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PROJECT NO. 53385

JOHNSON COUNTY POWER, LLC

EMERGENCY OPERATIONS PLAN ("EOP")

UNREDACTED VERSION

Date of Approval: March 6, 2024

Version: 2024-1

Change History:

This EOP was most recently approved by Johnson County Power, LLC ("Johnson County") on March 6, 2024.

Johnson County adopted the relevant portions of the EOP of Brazos Electric Power Cooperative, Inc. applicable to its generation facilities. This EOP applies that adoption in relevant part. Because this is Johnson County's initial EOP filing, the requirement set forth in 16 TAC § 25.53(d)(1)(C) to include a revision control summary that lists dates of previous changes made to the EOP since the initial EOP filing is inapplicable to this filing.

This EOP shall be reviewed at least once per calendar year and shall be updated within 60 days of the date of any significant change in Johnson County's facilities, Johnson County's operational processes or NERC Reliability Standards or other applicable rules or laws which affects the EOP. Revisions to the EOP shall be provided to the PUCT and other appropriate entities as required by NERC Reliability Standards and ERCOT Protocols.

1. EXECUTIVE SUMMARY

1.1 EOP Table of Contents, Requirement Mapping and Summary

#	Item	PUCT rule cite	Summary	Notes	Confidential?	Location	Page
1	Executive Summary	25.53(c)(1)(A)(i)(I)	Description of the contents and policies contained in the EOP			Section 1.1	3
2	Executive Summary	25.53(c)(1)(A)(i)(II)	Reference to specific sections and page numbers of the entity's EOP that correspond with the requirements of this rule			Section 1.1	3
3	Executive Summary (EOP Access, Distribution and Training)	25.53(c)(1)(A)(i)(III), (c)(4)(A)	Record of distribution required under paragraph (4)(A). A record of distribution that contains the following information in table format: (i) title and names of persons in the entity's organization receiving access to and training on the EOP; and (ii) dates of access to or training on the EOP, as appropriate			Section 1.2	6
4	Executive Summary (Affidavit)	25.53(c)(1)(A)(i)(IV), (c)(4)(C)	Affidavit required under paragraph (4)(C) signed by entity's highest-ranking representative			Section 1.3	7
5	Approval and implementation	25.53(d)(1)(B)	Individuals responsible for maintaining and implementing the EOP, and those who can change the EOP			Section 2.2	9
6	Approval and implementation	25.53(d)(1)(C)	Revision control summary that lists the dates of each change made to the EOP since the initial EOP filing	N/A (because this is the first EOP filed by Johnson County, no changes have yet been made to the EOP)			
7	Approval and implementation	25.53(d)(1)(D)	Dated statement that the current EOP supersedes previous EOPs	N/A (because this is the first EOP filed by Johnson County, previous EOPs do not exist)			

8	Approval and implementation	25.53(d)(1)(E)	Date the EOP was most recently approved by the entity			Cover Page	
9	Approval and implementation	25.53(d)(1)(A)	Introduces the EOP and outlines its applicability			Section 2.1	9
10	EOP Activation	25.53(d)(5)	Process the entity follows to activate the EOP			Section 2.4	9
11	Emergency contacts	25.53(c)(4)(B)	Emergency contacts, including identification of specific individuals who can immediately address urgent requests and questions from the Commission during an emergency			Section 3	11
12	Pre-identified supply plan	25.53(d)(3)	A plan to maintain pre-identified supplies for emergency response			Section 4	12
13	Staffing plan	25.53(d)(4)	A plan that addresses staffing during emergency response			Section 5;	13
14	Communications	25.53(d)(2)(B)	Procedures during an emergency for communicating with the media; the commission; OPUC; fuel suppliers; local and state governmental entities, officials, and emergency operations centers, as appropriate in the circumstances for the entity; and the applicable reliability coordinator			Annex 1	14
15	Pandemic and epidemic	25.53(c)(2)(D)	Pandemic and epidemic plan			Annex 2; Appendix 1	15
16	Cyber security	25.53(c)(2)(F)	Cyber security plan			Annex 3	16
17	Physical security incident	25.53(c)(2)(G)	Physical security incident plan			Annex 4; Appendix 2	18
18	Plan for weather-related hazard identification	25.53(d)(5)	Addresses tornadoes, hurricanes, extreme cold weather, extreme hot weather, drought, and flooding			Annex 5	19
19	Weather Emergency	25.53(c)(2)(A)(i)	Operational plans for responding to a cold or hot weather emergency, distinct from the weather preparations required under §25.55 of this title			Annex 5	19

20	Weather Emergency	25.53(c)(2)(A)(ii)	Verification of the adequacy and operability of fuel switching equipment, if installed			Annex 5	19
21	Weather Emergency	25.53(c)(2)(A)(iii)	Checklist for generation resource personnel to use during a cold or hot weather emergency response that includes lessons learned from past weather emergencies to ensure necessary supplies and personnel are available through the weather emergency			Annex 5; Appendix 3	19
22	Water Shortage	25.53(c)(2)(B)	Addresses supply shortages of water used in the generation of electricity			Annex 5	19
23	Restoration of Service	25.53(c)(2)(C)	Plans intended to restore to service a generation resource that failed to start or tripped offline due to a hazard or threat			Annex 6	23
24	Hurricanes	25.53(c)(2)(E)	Includes evacuation and re-entry procedures if facilities are located within a hurricane evacuation zone	N/A (not located in a TDEM hurricane evacuation zone)			

1.2 Record of Distribution

The following personnel have been provided with access to and/or training on the EOP:

Johnson County Staff (electronic access and/or paper copies, training as needed by role):

Name	Title	Access Date	Training Date[1]
[redacted]	[redacted]	[redacted]	[redacted]

[1] Refers to training conducted for this plant under the substantially similar Brazos Electric Power Cooperative, Inc. EOP, which was adopted by Johnson County in relevant part in its Power Generation Company registration form approved by the PUCT on May 24, 2023.

1.3 EOP Affidavit (see attached)

STATE OF New York §
COUNTY OF New York §

BEFORE ME, the undersigned authority, on this day personally appeared Nathan Hanson, who, having been placed under oath by me, did depose as follows: "My name is Nathan Hanson. I am the President of Johnson County Power, LLC ("Johnson County"). I affirm that the following statements are true and complete, to the best of my knowledge and belief:

1. I am the highest-ranking representative, official, or officer with binding authority for Johnson County;
2. Relevant Johnson County operating personnel are familiar with and have received training on the applicable contents and execution of the EOP, and such personnel are instructed to follow the applicable portions of the EOP except to the extent deviations are appropriate as a result of specific circumstances during the course of an emergency;
3. The Johnson County EOP has been reviewed and approved by the appropriate executives;
4. Drills have been conducted to the extent required by subsection (f) of PUCT Subst. R. 25.53;
5. The Johnson County EOP or an appropriate summary has been distributed to local jurisdictions as needed;
6. Johnson County maintains a business continuity plan that addresses returning to normal operations after disruptions caused by an incident; and
7. Johnson County's emergency management personnel who are designated to interact with local, state, and federal emergency management officials during emergency events have received the latest IS-100, IS-200, IS-700, and IS-800 National Incident Management System training.

Nathan Hanson

SUBSCRIBED AND SWORN TO BEFORE ME by the said Nathan Hanson this 6th day of March, 2024.

Notary Public, State of New York

JENNI NASH
Notary Public - State of New York
No. 01NA0002298
Qualified in Queens County
My Commission Expires 03/06/2027

2.0 APPROVAL AND IMPLEMENTATION

2.1 Purpose

The purpose of this Emergency Operations Plan ("EOP") is to specify the organization, responsibilities and actions to be taken during system emergencies that may arise impacting Johnson County. System emergencies include adverse operating situations due to severe weather, physical or cyber-attack, or other causes that pose a threat to the reliable operations of Johnson County generation facilities.

2.2 Organization and Responsibilities

A full table of contents and summary of the various sections and annexes of the EOP are provided in Section 1.1. The Plant Manager is responsible for the conduct of this EOP and approves all changes. The Plant Manager shall be responsible to maintain, update, and manage revision control, as needed, of the EOP and all associated files. Comments concerning this EOP and requests for copies may be addressed to the Plant Manager. The Johnson County Energy Manager[2] control room is currently staffed with at least one on-duty System Operator for its real-time desk. If conditions warrant, additional System Operators may be called. If there is a potential issue with communications or with control system equipment, the associated support staff may be put on alert or called to service as deemed necessary by the on duty System Operator. The Johnson County Energy Manager shall take steps to ensure that only required support and management personnel are present in the Energy Manager's control center during a capacity or energy emergencies.

