




Filing Receipt

Received - 2022-04-20 04:50:39 PM
Control Number - 53385
ItemNumber - 549

 Pattern	AMS 104 Policy or Procedure Creation, Revision, and Implementation Process	
Owner: Senior Manager, Regulatory Compliance	Applicability: Pattern Operations	
Revision No: 4	Revision Date: 2/27/2019	Page: 1 of 11

Management Approval:

By: 
 Signature

Name: Luis Zaragoza
 Printed Name

Title: Senior Manager, Regulatory Compliance



AMS 104 Policy or Procedure Creation, Revision, and Implementation Process

DOCUMENT CHANGE LOG			
DATE	REV	NATURE OF CHANGE	AUTHOR
5/24/2012	1	New template, new name of Procedure, entity wording and major expansion of scope.	
6/27/2016	2	Updated Owner title.	
1/24/2018	3	Update Procedure to accommodate current processes.	
9/26/2018	3	Updated procedure to correct the owner throughout. Minor edit	
2/27/2019	4	Update procedure owner, and adjust some verbiage to better understand.	



AMS 104 Policy or Procedure Creation, Revision, and Implementation Process

1. PURPOSE

This Procedure establishes a process to develop and maintain Pattern's Policies and Procedures including the creation, revision, and retirement of Pattern's Policies and Procedures. This Procedure details the change management process with the Procedure area Owners and subject matter experts.

2. SCOPE

This Procedure applies to all Pattern employees, agents, and contractors in our operating business.

3. DEFINITIONS

Administrative Management Standards (AMS): Acronym naming convention prefix for Policies and/or Procedures that include accounting and other administrative responsibilities within Pattern Operations.

Approving Manager: A Pattern employee, a) designated as the procedure owner, or b) an employee whose span of authority encompasses all groups and resources impacted by the Procedure.

Change Requestor: Any personnel, internal or external, that would like to recommend a change to a Policy and/or Procedure that completes the AMS 104 Appendix B: Change Request Form, to send to the Owner.

Community Management System (CMS): Acronym naming convention prefix for Policies and/or Procedures that include external affairs and community related responsibilities with Pattern Energy.

Environmental Management Standards (EMS): Acronym naming convention prefix for Policies and/or Procedures that include environmental protection and prevention responsibilities.

Learning Management System (LMS): Software used to train and track all of the required training for each respective Pattern Operations Policy or Procedure.

Operations Management Standards (OMS): Acronym naming convention prefix for Policies and/or Procedures that include operational and maintenance functions and responsibilities.

Owner: Person responsible for the Policy or Procedure development, review and publication.

Peer Review Group: Pattern personnel, chosen by the Policy or Procedure Owner, and generally comprised of up to three (3) personnel who collectively represent both the subject matter experts addressed by the document, as well as representation from group(s) that will take on new or modified obligations if the document is adopted. Each member of the Peer Review Group should have some previous exposure to the subject of the Policy and/or Procedure to which they are reviewing and contributing, if needed.



AMS 104 Policy or Procedure Creation, Revision, and Implementation Process

Policy: The document that formally guides and coordinates the executable activity throughout Pattern, and helps focus attention and resources on high priority issues, and provides the operational framework within which Pattern functions; intended to influence and determine decisions, actions, and other declared objectives that Pattern Operations seeks to achieve.

Procedure: The document that helps to achieve the objective that is expressed in a Procedure. A series of steps to accomplish the operational requirements stated.

Regulatory Management Standards (RMS): Acronym naming convention prefix for Policies and/or Procedures that include responsibilities and requirements for regulatory compliance, including ensuring reliable operations to avoid adverse impacts to the bulk electric system.

Safety Management Standards (SMS): Acronym naming convention prefix for Policies and/or Procedures that include safety and health responsibilities and requirements.

4. ROLES AND RESPONSIBILITIES

4.1 Senior Manager, Regulatory Compliance:

Manages the creation, revision, and administration of Policies and/or Procedures, and maintains document control.

4.2 Personnel, Internal and External:

Adheres to, and promotes Pattern's Policies and/or Procedures.

4.3 Owner:

4.3.1 The administrator of the Policies and/or Procedures for their area of responsibility.

4.3.2 Manages the Policies and/or Procedures training and change request process for their area of responsibility.

4.4 Peer Review Group:

The Peer Review Group will receive, review, and collaborate with the Owner for any necessary and required revisions to Policies and/or Procedures they are assigned.

4.5 Training Coordinator, Operations:

Manages and maintains training records in the LMS for all identified Policies and/or Procedures, (new and revised).



AMS 104 Policy or Procedure Creation, Revision, and Implementation Process

5. PROCEDURE

5.1 Policy and/or Procedure Change Request Process

5.1.1 All personnel, internal and external, may submit a Policy and/or Procedure change request to the Owner of the Policy and/or Procedure.

5.1.2 The Change Requestor shall complete AMS 104 Appendix B: Change Request Form, and submit the form to the Policy and/or Procedure Owner.

5.1.3 The Owner and Change Requestor will review the change request form, and determine the validity of the reason for the change request.

5.1.4 The Owner and Peer Review Group, if needed, shall determine if there is a need to create a new Policy and/or Procedure, modify an existing Policy and/or Procedure, retire an existing Policy and/or Procedure, or determine if there is no need for change.

5.1.5 For any change request forms not resulting in a new Policy and/or Procedure, modifications to an existing Policy and/or Procedure, or a retirement of an existing Policy and/or Procedure as detailed below, the change request form must be updated that no change is required and communicated to the Change Requestor and stored in the proper location in SharePoint.

5.1.6 AMS 104 Appendix A: Change Request Process includes a flowchart guide to requesting and implementing Policy and/or Procedure changes.

5.2 Creating a New Policy or Procedure

5.2.1 The Policy and/or Procedure Owner shall check for existing related Policies and/or Procedures in SharePoint, and also assess if there are any related corporate policies that should be considered (such as corporate HR policies).

5.2.2 If a Policy and/or Procedure does not exist to address the need required, then the Owner will create a new Policy and/or Procedure draft utilizing AMS 104 Appendix D: Template.

5.2.3 The Compliance Coordinator, by request, will create a Policy and/or Procedure number, and move AMS 104 Appendix D: Template to the drafts and revisions folder where the Policy and/or Procedure Owner and Peer Review Group can work on the document.

5.2.4 Once the Policy and/or Procedure is drafted, the Owner shall determine the Peer Review Group members and circulate the link to the new Policy and/or Procedure.



AMS 104 Policy or Procedure Creation, Revision, and Implementation Process

5.2.5 Each member of the Peer Review Group shall access the link in the drafts and review folder to track changes with suggested edits and comments.

5.2.6 The Owner shall incorporate all appropriate necessary comments and changes into a final draft document, and:

5.2.6.1 Have the Approving Manager, included in the Peer Review Group communications, and, if needed,

5.2.6.2 Have an approval meeting to explain the changes and address any potential concerns and issues of the final draft with the Peer Review Group, Senior Manager, Regulatory Compliance, and the Approving Manager.

5.2.7 After all necessary comments and changes are incorporated into a final draft document; the Owner will submit, via email, the link to the final draft document to the Senior Manager, Regulatory Compliance for approval by the Approving Manager, Peer Review Group, and Owner included in the email.

5.2.8 The Compliance Coordinator will submit the link to the final draft to the Approving Manager for approval, with the Peer Review Group and Owner included in the email.

5.2.9 If significant changes are required from the Approving Manager, the Owner and Peer Review Group members shall go back to the draft in drafts and revisions for any additional changes, and then notify the Senior Manager, Regulatory Compliance until final draft approval is reached.

5.2.10 After the approval is granted, and the Policy and/or Procedure signature page is signed by the Approving Manager, and then the Policy and/or Procedure is uploaded by the Compliance Coordinator in final Word and PDF formatted documents into SharePoint.

5.2.11 The Compliance Coordinator shall initiate the Policy and/or Procedure notification and implementation process by notifying the Owner and Peer Review Group of the Policy and/or Procedure approval.

5.2.12 The Training Coordinator, Operations will update the LMS for training purposes, if needed, and the Compliance Coordinator will update the Policy and Procedure Matrix in SharePoint to reflect the new Policy and/or Procedure.

5.3 Modifying an Existing Policy or Procedure

5.3.1 The Change Request Process will determine if modifications are needed.

5.3.2 If it is determined that changes need to be made, the Policy and/or Procedure will be moved back into the drafts and revisions folder by the



AMS 104 Policy or Procedure Creation, Revision, and Implementation Process

Compliance Coordinator who then will notify the Owner. The Owner will revise and circulate the proposed revisions to Peer Review Group for discussion.

5.3.3 The Owner shall incorporate all appropriate comments and changes into a final draft document, and:

5.3.3.1 Have the Approving Manager included in the Peer Review Group communications; and if needed;

5.3.3.2 Have an approval meeting to explain the changes and address any potential concerns and issues of the final draft with the Peer Review Group, Senior Manager, Regulatory Compliance, and Approving Manager.

5.3.4 After all necessary comments and changes are incorporated into a final draft document; the Owner will submit, via email, the link to the final draft document to the Senior Manager, Regulatory Compliance for approval by the Approving Manager, Peer Review Group, and Owner included in the email.

5.3.5 The Compliance Coordinator will submit the link to the final draft to the Approving Manager for approval, with the Peer Review Group and Owner included in the email.

5.3.6 If significant changes are required from the Approving Manager, the Owner and Peer Review Group members shall go back to the draft in drafts and revisions for any additional changes, and then notify the Senior Manager, Regulatory Compliance until final draft approval is reached.

5.3.7 After the approval is granted, and the Policy and/or Procedure signature page is signed by the Approving Manager, and then the Policy and/or Procedure is uploaded by the Compliance Coordinator in final Word and PDF formatted documents into SharePoint.

5.3.8 Compliance Coordinator shall initiate the Policy and/or Procedure notification and implementation process by notifying the Owner and Peer Review Group of the approval.

5.3.9 The Training Coordinator, Operations will update the LMS for training purposes, if needed, and the Compliance Coordinator will update the Policy and Procedure Matrix in SharePoint to reflect the modification of the Policy and/or Procedure.

5.4 Retiring Existing Policy or Procedure

5.4.1 The Change Request Process will determine if retiring is necessary.



AMS 104 Policy or Procedure Creation, Revision, and Implementation Process

5.4.2 If it is determined that a Policy or Procedure should be retired, the Owner and Peer Review Group will provide justification to retire the existing Policy and/or Procedure to the Approving Manager and the Compliance Coordinator via email.

5.4.3 Once the Approving Manager confirms the Policy and/or Procedure can be retired, the Compliance Coordinator will be notified via email that a Policy and/or Procedure can be retired by the Approving Manager, with the Owner and Peer Review Group included.

5.4.4 The Compliance Coordinator will move the Policy and/or Procedure deemed retired to the prior version or retired procedures folder in SharePoint.

5.4.5 The Owner will publish this retirement by email communication to all impacted Pattern operations personnel with the justification of the retired Policy and/or Procedure, if necessary.

5.4.6 The Compliance Coordinator will follow the retirement naming convention by adding the retirement date to the end of the document name, so that the retirement date is clearly visible.

5.4.7 The Training Coordinator, Operations will update the LMS for training purposes, if needed, and the Compliance Coordinator will update the Policy and Procedure Matrix in SharePoint to reflect the retired Policy and/or Procedure retirement date.

5.5 Review of an Existing Policy or Procedure

5.5.1 Each Policy and/or Procedure shall be reviewed at least every three (3) years by the Owner, unless the Policy and/or Procedure requires more frequent reviews, and such requirements are documented within that Policy and/or Procedure, and updated, as necessary.

5.5.2 The Owner is responsible for the management and execution of timely periodic reviews.

5.5.3 The Owner shall complete AMS 104 Appendix: C Review Form for all periodic reviews.

5.6 Naming Convention and Structure for a Policy and/or Procedure

5.6.1 Policies and/or Procedures shall maintain the naming convention set forth below for consistency and ease of retrieval from SharePoint whether new or revised:

5.6.1.1 LLL NNN Title of Policy or Procedure



AMS 104 Policy or Procedure Creation, Revision, and Implementation Process

5.6.1.2 LLL NNN Title of Policy or Procedure Appendix

5.6.2 LLL will be replaced with the appropriate abbreviation: AMS, CMS, EMS, OMS, RMS, SMS, etc.

5.6.3 NNN will be replaced with a number assigned by the Compliance Coordinator from consulting the Policy and Procedure Matrix located in SharePoint.

5.6.4 If there are variations from site to site that are not so substantial that a separate site-specific Policy and/or Procedure is required (e.g., Procedure specific contact information may vary but the process is the exact same for all Pattern Operations facilities), this site-specific information will be captured in an appendix to the Policy and/or Procedure specific to each site applying the following the naming convention example:

5.6.4.1 LLL NNN Title of Policy or Procedure_Appendix_Contacts HRW

5.6.5 If there are variations from site to site that are substantial and unique to each site, and therefore require a site-specific Policy and/or Procedure, the following naming convention will be applied:

5.6.4.2 LLL NNN Title of Policy or Procedure_PGW

5.7 Storing Policies and Procedures in SharePoint

5.7.1 The Compliance Coordinator will manage and control Pattern Operations Policies and Procedures, and all associated appendices and/or templates in the following manner for ease of retrieval:

5.7.1.1 All master Policies and Procedures are in Microsoft Applications as well as their associated appendices and/or templates, if applicable, and will be maintained and managed in SharePoint by the Compliance Coordinator, Operations only.

5.7.1.2 All final operations Policies and/or Procedures, and their associated appendices and/or templates are in PDF and Microsoft Applications, if applicable, and maintained and managed in SharePoint by the Compliance Coordinator. The final PDF's will be accessible by all Pattern Personnel as read only.

5.7.1.3 All prior versions or retired Policies and/or Procedures and their associated appendices and/or templates, if applicable, will be in their native form (PDF, Microsoft Word, Microsoft Excel, etc.) and maintained and managed in SharePoint by the Compliance Coordinator and accessible by the Owner as read only.



AMS 104 Policy or Procedure Creation, Revision, and Implementation Process

5.7.1.4 All draft and revision Policies and/or Procedures in Microsoft Applications form, and their associated appendices and/or templates, if applicable, are maintained and managed in SharePoint by the Compliance Coordinator and accessible by the Owner and Peer Review Group as contribute.

5.8 Implementation and Training of New or Revised Policies and/or Procedures

5.8.1 The Owner is responsible for ensuring new, revised, or retired Policies and/or Procedures are communicated to all impacted personnel, to include, but not limited to:

5.8.1.1 Summary of the changes made;

5.8.1.2 Actions required to implement the changes;

5.8.1.3 The timeline for implementing the changes; and

5.8.1.4 Training on changes, if needed.

5.8.2 Any appropriate training needs must be identified and prepared by the Owner, including but not limited to, the information in Section 5.8.3 below and in accordance with the requirements of AMS 102 Training Procedure.

5.8.3 If the Owner determines that formal training is needed, the following steps shall be followed:

5.8.3.1 The Owner will provide the following to the Training Coordinator, Operations:

5.8.3.1.1 Prepared training materials (including training plan and exam if applicable);

5.8.3.1.2 Identify the individuals who will require the training; and

5.8.3.1.3 The frequency or refresher schedule of the training.

5.8.3.2 The Training Coordinator, Operations will then set up the training within the LMS based on the training parameters from the Owner.

5.8.3.3 For any training being delivered by the Owner outside the LMS system, the Owner is responsible for updating the Training Coordinator, Operations of the status of any such training, to include sign-in sheets.

5.8.4 The Training Coordinator, Operations will maintain training records in the LMS for all identified Policies and/or Procedures (new and revised) with training requirements identified by the Owner.



AMS 104 Policy or Procedure Creation, Revision, and Implementation Process

5.8.5 All training shall be documented according to the AMS 102 Training Procedure.

5.9 Policy and Procedure Matrix

5.9.1 The Compliance Coordinator is the Owner of the Policy and Procedure Matrix and will:

5.9.1.1 Update and maintain the Policy and Procedure Matrix in SharePoint.

5.9.1.2 Assign numbers to all new Policies and/or Procedures and put into the drafts and revisions folder for the Owner to start creating the new Policy and/or Procedure.

