledge ownership of the incident, and verify that C4 has notified appropriate first responders and de-energized site, if necessary. Gather enough information from the C4 Operator to inform initial actions.
2. Upon receipt of the Incident Activation Email, review and confirm incident category and severity level in accordance with ATTACHMENT 1: INCIDENT CATEGORY & SEVERITY MATRIX.
    a. If necessary, delegate the Incident Commander role based on incident severity in accordance with ATTACHMENT 1: INCIDENT CATEGORY & SEVERITY MATRIX while ensuring the delegate understands the Incident Response Protocol
    b. The IC or delegate will acknowledge ownership of the incident by responding to the Incident Activation Email stating initial actions taken and when recipients can expect the next status update.
    c. Include personnel on distribution who may have responsibilities for the facility required by O&M Service Agreements or Utility obligations (example, Operations Engineer, Regional Manager, Asset Manager, Account Manager)
3. Delegate actions to responsible parties and ensure timely completion.
    a. Ensure that customer(s) and/or adjacent landowners are notified through Account or Asset Managers
4. For incidents with compliance implications notify Operational Compliance Team at compliance@ccrenew.com.
5. Provide incident updates via reply all to the initial Incident Activation email. Recommended content can be found at the end of the Incident Activation Email Template, ATTACHMENT 5.
6. When appropriate, de-activate the incident via reply all to the initial incident activation email.
    a. Ensure positive confirmation is received from the Cypress Creek Control Center of incident de-activation status.
7. Assign any post-incident activities (E.g., insurance claim, warranty claim, AAR, RCA, etc.) accordingly.
8. For injury, notify affected employee`s supervisor via phone call. Follow up with CCR HSSE and HR teams to ensure they are aware for case management.

ATTACHMENT 1: INCIDENT CATEGORY & SEVERITY MATRIX

This table is used to define both the category and severity level for any given incident. Examples are given to help guide personnel in making this determination.

Incident Severity Level -> / Incident Category v	LEVEL 1 Incident has occurred and can be controlled by facility personnel	LEVEL 2 Incident has occurred but is confined to a small area or person and does not pose a threat of spreading to a larger area	LEVEL 3 Incident has occurred and action may be necessary for the surrounding area or personnel	LEVEL 4 Incident has occurred with significant safety, environmental, or security impact which requires escalation to executive team	LEVEL 5 Incident has occurred with severe safety, environmental, or security concerns which need immediate escalation to executive team
Criminal	Minor security incidents, Fence cut w/no missing materials,	Theft or Vandalism requiring police notification but no affect to equipment	Suspected sabotage, tampering, or malicious intent	Verified acts of sabotage	Verified bomb threat or detonated bomb