2.3 Action

Operation of the Johnson County plant during emergency or adverse conditions shall be conducted in accordance with operational procedures of the ERCOT reliability region. Johnson County shall comply with reliability directives issued by ERCOT unless such actions would violate safety, equipment, regulatory or statutory requirements. Under these circumstances, ERCOT or other authorized entity shall be immediately informed of the inability to perform the directive so that alternate actions can be implemented. ERCOT or other authorized entity and any other potentially impacted neighbors or interconnected entities shall be informed of real-time or anticipated emergency conditions, and take actions to avoid, when possible, or mitigate the emergency. Johnson County shall comply with the directives of ERCOT or other authorized entities, based on the next day assessments in the same manner in which Johnson County would comply during real time operating events.

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[2] "Energy Manager" refers to Johnson County's qualified scheduling entity as designated with ERCOT.

Detailed plans and procedures cannot anticipate all possible scenarios; therefore, the guidelines presented in this EOP may be adapted as necessary to resolve the emergency at hand. The Plant Manager will issue instructions to field personnel as needed to perform any necessary actions.

During system emergency operating conditions or emergency short supply conditions, the Johnson County Energy Manager operator responsible for the generation desk shall make available to ERCOT all uncommitted resources available in the time frame of the emergency. The Energy Manager operator shall not remove a resource from service without coordinating the removal with ERCOT.

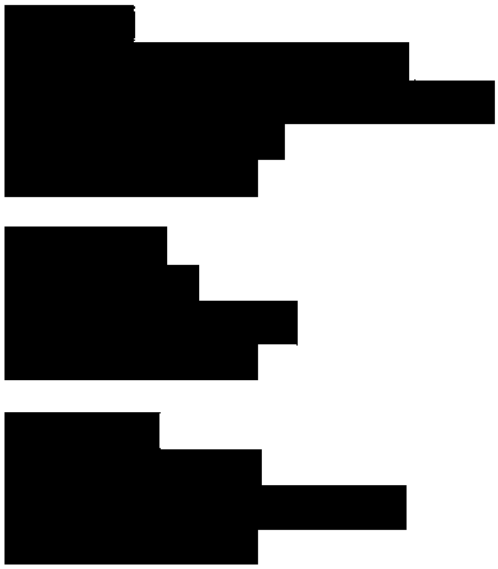
During a system emergency event, Johnson County may be requested by the PUCT or other regulatory agencies to provide periodic updates on the status of operations, outages, and restoration efforts until all event-related outages are restored or unless otherwise notified by the requesting agency. The PUCT or other agencies may also request submission of an event action report or lessons learned report.

Johnson County maintains additional procedures in other annexes of this EOP to address operating emergencies. Additional operating procedures for the Johnson County Energy Manager are maintained in the control room that address system black start restoration, geomagnetic disturbance operating plan, emergency ties, block load transfers and generation desk operations. If required, procedures to address remedial action plans or plans to address Interconnection Reliability Operating Limits (IROLs) or Generic Transmission Limits (GTLs) associated with Johnson County facilities would be developed and made available in the control room for the Johnson County Energy Manager.

2.4 Activation of EOP

The Johnson County Plant Manager or their designee is responsible for activating the EOP and determining what actions to take immediately following the occurrence of the events outlined in the EOP. The Plant Manager is responsible for determining the appropriate degree of overall response required and implementing those appropriate actions.

3. EMERGENCY CONTACTS



4. PRE-IDENTIFIED SUPPLY CHAIN

General procedures for addressing required supplies during emergency events.

In general, the Johnson County plant will perform annual checks for supplies required during various emergency conditions. The key focus will be to ensure food, water, cots, etc. are available for personnel that may be staying extended periods at the plants. In addition, options to rotate personnel will be monitored as conditions allow.

Plant management will review any key items such as fuel oil, hydrogen, chemicals, etc. that may be required to carry through an emergency period during the pertinent seasonal readiness preparation. Arrangements will be made to support having items delivered during adverse weather conditions.

5. EMERGENCY STAFFING PLAN

Emergency events may require special staffing needs depending on the specifics of the emergency. Each plant has local procedures to handle the requirements for various emergency conditions. The emergencies include but are not limited to fires, severe storms, extreme hot weather, extreme cold weather, plant outages, etc. Each of these events will be reviewed for personnel skillsets, quantity, and duration to determine how to utilize existing and contractor resources.

During the course of an emergency event, the Johnson County Plant Manager will evaluate the particular staffing needs of the event and will determine the appropriate staffing levels needed to manage the event response. This could include the following as necessary:

- Notifying additional Johnson County Plant management and employees to respond to the site to support the event response.
- Procuring contracted support companies to support the plant-led event response with additional manpower and/or equipment as required.

During extreme cold weather (ambient temperatures below 26 degrees F) the Plant Manager will give additional consideration to assigning maintenance personnel to night shift duties for cold weather support of the facility. If temperatures are forecast to be below 20 degrees for more than 8 hours, the following staff will be moved to nights: one member of the management team, one I/E tech, one Mechanic. All day shift personnel will work 12 hour days including weekends and additional contractors will be brought on as needed.

ANNEX 1

Emergency Communications

The following individuals are designated support personnel to assist in phone communications with Johnson County's TSPs should this EOP be implemented by the Plant Manager.

Phone Communications Support
[redacted]
[redacted]

The individuals will be contacted in the order shown. Each individual will be responsible for his/her own transportation to the Johnson County power station. If necessary and possible, Johnson County will assist with providing transportation.

Insofar as possible, the order of individuals on the list will be rotated after each implementation of the EOP (which may be for more than one day) or annually, whichever occurs first. In addition, other key Johnson County personnel may be called upon to support implementation of the EOP. A copy of the key personnel contact list is shown in Section 5 and a current electronic copy of the list is maintained by the Plant Manager in a document folder accessible by the control room operator.

Regulatory and emergency coordination contacts (e.g., PUCT, OPUC, local and state governmental entities and officials, emergency operations centers, media) will be notified as deemed necessary by the Plant Manager Current contact information is available on these entities websites.

Fuel supplier contact information is not maintained within the EOP because fuel providers change over time. The Johnson County Power team, LS Power, and Energy Manager will handle fuel supply coordination.

Events that meet the Event Reporting Operating Plan adopted under NERC Standard EOP-004 shall be reported in a manner consistent with that Plan.

Note: Contact with ERCOT (reliability coordinator) personnel is addressed throughout the EOP and varies based on the emergency conditions present.

ANNEX 2

Pandemic Plan

Johnson County staff shall fully adhere to the NAES Pandemic Preparedness and Response Plan attached to this EOP as Appendix 1.

ANNEX 3

Cyber Security

A. INTRODUCTION

This annex summarizes best practice information and procedures designed to mitigate the risk of cyber security attack.

Johnson County Cyber Security Posture:

- Comprehensive program: In addition to its corporate cyber security program, Johnson County complies with NERC Critical Infrastructure Protection standards in effect covering topics such as network protection, physical security, information protection, training, vulnerability assessments and incident response plans.
- Johnson County SMEs participate in many working groups at the national and state level regarding cyber security.
- Johnson County monitors multiple sources to anticipate and identify new threats.

B. LAYERS OF CYBER SECURITY

Johnson County implements the following layers of security for its systems:

- Multiple firewalls between DCS and SCADA environments with least privilege access policies.
- Firewall AV scans for web traffic and malicious files
- Email AV scans on SPAM prevention server
- Users do not administrative access to local desktops and laptops to install software
- Malware software prevents mail cloud and corporate blocked applications from being installed.
- Endpoint AV and Malware scanner scans incoming files for malicious agents/software.
- Anti-exploit and ransomware protection software installed on computers.
- Additional firewalls are implemented between office and SCADA environments.