6. TRAINING

All applicable personnel shall be trained according to the training schedule developed by the Owners of the Policies and/or Procedures.

7. DATA RETENTION

All Policies and/or Procedures will be maintained in Ops Corporate SharePoint in the Policies and Procedures folder.

8. REVIEW

This Procedure/Process and any Appendices shall be reviewed and updated as necessary, at a minimum of every three years by the Owner.

9. REFERENCES

- 9.1 AMS 104 Policy or Procedure Creation, Revision, and Implementation Process Appendix A: Change Request Process
- 9.2 AMS 104 Policy or Procedure Creation, Revision, and Implementation Process Appendix B: Change Request Form
- 9.3 AMS 104 Policy or Procedure Creation, Revision, and Implementation Process Appendix C: Review Form
- 9.4 AMS 104 Policy or Procedure Creation, Revision, and Implementation Process Appendix D: Template
- 9.5 Procedure Matrix by Owner 2019
- 9.6 AMS 102 Training Procedure



Policy or Procedure Creation, Revision, and Implementation Process Appendix B Change Request Form

Policy and/or Procedure Information

Policy and/or Procedure for Change Request: [Click here to enter text.](#)

Policy and/or Procedure for Change Request Date: [Click here to enter text.](#)

Policy and/or Procedure Owner: [Click here to enter text.](#)

Policy and/or Procedure Change Request Type: ☐ New ☐ Change ☐ Retirement

Policy and/or Procedure Change Request Reason: [Click here to enter text.](#)

Requestor Information

User Name: [Click here to enter text.](#)

User Phone Number: [Click here to enter text.](#)

User Email Address: [Click here to enter text.](#)


Request Determination (Policy or Procedure Owner Section)

Policy and/or Procedure Owner: [Click here to enter text.](#)

Policy and/or Procedure Determination Type:

☐ New ☐ Change ☐ Retirement ☐ Not Needed

Policy and/or Procedure Determination Explanation: [Click here to enter text.](#)

 Pattern	Pattern Operations	COM-001-002	REVISION 00	Page 1 of 11
		Title: RMS-US-PRO-COM-001-002 Communications and Protocols		

Compliance Director	[REDACTED]
Title	Assistant Vice President
Signature And Date	[REDACTED] [REDACTED]
Subject Matter Expert	[REDACTED]
Title	Director, Energy, Policy Design and Compliance
Signature And Date	[REDACTED] [REDACTED]

I. PROCEDURE SUMMARY

- This procedure provides written guidance for Pattern Operations to maintain compliance with NERC Standards COM-001 and COM-002. COM-001 requires that Interpersonal Communication capabilities are maintained with appropriate parties. COM-002 requires that Control Room/Operations Control Center (OCC) personnel are trained on receiving and responding to Operation Instructions.
- Applicability: BA, DP, GOP, RC, TOP
- Are actions directed by this procedure designed to address compliance with regulations, standards or requirements? Yes
- Does this procedure potentially impact the processes or procedures of other work groups outside of Pattern Operations? No
- If you answered yes to the above question, notification should be provided to the Procedure Owner.

Pattern Operations	COM-001-002	REVISION 00
Title: RMS-US-PRO-COM-001-002 Communications and Protocols	PAGE 3 OF 11	

II. TABLE OF CONTENTS

1.0 PURPOSE..... 4

2.0 REFERENCES 4

3.0 DEFINITIONS 4

4.0 RESPONSIBILITIES 4

5.0 DETAILS..... 5

6.0 RECORDS..... 6

7.0 REGULATIONS, STANDARDS, AND REQUIREMENTS..... 6

8.0 KEY WORDS..... 7

9.0 ATTACHMENTS..... 7

ATTACHMENT 1..... 8

ATTACHMENT 2..... 10

ATTACHMENT 3..... 11

Pattern Operations	COM-001-002	REVISION 00
Title: RMS-US-PRO-COM-001-002 Communications and Protocols	PAGE 4 OF 11	

III. DETAILED PROCEDURE

1.0 PURPOSE

The purpose of this procedure is to provide Pattern Operations with guidance on how to comply with NERC Standard COM-001 and COM-002. NERC Standard COM-001 establishes Interpersonal Communication capabilities necessary to maintain reliability. NERC Standard COM-002 requires improved communications for the issuance of Operating Instructions with predefined communications protocols to reduce the possibility of miscommunication that could lead to action or inaction harmful to the reliability of the Bulk Electric System (BES).

2.0 REFERENCES

- 2.1** NERC Standard COM-001-3 – Communications
- 2.2** NERC Standard COM-002-4 – Operating Personnel Communications Protocols
- 2.3** RMS-PRO-EOP-004 – Event Reporting

3.0 DEFINITIONS

- 3.1** Control Center - One or more facilities hosting operating personnel that monitor and control the Bulk Electric System (BES) in real-time to perform the reliability tasks, including their associated data centers, of: 1) a Reliability Coordinator, 2) a Balancing Authority, 3) a Transmission Operator for transmission Facilities at two or more locations, or 4) a Generator Operator for generation Facilities at two or more locations.
- 3.2** Interpersonal Communications – Any medium that allows two or more individuals to interact, consult, or exchange information.
- 3.3** Operating Instruction – A command by operating personnel responsible for the Real-time operation of the interconnected Bulk Electric System to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System. (A discussion of general information and of potential options or alternatives to resolve Bulk Electric System operating concerns is not a command and is not considered an Operating Instruction.)

4.0 RESPONSIBILITIES

- 4.1** Senior Manager, Operations Control Center or designee shall ensure that the facility has appropriate Interpersonal Communication capability and that communication failures are communicated and restored.
- 4.2** Senior Manager, Operations Control Center or designee shall ensure that Operations Control Center (OCC) personnel are trained and utilize the correct methods for receiving and responding to Operating Instructions.

Pattern Operations	COM-001-002	REVISION 00
Title: RMS-US-PRO-COM-001-002 Communications and Protocols	PAGE 5 OF 11	

5.0 DETAILS

- 5.1** Pattern Operations shall have Interpersonal Communication capability with their Reliability Coordinator, Transmission Operator, Balancing Authority, Operations Control Center, and field personnel.

- See Attachment 1 for facility respective contacts regarding all Interpersonal Communication.

Note: For additional Contact Information see RMS-PRO-EOP-004 facility specific contact list.

Note: Communications to ERCOT (Electric Reliability Council of Texas) normally take place via the QSE (Tenaska). *****ERCOT ONLY*****

Phone: 817-462-1509

Email: kemery@tnsk.com

- 5.2** If Interpersonal Communication capability fails, Pattern Operations shall consult their Reliability Coordinator, Transmission Operator, Balancing Authority, Operations Control Center, and field personnel (as appropriate) to determine a mutually agreeable action for the restoration of the capability.

- 5.3** Pattern Operations Control Room/Operations Control Center (OCC) personnel shall respond to Operating Instructions given by their Balancing Authority, Reliability Coordinator, or Transmission Operator by:

Note: The following communication protocols do not apply to written or oral single-party to multiple-party burst Operating Instructions.

- Repeating the Operating Instruction information back (not necessarily verbatim) in a clear, concise, and definitive manner.
- If the Operating Instruction was not understood, request the issuer reissue the Operating Instruction to resolve any misunderstandings.
- Receive confirmation from the issuer of the Operating Instruction that the information is correct.

Note: Usage of Three-Part communication when receiving an Operating Instruction should be recorded and/or noted in the Operator's Log.

- 5.4** Pattern Operations Control Room/Operations Control Center (OCC) personnel shall be trained on receiving and responding to Operating Instructions prior to performing functions that could require response.

- Documentation regarding training completion shall be retained.

Pattern Operations	COM-001-002	REVISION 00
Title: RMS-US-PRO-COM-001-002 Communications and Protocols	PAGE 6 OF 11	

6.0 RECORDS

- 6.1** Pattern Operations shall ensure all documentation, procedures, logs, and compliance records are retained for a period of at least 7 years with the exception of voice recordings which shall be retained for a minimum of 90 calendar days unless directed by its Compliance Enforcement Authority to retain specific evidence for a longer period of time as part of an investigation or an open compliance violation.
- 6.2** Pattern Operations shall keep the last audit records and all requested and submitted subsequent audit records.

7.0 REGULATIONS, STANDARDS, AND REQUIREMENTS

- 7.1** COM-001-3 (R8) Each Generator Operator shall have Interpersonal Communication capability with the following entities (unless the Generator Operator detects a failure of its Interpersonal Communication capability in which case Requirement R11 shall apply):
- COM-001-2 (R8.1) Its Balancing Authority.
 - COM-001-2 (R8.2) Its Transmission Operator.
- 7.2** COM-001-3 (R11) Each Distribution Provider and Generator Operator that detects a failure of its Interpersonal Communication capability shall consult each entity affected by the failure, as identified in Requirement R7 for a Distribution Provider or Requirement R8 for a Generator Operator, to determine a mutually agreeable action for the restoration of its Interpersonal Communication capability.
- 7.3** COM-001-3 (R12) Each Reliability Coordinator, Transmission Operator, Generator Operator, and Balancing Authority shall have internal Interpersonal Communication capabilities for the exchange of information necessary for the Reliable Operation of the BES. This includes communication capabilities between Control Centers within the same functional entity, and/or between a Control Center and field personnel.
- 7.4** COM-002-4 (R3) Each Distribution Provider and Generator Operator shall conduct initial training for each of its operating personnel who can receive an oral two-party, person-to-person Operating Instruction prior to that individual operator receiving an oral two-party, person-to-person Operating Instruction to either:
- Repeat, not necessarily verbatim, the Operating Instruction and receive confirmation from the issuer that the response was correct, or
 - Request that the issuer reissue the Operating Instruction.
- 7.5** COM-002-4 (R6) Each Balancing Authority, Distribution Provider, Generator Operator, and Transmission Operator that receives an oral two-party, person-to-person Operating Instruction during an Emergency, excluding written or oral single-party to multiple-party burst Operating Instructions, shall either:
- Repeat, not necessarily verbatim, the Operating Instruction and receive confirmation from the issuer that the response was correct, or

Pattern Operations	COM-001-002	REVISION 00
Title: RMS-US-PRO-COM-001-002 Communications and Protocols	PAGE 7 OF 11	

- Request that the issuer reissue the Operating Instruction.

8.0 KEY WORDS

8.1 EOP-004 Contact List

8.2 Interpersonal Communication

9.0 ATTACHMENTS

9.1 Attachment 1: Interpersonal Communication Contacts

9.1 Attachment 2: General Guidance on Communication and Documentation

9.2 Attachment 3: COM-001-002 Procedure Flowchart

Pattern Operations	COM-001-002	REVISION 00
Title: RMS-US-PRO-COM-001-002 Communications and Protocols	PAGE 8 OF 11	

ATTACHMENT 1
Interpersonal Communication Contacts

Site	RC	BA	TOP	Field Personnel
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Logan's Gap Wind, LLC (LGW)	ERCOT	ERCOT	ONCOR	Kelly Yarbrow
	512-248-3030	512-248-3030	214-743-6926	325-203-2440
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Pattern Gulf Wind, LLC (PGW)	ERCOT	ERCOT	AEP	Tommie Trowbridge
	512-248-3030	512-248-3030	877-269-1988	361-406-7613
Pattern Panhandle Wind, LLC (PH1)	ERCOT	ERCOT	CROSS TEXAS	Spencer Roland
	512-248-3030	512-248-3030	512-982-5800	806-279-0474
Pattern Panhandle Wind 2, LLC (PH2)	ERCOT	ERCOT	CROSS TEXAS	Spencer Roland
	512-248-3030	512-248-3030	512-982-5800	806-279-0474
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Pattern Operations	COM-001-002	REVISION 00
Title: RMS-US-PRO-COM-001-002 Communications and Protocols	PAGE 10 OF 11	

ATTACHMENT 2

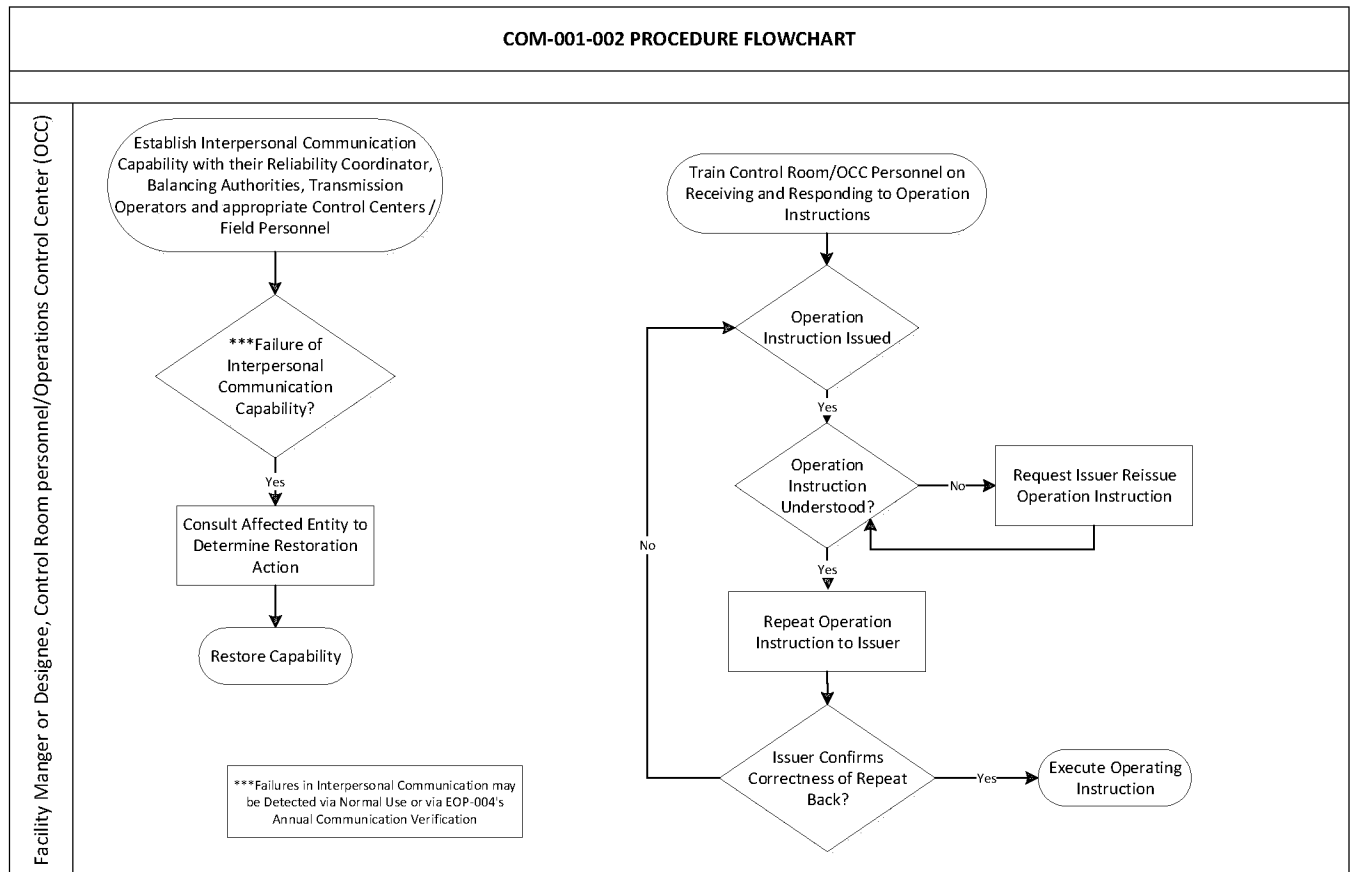
GENERAL GUIDANCE ON COMMUNICATION AND DOCUMENTATION

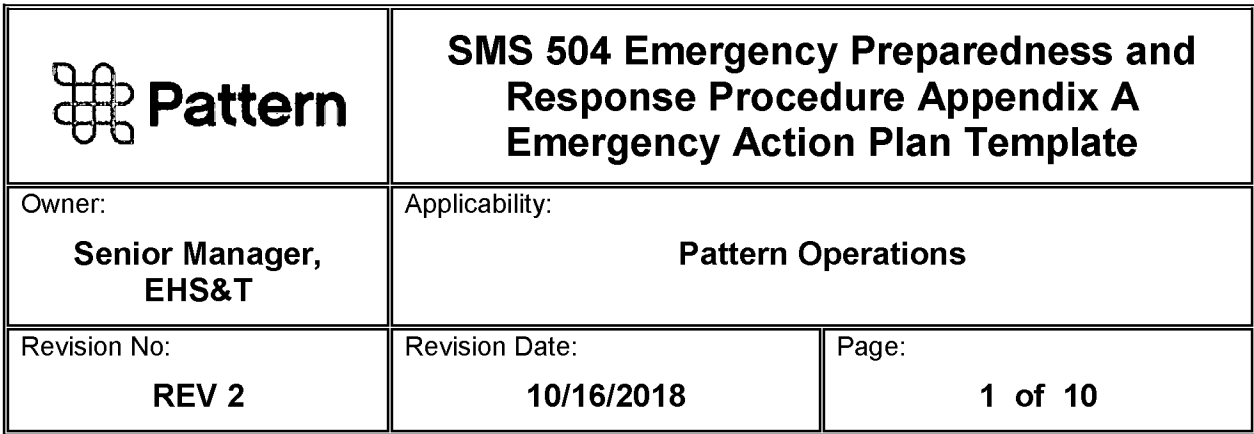
Accurate operator logs are necessary records to show that the proper communications took place between the site and Reliability Entities.

- A. When documenting activities and oral communications, the Operator Log should include, but is not limited to:
 - a. Date of communication
 - b. Time of communication
 - c. Site person's name
 - d. External person's name
 - e. The entity that the external person represents
 - f. Activity that is requested and confirmation that activity was done
 - g. Information communicated
- B. Oral communication of instructions and directives with Reliability Entities should utilize 3-way communication practices.
 - a. The initiator shall issue the communication in a clear, concise and definitive manner.
 - b. The recipient of the communication shall acknowledge the communication and repeat the original statement back to the initiator (not necessarily verbatim).
 - c. The initiator shall confirm the response as correct, or repeat the communication to resolve any misunderstandings.
- C. All pertinent written/electronic correspondence with Reliability Entities should be retained. (Should be documented in the Control Room/Operations Control Center (OCC) Log)

Pattern Operations	COM-001-002	REVISION 00
Title: RMS-US-PRO-COM-001-002 Communications and Protocols	PAGE 11 OF 11	

ATTACHMENT 3 COM-001-002 PROCEDURE FLOWCHART



[illegible]



SMS 504 Emergency Preparedness and Response Procedure Appendix A Emergency Action Plan Template

EMERGENCY ACTION PLAN (EAP) - [FACILITY NAME]

1. EMERGENCY CONTACTS

Site Name:	Site Address:	Site Phone Number:
Inside Assembly Area: Name:		Location:
Outside Assembly Area: Name:		Location:
Evacuation Area: Name:	Phone Number:	Address:
Facility Manager Name:	Office: Cell:	Email:
Assistant Facility Manager Name:	Office: Cell:	Email:
Contractor Lead Name:	Office: Cell:	Email:
Fire Department: Name:	Phone Number	Address:
Hospital (first aid): Name:	Phone Number	Address:
Hospital (burn unit): Name:	Phone Number	Address:
Hospital (trauma center): Name:	Phone Number	Address:
Police: Name:	Phone Number	Address:
Pattern OCC	Main: 713-308-4242 Secondary: 713-308-4243/4244	Patternocc@patternenergy.com
Pattern EHS Manager Name:	Office: Cell:	Email:
Regional Manager Name:	Office: Cell:	Email:



SMS 504 Emergency Preparedness and Response Procedure

Appendix A Emergency Action Plan Template

Contractor EHS Specialist Name	Office: Cell:	E-mail
Contractor Manager Name	Office: Cell:	E-mail

2. BASIC EMERGENCY INSTRUCTIONS

- 2.1 Anyone observing an emergency condition should immediately contact Site Management by cell phone or radio.
- 2.2 Site Management will issue a site-wide stop work announcement, initiate the general emergency procedure and take on or designate the role of Emergency Coordinator.
- 2.3 Site Management will notify Pattern's OCC to act as Off-site Emergency Coordinator and facilitate communications with essential personnel.
- 2.4 In the case of fire or injury/illness, the scenario-specific emergency response actions shall be initiated as well (as described in this document).
- 2.5 Once notified of the emergency condition, the Emergency Coordinator shall determine whether outside resources are needed and manage the support and interaction with those outside resources.

3. DIRECTIONS AND ADDRESS TO NEAREST HOSPITAL/CLINIC



SMS 504 Emergency Preparedness and Response Procedure

Appendix A Emergency Action Plan Template

4. SITE MAP: INCLUDE PHYSICAL ADDRESS

[Insert Site Map]

(Must include locations of all inside and outside Assembly Areas, the O&M building, access roads, turbines, substation(s), all buildings (including any dwellings on site) and emergency responder meeting points.)



SMS 504 Emergency Preparedness and Response Procedure

Appendix A Emergency Action Plan Template

5. FIRE

Personnel and contractors shall notify Site Management immediately upon discovery of a fire. Site Management will designate an Emergency Coordinator to manage the incident. Different types of fires will require different types of responses.

5.1 Grass, Brush and Forest Fires

- 5.1.1 In the event of grass and brush fires, personnel and contractors shall notify Site Management.
- 5.1.2 Site Management will designate an Emergency Coordinator to manage the incident.
- 5.1.3 Site Management will notify Pattern's OCC to act as Off-site Emergency Coordinator and facilitate communications with essential personnel.
- 5.1.4 The Emergency Coordinator will obtain details of the exact location and size of the fire from the notifier.
- 5.1.5 The Emergency Coordinator will contact 911 and coordinate with the notifier to lead fire-fighting equipment to the scene. The designated responder will be notified by the Emergency Coordinator by radio of the location at which to meet with the fire department.
- 5.1.6 The Emergency Coordinator will contact any land owners in the area with the location and size of the fire. Personnel may be directed by the Emergency Coordinator to visit any buildings/dwellings that may be in the anticipated path of a fire.
- 5.1.7 Only personnel trained to fight fires may do so and only under instruction from the civil authorities. In all other events, personnel shall at no time attempt to extinguish or "fight" a large brush or grass fire.

5.2 Turbine Fire – No Personnel Present

- 5.2.1 In the event of a turbine fire, personnel discovering the fire shall contact Site Management.
- 5.2.2 Site Management will designate an Emergency Coordinator to manage the incident.
- 5.2.3 Site Management will notify Pattern's OCC to act as Off-site Emergency Coordinator and facilitate communications with essential personnel.
- 5.2.4 The Emergency Coordinator will obtain details of the exact location and size of the fire from the notifier.



SMS 504 Emergency Preparedness and Response Procedure

Appendix A Emergency Action Plan Template

- 5.2.5 The Emergency Coordinator will contact 911 and coordinate with the notifier to lead fire-fighting equipment to the scene. The designated responder will be notified by the Emergency Coordinator by radio of the location at which to meet with the fire department.
- 5.2.6 The responder will then proceed to the designated meeting point and be available to direct fire-fighting equipment to the scene.
- 5.2.7 Personnel or contractors shall at no time attempt to go up tower to extinguish or “fight” a turbine fire. The role of personnel/contractor is to notify Site Management, liaise with the Emergency Coordinator, and lead fire-fighting equipment to the scene.
- 5.3 Turbine Fire – People in Nacelle, Fire in Down Tower Control Cabinet
 - 5.3.1 If a fire occurs in the down tower control cabinet while personnel or contractors are working in the nacelle, all nacelle hatches shall be opened immediately.
 - 5.3.2 Personnel discovering the fire will contact Site Management.
 - 5.3.3 The Site Management will designate an Emergency Coordinator to manage the incident.
 - 5.3.4 Site Management will notify Pattern’s OCC to act as the Off-site Emergency Coordinator and facilitate communications with essential personnel.
 - 5.3.5 The Emergency Coordinator shall obtain details of the exact location and size of the fire from the notifier.
 - 5.3.6 The Emergency Coordinator will contact 911 and request fire and medical assistance.
 - 5.3.7 The Emergency Coordinator will nominate a designated responder to meet at the Emergency Responder Meeting Point and lead fire-fighting equipment and medical resources to the scene. The designated responder will be notified by the Emergency Coordinator by radio of the location at which to meet with the fire department and medical resources.
 - 5.3.8 The designated responder will then proceed to a designated meeting point and be available to direct fire-fighting equipment and medical resources to the scene.
 - 5.3.9 Personnel and contractors in the nacelle will follow all normal fall protection procedures and attempt to remain in smoke free air until directed by fire-fighting personnel to climb down.
 - 5.3.10 If a smoke free environment cannot be maintained or the fire is not extinguished within 30 minutes, personnel will communicate with the designated responder to determine if emergency descent on the outside of the tower is feasible and appropriate.



SMS 504 Emergency Preparedness and Response Procedure

Appendix A Emergency Action Plan Template

5.3.11 At no time shall personnel attempt to climb down until directed.

5.4 Turbine Fire – People in Nacelle, Fire in Nacelle

5.4.1 If a fire occurs in the nacelle while personnel are present, personnel shall abandon all tools and equipment and immediately descend the tower ladder and exit the turbine.

5.4.2 If the fire blocks access to the exit, personnel shall use the emergency descent system to reach ground level.

5.4.3 Personnel nor contractors shall not attempt to extinguish or “fight” a nacelle fire, unless required to maintain access to an exit.

5.4.4 Once away from the fire, personnel discovering the fire shall contact Site Management.

5.4.5 Site Management will designate an Emergency Coordinator to manage the incident.

5.4.6 Site Management will notify Pattern’s OCC to act as Off-site Emergency Coordinator and facilitate communications with essential personnel.

5.4.7 The Emergency Coordinator will obtain details of the exact location and size of the fire from Site Management.

5.4.8 The Emergency Coordinator will contact 911 and request fire and medical assistance.

5.4.9 The Emergency Coordinator will nominate a designated responder to lead fire-fighting equipment and medical resources to the scene. The designated responder will be notified by the Emergency Coordinator by radio of the location at which to meet with the fire department and medical resources.

5.4.10 The designated responder will then proceed to the designated meeting point and be available to direct fire-fighting equipment and medical resources to the scene.

5.5 Fire – O&M Building

5.5.1 In the event of a fire in the O&M building, personnel discovering the fire will activate the building fire alarm.

5.5.2 At the alarm sound, Site Management will designate an Emergency Coordinator who will immediately notify 911 and request fire and medical assistance.

5.5.3 Site Management will notify Pattern’s OCC to act as Off-site Emergency Coordinator and facilitate communications with essential personnel.

5.5.4 The General Emergency Response and Evacuation Procedures will then be followed.



SMS 504 Emergency Preparedness and Response Procedure

Appendix A Emergency Action Plan Template

5.5.5 All employees, contractors and visitors will remain clear of buildings and structures until an all clear notice is received from fire-fighting personnel.

5.5.6 Personnel and contractors shall at no time attempt to extinguish or “fight” a fire.

5.6 Fire – Electrical Facilities

5.6.1 In the event of a fire inside a substation, personnel discovering the fire will contact Site Management.

5.6.2 Site Management will designate an Emergency Coordinator to manage the incident.

5.6.3 Site Management will notify Pattern’s OCC to act as Off-site Emergency Coordinator and facilitate communications with essential personnel.

5.6.4 The Emergency Coordinator will obtain details of the exact location and size of the fire from the notifier.

5.6.5 The Emergency Coordinator will contact 911 and coordinate with the notifier to lead fire-fighting equipment to the scene. The designated responder will be notified by the Emergency Coordinator by radio of the location at which to meet with the fire department.

5.6.6 Personnel that discovered the fire will then proceed to the designated meeting point and be available to direct fire-fighting equipment to the substation.

5.6.7 Transformers and capacitors contain flammable, combustible material and all personnel must remain in safe areas away from these potentially explosive sources.

5.6.8 Personnel and contractors shall at no time attempt to extinguish or “fight” a fire.

6. INJURY/ILLNESS

6.1 Injury/Illness – Ground

6.1.1 In the event of an injury/illness requiring medical treatment, personnel will contact Site Management immediately.

6.1.2 Site Management will designate an Emergency Coordinator who will obtain details of the exact location and severity of the injury.

6.1.3 Site Management will notify Pattern’s OCC to act as Off-site Emergency Coordinator and facilitate communications with essential personnel.

6.1.4 The Emergency Coordinator will contact 911 and coordinate meeting points with medical assistance and site personnel.



SMS 504 Emergency Preparedness and Response Procedure

Appendix A Emergency Action Plan Template

6.2 Injury/Illness – At Heights

- 6.2.1 In the event of an injury/illness requiring medical treatment to personnel working in a nacelle or tower, personnel will contact Site Management immediately.
- 6.2.2 Site Management will designate an Emergency Coordinator who shall obtain details of the exact location and severity of the injury.
- 6.2.3 Site Management will notify Pattern's OCC to act as Off-site Emergency Coordinator and facilitate communications with essential personnel.
- 6.2.4 The Emergency Coordinator will contact 911 and coordinate meeting points with medical assistance and site personnel.
- 6.2.5 In the event that personnel are injured or ill while suspended in their harness, attending personnel will lower injured person using approved rescue devices.
- 6.2.6 If the injured person is not suspended in their harness, the attending personnel will wait for EMT assistance and instruction before lowering injured person using approved rescue devices.

6.3 Injury/Illness – Pesticide/Herbicide Treated Fields

- 6.3.1 In the event of an injury/illness due to pesticide or herbicide exposure, contact Site Management immediately.
- 6.3.2 Site Management will designate an Emergency Coordinator who will look at the pesticide labeling or Right to Know Bulletin Board and SDS, if available. If it gives specific first aid instructions, the Emergency Coordinator will disseminate the instructions.
- 6.3.3 Site Management will notify Pattern's OCC to act as Off-site Emergency Coordinator and facilitate communications with essential personnel.
- 6.3.4 The Emergency Coordinator will contact 911 if determined necessary by the extent of the injuries and/or the SDS and coordinate meeting points with medical assistance and site personnel.

7. CRIMINAL BEHAVIOR

7.1 Suspicious People

- 7.1.1 In case of suspicious people, it is the responsibility of all personnel, contractors and visitors to notify Site Management and report the location and nature of the suspicious activity. Personnel, contractors and visitors should not confront or attempt to detain trespassers or suspicious people. If is suspected, Site Management shall refer to RMS 402 Disturbance Reporting Procedure.



SMS 504 Emergency Preparedness and Response Procedure

Appendix A Emergency Action Plan Template

7.1.2 Site Management will determine the scope of the emergency response. For reports of criminal behavior such as vandalism, shooting, or illegal vehicles, Site Management or the Emergency Coordinator will contact local law enforcement.

7.1.3 Investigations into suspicious individual(s) may require a conversation with the individual to ascertain that person's connection with the site. At no time should any confrontation be allowed. If suspicious individuals seem hostile or violent, personnel should leave the area and inform Site Management to contact local law enforcement.

7.2 Personnel, Contractor or Visitor

7.2.1 Confrontational situations between personnel, contractors or visitors involving threats, harassment, confrontations or obscene acts or language should be reported immediately to Site Management.

7.2.2 If at any time personnel, contractors or visitors working at a site are concerned about their safety, it is their responsibility to report the situation to Site Management.

7.2.3 All employees are to read and understand this procedure. In the event of an electric shock, potentially minor in nature, employee will be escorted to medical clinic for evaluation

7.3 Third Party Threats to Facilities

7.3.1 In the event there is a threat to personnel or the site, Site Management will designate an Emergency Coordinator, initiate the Evacuation Procedure, and contact law enforcement. If sabotage is suspected, Site Management shall refer to RMS 402 Disturbance Reporting Procedure.