C. INDUSTRY RECOMMENDATIONS AND JOHNSON COUNTY'S RESPONSES

Johnson County implements the following best practices:

Recommendation	Homeland Security	NERC	Implemented by Johnson County
Implement Application Whitelisting	X		X
Implement Patch and Configuration Management	X		X

Manage Authentication	X		X
Monitor And Respond	X		X
Reduce Your Attack Surface	X		X
Build Security Trust Rings	X	X	X
Implement Secure Remote Access	X	X	X
Develop secondary communication strategies		X	X
Drill scenarios where individuals can interact with an HMI		X	X
Review ability to rapidly disable remote access		X	X
Review Response Plans		X	X
Employee Training Program			X
Maintain Good Backups			X
Memory Protection			X
Phish Testing/Training Program			X
Security Awareness Program			X
Use Next Generation Firewall Features to Block regions and applications			X

D. ADDITIONAL PROTECTIONS

Johnson County's cyber security posture is constantly evolving in the face of new threats. Additional measures taken include:

- Vet Files - Check hash and scan files from 3rd parties before moving to the control network
- Review PoLP for Administrative System Tools - Review access and ensure application of the PoLP (principle of least privilege) for control system administrative tools
- Abnormal Activity Monitoring
- Regular phishing awareness campaigns for employees
- Procurement of a cyber-insurance policy which includes forensics and recovery support in the event of an attack

ANNEX 4

Physical Security Incidents

Johnson County shall follow the plans and procedures outlined in the Event Reporting Operating Plan adopted under NERC Standard EOP-004 (included as Appendix 2 to this EOP) for all physical security incidents.

ANNEX 5

Severe Weather and Water Shortage

A. Severe Weather Plans

Johnson County' s plant management and maintenance personnel will conduct meetings seasonally and as needed to discuss, plan and prepare for the upcoming hot/cold weather season. A weather readiness evaluation list will be created and used by plant personnel that includes a list of critical equipment to be checked, repaired and or replaced. Upon completion, maintenance personnel will review and report on the maintenance activities performed and then the maintenance superintendent and plant manager will verify and sign off on the completed work.

Johnson County plant personnel will identify and address any known critical failure points, including those effects of weather design limits. A complete list of components and work orders will be generated each season for checking the operations of critical components and where needed the replacement of worn elements and related components such as wiring, connections, and insulation.

Plant management and maintenance personnel shall ensure seasonal plant readiness of critical operating systems (including items found in the previous paragraph), cooling and heating equipment, critical elements, personnel, supplies and weather related safety training. Plans are executed prior to June 1 annually for the summer months, typically right after the spring maintenance outages, and again prior to December 1 for the upcoming winter months, typically right after the fall maintenance outages.

Johnson County will monitor water supplier and update ERCOT as needed of any shortages of water supplies that may affect the reliability of any of Johnson County's resources. If an emergency shortage of water from municipalities is noticed, Johnson County will notify ERCOT as soon as possible.

Johnson County plant management will keep plans for addressing emergency events, such as forced outage, sabotage, extreme heat or cold situations and injuries. These plans and associated procedures will include actions to be taken by plant personnel for each type of emergency event and emergency contacts.

Johnson County tests its alternative fuel supplies as part of its annual cold weather preparations prior to December 1. Annual testing of the fuel existing in tank and new fuel oil deliveries. The specific unit testing as to high sustainable limit (HSL) and ramping will be performed. Specific testing requirements will be maintained in the local plants' procedure(s).

The Johnson County generating facilities have a plan to address wildfire threats and conditions. As part of the plan during drought and fire related seasons, plant personnel will monitor for wildfire and wildfire conditions including prevailing winds blowing toward the plant. Plant personnel will also monitor plant grounds and the immediate areas for warnings of wildfire conditions and by monitoring notification given by official authorities. Upon receipt of such notification or if a wildfire becomes present in the surrounding plant areas, the plant personnel will implement its wildfire plan that includes but not limited

to plant shut down procedures, emergency contacts, system control center notifications, relocation point for plant employees upon the evacuation of the plant site.

B. Power Plant Weatherization

March:

- Survey fuel oil inventory and initiate purchasing procedures to fill storage tanks as needed to maintain appropriate levels determined by Johnson County management
- Test fuel oil for proper biocide and CFPP levels – increase additives as necessary
- Review for extreme hot weather impacts – review plant extreme hot weather items list as identified in each plant's procedures.

April:

- Complete a review of any outstanding winter issues that may have occurred during the previous winter period. Initiate efforts to resolve all extreme cold weather items by December 1
- Complete open items that support the extreme hot weather prior to June 1
- Update on any incomplete extreme hot weather preparedness efforts during weekly generation calls and provide expected completion time

May:

- Certify that the extreme hot weather readiness efforts are complete before June 1
- Verify proper staffing as may be required during the extreme hot weather period
- Initiate the plant procedures for extreme hot weather preparation. This includes HVAC units in equipment buildings, inlet cooling system, transformer top oil temperature monitored, equipment heating, etc.

June:

- Submit summer weatherization readiness report to ERCOT on or before June 1
- (Summer run)

July:

- (Summer run)

August:

- (Summer run)

September:

- Complete open items that support the extreme cold weather prior to December 1
- Prepare work orders for needed work.
- Inventory fuel used for portable heaters; provision as necessary.
- Inventory freeze protection preparedness materials; order as necessary.

October:

- Verify any dual fuel unit can successfully switch between the two fuel sources
- Verify proper staffing as may be required during the extreme cold weather period

November:

- Initiate the plant procedures for extreme cold weather preparation. This includes heat-trace, windbreaks, heaters, shelters, etc.
- Initiate freeze protection checks when ambient conditions are expected to be below 40°F
- Check fuel oil systems on applicable units; test run the fuel systems
- Complete any incomplete work orders for extreme cold weatherization prior to December 1

December:

- Submit winter weatherization preparedness report to ERCOT on or before June 1
- Remain prepared to fire oil, at short notice, any time from mid-December to the second week in March.
- Continue use of freeze protection checks when ambient conditions are expected to be below 40°F.

January:

- Continue to monitor equipment for extreme cold weather impact
- Continue use of freeze protection checks when ambient conditions are expected to be below 40°F.

February:

- Continue to monitor equipment for extreme cold weather impact
- Recheck all enclosure heaters and freeze protection systems when ambient conditions are expected to be below 40°F.

Oil Firing:

- Call in extra operations and maintenance personnel as needed.
- Set up fuel oil spill watch.
- Document the following as accurately as possible.
- Hourly generation:
  On gas
  On oil
- Fuel oil inventories, daily update by tank measurement.

Additional Cold Weather Measures (when and where applicable):

- Close outside doors and windows.
- Turn off all vent fans.
- Check all boiler and duct air heater enclosures for security.
- Check operation of all freeze protection systems.
- Set up additional space heaters as needed
- Notify instrument and electrical personnel of cold weather watch.

- Sample dew point of instrument air dryers every 6 hours.
- Check air lines for moisture.
- Alternate service water pumps every 4 hours.
- Circulate fuel oil in preparation of the run period

In addition to the above specific work orders and/or preventive maintenance activities may be utilized to support the preparation process. The above schedule is for typical Texas climate and changes may be required to accommodate rapid changes in weather conditions.

C. Alternative Fuel and Storage Capacity

Johnson County has provided for a dependable source of alternative fuel at the Johnson County plant. Fuel oil capacity at the Johnson County plant is approximately one million four hundred fifty thousand (1,450,000) gallons.

D. Water Shortages

The plant gets two types of water from the City of Cleburne - potable and effluent. The potable water is used to make demineralized water and support for the cooling towers, if required. The effluent water is used for cooling tower make-up. If the effluent water is lost, options to get potable is an option. If the potable water source is lost, the unit may be able to run for about a day based on onsite water storage but will not be able to maintain thereafter.

E. Weather Emergency Checklist

Refer to the summer and winter season checks included in the North American Energy Services Company Operations Procedure – 105 (OP-105) for the Johnson County Generation Facility attached as Appendix 3 to this EOP.

ANNEX 6

Restoration of Service

Johnson County shall coordinate with ERCOT in the event of the need to restore generation that has been offline during an emergency. Current recovery priority of Johnson County generators, subject to ERCOT instructions and then-existing circumstances at the time of recovery steps is as follows:

1. TEN_CC1

Pandemic Preparedness and Response Plan

Safety Manual Program (SMP)

Introduction

Purpose:

The purpose of this procedure is to provide a coordinated and comprehensive response to a pandemic event in order to help ensure continuation of operations.

The procedure describes potential pandemic threats, identifies and prioritizes the critical operations and business functions of this facility, and provides appropriate response guidelines.

The information in this Plan is based on generally accepted assumptions about the development, outbreak, and expected progress of an influenza pandemic. Site-specific information required for implementing this Plan (contact lists, recovery details, etc.) is provided in Appendices A through G at the end of this Procedure. Control and survival of a pandemic will depend on the ability of thoughtful individuals to conduct a well-planned and well-organized response. The ultimate objective of this Plan is to prepare those individuals for success.

Scope:

All NAES Employees, All Site Personnel

References

Terms and Definitions:

Term:	Definition:
RTO (Recovery Time Objective)	The period of time within which systems, applications, or functions must be recovered after an outage.
WRT (Work Recovery Time)	The period of time needed to complete the disrupted work on a recovered/repaired resource in order to return it to normal operational status.