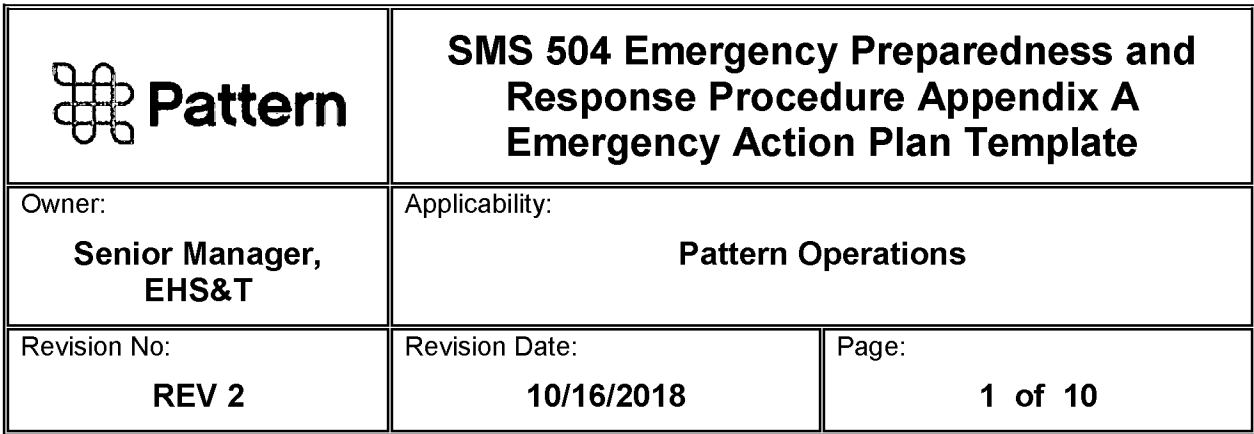
7.3.2 Once all personnel have been accounted for, the Emergency Coordinator will order the site evacuated.

7.3.3 Upon "all clear" notification from law enforcement, personnel may return to the building.

8. REFERENCES

8.1 RMS 402 Disturbance Reporting Procedure

8.2 KHA Online SDS database

[illegible]



SMS 504 Emergency Preparedness and Response Procedure Appendix A Emergency Action Plan Template

EMERGENCY ACTION PLAN (EAP) - [FACILITY NAME]

1. EMERGENCY CONTACTS

Site Name:	Site Address:	Site Phone Number:
Inside Assembly Area: Name:		Location:
Outside Assembly Area: Name:		Location:
Evacuation Area: Name:	Phone Number:	Address:
Facility Manager Name:	Office: Cell:	Email:
Assistant Facility Manager Name:	Office: Cell:	Email:
Contractor Lead Name:	Office: Cell:	Email:
Fire Department: Name:	Phone Number	Address:
Hospital (first aid): Name:	Phone Number	Address:
Hospital (burn unit): Name:	Phone Number	Address:
Hospital (trauma center): Name:	Phone Number	Address:
Police: Name:	Phone Number	Address:
Pattern OCC	Main: 713-308-4242 Secondary: 713-308-4243/4244	Patternocc@patternenergy.com
Pattern EHS Manager Name:	Office: Cell:	Email:
Regional Manager Name:	Office: Cell:	Email:



SMS 504 Emergency Preparedness and Response Procedure

Appendix A Emergency Action Plan Template

Contractor EHS Specialist Name	Office: Cell:	E-mail
Contractor Manager Name	Office: Cell:	E-mail

2. BASIC EMERGENCY INSTRUCTIONS

- 2.1 Anyone observing an emergency condition should immediately contact Site Management by cell phone or radio.
- 2.2 Site Management will issue a site-wide stop work announcement, initiate the general emergency procedure and take on or designate the role of Emergency Coordinator.
- 2.3 Site Management will notify Pattern's OCC to act as Off-site Emergency Coordinator and facilitate communications with essential personnel.
- 2.4 In the case of fire or injury/illness, the scenario-specific emergency response actions shall be initiated as well (as described in this document).
- 2.5 Once notified of the emergency condition, the Emergency Coordinator shall determine whether outside resources are needed and manage the support and interaction with those outside resources.

3. DIRECTIONS AND ADDRESS TO NEAREST HOSPITAL/CLINIC



SMS 504 Emergency Preparedness and Response Procedure

Appendix A Emergency Action Plan Template

4. SITE MAP: INCLUDE PHYSICAL ADDRESS

[Insert Site Map]

(Must include locations of all inside and outside Assembly Areas, the O&M building, access roads, turbines, substation(s), all buildings (including any dwellings on site) and emergency responder meeting points.)



SMS 504 Emergency Preparedness and Response Procedure

Appendix A Emergency Action Plan Template

5. FIRE

Personnel and contractors shall notify Site Management immediately upon discovery of a fire. Site Management will designate an Emergency Coordinator to manage the incident. Different types of fires will require different types of responses.

5.1 Grass, Brush and Forest Fires

- 5.1.1 In the event of grass and brush fires, personnel and contractors shall notify Site Management.
- 5.1.2 Site Management will designate an Emergency Coordinator to manage the incident.
- 5.1.3 Site Management will notify Pattern's OCC to act as Off-site Emergency Coordinator and facilitate communications with essential personnel.
- 5.1.4 The Emergency Coordinator will obtain details of the exact location and size of the fire from the notifier.
- 5.1.5 The Emergency Coordinator will contact 911 and coordinate with the notifier to lead fire-fighting equipment to the scene. The designated responder will be notified by the Emergency Coordinator by radio of the location at which to meet with the fire department.
- 5.1.6 The Emergency Coordinator will contact any land owners in the area with the location and size of the fire. Personnel may be directed by the Emergency Coordinator to visit any buildings/dwellings that may be in the anticipated path of a fire.
- 5.1.7 Only personnel trained to fight fires may do so and only under instruction from the civil authorities. In all other events, personnel shall at no time attempt to extinguish or "fight" a large brush or grass fire.

5.2 Turbine Fire – No Personnel Present

- 5.2.1 In the event of a turbine fire, personnel discovering the fire shall contact Site Management.
- 5.2.2 Site Management will designate an Emergency Coordinator to manage the incident.
- 5.2.3 Site Management will notify Pattern's OCC to act as Off-site Emergency Coordinator and facilitate communications with essential personnel.
- 5.2.4 The Emergency Coordinator will obtain details of the exact location and size of the fire from the notifier.



SMS 504 Emergency Preparedness and Response Procedure

Appendix A Emergency Action Plan Template

- 5.2.5 The Emergency Coordinator will contact 911 and coordinate with the notifier to lead fire-fighting equipment to the scene. The designated responder will be notified by the Emergency Coordinator by radio of the location at which to meet with the fire department.
- 5.2.6 The responder will then proceed to the designated meeting point and be available to direct fire-fighting equipment to the scene.
- 5.2.7 Personnel or contractors shall at no time attempt to go up tower to extinguish or “fight” a turbine fire. The role of personnel/contractor is to notify Site Management, liaise with the Emergency Coordinator, and lead fire-fighting equipment to the scene.
- 5.3 Turbine Fire – People in Nacelle, Fire in Down Tower Control Cabinet
 - 5.3.1 If a fire occurs in the down tower control cabinet while personnel or contractors are working in the nacelle, all nacelle hatches shall be opened immediately.
 - 5.3.2 Personnel discovering the fire will contact Site Management.
 - 5.3.3 The Site Management will designate an Emergency Coordinator to manage the incident.
 - 5.3.4 Site Management will notify Pattern’s OCC to act as the Off-site Emergency Coordinator and facilitate communications with essential personnel.
 - 5.3.5 The Emergency Coordinator shall obtain details of the exact location and size of the fire from the notifier.
 - 5.3.6 The Emergency Coordinator will contact 911 and request fire and medical assistance.
 - 5.3.7 The Emergency Coordinator will nominate a designated responder to meet at the Emergency Responder Meeting Point and lead fire-fighting equipment and medical resources to the scene. The designated responder will be notified by the Emergency Coordinator by radio of the location at which to meet with the fire department and medical resources.
 - 5.3.8 The designated responder will then proceed to a designated meeting point and be available to direct fire-fighting equipment and medical resources to the scene.
 - 5.3.9 Personnel and contractors in the nacelle will follow all normal fall protection procedures and attempt to remain in smoke free air until directed by fire-fighting personnel to climb down.
 - 5.3.10 If a smoke free environment cannot be maintained or the fire is not extinguished within 30 minutes, personnel will communicate with the designated responder to determine if emergency descent on the outside of the tower is feasible and appropriate.



SMS 504 Emergency Preparedness and Response Procedure

Appendix A Emergency Action Plan Template

5.3.11 At no time shall personnel attempt to climb down until directed.

5.4 Turbine Fire – People in Nacelle, Fire in Nacelle

5.4.1 If a fire occurs in the nacelle while personnel are present, personnel shall abandon all tools and equipment and immediately descend the tower ladder and exit the turbine.

5.4.2 If the fire blocks access to the exit, personnel shall use the emergency descent system to reach ground level.

5.4.3 Personnel nor contractors shall not attempt to extinguish or “fight” a nacelle fire, unless required to maintain access to an exit.

5.4.4 Once away from the fire, personnel discovering the fire shall contact Site Management.

5.4.5 Site Management will designate an Emergency Coordinator to manage the incident.

5.4.6 Site Management will notify Pattern’s OCC to act as Off-site Emergency Coordinator and facilitate communications with essential personnel.

5.4.7 The Emergency Coordinator will obtain details of the exact location and size of the fire from Site Management.

5.4.8 The Emergency Coordinator will contact 911 and request fire and medical assistance.

5.4.9 The Emergency Coordinator will nominate a designated responder to lead fire-fighting equipment and medical resources to the scene. The designated responder will be notified by the Emergency Coordinator by radio of the location at which to meet with the fire department and medical resources.

5.4.10 The designated responder will then proceed to the designated meeting point and be available to direct fire-fighting equipment and medical resources to the scene.

5.5 Fire – O&M Building

5.5.1 In the event of a fire in the O&M building, personnel discovering the fire will activate the building fire alarm.

5.5.2 At the alarm sound, Site Management will designate an Emergency Coordinator who will immediately notify 911 and request fire and medical assistance.

5.5.3 Site Management will notify Pattern’s OCC to act as Off-site Emergency Coordinator and facilitate communications with essential personnel.

5.5.4 The General Emergency Response and Evacuation Procedures will then be followed.



SMS 504 Emergency Preparedness and Response Procedure

Appendix A Emergency Action Plan Template

5.5.5 All employees, contractors and visitors will remain clear of buildings and structures until an all clear notice is received from fire-fighting personnel.

5.5.6 Personnel and contractors shall at no time attempt to extinguish or “fight” a fire.

5.6 Fire – Electrical Facilities

5.6.1 In the event of a fire inside a substation, personnel discovering the fire will contact Site Management.

5.6.2 Site Management will designate an Emergency Coordinator to manage the incident.

5.6.3 Site Management will notify Pattern’s OCC to act as Off-site Emergency Coordinator and facilitate communications with essential personnel.

5.6.4 The Emergency Coordinator will obtain details of the exact location and size of the fire from the notifier.

5.6.5 The Emergency Coordinator will contact 911 and coordinate with the notifier to lead fire-fighting equipment to the scene. The designated responder will be notified by the Emergency Coordinator by radio of the location at which to meet with the fire department.

5.6.6 Personnel that discovered the fire will then proceed to the designated meeting point and be available to direct fire-fighting equipment to the substation.

5.6.7 Transformers and capacitors contain flammable, combustible material and all personnel must remain in safe areas away from these potentially explosive sources.

5.6.8 Personnel and contractors shall at no time attempt to extinguish or “fight” a fire.

6. INJURY/ILLNESS

6.1 Injury/Illness – Ground

6.1.1 In the event of an injury/illness requiring medical treatment, personnel will contact Site Management immediately.

6.1.2 Site Management will designate an Emergency Coordinator who will obtain details of the exact location and severity of the injury.

6.1.3 Site Management will notify Pattern’s OCC to act as Off-site Emergency Coordinator and facilitate communications with essential personnel.

6.1.4 The Emergency Coordinator will contact 911 and coordinate meeting points with medical assistance and site personnel.



SMS 504 Emergency Preparedness and Response Procedure

Appendix A Emergency Action Plan Template

6.2 Injury/Illness – At Heights

- 6.2.1 In the event of an injury/illness requiring medical treatment to personnel working in a nacelle or tower, personnel will contact Site Management immediately.
- 6.2.2 Site Management will designate an Emergency Coordinator who shall obtain details of the exact location and severity of the injury.
- 6.2.3 Site Management will notify Pattern's OCC to act as Off-site Emergency Coordinator and facilitate communications with essential personnel.
- 6.2.4 The Emergency Coordinator will contact 911 and coordinate meeting points with medical assistance and site personnel.
- 6.2.5 In the event that personnel are injured or ill while suspended in their harness, attending personnel will lower injured person using approved rescue devices.
- 6.2.6 If the injured person is not suspended in their harness, the attending personnel will wait for EMT assistance and instruction before lowering injured person using approved rescue devices.

6.3 Injury/Illness – Pesticide/Herbicide Treated Fields

- 6.3.1 In the event of an injury/illness due to pesticide or herbicide exposure, contact Site Management immediately.
- 6.3.2 Site Management will designate an Emergency Coordinator who will look at the pesticide labeling or Right to Know Bulletin Board and SDS, if available. If it gives specific first aid instructions, the Emergency Coordinator will disseminate the instructions.
- 6.3.3 Site Management will notify Pattern's OCC to act as Off-site Emergency Coordinator and facilitate communications with essential personnel.
- 6.3.4 The Emergency Coordinator will contact 911 if determined necessary by the extent of the injuries and/or the SDS and coordinate meeting points with medical assistance and site personnel.

7. CRIMINAL BEHAVIOR

7.1 Suspicious People

- 7.1.1 In case of suspicious people, it is the responsibility of all personnel, contractors and visitors to notify Site Management and report the location and nature of the suspicious activity. Personnel, contractors and visitors should not confront or attempt to detain trespassers or suspicious people. If is suspected, Site Management shall refer to RMS 402 Disturbance Reporting Procedure.



SMS 504 Emergency Preparedness and Response Procedure

Appendix A Emergency Action Plan Template

7.1.2 Site Management will determine the scope of the emergency response. For reports of criminal behavior such as vandalism, shooting, or illegal vehicles, Site Management or the Emergency Coordinator will contact local law enforcement.

7.1.3 Investigations into suspicious individual(s) may require a conversation with the individual to ascertain that person's connection with the site. At no time should any confrontation be allowed. If suspicious individuals seem hostile or violent, personnel should leave the area and inform Site Management to contact local law enforcement.

7.2 Personnel, Contractor or Visitor

7.2.1 Confrontational situations between personnel, contractors or visitors involving threats, harassment, confrontations or obscene acts or language should be reported immediately to Site Management.

7.2.2 If at any time personnel, contractors or visitors working at a site are concerned about their safety, it is their responsibility to report the situation to Site Management.

7.2.3 All employees are to read and understand this procedure. In the event of an electric shock, potentially minor in nature, employee will be escorted to medical clinic for evaluation

7.3 Third Party Threats to Facilities

7.3.1 In the event there is a threat to personnel or the site, Site Management will designate an Emergency Coordinator, initiate the Evacuation Procedure, and contact law enforcement. If sabotage is suspected, Site Management shall refer to RMS 402 Disturbance Reporting Procedure.

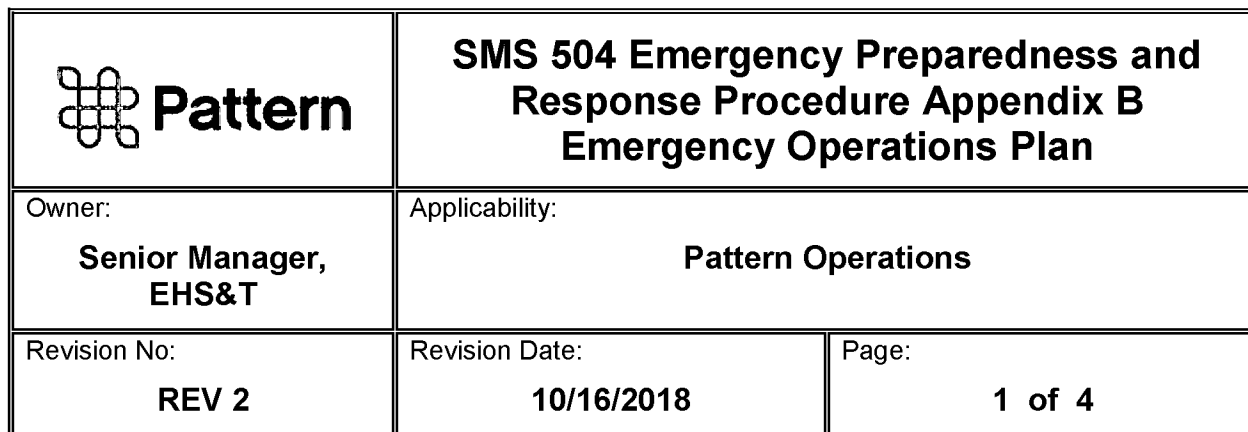
7.3.2 Once all personnel have been accounted for, the Emergency Coordinator will order the site evacuated.

7.3.3 Upon "all clear" notification from law enforcement, personnel may return to the building.

8. REFERENCES

8.1 RMS 402 Disturbance Reporting Procedure

8.2 KHA Online SDS database

[illegible]



SMS 504 Emergency Preparedness and Response Procedure

Appendix B Emergency Operations Plan

1. OBJECTIVE

The intent of the Emergency Operations Plan (EOP) is to provide a guide for operations during the event of an emergency. The EOP addresses the requirements for systematic restoration of electrical service and return to normal working conditions from emergency conditions. Each operating facility shall have its own plan specific to site conditions, regulatory entities and specific environmental conditions.

1.1 Operations Control Center and Emergency Communication Set-Up

- 1.1.1 During all emergency situations at a site, the OCC provides the coordination and control. The OCC will coordinate with the onsite Emergency Coordinator as designated by SMS 504 Emergency Preparedness and Response.
- 1.1.2 All sites are equipped with redundant data links, local telephone service and mobile devices. In addition, connectivity onsite is ensured by the use of hand-held radios. All site personnel are equipped with laptops and mobile phones that can be taken to an offsite location as needed. These devices are all set up to allow for continuous monitoring and operation from a remote location.
- 1.1.3 The OCC is headquartered in the Houston office. This office is equipped with redundant data links, local telephone service and mobile devices. If the Houston office is destroyed or unusable, the OCC will be established at an offsite location. The OCC is equipped with laptops and mobile phones that will be taken to this offsite location as needed. These devices are set up to allow for continuous monitoring and operation from a remote location.

1.2 Internal Communications

- 1.2.1 In an emergency, it is expected of all personnel and contractors to follow the directions of the Emergency Coordinator and designee(s). No individuals are to take it upon themselves to notify other personnel or contractors to come to an emergency area. The Emergency Coordinator and designee(s) will notify personnel and/or contractors required to handle a specific emergency.
- 1.2.2 The Emergency Coordinator shall ensure the OCC is informed of any suspected and/or actual emergency as soon as practical.
- 1.2.3 The OCC shall disseminate any emergency notification to appropriate personnel. The Director, Operations will determine the need to inform other business units within Pattern including members of executive management.
- 1.2.4 In the event the OCC suspects an emergency at a Pattern site without having received prior notification from the Emergency Coordinator, the OCC shall attempt to establish contact with Site Management. If Site Management cannot be reached, the OCC shall attempt to contact the service provider on site. If this contact cannot be established, the OCC shall contact appropriate Pattern personnel to determine an appropriate plan of action based on the suspected emergency.



SMS 504 Emergency Preparedness and Response Procedure

Appendix B Emergency Operations Plan

1.3 External Communications

- 1.3.1 In an emergency situation, the OCC shall ensure all applicable parties of the interconnect, scheduling agents and neighboring utilities are contacted and informed of the emergency.
- 1.3.2 Communication with emergency response teams, such as the local fire department, local law enforcement and others is executed in accordance with SMS 504 Emergency Preparedness and Response Appendix A Emergency Action Plan.
- 1.3.3 Inquiries from non-Pattern personnel or external contacts that are not part of emergency response and restoration efforts should immediately be referred to the Director, Operations.
- 1.3.4 Direct responsibility for external media interface will be delegated to Pattern's media relations personnel. No other personnel should talk to the media.
- 1.3.5 Primary Emergency and other reporting contacts can be found in SMS 504 Emergency Preparedness and Response Appendix A Emergency Action Plan and RMS 407 Communication and Reporting Contacts (all sites).
- 1.3.6 A satellite phone should be available onsite in the event regular communication is affected. To be activated when a warning is initiated by the NWS.

1.4 Emergency Response and Restoration Efforts

- 1.4.1 There are many types of emergency conditions that can interrupt service and affect operations in a variety of ways. Included below are several classifications of major emergencies and a general description of the response(s) to the particular emergency condition.
- 1.4.2 Any employee who experiences an electrical shock event, shall be escorted to medical facility for evaluation.

1.5 Actual or Suspected Sabotage

- 1.5.1 All threats must be treated seriously by Pattern personnel and contractors. RMS 402 Disturbance Reporting Procedure shall be considered and implemented as appropriate.
- 1.5.2 Personnel and contractors shall adhere to the direction of local law enforcement. Should evacuation of the affected facility be necessary, all involved personnel should contact their immediate supervisor for details regarding a return to work.
- 1.5.3 If a disaster is caused by suspected sabotage, the Emergency Coordinator at site will be the principal contact for the first responder, local law enforcement and OCC.



SMS 504 Emergency Preparedness and Response Procedure

Appendix B Emergency Operations Plan

1.6 Natural Disasters Including Hurricanes, Tornadoes, Flooding and Other

- 1.6.1 In the event of a disaster, the onsite Emergency Coordinator shall notify Pattern personnel by contacting the OCC and informing the OCC of the status on an ongoing basis as practical.
- 1.6.2 Damage assessment should begin as soon as it is safe to do so. All damaged sites must be secured including, if necessary, the disconnection of power and gas utilities by qualified technicians. Back-up power sources should also be activated if necessary. In addition, necessary safety zones must be established and caution signs posted as a safety precaution for personnel and emergency personnel. Employees and first responders need to be aware if there is a potential for toxic fumes.
- 1.6.3 All incidents shall be investigated to the root cause of the event, based on actual or worst risk ranking rated at 10 or above.

1.7 Fire

- 1.7.1 In the event of a fire at a site including transformers, substations, or Wind Tower Generators (WTGs), local fire officials shall be notified immediately. The onsite Emergency Coordinator shall notify Pattern personnel by contacting the OCC and informing the OCC of the status on an ongoing basis as practical. Personnel, contractors and first responders need to be aware if there is a potential for toxic fumes.
- 1.7.2 All damaged sites must be secured including, if necessary, the disconnection of power and gas utilities by qualified technicians. Back-up power sources should also be activated, if necessary. In addition, necessary safety zones must be established and caution signs posted as a safety precaution for personnel and emergency personnel.
- 1.7.3 A site experiencing an emergency will coordinate restoration efforts with the applicable parties of the interconnect (transmission operator, balancing authority and/or reliability coordinator) and will make all reasonable efforts to restore operations as soon as practical. Operators shall follow all operating instructions issued by the applicable parties of the interconnect. The site will be brought back online only after approval has been obtained from the applicable transmission operator.

1.8 Training

- 1.8.1 The EOP shall be trained on in connection with training on SMS 504 Emergency Preparedness and Response Procedure.

2. REFERENCES

- 2.1 SMS 504 Emergency Preparedness And Response Appendix A Emergency Action Plan
- 2.2 RMS 407 Communication And Reporting Contacts (All Sites).
- 2.3 RMS 402 Disturbance Reporting Procedure



SMS 504 Emergency Preparedness and Response Procedure

Appendix C Pandemic Plan

1. OBJECTIVE

The intent of the Pandemic Plan is to provide guidelines for responding to a Pandemic Declaration by Pattern, local health services, local emergency management, the Federal Emergency Management Agency (FEMA), the World Health Organization (WHO), Public Health Agency of Canada (PHAC) and/or the Centers for Disease Control and Prevention (CDC). All sites shall monitor their respective state or provinces' health department advisories.

2. COMMUNICATION

The Vice President, Operations will be responsible for a Pandemic Declaration at any operating facility. Upon reviewing and verifying notifications from local health services, local emergency management, FEMA, WHO and/or the CDC, Site Management will notify site personnel, local emergency management agencies, and suppliers and vendors as necessary.

3. HYGIENE

- 3.1 In response to a Pandemic Declaration, Site Management shall impose hygiene controls on all areas of the site occupied or used by personnel. Additional attention will be given to equipment, door handles, restrooms, telephones, keyboards, keypads, file drawer handles and test equipment that are used by multiple people. Particular attention will be made to all new deliveries that arrive at the site immediately after the Pandemic Declaration.
- 3.2 Site Management will maintain hygiene supplies in suitable quantities to maintain an enhanced hygiene program. Supplies will be routinely rotated for general use and for exercises/drills to ensure a working shelf life. The following list may be required, but is not limited to:
 - 3.2.1 Hygienic solutions including medical grade alcohol (minimum of 60% concentration), household bleach, antiseptics/disinfectants cleaners and air sprays;
 - 3.2.2 Cloth and paper cleaning towels;
 - 3.2.3 Disposable paper uniforms and slippers;
 - 3.2.4 Latex gloves;
 - 3.2.5 Drawstring trash bags;
 - 3.2.6 Bottled water;
 - 3.2.7 Air/microbial masks; and
 - 3.2.8 Over-the-counter drugs to reduce symptoms and promote recovery.



SMS 504 Emergency Preparedness and Response Procedure

Appendix C Pandemic Plan

3.3 Site Management shall impose stringent hygiene rules that all personnel at the site must follow, such as:

3.3.1 All common areas will be cleaned on a regular basis with antiseptics/disinfectants cleaners; Users shall clean/wipe down work areas daily;

4. INCOMING SUPPLIES AND EQUIPMENT

4.1 Sites shall set up a “drop and go” location for deliveries.

4.2 Incoming supplies and equipment or any other type of deliverable(s) that arrive at the site shall be cleaned with antiseptics/disinfectants cleaners before being distributed on site.

5. REDUCE EXPOSURE RISK

5.1 Non-essential site visitors are NOT allowed on site.

5.2 For essential visitors, they must first complete a Visitor Questionnaire prior to coming onto site.

5.2.1 Essential: Performing work that directly results in or assists in or provides enhanced reliability in the wind plant’s operations and power delivery to the grid.

5.2.2 Non-essential: Anyone that does not meet the criteria of essential.

5.3 In accordance with CDC guidance, refrain from attending any large gatherings.

5.4 Avoid use of public transportation, in particular air, train, and bus travel.

5.5 Avoid social contact. Do not shake hands, or otherwise come in contact with others.

6. TRAINING

6.1 The Pandemic Plan shall be trained on, in connection with, training on SMS 504 Emergency Preparedness and Response.

7. REFERENCES

7.1 SMS 504 Emergency Preparedness and Response Procedure

Enclosure 1: COVID-19 Response Plan - Field Operations – Rev 2

The following response plan prescribes actions and requirements for the North American Field Operations teams as a result of the COVID-19 pandemic.

Actively encourage site personnel to stay home if they are feeling ill.

Employees should notify their supervisor and stay home if they are feeling ill. Do not come to site if you are feeling ill. Facility Managers should develop an employee coverage plan should the FM, AFM and/or Lead Tech become ill and need to work from home or remain off site for an extended period.

Ensure employees who have or are suspected of having COVID-19 symptoms are asked to stay home and not come to work until they are free of fever (100.4° F [37.8° C] or greater using an oral thermometer), free of signs of a fever, and any other symptoms for at least 72 hours, without the use of fever-reducing or other symptom-altering medicines (e.g. cough suppressants).

COVID-19 symptoms: <https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>

External Requirements:

Sites shall follow all Federal, State, and Local jurisdiction requirements and mandates in your area. Should jurisdictional requirements be more stringent than what is required in this plan, those requirements shall be followed. This plan represents the minimum operating requirements for the sites.

Face Coverings:

OCC staff: OCC staff are required to wear face coverings anytime they are away from their desk in accordance with the COVID-19 OCC Response Plan.

Field Staff: Field staff are required to wear face coverings in all common areas of the O&M building, and/or when interacting with others. Exception: if you are in your office, isolated from others, face coverings are not required. However, if someone comes into your office, or you interact with others while in your office, you and the other individual shall don face coverings.


Common areas are defined as: Conference Rooms, Tech Rooms, Kitchen/eating areas, shop/warehouse, restrooms, entry-ways, and in vehicles.

Facility Managers (Self Perform) are encouraged to purchase face shields and have available for technicians to wear while working in the turbine.



SMS 504 Emergency Preparedness and Response Procedure Appendix C Pandemic Plan

Mitigate the Risk of Exposure:



Ten Steps All Workplaces Can Take to Reduce Risk of Exposure to Coronavirus

All workplaces can take the following infection prevention measures to protect workers:

- 1 Encourage workers to stay home if sick.
- 2 Encourage respiratory etiquette, including covering coughs and sneezes.
- 3 Provide a place to wash hands or alcohol-based hand rubs containing at least 60% alcohol.
- 4 Limit worksite access to only essential workers, if possible.
- 5 Establish flexible worksites (e.g., telecommuting) and flexible work hours (e.g., staggered shifts), if feasible.
- 6 Discourage workers from using other workers' phones, desks, or other work tools and equipment.
- 7 Regularly clean and disinfect surfaces, equipment, and other elements of the work environment.
- 8 Use Environmental Protection Agency (EPA)-approved cleaning chemicals with label claims against the coronavirus.
- 9 Follow the manufacturer's instructions for use of all cleaning and disinfection products.
- 10 Encourage workers to report any safety and health concerns.

For more information, visit www.osha.gov/coronavirus or call 1-800-321-OSHA (6742).



SMS 504 Emergency Preparedness and Response Procedure Appendix C Pandemic Plan

In addition to the actions and recommendations above, site management shall ensure soap and water is readily available, as well as alcohol-based (at least 60% alcohol) hand rubs/sanitizers are provided and/or available for use. Ensure adequate sanitizing and disinfecting supplies are maintained. Place hand rubs in multiple locations, as well as all common areas, to encourage proper hygiene.

Routinely clean all frequently touched surfaces in the workplace, such as workstations, countertops, and doorknobs. Use the cleaning agents that are usually used in these areas and follow the directions on the label.

Provide disposable wipes so that commonly used surfaces (for example, doorknobs, keyboards, remote controls, desks) can be wiped down by site personnel before each use.

Reporting:

Inform your supervisor if any of your site employees have been exposed to and/or test positive for Coronavirus (or other members of their households).

Visitor Policy:

Non-essential visitors, vendors, or contractors are **not** permitted on site.

- As a best practice, it's recommended to close and lock the O&M gate having a sign available with site management contact numbers allowing any unannounced visitors to call and request permission to enter the site.

Establish an entry containment area to allow for **essential** site visitors (vendors, land owners, or contractors) to serve as a holding/screening area until the individual(s) are vetted and approved to work on site. Essential visitors must complete a Visitor Questionnaire and answer all questions in the negative in order to be allowed on site.

- Entry containment areas shall be designated away from the site main entry, offices and normal traffic areas, allowing visitors to be isolated from site personnel during the visitor screening process. Ensure the containment area is disinfected after each use.

As noted above, all **essential** site visitors shall complete a **Visitor Questionnaire**

- **If any of the responses on the Visitor Questionnaire are in the affirmative, site entry is not permitted:**

See enclosure 2 for the Visitor Questionnaire



SMS 504 Emergency Preparedness and Response Procedure Appendix C Pandemic Plan

Action Plans:

Site Deliveries

Site management shall designate a delivery drop off at the office/shop that which eliminates the need for human to human interaction. I.e. drop and go. A wipe down of boxes and goods shall be conducted prior handling.

If site support is required to offload deliveries, follow the essential visitor section above.

Response Plans

All wind plants shall operate with staggered shifts, designating and isolating teams whenever possible, and utilize remote/virtual PODs. Vehicles and tools shall not be shared whenever possible.

Eliminate or minimize time in the O&M whenever possible and ensure all touch points are wiped down.

High Risk

In the event a site employee tests positive, or a site employee sharing a living space with an individual who tested positive, or a site employee who otherwise came in **direct** contact with an individual that tested positive for COVID-19 the following actions shall be taken:

- All site employees shall self-monitor, and get tested if symptoms warrant
- A review of potential employee to employee contact will be conducted. Based on the results of the contact review, certain employees may be asked to self-isolate and be tested.
- Isolation period shall be 14 days unless otherwise directed
 - Employees shall work remotely during isolation period wherever possible
- Employees may return to work only when they have a negative test or have completed the required isolation period
- Site management shall ensure affected facilities are routinely cleaned/disinfected and shall be cleaned immediately following any potential employee contact.