Other References:

Center for Infectious Disease Research and Policy, University of Minnesota
North American Electric Reliability Council
United States Center for Disease Control
U.S. Government Public Information Site
World Health Organization Site
DHS site (U.S.)
Public Health Agency of Canada

Responsibilities

① PLANT STAFF

- Brainstorm critical business functions and priorities
- Determine locally appropriate mitigations
- Prepare and test draft Pandemic Response Plans
- Assist employees with family care plans
- Manage work continuation if a pandemic strikes
- If NAES corporate management is not available, plant managers shall take control

② CORPORATE

Plan Development

- Recognize threat and authorize a planning and response effort
- Identify critical departments needing response plans
- Require preparation of approved Pandemic Response Plans
- Provide schedule for preparation of Plans
- Request draft policy changes needed for pandemic management
- Adjust strategy and response level as needed

Pandemic Management Program Team Inputs

- Pandemic threat and impact information
- Program coordination
- Initiation criteria
- Threat monitoring updates
- Department pandemic management plan templates and coaching
- Coordination with support departments (Human Resources, Information Services, etc.)

NAES Headquarters Inputs

- General pandemic information (issues, impacts, mitigation strategies, pandemic management, suggested plan outline)
- Guidance and coaching
- Plan templates
- Family care outline and websites

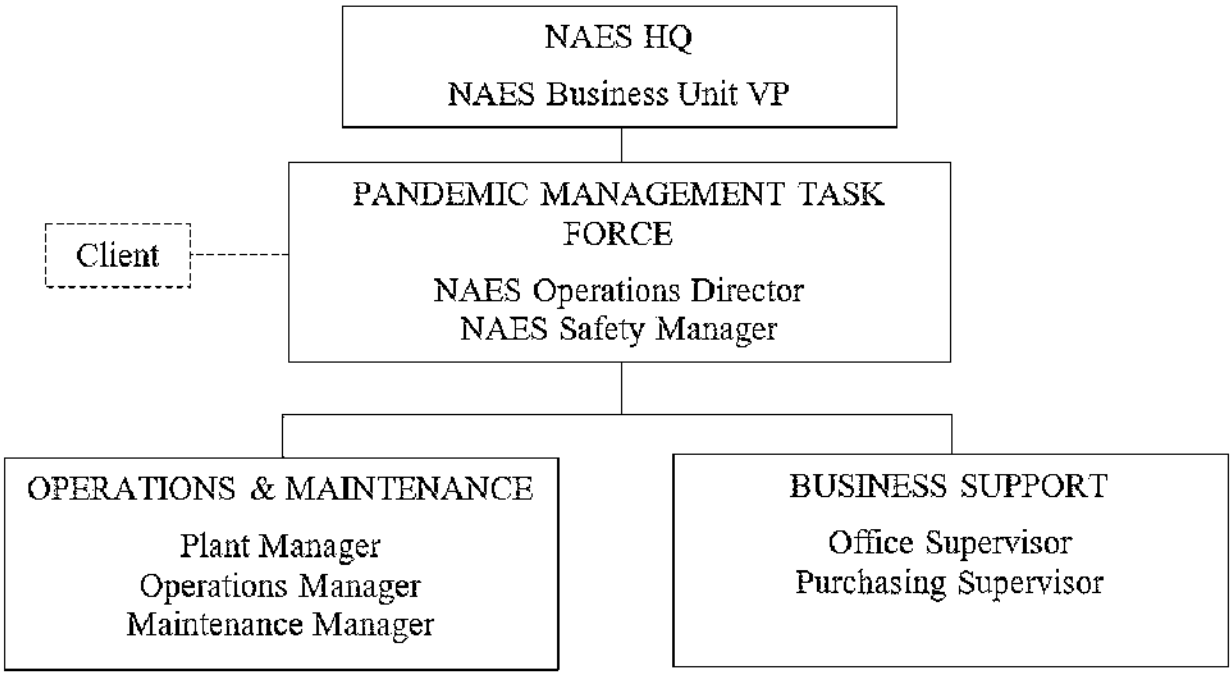
③ EMPLOYEE

- Perform critical department work if a pandemic strikes

- If management is not available, senior personnel will provide leadership
- Remain individually healthy by following guidelines
- Review family care outlines and websites; prepare a family response plan and discuss with family members
- Stockpile essential supplies

④ PLANNING RESPONSIBILITIES

The diagram below is the organization chart for the NAES Pandemic Management Program Team (PMPT) for this facility. The PMPT task force is responsible for the preparation, the continuing readiness, and (if needed) the implementation of this Plan.



Policy

① PANDEMIC CHARACTERISTICS

A. Timing and severity of the outbreak of a pandemic are uncertain and may not be immediately recognized. The most feared pandemic strains (such as SARS, COVID-19, avian influenza or "bird flu", H5N1) exhibit the following characteristics:

A.1. Able to cause severe disease in humans.

A.2. Global human population has no pre-existing immunity.

A.3. Able to spread rapidly through human-to-human contact.

B. Once human to human transmission begins, the disease will spread very rapidly around the world within three to eight weeks. It is likely that 20 to 30 percent of global population will contract influenza during the first wave and will become very ill for several weeks. Additional waves will follow over one to two weeks.

C. Absentee rates for employees may be in the range of 25 to 60 percent for the duration of the pandemic, due to employee illness and to other factors such as caring for family members. Absentee rates will normally vary across an organization based on location and isolation.

D. With the expected high percentage of ill people, the existing healthcare system will be overwhelmed. Most government and health organizations will not have sufficient stockpiles of anti-viral agents or vaccines to treat those who are exposed or who will become ill if a pandemic occurs in the next one to two years.

E. Persons who contract the virus are not expected to contract it a second time due to a buildup of personal immunity. However, if the virus mutates, recurrences for the same individuals could be possible.

F. Personnel management will need to be modified to continue essential plant operations and business processes, while minimizing the spread of the virus.

G. The organizational response will need to include the distribution of accurate and timely information to employees, families, and customers.

H. Because of the percentage of affected people around the world, global trade and the global economy will be significantly impacted by the pandemic, limiting the supplies of food and manufactured goods.

I. Other cross dependencies with other segments of the utility sector (generators, transmission operators, distribution providers) and other critical infrastructure (communications, nuclear, natural gas, petroleum, transportation, emergency services, etc.) as well as contractors and suppliers will be severely tested during influenza pandemic.

② PANDEMIC PHASES

Information developed by the World Health Organization (WHO) defines five phases of a possible pandemic as listed below. These five phases provide a useful framework for pandemic response planning.

A. **Phase 1 - Pandemic Alert**

Governments, owners, and operators are notified that a pandemic is possible and preparedness plans should be reviewed and updated.

B. **Phase 2 - Pre-Pandemic**

Localized outbreaks are occurring with human-to-human transmission. Governments and electricity sector entities begin to assign resources, prepare staffing, and implement contingency plans. Begin an information distribution program to promote appropriate responses by employees.

C. **Phase 3 - Pandemic Outbreak**

General outbreaks across borders and continents. Organizations implement response plans.

D. **Phase 4 - Maximum Disruption**

High absentee rates occur, and fatalities begin to impact the workforce. This phase could last for several months.

E. **Phase 5 - Prolonged Recovery**

Recovery will be slow, and the underlying economy will weaken. Altered business conditions will be prevalent for large and small firms. This phase will last for at least three months and possibly up to six months.

③ PANDEMIC RESPONSE PLAN DEVELOPMENT

This section will provide guidelines for corporate departmental planning to meet the challenges of an influenza pandemic. Various charts and tables (see Appendices A, B and C for details) are provided for planners to use during these assessment processes. Some limited information (typically applicable to power plant operations) has been included in these tables for demonstration purposes, but each organization shall develop a site-specific Plan by filling local information into the various assessment tables provided in this Section. Any text that is highlighted in yellow in these tables has been inserted only as an example of a possible data entry.

A. Business Processes Assessment

In planning for a potential Pandemic, it is important to identify the major business processes in the organization. It is also important to determine the critical inputs that are needed to accomplish those processes. Other departments in the company may depend on some of your organization's output to do their work. The most important outputs should also be defined.

As you identify critical inputs and outputs, consult with upstream and downstream organizations. They may have priorities that are different from your own and negotiation with them may be necessary. Critical information should include Contact Lists, Vendor Lists, etc. To set the Priority Ranking, #1 is for most important, and #5 is for least. For example, the critical business functions needed for the business to survive should be in the #1 category.

A "Major Business Functions" assessment chart is recommended as a starting point for the NAES Pandemic Management process. An example of this table can be found at Table 1. at the end of this procedure. In addition, several follow-up assessment charts are also available at the end of this document.

B. Pandemic Risks Assessment

Once the major business processes have been identified, it will be important to determine what the largest risks to those functions are. What problems would be caused by loss of key staff inside or outside of the company (loss of key department personnel, loss of vendors, bankruptcy of a large customer, stock market crash, late or no payments, inability to communicate with other businesses, failure of service providers, etc. Once these largest risks are determined, appropriate mitigation strategies can be established. These risks should be detailed in a table similar to Table 2. located at the end of this document.

C. Loss of Key Personnel

C.1. For Pandemic Only

This case differs from the normal Business Continuity case because all the supporting departments and vendors that the department might call upon in an emergency will also be having a personnel shortage. This means many more vendors will be needed, more work must be cancelled or postponed, and more drastic measures to protect the remaining employees must be taken. Develop a table detailing the recovery strategies similar to the examples in Table 3. at the end of this document.

C.2. For Influenza Pandemic with Emergency Succession

It is critical to identify key personnel doing critical work for each major business function. These key persons are those personnel without whom, the Major Business Function could not be done. This might be a senior department employee, group leader, or supervisor.

Create a table similar to the example Table 4. At the end of this document naming the current key personnel, enter the name(s) of the person(s) that could take over the work in an emergency where the current key person is not available. In other words, Table 4. is an emergency succession plan for the work that is most important to the company.

D. Employee Critical Skills Inventory

Create a table similar to Table 5. at the end of this document listing personnel who have skills in high demand critical areas that could fill in for others in an emergency. The example table lists some typical skill sets for plant operations but should be modified as needed for the skill set categories that suit your department's needs.

E. INFORMATION SYSTEM (IS) INVENTORY

E.1. Critical Systems

Create a table similar to the example Table 6. found in the end of this document listing the critical Information Systems and IS Applications which are essential to the most important work done in the department. The following acronyms used in the table are defined as:

RTO (Recovery Time Objective) - The period of time within which systems, applications, or functions must be recovered after an outage.

WRT (Work Recovery Time) - The period of time needed to complete the disrupted work on a recovered/repaired resource in order to return it to normal operational status.

E.2. Loss of Software, Hardware or Data Assets

Create a table similar to Table 7. found at the end of this document to help listing the facility hardware loss strategy. In the event that your critical IT Systems and Applications are not available, what is your strategy to continue work? Would you use a simple Excel spreadsheet to record and manipulate data until the main application was restored? Would you use another application that could do some of the important functions? Is there an old or newer program that would work? Would you cease work? Are there any other relevant questions?

E.3. Recovery of Lost Software, Hardware, or Data Assets

Assume that the loss of Software, Hardware or Data Assets scenario has occurred, and the recovery team has been activated. The general strategy from the previous sections applies but more detail is needed to describe the steps that would be taken.

To capture the detailed tasks that must be initiated, create a table similar to the example Table 8. found at the end of this document and indicate which member(s) of the recovery team (e.g., team leader, team member, or names of individuals) will perform it.

Detailed current backups of the software and systems in Table 8. are maintained on file in a fireproof cabinet in an area separate from the main control area.

E.4. Pandemic Plan Validation

Identify the known gaps, issues and problems with this Pandemic Plan that would make it difficult to succeed, contribute to its failure or make the recovery from a significant event slower and less efficient. Identify the expected time frame to eliminate these problem areas. If an economic, time related, organizational, or technical issue is causing the gap, include the description of this cause. Describe the gaps in order of importance, with the most important one listed first.

E.5. Qualified CROs

a. Long term action is to get APOs sufficiently trained and qualified to fill in as CROs.
b. Cross training of plant personnel is required for better flexibility.

E.6. Limited Vendor Resources

a. Resources critically tied to interstate transportation. These include lime, soda ash, hydrogen, caustic, acid, and ammonia.
b. Some staff may not be from the local area. This makes alternate transportation more difficult and timely relief for ill personnel may not be readily available.

④ THREAT MITIGATION - GENERAL GUIDELINES

The purpose of a Pandemic Management Program is to assist NAES plant management in preparing for a potential pandemic by developing plans to manage the threat. The actions listed below could be taken by all departments to help them minimize the impact if the pandemic threat becomes real.

A. Review existing emergency plans (see Appendix D) and contact lists (see Appendix F). Update these and inform essential personnel.

B. Update the contact list of all employees in your department (see Appendix E). Include after-hours contact number(s); some of these phone numbers may be out of this region, such as parents, or other family members or friends.

C. Identify employees and key customers with special needs and incorporate the requirements of such persons into your preparedness plan.

D. Consider the impact of community containment measures and quarantines, school and/or business closures, and public and financial institution closures.

E. Expand the use of teleconferencing and video conferencing to limit the frequency of meetings and other types of face-to-face contact.

F. Implement guidelines to modify the frequency and type of face-to-face contact (e.g., handshaking, seating in meetings, shared workstations) among employees and between employees and customers.

G. Train and prepare ancillary workforce (e.g., contractors, employees in other jobs or other departments, retirees, etc.).

H. Develop cross training programs to assure adequate staffing of essential functions; consider strategies such as developing "job sheets" that outline key activities by position.

I. Consider a transportation plan in case of fuel shortages and loss of public transportation.

J. Develop a plan to send home non-critical staff and shift workers to home offices or other sites or change work hours that would minimize exposure risks, address potential fuel shortages, and curtail dependence on public transportation.

K. If services are contracted to outside organizations, contact vendors, and find what type of contingency plans they may have in place.

L. Consider the impact of a disruption of social systems and services on your organization (assume the possibility of no response or slow response from emergency first responders, other basic services not available, etc.)

⑤ MITIGATION STRATEGIES

There are several possible risks and mitigations to be considered when planning your strategies. Appendix A contains a listing of the most common risks and the associated mitigations. Each specific facility or department may have more or different risks than those listed in Appendix A.

A. Protect Work Force

A.1. Protect the workers that you have.

A.2. Provide the personal protective equipment that may be needed.

A.3. Minimize meetings and face to face contact.

A.4. Wherever possible, get priority medical treatment arranged.

A.5. Provide essential medical training for on-site emergencies.

A.6. Gather the contact phone numbers for your employees and their "out of area" contact numbers (see Appendix E).

A.7. Be prepared to have an alternative way to transport essential employees to work or locations where they can work.

A.8. Consider the impact of civil unrest and a breakdown in social order if police, fire, and other personnel are not available. How will you protect your work site and employees?

A.9. Should you be prepared for some employees to live on the work site for several days or weeks?

B. Help Employees Protect Their Families

B.1. Provide information so employees can protect their families and can feel free to work.

B.2. Provide the personal protective equipment that may be needed.

B.3. Counsel employees that need help coping with illness or losses.

C. **Augment the Work Force**

C.1. Broaden the vendor base in type and geographic area.

C.2. Gather the contact phone numbers for your vendors and their after-hours contact numbers.

C.3. Ask that your most critical vendors also have and carry out Pandemic Planning and Mitigation.

C.4. Ask to see their plans and be briefed on them.

C.5. Identify groups of additional workers from other departments, retirees, employment agencies, etc. The lists should be long and geographically diverse.

D. **Protect Work Processes**

D.1. Be prepared to alter your work process and use alternative methods. Your normal software may become disabled due to routine failure and there may not be personnel to get it repaired. Your software or application recovery may not be on a high priority list.

D.2. Cross train your personnel to be more generalists rather than specialists so they can support and stand in for each other.

D.3. Is it possible for vendors to help with more routine work or to outsource some of the work?

D.4. Buy, write, or update procedure or instruction manuals so that a broader segment of the department could do the work. Train the work force on these procedures.

D.5. Maintain essential data on backup CD-ROMs or other sources. Make sure several people know how to access this data.

D.6. Move some processes away from "just in time" methods. The "just in time" processes might collapse when critical materials or data are not available. Some stockpiling or source diversification may be necessary.

D.7. How will you work if the city or state is broken up into quarantined areas?

D.8. Have a current and workable succession plan.

E. **Stockpile Resources**

E.1. Stockpile critical materials (parts, supplies, protective equipment, routine but necessary supplies, fuel, etc.)

E.2. Consider alternative transportation methods to get workers to and from work.

E.3. Consider storing bottled water, canned goods, and emergency meals. Include flashlights, batteries, radios, masks, disposable gloves, soaps and disinfectants.