SMS 504 Emergency Preparedness and Response Procedure Appendix C Pandemic Plan

Low Risk

In the event a site employee who was in the vicinity of an individual that tested positive, but did not come in direct contact with the individual who tested positive for COVID-19 the following actions shall be taken:

- Site management investigate the circumstances of indirect contact
- A review of potential employee to employee contact will be conducted. Based on the results of the contact review, certain employees may be asked to self-isolate and be tested.
- Site management shall ensure affected facilities are appropriately cleaned/disinfected
 - Take appropriate action to mitigate any potential exposure until the facilities can be disinfected

Additional considerations

Consider increasing spare part levels for certain consumables/high volume parts in case of supply disruption.

Government-mandated closure of worksites or travel restrictions to a location

- Follow closure requirements and work remotely as able. If allowed, respond to site for outages only.
- Carry official Pattern Letter confirming you are an essential employee to inform authorities that certain plant staff are providing critical service and shall be allowed to travel between the plant and residence.

General policy on travel for business-critical issues (e.g. critical plant outage or safety incident) for Field Ops

- Travel is not permitted unless deemed business critical and approved by VP, Operations. Utilize Webex / Facetime for off-site support as needed.

Travel Requirements

If an employee has received permission to travel and is planning to travel to a Pattern Operational site, ensure all COVID requirements (travel in/out of, as well as on site requirements) are understood in advance, and are followed throughout the travel period. Coordinate travel plans with both the Facility Manager and Regional Director in addition to the following requirements:

- a) The employee seeking a travel exemption must be performing critical/essential services directly relating to the operations of our facilities and the work is of an urgent nature.



SMS 504 Emergency Preparedness and Response Procedure Appendix C Pandemic Plan

- b) The employee must not have travelled in the previous 14 days, and must not be exhibiting any symptoms of illness
- c) After receiving approval from their direct manager, the employee should have the VP, Operations email approval that there is a bona fide requirement that the work be performed within 14 days of their entry into Canada (such that they must be exempt from a quarantine requirement).
- d) The employee is required to request and receive a letter from Pattern HR detailing the work to be performed and the essential nature of it. Letter will also include specific dates of travel.
- e) The person will be required to wear a mask at all times while indoors in work settings, while in outdoor/public settings where distancing cannot be maintained, and generally to respect all social distancing rules & guidelines when in Canada

Puerto Rico:

In addition to the above, Puerto Rico's current travel advisory requires travelers to 1) fill out a Travel Declaration Form through the Puerto Rico Health Department's online portal; 2) get a molecular COVID-19 test (nasal or throat swab) no more than 72 hours prior visiting the Island and; 3) show proof of a negative result, otherwise the traveler must quarantine. Face coverings are to be worn at all times when in public, and are subject to a fine if found without.

Travel Declaration Form can be found here:

<https://app.travelsafe.pr.gov/>

This enclosure will be updated as COVID-19 conditions and notices change.

SMS 504 Appendix C Pandemic Plan

Visitor Questionnaire:

1. Have you travelled through any major cities or hubs in the past 14 days?

Yes or No

Please list: _____

2. Please provide your proposed travel itinerary to site.

3. Have you travelled to, stopped over in, or traveled with airlines with an Alert Level 2 or Warning Level 3? List of travel notices and advisories can be found here: <https://wwwnc.cdc.gov/travel/notices>

Please list: _____

4. Have you had any known contact with anyone who has tested positive or may be suspected of having COVID-19? Yes or No

5. Have you participated in any large gatherings in the past 14 days? Yes or No

6. Have you experienced any of the following symptoms over the past 14 days?

a. Fever

b. Cough

c. Shortness of breath or other respiratory difficulties

Additional pertinent notes/details: _____

Name: _____

Company: _____

Phone Number: _____

Date: _____

COVID-19 OCC Preparations

Disaster Recovery Plan Outline

If OCC is required to vacate the Houston office and work from home for any reason*, OCC will follow its normal disaster recovery plan as outlined below.

Please note: OCC schedules two operators to work at all times (Operator 1 and Operator 2).

1. Operator 1 will leave the office while Operator 2 works solo in the Houston OCC.
2. When Operator 1 arrives at home, connects to all systems and notifies Operator 2 that he is ready to take over, Operator 2 will transfer phone calls to Operator 1's cell phone number and will vacate the building. Operator 2 will drive home and connect to all systems.
3. When Operators 1 and 2 are both fully functional at home, one of the operators will make phone calls to all required entities notifying them that OCC has enacted its disaster recovery plan and is working away from the primary control room. The other operator will monitor sites and answer external phone calls.
4. OCC will send an email notification to all Pattern site's emergency notification distribution lists to notify all field personnel and management that they are working from home.
5. The OCC Manager may step in at any time to help complete these tasks or to act as an OCC operator while these tasks are completed.
6. There is a possibility that at any given time, the OCC may still be habitable, but an operator is required to work from home. OCC will function as normal, with the secondary operator connecting and working from home.

Internal communications between OCC personnel should be done via Skype instant messages, emails, or text messages. Phone calls should be limited during this time, since the OCC phone line is forwarded to a cell phone and the line should be kept clear.

When employees are able to return to the Houston OCC, the above steps will be followed to re-enter the OCC and forward phone calls back to the main office.

*Reasons may include the following:

- An employee tested positive for COVID-19 in the Houston office building requiring the building to be evacuated or a government-mandated closure of worksites.
- OCC operator requests to work from home to care for sick family members, or to care for children if schools are closed.
- A person that shares living space with an OCC operator has tested positive for COVID-19 requiring this operator to self-quarantine.

Backup Plan

If one or more OCC operators become ill or are unable to complete the duties of the job while initiating the Disaster Recovery Plan, replacement operators have been identified to potentially cover OCC shifts. These replacement operators will be responsible for simple substation monitoring and turbine resets at Pattern's self-perform sites. The primary OCC operator and/or OCC Manager will be responsible for all other duties during these times.

The OCC Manager will coordinate with these replacement operators and IT to secure access to all of the OCC's tools that will need to be monitored in real-time.

Training will be provided to these replacement operators (operations training; compliance training; etc...) prior to the need for them to cover any shifts.

These replacement operators will be notified that their services are required as soon as possible before their scheduled shift begins.

SMS 517 Safety Assessment

Appendix B EHS and Housekeeping Assessment Route Example

Offices		Needs Improvement	Action Required
<input type="checkbox"/> Entry Door	<input type="checkbox"/> Closes/latches and seals properly <input type="checkbox"/> Opens without abnormal resistance	<input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Fire Extinguisher	<input type="checkbox"/> Inspection tag is current up to date <input type="checkbox"/> Extinguisher is visibly functional with proper safety devices	<input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Window/Blinds	<input type="checkbox"/> Verify all windows are undamaged and operate properly <input type="checkbox"/> Windows & blinds function correctly <input type="checkbox"/> Check window seals for debris	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Fire Extinguisher	<input type="checkbox"/> Inspection tag is current up to date <input type="checkbox"/> Extinguisher is visibly functional with proper safety devices	<input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Security Camera	<input type="checkbox"/> Lens is clean of mud/dirt debris <input type="checkbox"/> Camera is undamaged & visibly fit for use <input type="checkbox"/> Camera free from tampering	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> TV/Monitor	<input type="checkbox"/> Mounted properly <input type="checkbox"/> Free of damage <input type="checkbox"/> No loose cables in plain view	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Emergency Lighting (Restrooms)	<input type="checkbox"/> Lights are mounted correctly <input type="checkbox"/> Lights activate when testing	<input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Emergency Lighting (SCADA Room)	<input type="checkbox"/> Lights are mounted correctly <input type="checkbox"/> Lights activate when testing	<input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Emergency Lights	<input type="checkbox"/> Lights are mounted correctly <input type="checkbox"/> Lights activate when testing <input type="checkbox"/> Both lights are active	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Entry Door	<input type="checkbox"/> Closes/latches and seals properly <input type="checkbox"/> Opens without abnormal resistance	<input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Fluorescent Lights	<input type="checkbox"/> Lights and lens are present <input type="checkbox"/> Lights are undamaged <input type="checkbox"/> Lights are functioning correctly	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	

<input type="checkbox"/> Exit Sign	<input type="checkbox"/> Sign is undamaged <input type="checkbox"/> Sign is illuminated <input type="checkbox"/> Emergency lights function when testing	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Entry Door	<input type="checkbox"/> Closes/latches and seals properly <input type="checkbox"/> Crash bar operates correctly <input type="checkbox"/> Opens without abnormal resistance	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Trauma Kit/AED (red bag) 1 in the office 1 in shop	<input type="checkbox"/> Kit is accessible <input type="checkbox"/> Kit is fully stocked (not expired) <input type="checkbox"/> AED operates and pads are not expired	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> First Aid Kit (white box)	<input type="checkbox"/> Kit is accessible <input type="checkbox"/> Kit is fully stocked (not expired)	<input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> SDS	<input type="checkbox"/> Poster board with log in information is available and legible	<input type="checkbox"/>	
Building (Outside)		Needs Improvement	Action Required
<input type="checkbox"/> Building (North side)	<input type="checkbox"/> No damage to exterior siding <input type="checkbox"/> No Trash/debris in yard	<input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> A/C Unit	<input type="checkbox"/> No signs of damage <input type="checkbox"/> Functions properly	<input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Cummins Generator	<input type="checkbox"/> Inspect generator housing <input type="checkbox"/> Inspect air filter <input type="checkbox"/> Verify oil level is acceptable <input type="checkbox"/> Self test (check on Feb, April, June, Aug, Oct, Dec.) <input type="checkbox"/> Note run time hours _____ hrs	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Propane Tank	<input type="checkbox"/> No damage to exterior <input type="checkbox"/> Note guage readings on tank _____	<input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Septic Covers	<input type="checkbox"/> Covers are present and installed <input type="checkbox"/> Has no damage to lids or exposed area	<input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Tornado Shelter	<input type="checkbox"/> Is not damaged	<input type="checkbox"/>	

<input type="checkbox"/> Free from wildlife <input type="checkbox"/> Emergency supplies are available and in not expired		<input type="checkbox"/> <input type="checkbox"/>	
Shop		Needs Improvement	Action Required
<input type="checkbox"/> Entry Door	<input type="checkbox"/> Door swing if free of obstructions <input type="checkbox"/> Door self closes <input type="checkbox"/> Proper labeled	<input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> LED Lights	<input type="checkbox"/> Lights and lens are present <input type="checkbox"/> Lights are undamaged <input type="checkbox"/> Lights are functioning correctly	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Electrical Panel	<input type="checkbox"/> Door is closed and latched <input type="checkbox"/> Free of any obstructions	<input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Ice Maker	<input type="checkbox"/> Ice Maker is producing ice <input type="checkbox"/> No signs of leaks	<input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Emergency Eye Wash	<input type="checkbox"/> Proper signs/labels <input type="checkbox"/> Functions properly <input type="checkbox"/> Free of any debris/obstructions	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Water Heater/Tank	<input type="checkbox"/> Free of any water leak <input type="checkbox"/> No Trash/debris around tanks <input type="checkbox"/> Good overall condition	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Emergency Lights	<input type="checkbox"/> Lights are mounted correctly <input type="checkbox"/> Lights activate when testing	<input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Fire Extinguisher	<input type="checkbox"/> Inspection tag is current up to date <input type="checkbox"/> Extinguisher is visibly functional with proper safety devices	<input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Pattern Supply Cabinets	<input type="checkbox"/> Cabinets are undamaged <input type="checkbox"/> Cabinets locked <input type="checkbox"/> Cabinets stored in a correct area	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Flammable/Chemical Cabinet	<input type="checkbox"/> Cabinet are undamaged <input type="checkbox"/> Cabinet is properly grounded <input type="checkbox"/> Cabinet doors latch properly <input type="checkbox"/> No combustibles are located inside cabinet <input type="checkbox"/> All containers are labeled	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Ladders	<input type="checkbox"/> Ladders are in good shape and not bent <input type="checkbox"/> No loose/missing rungs or parts	<input type="checkbox"/> <input type="checkbox"/>	

<input type="checkbox"/> Fire Extinguisher	<input type="checkbox"/> Inspection tag is current up to date <input type="checkbox"/> Extinguisher is visibly functional with proper safety devices	<input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Smoke Detectors	<input type="checkbox"/> Sensor is visually working <input type="checkbox"/> Sensor is mounted properly	<input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Exit Sign	<input type="checkbox"/> Sign is undamaged <input type="checkbox"/> Sign is illuminated <input type="checkbox"/> Emergency lights function when testing	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Overhead Door	<input type="checkbox"/> Opens automatically <input type="checkbox"/> Opens without abnormal resistance <input type="checkbox"/> Closes and door seal seats properly	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Emergency Lights	<input type="checkbox"/> Lights are mounted correctly <input type="checkbox"/> Lights activate when testing	<input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Air Vent	<input type="checkbox"/> Louvers open when activated <input type="checkbox"/> Fan turns on in upper NW side of shop	<input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Thermostat	<input type="checkbox"/> Thermostat is set to proper temp. (60) <input type="checkbox"/> Thermostat activates heater <input type="checkbox"/> Heater visual check <input type="checkbox"/> Heater path is not obstructed	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Chemical Labels	<input type="checkbox"/> Check for proper labeling of any chemicals	<input type="checkbox"/>	
Mezzanine		Needs Improvement	Action Required
<input type="checkbox"/> Stairs/Mezzanine Floor	<input type="checkbox"/> Stairs are clear of any obstruction <input type="checkbox"/> Clear marked and labeled static weight rating <input type="checkbox"/> Handrail is undamaged and properly mounted	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Lights	<input type="checkbox"/> Lights and lens are present <input type="checkbox"/> Lights are undamaged <input type="checkbox"/> Lights are functioning correctly	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> HVAC Systems	<input type="checkbox"/> Condenser units are free of any debris <input type="checkbox"/> Condenser are free of any water leaks <input type="checkbox"/> System is functioning correctly	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	

<input type="checkbox"/> Fire Extinguisher	<input type="checkbox"/> Install new filters (July, October, January, April)	<input type="checkbox"/>	
	<input type="checkbox"/> Check inventory on filters	<input type="checkbox"/>	
	<input type="checkbox"/> Pressure gauge shows pressure at an acceptable level	<input type="checkbox"/>	
	<input type="checkbox"/> Inspection tag is current up to date	<input type="checkbox"/>	
<input type="checkbox"/> Emergency Lights	<input type="checkbox"/> Remove extinguisher and turn upside down to mix ingredients	<input type="checkbox"/>	
	<input type="checkbox"/> Lights are mounted correctly	<input type="checkbox"/>	
<input type="checkbox"/> Smoke Detector	<input type="checkbox"/> Lights activate when testing	<input type="checkbox"/>	
	<input type="checkbox"/> Detector is present and free of damage	<input type="checkbox"/>	
<input type="checkbox"/> Mezzanine	<input type="checkbox"/> Functions correctly when testing	<input type="checkbox"/>	
	<input type="checkbox"/> No trash/debris	<input type="checkbox"/>	
	<input type="checkbox"/> Floor is undamaged	<input type="checkbox"/>	
<input type="checkbox"/> Cold Room	<input type="checkbox"/> Guard rails are locked and chained close	<input type="checkbox"/>	
	<input type="checkbox"/> A/C is functioning correctly	<input type="checkbox"/>	
	<input type="checkbox"/> Neatly organized and labeled	<input type="checkbox"/>	
Oil Storage		Unsatisfactory	Action Required
<input type="checkbox"/> Entry Door	<input type="checkbox"/> Door swing is free of obstructions	<input type="checkbox"/>	
	<input type="checkbox"/> Door self closes	<input type="checkbox"/>	
<input type="checkbox"/> Fluorescent Lights	<input type="checkbox"/> Lights and lens are present	<input type="checkbox"/>	
	<input type="checkbox"/> Lights are undamaged	<input type="checkbox"/>	
	<input type="checkbox"/> Lights are functioning correctly	<input type="checkbox"/>	
<input type="checkbox"/> Electrical Panel	<input type="checkbox"/> Door is closed and latched	<input type="checkbox"/>	
	<input type="checkbox"/> Free of any obstructions	<input type="checkbox"/>	
<input type="checkbox"/> Overhead Door	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/> Opens without abnormal resistance	<input type="checkbox"/>	
	<input type="checkbox"/> Closes and door seal seats properly	<input type="checkbox"/>	
<input type="checkbox"/> Fire Extinguisher	<input type="checkbox"/> Inspection tag is current and up to date	<input type="checkbox"/>	
	<input type="checkbox"/> Extinguisher is visibly functional with proper safety devices	<input type="checkbox"/>	
<input type="checkbox"/> Filter Crusher	<input type="checkbox"/> Crusher is upright and free of damage	<input type="checkbox"/>	
	<input type="checkbox"/> Direction valve is functioning correctly	<input type="checkbox"/>	
	<input type="checkbox"/> Hoses are routed properly and free of leaks	<input type="checkbox"/>	