F. **Reduce Non-Essential Work**

F.1. Each department should identify its most critical business functions and the overall mitigation strategies for them. Determine what lower priority work to cut.

F.2. Each department should determine its essential inputs needed for its work and the critical outputs that others need for their work.

F.3. Reduce work to the most important tasks.

F.4. Reduce personal contact and make essential contact safer.

F.5. Have people work from home where possible.

F.6. Reduce or "sanitize" customer contact.

F.7. Teach proper hand washing, use of sanitizing wipes, use of disinfectant soaps, proper use of effective masks and gloves and other personal protective measures.

F.8. Teach people how to handle potentially contaminated material from other people.

G. **Develop Communication Plans**

G.1. What are the essential information data and messages that need to reach employees, vendors, their families, vendors, customers, and the public?

G.2. What is the structure of these messages, what is the likely content that is needed?

G.3. Develop specific, honest, timely and helpful messages that give the whole, unvarnished truth. Have these messages available and ready to fill in the blanks.

G.4. Have enough people to do the information gathering and to do the communicating.

G.5. Test the messages on people outside of the communications department. Are the messages clear and do they give the intended information?

G.6. What alternative ways will the company use to communicate if normal services are

not available? Can Webcasts, internet sites, phone recordings, or other sources be of help?

Attachments

SMP-20 Appendix A: Matrix of Major Risks and Mitigations

SMP-20 Appendix B: Critical Equipment and Materials

SMP-20 Appendix C: Vital Records and Storage

SMP-20 Appendix D: Plant Specific Manuals and Procedural Inspections

SMP-20 Appendix E: Employee Contact List

SMP-20 Appendix F: Emergency Contact List

SMP-20 Table 1: Major Business Functions

SMP-20 Table 2: Largest Risk to Major Business Functions

SMP-20 Table 3: Recovery Strategies

SMP-20 Table 4: Key Personnel and Critical Functions

SMP-20 Table 5: Critical Skills Inventory

SMP-20 Table 6: Work Recovery Time

SMP-20 Table 7: Information Systems (IS) Recovery Strategies

SMP-20 Table 8: Detailed IS Recovery Strategies

Revision Management

Revision History Log:

Revision #:	Date:	Nature of Change:	Recorded By:
R0.1	11/14/2019 8:58 AM	Corrected spelling mistakes and other clerical errors.Added 4. Planning Responsibilities and diagram diagram under Responsibilities. Tables moved to the bottom of the document as attachments and corresponding references updated.	Alex Tan
R0	11/7/2019 6:28 AM	Final QC prior to Publication Conducted - Moved to R0 - Published to Portal	Alex Tan
D1.0	3/12/2019 4:19 PM	New document	Jason Schuler

Johnson County Power Station, LLC	NERC Standard: EOP-004-4 Revision: 0 Issue Date: 6-12-2023 Document Title: JON-NERC-PGP-EOP-004-ATT-A – Event Reporting Operating Plan

NERC Policies, Guidelines, and Procedures (PGP) – EOP-004-Attachment A

Event Reporting Operating Plan

Revision History			
Version	**Date**	**Section**	**Reason for Issue**
0	5-30-2023	All	Initial Document for EOP-004 Event Reporting Operating plan

Annual Review		
Date	**Initials**	**Comments**

Reviewed by: [redacted]

Plant Manager/Delegate

[redacted] 6/9/23

Print Name **Date**

Reviewed and Approved by:

[redacted]

Asset Manager/Delegate

[redacted] 6/9/2023

Print Name **Date**

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Event Reporting Operating Plan

1.0 RESPONSIBILITIES

1.1 Plant Manager

- Verifies and monitors that the provisions within this procedure are followed in the operating environment.
- Reports events as identified in this procedure to the appropriate parties.
- Ensures that all employees are made aware of reportable events by phone, quick calls or through operating personnel.
- Maintains and approves this procedure.
- Establishes communication protocol with North American Electric Reliability Corporation (NERC), pertinent parties on the interconnection, and law enforcement.
- Ensures operating personnel receive training on this operating plan.

1.2 Operators and Maintenance Personnel

- Use sound judgment, take reasonable action, and provides complete and timely communications with the general manager and local law enforcement regarding the events listed in this document.

1.3 All Plant Personnel

- Maintain full awareness of this procedure, recognition reportable events and following the provisions when discovering suspicious activity.

2.0 SCOPE & APPLICABILITY OF EVENT REPORTING

There are situations worthy of reporting because they have the potential to impact reliability. Event reporting facilitates industry awareness, which allows potentially impacted parties to prepare for and possibly mitigate any associated reliability risk.

It also provides the raw material, in the case of certain potential reliability threats, to see emerging patterns.

Examples of such events include:

- Bolts removed from transmission line structures.
- Train derailment adjacent to a Facility that either could have damaged a Facility directly or could indirectly damage a Facility (e.g. flammable or toxic cargo that could pose fire hazard or could cause evacuation of a control center)
- Destruction of Bulk Electric System (BES) equipment

Having an Operating Plan for reporting specific types of events provides the entity with a method to have its operating personnel recognize events that affect reliability and to be able to report them to appropriate parties, e.g., Regional Entities, applicable Reliability Coordinators (RCs), and law enforcement and other jurisdictional agencies when so recognized. In addition, these event reports are an input to the NERC Events Analysis Program. These other parties use this information to promote reliability, develop a culture of reliability excellence, provide industry collaboration and promote a learning organization.

3.0 REPORTABLE EVENT TYPES

3.1 Identifying Reportable Events

The following guidelines are to assist JON personnel in the determination of events that should be reported per NERC Reliability Standard EOP-004-4. When an event occurs at JON, personnel will take immediate action as deemed reasonable during any event based on the information available using the following guidelines:

1. The safety of the public, JON and the JON Plant Personnel are affirmed as the utmost priority.
2. For incidents that cannot be managed by JON, law enforcement will be called immediately by control room personnel. Contact information for law enforcement can be found below.

3. Notification will be made to the JON Plant Manager as soon as suspicious activity, or an event occurs.

3.2 EOP-004-4/DOE-OE-417 Reportable Events

EOP-004-4 Requirement 2 will be met by filing the DOE OE-417 Form; all OE-417 reports must be filed within one hour, 6 hours or 24 hours as applicable. JON will comply with the reporting criteria upon recognition of a threshold for reporting.

Submit Form OE-417 to the listed parties if one of the events listed below occurs:

<table>
<tr><th colspan="5">DOE Form OE-417 Reportable Events</th></tr>
<tr><th>Event Type</th><th>Threshold for Reporting Upon Recognition</th><th colspan="2">OPERATING PLAN
Reporting Requirements and Actions (within 24 hours or less if noted)</th><th>Primary Communication Responsibility</th></tr>
<tr><td>(1) Physical attack</td><td>If causes major interruption or impact to critical infrastructure facilities or to operations.</td><td rowspan="2"><u>Emergency Alert:</u>
1 hour (DOE)
24 hours (Others)</td><td rowspan="3">☐ Without substantial delay, notify the Control Room Operator (CRO).
☐ Without substantial delay, call the Plant Manager, Operations Manager.
☐ Call the Brazos Electric Power Cooperative (BEPC) Central Desk at 254-750-6260
☐ Send a message to BEPC: sysop@brazoselectric.com
☐ Notify local law enforcement (911).
☐ Notify all onsite plant personnel at both plants</td><td>Local Law Enforcement
DOE
NERC
Texas RE (TRE)
BEPC
ERCOT</td></tr>
<tr><td>(2) Cyber event</td><td>If causes interruptions of electrical system operations.</td><td></td></tr>
<tr><td>(9) Physical attack or vandalism</td><td>A physical attack that could potentially impact electric system adequacy or reliability; or vandalism which targets components of any security systems.</td><td><u>Normal Report:</u>
6 hours (DOE)
24 hours (Others)</td><td>Local Law Enforcement
DOE
Texas RE
BEPC
ERCOT</td></tr>
</table>

DOE Form OE-417 Reportable Events				
Event Type	**Threshold for Reporting Upon Recognition**	**OPERATING PLAN** **Reporting Requirements and Actions (within 24 hours or less if noted)**		**Primary Communication Responsibility**
(10) Cyber event that could potentially impact electric power system adequacy or reliability	If the attempt occurred or was mitigated before causing an interruption or impact.		by radio. ☐ Submit EOP-004-2 Attachment 2 Event Reporting Form (or the current DOE-OE-417 form) to **NERC. systemawareness@nerc.net or fax 404-446-9770 or Voice 404-446-9780**	
(14) Damage or destruction of a Facility	Damage or destruction of a Facility that results from actual or suspected intentional human action.	**System Report:** Later of 24 hours or 1 business day		Local Law Enforcement DOE NERC Texas RE BEPC ERCOT
(15) Physical threat to Facility	Physical threat to a Facility, excluding weather or natural disaster related threats that has the potential to degrade the normal operation of the Facility. OR Suspicious device or activity at a Facility.			