<input type="checkbox"/> Oil Containment	<input type="checkbox"/> Organized according to labeled items <input type="checkbox"/> Clean free of trash/debris	<input type="checkbox"/> <input type="checkbox"/>	
Building		Unsatisfactory	Action Required
<input type="checkbox"/> Building (all sides)	<input type="checkbox"/> No damage to exterior siding <input type="checkbox"/> No trash/debris in yard	<input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Perimeter Fence	<input type="checkbox"/> No damaged on or around fence <input type="checkbox"/> Separating gates are locked <input type="checkbox"/> Perimeter of fence is not tampered with	<input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Trash Container/Bin	<input type="checkbox"/> Bin is not over-full <input type="checkbox"/> Bin is free of damage	<input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Entrance Gate	<input type="checkbox"/> Gate functions properly <input type="checkbox"/> Gate is free of damage <input type="checkbox"/> Operators key pad is working correctly	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Water Drainage	<input type="checkbox"/> Gutters are present and angled to drain <input type="checkbox"/> Gutters are undamaged and mounted to wall properly <input type="checkbox"/> Drain box screen is seated correctly and clear of any debris <input type="checkbox"/> Drain box is uniform and aggregate is stacked uniformly	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Hose bibs	<input type="checkbox"/> Are not leaking <input type="checkbox"/> Free of any damage	<input type="checkbox"/> <input type="checkbox"/>	
<input type="checkbox"/> Receptacle	<input type="checkbox"/> Has dust cover <input type="checkbox"/> Free of any damage	<input type="checkbox"/> <input type="checkbox"/>	

Print Name:	Date:
--------------------	--------------

Generator Preparation Supplies List				
Checklist Items	Yes	No	Not Required	Person Responsible/ Comments
Sanitation				
Toilet paper, towelettes, soap, baby wipes, liquid hand sanitizer (6 each)				
Personal hygiene items (toothpaste, deodorant, shampoo etc.) 1 each				
Plastic garbage bags, ties (for personal sanitation uses) 2 roles of 50 each				
Plastic bucket with tight lid (6)				
Household chlorine bleach, disinfectant (4 gallons)				
2 cases of shop style paper towels (unopened)				
Protective Clothing	Yes	No	Not Required	Person Responsible/ Comments
Steel toe shoes or work boots (employees to supply)				
Rain gear				
Waders and rubber boots (6 sets each)				
Hard Hats and gloves				
Clear and shaded safety glasses				
Tools and Supplies	Yes	No	Not Required	Person Responsible/ Comments
Drinking Water: One gallon per person/per day in unbreakable containers. A normally active person needs to drink at least two quarts of water each day. Hot environments and intense physical activity can double that amount.				


Water for sanitation use: Store extra containers of water to be used for flushing toilets, cleaning, and bathing.				
Portable Generator				
Tarps 6 each size 20' x20'				
Extra filled 2 – 5 gallons Propane Tanks				
1 Battery operated weather radio				
Bug repellent (1 case)				
Sunscreen (1 Case) 50 SPF				

Flashlights (6) with extra batteries(6 sets) and bulbs (1)				
6 boxes of Matches in a waterproof container				
Portable Emergency Generator and Fuel (6 days) <u>(what size and what fuel?) Tommie will determine.</u>				
Portable Ice Cooler (3)				
<u>First Aid and Non- Prescription Drugs</u>			Not Required	<u>Person Responsible/</u> <u>Comments</u>
	<u>Yes</u>	<u>No</u>		
Check expiration dates on non-prescription drugs and other first aid kit components				
First Aid Kit (20) Adhesive bandages, various sizes				

(1) 5" x 9" sterile dressing.				
(1) Conforming roller gauze bandage.				
(2) Triangular bandages.				
(2) 3 x 3 sterile gauze pads.				
(2) 4 x 4 sterile gauze pads.				
(1) roll 3" cohesive bandage.				
(2) Germicidal hand wipes or waterless alcohol-based hand sanitizer.				

(6) Antiseptic wipes.				
(2) Pair large medical grade non- latex gloves.				
Adhesive tape, 2" width.				
Anti-bacterial ointment.				
Cold pack.				
Scissors (small, personal).				
Tweezers.				

CPR breathing barrier, such as a face shield.				
Any component missing or used should be replaced after emergency				
<u>Non-Prescription Drugs</u> <u>Aspirin or non-aspirin pain reliever</u>	<u>Yes</u>	<u>No</u>	<u>Not Required</u>	<u>Person Responsible/ Comments</u>
Anti-diarrhea medication (2)				
Antacid (for stomach upset) (2 bottles of 30 tablets each)				
Laxative (2)				
Neosporin or any other antibiotic skin cream (6 tubes)				

 Pattern	Pattern Operations	ERCOT	November 2021	Page 1 of 3
		Title: Generation Resource Cold Weather Checklist		

Generation Resource Cold Weather Checklist


In the event of extreme cold weather conditions, plant's operations are conducted according to the dispatch or direction instructions from the designated Qualified Scheduling Coordinator (QSE) and ERCOT, where safety of personnel shall take precedence over all other considerations when determining the actions to be taken.

Plant operations during extreme weather conditions, safety and communications are always at the forefront.

Routine weather preparations are conducted prior to winter season. Preparations include but not limited to an overall assessment and identification of the plant critical components, operations, and onsite personnel preparedness prior to the cold weather season.


Some of the plant assessment and evaluations include:

- Daily operational and safety orientations
- Check and update the contact information of the plant authorized personnel
- Check for fluid levels
- Check for critical devices related to turbine functionality
- Test the heating systems for proper operation
- Check for insulations
- Check for batteries
- Check breakers
- Inspect SCADA and Control rooms, log and address any concerns for corrective action
- Test controls and safety switches
- Test communication systems
- Stay in constant communication with Pattern Operation Control Center (OCC), designated QSE, ERCOT and Gulf Wind's Leadership Team via telephone, texts, e-mail or available means of communication, providing updates on the current and future weather conditions, or as needed
- Update plant operations plan, outage scheduling and planning
- Check for road conditions, weather updates, identifying unsafe extreme weather conditions by site personnel and contractors and report accordingly to the Leadership Team
- Procure O&M building: check and update plant emergency supplies, Personnel Protective Equipment, procure civilian services, and plant operating equipment
- Observe with extreme caution for ice/snow on the ground and surrounding areas

 Pattern	Pattern Operations	ERCOT	November 2021	Page 2 of 3
		Title: Generation Resource Cold Weather Checklist		

Generator Resource Preparations Checklist

- ☐ Check for cooling fins and fans on main power transformer (s)
- ☐ Check O&M building, SCADA/Control room, Breaker LV cabinets (HV/MV), test & verify for operations
- ☐ Check SF6 gas levels in Breakers
- ☐ Check block heaters on emergency generators
- ☐ Check cabinet heaters on breaker low voltage compartment
- ☐ Check cooling levels in emergency generator
- ☐ Check antifreeze mixture in emergency generator
- ☐ Check turbine transformers oil levels
- ☐ Check turbine coolant levels
- ☐ Check control house a/c, heating, and air
- ☐ Update emergency supply list for site personnel
- ☐ Check for civilian maintenance services and onsite weather-related tools
- ☐ Make sure that Sub-station building air conditioning system is working properly.
- ☐ Battery systems are properly charged, and fluid levels are maintained
- ☐ Inspect for accumulation of ice on overhead lines as well as any other obstruction (trees etc..) which may cause damage to lines during ice
- ☐ If any obstruction found, please get it removed before winter if possible.
- ☐ Inspect all junction boxes for any abnormalities and rodent
- ☐ At Turbine level ensure heating or cooling systems are properly functioning at every level down tower, nacelle and Hub
- ☐ Inspect every turbine for any open hatch or tower doors and close it if found open to ensure proper encloser of turbines
- ☐ Relevant Operational Personnel Annual Weatherization Training(s) & Technical Bulletins Review

 Pattern	Pattern Operations	ERCOT	November 2021	Page 3 of 3
		Title: Generation Resource Cold Weather Checklist		

Additional Comments:

I.	PURPOSE.....	2
II.	CONTACT INFORMATION.....	2
III.	DEFINITIONS.....	3
IV.	ROLES AND RESPONSIBILITIES.....	5
V.	MAIN OBJECTIVES OF THE HURRICANE PREPAREDNESS PLAN	
VI.	ACTIONS/RESPONSES	10
VII.	PRE-HURRICANE PLANNING	15
VIII.	PROCEDURES DURING THE HURRICANE.....	22
IX.	PROCEDURES AFTER THE HURRICANE	25

I. PURPOSE

It is the intent of this plan to give the Pattern Gulf Wind (PGW) Facility Manager (FM), Assistant Facility Manager (AFM or designee(s) and staff a guideline to prepare Gulf Wind to manage a tropical weather event like hurricanes or tropical storms.

II. CONTACT INFORMATION

OPERATIONS CONTACT LIST

Tommie Trowbridge Office: 361-216-5313 Mobile: 361-406-7613	Facility Manager, Gulf Wind
Tad Wright Office: 361-216-5313 Mobile: 361-728-1673	Assistant Facility Manager, Gulf Wind
Ryan Pierce Office: 713-308-4247 Mobile: 503-208-1335	VP of Operation & Maintenance
Brent Mitchell Office: N/A Mobile: 325-262-6727	Central Regional Director
Robert Milligan Office: 713-308-4248 Mobile: 346-313-4767	EHS Specialist
David Selsky Office: Mobile: 713-775-8527	SR. Manager EHS & Training
OCC Office: 713-308-4242	Operation Control Center
Tomas Sanchez Office 361-595-8527 Cell 361-675-0096	Kleberg / Kenedy Emergency coordinator
Patrick Pyle Office 713-308-4292 Cell 281-813-7761	Director of Meteorology
Gulf Wind Physical Address:	803 Gulf Wind Road Armstrong, TX 78338
Joe Huck Office 361-216-5312 Cell 325-226-6193	SGRE Lead

III. DEFINITIONS

Emergency:

An event or situation that results in immediate threat to a) the health and safety of Pattern employees, contractors or the public b) the environment or c) property.

Hurricane Preparedness Plan (HPP):

The HPP is a document containing site specific information covering required actions, contact details and actions to prepare the facility and personnel in the event of a tropical storm or hurricane. Each facility shall have a unique EAP (Emergency Action Plan).

Emergency Coordinator:

The person designated to be in charge during any emergency at the facility. This person may be the Facility Manager, Assistant Facility Manager or other person with the knowledge of the facility to manage the event.

Emergency Medical Services (EMS):

Emergency service dedicated to providing out-of-hospital medical care, transport to definitive care, and other medical transport to patients with illnesses and injuries.

Emergency Operations Plan (EOP):

Plan that provides guidance for operations of a facility during an emergency.

Emergency Responders:

Professional responders to emergencies, such as fire department, police, and emergency medical services.

Essential Personal

PGW personnel working after the storm has passed will be a predetermined list created by FM/AFM and approved by Regional Manager.

Flash Flood:

A rapid rise in water that occurs with little or no advanced warning, usually as the result of intense rainfall over a relatively small area in a short amount of time. Flash Floods can also be caused by dam or levee failures, ice jams, and topography.

Hazardous Weather Outlook:

A product which is issued daily, highlighting any potential significant weather in the area for the next 7 days.

Hurricane:

A tropical cyclone with maximum sustained winds of 74 mph (64 knots) or higher. In the western North Pacific, hurricanes are called typhoons; similar storms in the Indian Ocean and South Pacific Ocean are called cyclones.

Category One Storm:

Very dangerous winds will produce some damage (74-95 mph Sustained Winds): Well-constructed frame homes could have damage to roof, shingles, vinyl siding and gutters. Large branches of trees will snap and shallowly rooted trees may be toppled. Extensive damage to power lines and poles likely will result in power outages that could last a few to several days.

Category Two Storm:

Extremely dangerous winds will cause extensive damage (96-110 mph Sustained Winds): Well-constructed frame homes could sustain major roof and siding damage. Many shallowly rooted trees will be snapped or uprooted and block numerous roads. Near-total power loss is expected with outages that could last from several days to weeks.

Category Three Storm:

Devastating damage will occur (111-129 mph Sustained Winds): Well-built framed homes may incur major damage or removal of roof decking and gable ends. Many trees will be snapped or uprooted, blocking numerous roads. Electricity and water will be unavailable for several days to weeks after the storm passes.

Category Four Storm:

Catastrophic damage will occur (130-156 mph Sustained Winds): Well-built framed homes can sustain severe damage with loss of most of the roof structure and/or some exterior walls. Most trees will be snapped, or uprooted and power poles downed. Fallen trees and power poles will isolate residential areas.

Category Five Storm:

Catastrophic damage will occur (157 mph or higher Sustained Winds): A high percentage of framed homes will be destroyed, with total roof failure and wall collapse. Fallen trees and power poles will isolate residential areas. Power outages will last for weeks to possibly months. Most of the area will be uninhabitable for weeks or months.

Hurricane Season:

The portion of the year having a relatively high incidence of hurricanes. The hurricane season in the Atlantic, Caribbean, and Gulf of Mexico runs from June 1 to November 30.

Major Hurricane:

A tropical cyclone with maximum sustained winds of 111 mph (96 knots) or higher, corresponding to a Category 3, 4 or 5 on the Saffir-Simpson Hurricane Wind Scale.

Storm Surge:

An abnormal rise of water generated by storm winds. Storm surge can reach heights well over 20 feet and can span hundreds of miles of coastline. More intense and larger hurricanes produce higher surge. In addition, shallower offshore waters contribute to higher storm surge inundation. Storm surge is by far the greatest threat to life and property along the immediate coast.

Storm Tide:

Is the water level rise during a storm due to the combination of storm surge and the astronomical tide?

Tropical Depression:

A tropical cyclone with maximum sustained winds of 38 mph (33 knots) or less.

Tropical Storm:

A tropical cyclone with maximum sustained winds of 39 to 73 mph (34 to 63 knots).

Watch:

Issued when conditions are favorable for the development of severe weather in and close to the watch area. The size of the watch can vary depending on the weather situation and is usually issued for a duration of 4 to 8 hours. During the watch, people should review severe weather safety rules and be prepared to move to a place of safety if threatening weather approaches.

Warning:

Issued when severe weather is detected by radar or reported by storm spotters. Information in this warning will include the location of the storm, what areas will be affected, and the primary threat associated with the storm. People in the affected area should seek safe shelter immediately. Remember that severe thunderstorms can produce tornadoes with little or no advance warning. Warnings can be issued without a watch already in effect.

IV. ROLES AND RESPONSIBILITIES

All Pattern employees and contractors on site are expected to be familiar with the plan and to comply with all of the provisions set forth therein. Specific roles are outlined below.

PATTERN METEOROLOGICAL TEAM, OPERATION CONTROL CENTER (OCC)

Monitor tropical depressions from the National Weather Service Hurricane Center and communicate Hurricane Alerts, Watches, and Warning Advisories to Pattern Asset Management Team and site contractors.

VP, OPERATIONS

Provide sites with adequate resources to support this procedure,
Reviews and approves all changes to this procedure, and
Directs all compliance assessments of this procedure and initiates all corrective actions, incident investigations and disciplinary measures as necessary to assure consistent and effective compliance with established requirements of this procedure.

Facility Manager or Designee

Responsible for the activities of their operating facility, along with establishing, implementing, managing, and supporting this procedure.

Provides the resources and personnel necessary to maintain the system, and facilitate the incorporation of goals into management practices, as appropriate to those functions that can affect the safety goals.

Monitor weather and alert site personnel when Severe Weather is occurring or likely.

Insure forms of emergence communication equipment (1 Satellite phone, 6 sets of long range walkie talkies) is available and in good working order

Manager, EHS

Provide support to FM or designee in facilitating, and implementation of this plan to assure the safety of employees, contractors, visitors, and facilities.

V. MAIN OBJECTIVES OF THE HURRICANE PREPAREDNESS PLAN

- A. Protect Pattern Gulf Wind staff, contractors, and visitors.
- B. Protect property and assets.
- C. Prioritize tasks to be performed utilizing available resources and personnel.
- D. Resume normal operations as quickly as safely as possible.

VI. ACTIONS/RESPONSES

At the beginning of hurricane season, PGW FM and AFM must determine what materials and equipment should be discarded and which equipment or materials should be stored during a severe atmospheric event. This decision and list should be made by June 1st and as projects change. This decision and list will determine the hours needed on the reverse critical path before site evacuation.

Upon notification of an ALERT

The FM or designee will announce the Hurricane ALERT if/when the forecasted track indicates that the Texas Gulf Coast falls within the probability cone. Pattern's OCC will distribute the information within the organization in conjunction with FM involvement. FM will monitor notifications and alerts from OCC, NOAA and local weather channels. At the appropriate time, all non-essential personnel will be asked to leave the site. Essential personnel (predetermined list) will work with Site Management to carry out duties related to weather preparedness. The FM will schedule a Readiness Briefing with all PGW personnel to assure readiness in the event of an atmospheric event. Information will then be passed on to the Director, Operations, Regional Manager, and EHS Coordinator for revision and comments.

Upon notification of a WATCH

PGW personnel will secure the physical plant, i.e., clear entire site of non-essential personnel and secure all equipment and materials that are outside the O&M building and substations. If there is time all doors, windows, and other openings must be secured against wind and water. During this time, only essential personnel should remain at site to finalize preparations to the HPP.

Upon notification of a WARNING

At this time FM shall start excusing essential personnel from site to handle personal affairs. FM/AFM if time allows, must ensure that the following items have been completed before Site is evacuated: move desks, files, equipment and furniture away from un-shuttered windows. Papers, drawings, etc. should be placed inside files or desks. Unplug

and raise office equipment such as copy machine and computers to higher locations, if possible.

POST HURRICANE – ALL CLEAR

After the Hurricane and or weather event has been determined to be done, FM will travel to site to complete a site assessment to verify that the site is safe for an All Clear announcement. Only if roads and site are safe to drive, conduct visible, preliminary inspection of all assets (i.e. turbines, pad mount transformers, emergency generators, substation, O&M building, switchyard, transmission lines, roads, junction boxes, cattle crossings, etc...). Upon announcement of ALL CLEAR by the FM (approved by Director and or Regional Manager/EHS Manager) essential personnel will be asked to return to site. At this time the need for non-essential personnel and contractors will be evaluated. Communications should start between Pattern, OEM and any other contractors on when it is safe for all working personnel to return to site

RESUMPTION OF NORMAL OPERATIONS – EXITING RECOVERY PLAN

Upon completion of the atmospheric event, and site returns to normal operation, FM/AFM shall review and submit event related documents to the Director, Operations and the Regional Manager/EHS team for review and Lessons Learned. All personnel involved or onsite during the initial event should participate on a review of all events. Anything deemed unsafe condition or need to improve shall be reviewed and SMART actions developed.

Training

This plan must be reviewed annually (before end of quarter 1) by the FM or designee and revised for any changes that occurred in personnel, equipment or necessity. Site personnel must review and document understanding of this plan annually, before the start the Hurricane season.

Testing and Exercises

The PGW FM will conduct testing and exercises to evaluate the effectiveness of this preparedness program and will make sure employees know what to do and find any missing information or supplies to guarantee plan success. The testing and exercises will cover:

- 1) PGW personnel training; clarify roles and responsibilities
- 2) Evaluate policies, plans, procedures and the knowledge and skills of team

members

- 3) Reveal weaknesses and resource gaps.
- 4) Comply with local laws, codes and regulations.
- 5) . Testing is necessary to determine whether or not the various parts of the preparedness program will work.
- 6) FM/AFM will exercise the preparedness program to improve the overall strength of the preparedness program and the ability of team members to perform their roles and to carry out their responsibilities.

Supplies

Refer to Appendix B

Backup Records

1. Pattern IT and PGW management are responsible for ensuring that proper backup records are kept. It is recommended that a separate set of backup records be kept at an alternative storage area (plant operations manuals, drawings, etc...)
2. Protect computers from potential damage.
3. Computer systems are especially vulnerable and must be backed up in advance prior to fluctuations in electrical power that can occur during severe weather. Review contractor backup procedures to ensure no data loss during an energy shortage.

PUBLIC SERVICE COORDINATION AND COMMUNICATIONS

1. The FM/AFM will assure that the facility remains in communication with various public service organizations, especially the Kleberg County Emergency Coordinator. Contact local authorities to plan and coordinate activities before the need for emergency action.
2. FM/AFM will maintain close communication with OCC and Regional Manager to coordinate activities before, during and after the atmospheric event.

3. The protocol for when to notify Pattern Management should be clearly understood and documented.
4. Communications with government officials will depend upon the nature and severity of the weather incident and regulatory requirements.
5. Environmental regulations require notification if there is chemical spill or release that exceeds threshold quantities.
6. Copy of the HPP must be submitted to Operations Director at end of Quarter 1.

RECOMMENDED EVACUATION SITE ROUTES

- 1) The best route for leaving the O&M Building see Appendix F
- 2) When looking for a safe place during severe weather look for higher ground and avoid the coastline.
- 3) Don't wait until the last minute to evacuate. Trees and other debris might be blocking the roads preventing evacuating activities. Also rivers and other water bodies might overflow. **DO NOT DRIVE OR CROSS ROADS WHERE Flooding is prone to happen in high rain events.**

Communications

- 1) Ask for authorization from Pattern Media Group before providing any communication to local news or agencies.

Waste Disposal

- 1) If possible to empty all waste storage bins, tanks or other facilities before hurricane strikes.

Safety Precaution

- 1) . FM or designee must notify OCC / AEP when generators are in use. **Always isolate generators from grid to avoid a fatal incident during repairs.**

Post Storm Lesson Learned Report

FM to compile Post Storm Lesson Learned Report with due date of Year end

Preparation Supplies List				
Checklist Items	Yes	No	Not Required	Person Responsible/ Comments
Sanitation				
Toilet paper, towelettes, soap, baby wipes, liquid hand sanitizer (6 each)				
Personal hygiene items (toothpaste, deodorant, shampoo etc.) 1 each				
Plastic garbage bags, ties (for personal sanitation uses) 2 roles of 50 each				
Plastic bucket with tight lid (6)				
Household chlorine bleach, disinfectant (4 gallons)				
2 cases of shop style paper towels (unopened)				
Protective Clothing	Yes	No	Not Required	Person Responsible/ Comments
Steel toe shoes or work boots (employees to supply)				
Rain gear				
Waders and rubber boots (6 sets each)				
Hard Hats and gloves				
Clear and shaded safety glasses				
Tools and Supplies	Yes	No	Not Required	Person Responsible/ Comments
Drinking Water: One gallon per person/per day in unbreakable containers. A normally active person needs to drink at least two quarts of water each day. Hot environments and intense physical activity can double that amount.				


Water for sanitation use: Store extra containers of water to be used for flushing toilets, cleaning, and bathing.				
Portable Generator				
Tarps 6 each size 20' x20'				
Extra filled 2 – 5 gallons Propane Tanks				
1 Battery operated weather radio				
Bug repellent (1 case)				
Sunscreen (1 Case) 50 SPF				

Flashlights (6) with extra batteries(6 sets) and bulbs (1)				
6 boxes of Matches in a waterproof container				
Portable Emergency Generator and Fuel (6 days) <u>(what size and what fuel?) Tommie will determine.</u>				
Portable Ice Cooler (3)				
<u>First Aid and Non- Prescription Drugs</u>			Not Required	<u>Person Responsible/</u> <u>Comments</u>
	<u>Yes</u>	<u>No</u>		
Check expiration dates on non-prescription drugs and other first aid kit components				
First Aid Kit (20) Adhesive bandages, various sizes				

(1) 5" x 9" sterile dressing.				
(1) Conforming roller gauze bandage.				
(2) Triangular bandages.				
(2) 3 x 3 sterile gauze pads.				
(2) 4 x 4 sterile gauze pads.				
(1) roll 3" cohesive bandage.				
(2) Germicidal hand wipes or waterless alcohol-based hand sanitizer.				

(6) Antiseptic wipes.				
(2) Pair large medical grade non- latex gloves.				
Adhesive tape, 2" width.				
Anti-bacterial ointment.				
Cold pack.				
Scissors (small, personal).				
Tweezers.				

CPR breathing barrier, such as a face shield.				
Any component missing or used should be replaced after emergency				
<u>Non-Prescription Drugs</u> <u>Aspirin or non-aspirin pain reliever</u>	<u>Yes</u>	<u>No</u>	<u>Not Required</u>	<u>Person Responsible/</u> <u>Comments</u>
Anti-diarrhea medication (2)				
Antacid (for stomach upset) (2 bottles of 30 tablets each)				
Laxative (2)				
Neosporin or any other antibiotic skin cream (6 tubes)				

 Pattern	SMS 521 Inclement Weather	
Owner: Director, Health, Safety, & Training	Applicability: Pattern Operations	
Revision No: Rev 2	Revision Date: 4/22/2019	Page: 1 of 14

Management Approval:

By: 
Signature

Name: Andy Morris
Printed Name

Title: Director, Health, Safety, & Training



SMS 521 Inclement Weather

1. PURPOSE

The purpose of this procedure is to establish guidelines for working in or around inclement weather, including Strong Winds, Lightning, winter storms, Icing, hail, heavy rain, Tornadoes, cold weather, and hot weather to help identify and mitigate any associated Hazards.

2. SCOPE

This procedure applies to all employees, visitors, and contractors at Pattern operating facilities.

3. DEFINITIONS

Hazard: Equipment, materials, activities, or conditions that have significant potential to cause injury or harm to people and/or negatively impact the environment or property.

Heat Illness: Exposure to heat can cause illness and death. The most serious Heat Illness is a heat stroke. Other Heat Illnesses, such as heat exhaustion, heat cramps, and heat rash should also be avoided.

Hurricane: A tropical cyclone with winds of 74 miles (119 kilometers) per hour or greater that occurs especially in the western Atlantic that is usually accompanied by rain, thunder, and Lightning.

Icing: The formation of ice; specifically on wind turbines.

Lightning: A brilliant electric spark discharged in the atmosphere occurring within a thundercloud, between clouds, or between a cloud and the ground.

Precipitation: Rain, snow, sleet, or hail that falls to the ground.

Severe Weather: Includes, but is not limited to, Strong Winds, Lightning, hail, ice, snowstorms, Hurricanes, and Tornadoes.

Strong Winds: Winds that exceed 10-minute average of 30 m/s.

Tornado: A mobile, destructive vortex of violently rotating winds having the appearance of a funnel-shaped cloud, and advancing beneath a large storm system.

Watch: A series of enormous waves created by an underwater disturbance, such as an earthquake, landslide, volcanic eruption, or meteorite.

Watch: Potential exists for inclement weather.

Warning: Inclement weather is occurring or imminent.



SMS 521 Inclement Weather

4. ROLES AND RESPONSIBILITIES

4.1 Vice President, Operations:

4.1.1 Provide sites with adequate resources to support this procedure,

4.1.2 Reviews and approves all changes to this procedure, and

4.1.3 Directs all compliance assessments of this procedure and initiates all corrective actions, incident investigations and disciplinary measures as necessary to assure consistent and effective compliance with established requirements of this procedure.

4.2 Director, Health, Safety, & Training:

Responsible for the technical content of this procedure and its compliance with all Federal, state and international regulations and requirements.

4.3 Facility Manager (FM) or Designee:

4.3.1 Responsible for the activities of their operating facility, along with establishing, implementing, managing, and supporting this procedure.

4.3.2 Provides the resources and personnel necessary to maintain the system, and facilitate the incorporation of goals into management practices, as appropriate, to those functions that can affect the safety goals.

4.3.3 Monitor weather and alert site personnel when Severe Weather is occurring or likely.

4.4 OCC:

4.4.1 Monitor Severe Weather at sites and notify FMs or designees when Severe Weather is detected.

4.4.2 Manage Weather Alert licenses, notifications and authorizations.

4.5 All Personnel:

Review and comply with this procedure.

5. PROCEDURE

5.1 General

5.1.1 The weather should be monitored at all times.

5.1.2 Inclement weather should be noted on the JSEA. (SMS 502 Job Safety and Environmental Analysis Procedure).



SMS 521 Inclement Weather

5.1.3 When working outside of hours (e.g., during emergency call outs and after normal business hours), employees and contractors are required to check weather conditions prior to responding to the site.

5.1.4 If a Stop Work is issued, the activities shall cease and relevant crews shall acknowledge the receipt of the stop work order, exit their work areas, and return to the O&M building or other shelter as designated by site management.

5.1.5 After any major weather event, a roll call will be performed to assure that all personnel are accounted for.

5.2 Strong Winds

5.2.1 Site management shall monitor weather to provide advanced Warnings of potential strong wind conditions to employees and contractors in the field.

5.2.2 Workers shall confirm wind speeds prior to commencing working at heights in strong wind conditions, and follow wind speed requirements as outlined in SMS 511 Working at Heights Procedure Appendix B: Wind Speed Limits.

5.2.3 Before going back up tower, all crews will make an individual determination if it is safe to go back up based on the wind speed averages provided by the turbine they are working on. This is based on the wind speed limitations outlined in SMS 511 Working at Heights Procedure Appendix B: Wind Speed Limits.

5.3 Lightning

5.3.1 Pattern uses a weather tracking service. This service is monitored by Pattern's OCC. All authorizations and requests for notifications from this service will be authorized and arranged by the Senior Manager, OCC for the national license or site management for their local license.

5.3.2 The site management shall receive advanced Warning of potential Lightning generating conditions from the system directly, and a secondary phone call from Pattern's OCC. This weather information will be used by site management to identify the following:

5.3.2.1 Level 1 Alert: confirmed Lightning between 30 to 60 miles (48 to 97km) from where work is being performed. Personnel should prepare to leave the turbine and seek shelter.

5.3.2.2 Level 2 Alert: confirmed Lightning less than 30 miles (48 km) from where work is being performed. All personnel shall seek shelter in the O&M building or vehicle, if safe to do so.

5.3.2.3 All Clear: Lightning is greater than 30 miles (48 km) from the site for greater than 30 minutes, therefore, personnel may return to the turbines.



SMS 521 Inclement Weather

5.3.3 An All Clear message will be delivered after a period of 30 minutes with no events within the different ranges. Site management shall forward the All Clear notice to all site personnel.

5.3.4 If Lightning is All Clear but the storm is still in the area, site management has the authority to maintain the Lightning stand down until it is determined that it is safe to resume normal operation.

5.4 Icing

5.4.1 Site management shall monitor ice potential to provide advanced Warning of potential Icing conditions.

5.4.2 If Icing conditions are detected by a worker, the worker shall notify site management.

5.4.3 Icing conditions may be present if one or more of the following is true:

5.4.3.1 Freezing rain occurred in the last 24 hours;

5.4.3.2 The temperature has hovered at or around freezing during Precipitation;

5.4.3.3 Ice or compacted snow is visible on any part of the turbine;

5.4.3.4 Ice or compacted snow has fallen off the turbine in the last 24 hours;

5.4.3.5 Ice or compacted snow formations are present within the vicinity of the turbine;

5.4.3.6 The temperature was above 32°F / 0°C after Icing conditions were present; or

5.4.3.7 The current temperature is between -2 and +2 degrees Celsius (28.4 and 35.6 F).

5.4.4 In the event of any of these conditions, site management will issue an ice Watch and instructions to workers to remain clear of areas where there is an icfall potential.