Note: Event numbering is in accordance with the DOE OE-417 form that pertain to a Generator Owner and Operator.

Form Location: OE-417 and instructions for its completion are available from the Department of Energy Office of Electricity Delivery and Energy Reliability: http://www.oe.netl.doe.gov/oe417.aspx.

Where to File Report: The main recipient of Form OE-417 is the DOE:

- Online: https://www.oe.netl.doe.gov/OE417 /(Preferred)
- Fax: (202) 586-8485 (Second preference)
- Email: doehqeoc@hq.doe.gov (If online or fax is not available)
- Telephone: (202) 586-8100 (If online or fax is not available)

Additional Notifications: When Form OE-417 is submitted, other parties as listed above must be copied or informed of the event within 24 hours of recognition of the event as reportable by the recognition of meeting an event type threshold for reporting or by the end of the JON's next business day (4 p.m. local time will be considered the end of the business day). Contact information is provided below.

Submit updates as needed and/or a final report (all of Schedules 1 and 2) within 72 hours of the incident.

The ERO Event Analysis Process has specific reporting requirements that fall outside of the scope of EOP-004-4. In the event that the Facility experiences one of the events listed above, the Facility shall review and categorize the event per the ERO Event Analysis Process and submit any required reports as outlined in the Event Analysis Process. Reportable events are as follows:

A loss of an entire generation station consisting of three or more generators (aggregate generation of 500 MW to 1,999 MW); combined cycle units are represented a one unit.

4.0 REPORTING EVENTS TO NERC

NERC has approved that the form OE-417 meets the submittal requirements for NERC. There may be other applicable regional, state and local reporting requirements.

The Plant Manager shall use DOE-417 Form for both DOE and NERC reporting. Submit reports to the ERO via one of the following:

TABLE 1 – NERC Contact Information

CONTACT TYPE	Email/Fax/Phone
Email	systemawareness@nerc.net
Facsimile	404-446-9770
Voice	404-446-9780
E-ISAC	operations@EISAC.com

5.0 COMMUNICATION WITH LAW ENFORCEMENT AND OTHER PARTIES OF THE INTERCONNECTION

Certain outages, such as those due to vandalism and terrorism, may not be reasonably preventable. These are the types of events that should be reported to law enforcement. Entities rely upon law enforcement agencies to respond to and investigate those events which have the potential to impact a wider area of the BES. The inclusion of reporting to law enforcement enables and supports reliability principles such as protection of BES from malicious physical attack. The importance of BES awareness of the threat around them is essential to the effective operation and planning to mitigate the potential risk to the BES.

Reporting an event to law enforcement agencies requires the Facility to notify the state or local level law enforcement agency. The state or local level law enforcement agency will coordinate with law enforcement with jurisdiction to investigate. If the state or local level law enforcement agency decides federal agency law enforcement should respond and investigate, the state or local level law enforcement agency will notify and coordinate with the FBI.

Contacting Law Enforcement

If it has been identified that one the event types listed above has occurred, the control room operator shall contact the Plant Manager, who will in turn contact State and Local Law Enforcement as soon as possible. If the Plant Manager is not available, the control room operator shall contact Local Law Enforcement.

Contacting other Parties of the interconnection

If any of the events listed in above have occurred, the control room operator shall contact the Plant Manager, who will in turn contact TRE, JON's Regional Reliability Organization, JON's Reliability Coordinator (RC), Balancing Authority (BA), and Transmission Operator (TOP), using the contact information listed in Table 2 below.

TABLE 2 – PLANT MANAGER AND LAW ENFORCEMENT CONTACT INFORMATION

Contact Name/Position	Phone Number/Email Address
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
Regional Entity -Texas RE	Phone: 512-583-4900 Email(s): rapa@texasre.org
ERCOT ISO (RC/BA)	Primary Phone: 512-248-3030 (Taylor) Secondary Phone: 512-874-5030 (Bastrop) Email(s): shiftsupervisors@ercot.com **Outage Coordinator** Primary: 512-248-6841 (Taylor) Secondary: 512-874-5841 (Bastrop)
BEPC (TOP) Central Desk	**Primary Control Center** (Waco-Badby) Primary Phone: 254-750-6260 Secondary Phone: 254-752-1313 Email: sysop@brazoselectric.com **Backup Control Center** (Whitney Admin) Primary Phone: 254-622-8239 Secondary Phone: 254-622-8240
Law enforcement	911
FBI (Regional Offices)	210-225-6741 (SAN) SanAntonio@ic.fbi.gov 972-559-5000 (DFW) fbi.dallas@ic.fbi.gov 713-693-5000 (HOU) Houston.Texas@ic.fbi.gov

Dept. of Energy (for submittal of OE-417 Form) Required within 24 hours	https://www.oe.netl.doe.gov/OE417/Form/Home.aspx# (link to online form)
NERC (for submittal of Event Report Form)	systemawareness@nerc.net Phone: 404-446-9780 Fax: 404-446-9770

6.0 U.S. DEPARTMENT OF ENERGY DISTURBANCE REPORTING REQUIREMENTS

The Electric Emergency Incident and Disturbance Report (Form OE-417) collects information on electric incidents and emergencies. The Department of Energy uses the information to fulfill its overall national security and other energy emergency management responsibilities, as well as for analytical purposes.

The OE-417 Electric Emergency Incident and Disturbance Report (OMB No. 1901-0288) has been updated and was recertified by the Office of Management and Budget in May 2018. The updated version of Form OE-417 incorporates additional questions from the NERC EOP-004 Event Reporting Standard.

For NERC reporting entities registered in the United States, NERC has approved that Form OE-417 meets the submittal requirements for NERC; however, please note that there may be other applicable regional, state, and local reporting requirements.

NOTICE: This report is mandatory under Public Law 93-275. Failure to comply may result in criminal fines, civil penalties and other sanctions as provided by law. For the sanctions and the provisions concerning the confidentiality of information submitted on this form, see General Information portion of the instructions. Title 18 USC 1001 makes it a criminal offense for any person knowingly and willingly to make to any Agency or Department of the United States any false, fictitious, or fraudulent statements as to any matter within its jurisdiction.

RESPONSE DUE: Within 1 hour of the incident, submit Schedule 1 and lines M - Q in Schedule 2 as an Emergency Alert report if criteria 1-8 are met. Within 6 hours of the incident, submit.

Schedule 1 and lines M - Q in Schedule 2 as a Normal Report if only criteria 9-12 are met. By the later of 24 hours after the recognition of the incident OR by the

end of the next business day submit Schedule 1 & lines M - Q in Schedule 2 as a System Report if criteria 13-24 are met. Note: 4:00 pm local time will be considered the end of the business day. Submit updates as needed and/or a final report (all of Schedules 1 and 2) within 72 hours of the incident.

METHODS OF FILING RESPONSE (Retain a completed copy of this form for your files.)

The Form OE-417 can be found at:

https://www.oe.netl.doe.gov/OE417/Form/Home.aspx.

Online: Submit form via online submission at: https://www.oe.netl.doe.gov/OE417/

FAX: FAX Form OE-417 to the following facsimile number: (202) 586-8485.

Alternate: If you are unable to submit online or by fax, forms may be e-mailed to doehqeoc@hq.doe.gov or call and report the information to the following telephone number: (202) 586-8100.

For additional instructions on completing the OE-417 report, see OE-417 ELECTRIC EMERGENCY INCIDENT AND DISTURBANCE REPORT Form Instructions.

Brazos Electric Johnson County Generation Facility

NORTH AMERICAN ENERGY SERVICES COMPANY

OPERATIONS PROCEDURE - 105 (OP-105)

Issue Date: 17MAR23

Approved: _____

Revision: 6

SUBJECT: Freeze Protection System/Extreme Weather

APPLICABILITY: Brazos Electric Johnson County Generation Facility

PURPOSE: Provide operational guidance to protect susceptible plant systems and equipment against freezing when ambient temperatures are 34°F or below and when ambient temperatures are above 105°F.

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REFERENCES

		Rev	Date
1.	Cleburne Facility System Descriptions, All Systems	-	-
2.	Operations Procedures, (All Systems), NAES	-	-

1. SYSTEM DESCRIPTION

This procedure is intended to highlight operational considerations of those plant systems and equipment which are susceptible to damage during freezing and high heat weather. Serious damage can occur when water within an enclosed piping system expands upon freezing. Insulation and heat tracing are used extensively throughout the plant, but are not provided on some systems and equipment. Certain operational measures must be taken to ensure these components are protected from freezing conditions in order to maintain safe operation of the plant. A winter preparedness check sheet and associated work orders are to be executed by maintenance personnel in the fall of the year to verify proper operation of all key freeze protection equipment.

This procedure is designed to provide a brief overview of all freeze protection considerations for the circulating water system, heat recovery steam generator (HRSG), and miscellaneous piping. In the event of an extreme temperature required shut down of the facility, an addendum check sheet is part of this procedure which is to be immediately followed. Some other cold weather concerns are also addressed.

This procedure also addresses the need for additional measures to be taken for high heat weather(above 105deg F). A summer prepairedness check sheet and associated work orders are to be executed in the spring of the year to prepare plant equipment for the upcoming summer operations.

2. PROCEDURE

A. Building Space Conditioning

FALL

The space conditioning systems located throughout the plant are designed to maintain proper indoor air temperatures for satisfactory equipment performance. Thermostatically controlled equipment must be adjusted to the proper setpoints. These systems will be verified for proper operation during the fall winter preparedness check. When ambient temperatures drop below freezing, these systems should be verified for proper operation during outside operator rounds. Exterior doors must remain and be verified shut.

SPRING

Thermostatically controlled equipment must be adjusted to the proper setpoints. These systems will be verified for proper operation during the summer preparedness check. When ambient temperatures increase above 105 F, these systems should be verified for proper operation during additional extreme hot weather outside operator rounds. Exterior doors must remain and be verified shut in climate controlled buildings.

B. Heat Tracing

Many of the plant's external piping systems have been provided with protective heat tracing designed to keep pipes from freezing. Heat trace wiring is supplied from four individual electrical circuit panels throughout the plant. Each of these circuit panels will be checked for proper operation during the fall winter preparedness check. The four Panels will be verified for proper operation and checked alarm free during the outside operator rounds. The red operation illumination lights shall be observed illuminated indicatining the heat trace is in operation. The Transmitter housing enclosures contain separate heaters to maintain the internal environment at 50F. Note should be taken of any box that is below 50F.

C. Extreme Cold/Hot Weather

WINTER SEASON

During extreme cold weather, outside operators will conduct rounds on the site freeze protection equipment every 2 hours to assure plant operation during these critical times. Panel operation, red circuit light illumination and, transmitter enclosure temperatures will be checked. Extreme cold weather is considered to be ambient temperatures below 26F. Plant management will give additional consideration to assigning maintenance personnel to night shift duties for cold weather support of the facility. If temperatures are forcast to be below 20 degrees for more than 8 hours the following staff will be moved to nights, One member of the management team, one I/E tech, one Mechanic. All day shift personell will work 12 hour days including weekends and additional contractors will be brought on as needed.

SUMMER SEASON

During extreme hot weather, outside operators will conduct rounds on the site cooling equipment every 2 hours to assure plant operation during these critical times. All plant personel are advised to self monitor them selves and others for heat stress/exhaustion and remain hydrated. Extreme hot weather is defined as ambient temperatures >105 degs. F.

D. Natural Gas Curtailment

During winter months, the supply of natural gas to industrial users may be restricted (curtailed) for brief periods in order to ensure that sufficient fuel is made available to residential users. This curtailment may require that the fuel source for the combustion turbine (CT) be shifted from natural gas to No. 2 distillate oil. Detailed procedures for performing this shift are provided in OP-201.

EXTREME COLD/HOT WEATHER CHECKS

The procedures provided herein shall be implemented as lowering ambient air temperatures are predicted to drop below 32°F.

1. DEMIN WATER SYSTEM

The Demin Water System will be checked for/put into operation with a high recirculation rate to prevent shutdown due to high demin tank level.

2. DEH SYSTEM

The steam turbine DEH system cooler bypass will be put into operation to maintain the DEH system temperature at 90 F.

3. CIRCULATING WATER SYSTEM

The cooling tower is generally capable of operating at sub-freezing temperatures as long as sufficient heat load is provided by the system. Circulating water flow to the tower must be maintained as high as possible in order to provide a continuous flow of warm water to prevent freezing within the tower. The circulating water temperature will be monitored. If heat load is insufficient to prevent freezing, redirect flow to the basin via the tower bypass line. After sufficient heat load is established, the tower should be placed into normal service. This operating mode may also be used during shutdown to reduce the plant's auxiliary power requirement by not operating any cooling tower fans.

A. Maintain constant circulating water flow to operating cells at or near rated flow.

B. At this time all tower fans should have been shut down to maintain the minimum circ water temperature setpoint. If any fans are operating, manually stop them from the Distributed Control and Information System (DCIS) or local controllers as necessary.

C. MONITOR ambient temperature. If ambient temperature drops below 32°F, visually inspect tower structure for excessive ice formation.

CAUTION

Do not attempt to physically remove or otherwise strip the tower framework of ice. Serious structural damage may occur if ice is forcibly removed. Wait until heat load is sufficient to melt the ice. Melting will not generally cause damage to tower components.

NOTE

Continue to monitor circulating water supply temperature. If temperature continues to decrease to 50 F, system heat load should be considered negligible.

As circulating water temperature rises above 50F, the following bypass procedure should be reversed.

D. If heat load is negligible, and excessive ice buildup becomes evident, isolate flow to the tower as follows:

CAUTION

The following steps must be performed in the specified order to prevent operating the circulating water pump below the required minimum flow rate.

1. OPEN HRC-12 (tower bypass valve) slightly (10-15%) to establish some flow through the bypass.

2. While monitoring circulating water pump discharge pressure, sequentially SHUT HRC-8/9/10/11/22 in order to isolate flow through the tower's spray nozzles.

3. After the first four risers have been isolated, or when discharge pressure increases to 21-23 psig, OPEN HRC-12 to 50% open (there is a mark corresponding the position of the arrow on the valve operator when the valve is in the correct position).

4. THROTTLE HRC-1, -2, or -3 (motor-operated CW pump discharge valve) for the operating pumps to approximately 60% open or until the pump discharge pressure is 21-23 psig as measured by the local pump dischage pressure gage (there is a mark on the indicator of Pump A showing this position).

NOTE

As soon as throttling of the operating pump discharge valves has begun, the pressure transmitter indicating header pressure in the Control Room will not display actual pump discharge pressure and the pressure must be read locally.

E. If the pump discharge pressure is about 21 psig and the transmitter reads about 18 psig, the bypass operates with only minor cavitation, there is little vibration downstream of the orifice, only minor splashing occurs in the basin from the distribution pipe, and the pump operates smoothly with no noticeable vibration.

F. If freezing occurs within the basin, logs or other suitable wood material should be placed within the basin, around its perimeter, in order to prevent the water from freezing completely across the basin.

G. In the event of a system shut down, procede with the circ water system checklist in the provided addendum.

4. HEAT RECOVERY STEAM GENERATOR

To prevent freezing within the HRSG when it is out of service, **ALL** HRSG module manual drains and MOV's of the LP,IP and HP must be opened to drain as HRSG temperatures allow preventing over heating of the underground HDP blow down system piping. This includes all blowdown piping.

5. AIR AND WATER DRAINAGE SYSTEMS

Service/Instrument Air System

All compressed air header low point drain traps must be verified for proper operation in order to ensure complete drainage of any condensation within the air headers. Failure of these traps to perform their designed function will lead to accumulation of water. This water will freeze and cause damage to air system piping, potentially resulting in a loss of plant control casualty.

6. CHILLER UNIT WINTERIZATION

The plant is equipped with a combustion turbine inlet chilling system which is run seasonally for plant generation enhancement. The following operations are done on an annual basis for equipment protection. The procedure to accomplish the following tasks is located in the Operational Procedure OP-607.

A. Chiller Unit inlet coils will be drained back to the chilled water storage tank and the coils will be flushed with glycol and drained to prevent freezing and subsequent bursting of the Inlet coils.

B. The Chiller Unit cooling tower basin and all associated chemical delivery lines will be drained of water and the chemical controllers put in winter lay up.

C. The Chiller Unit condenser will be drained and its associated heads will be removed for dry layup.

D. The Chilled Water storage tank re-circulation pump will be put into service with the correct valving to permit an approximate 80gpm recirculation flow from the tank through the chiller unit evaporator.

7. WATER SYSTEMS DRAINAGE

In the event of a required facility shutdown during extreme cold weather conditions, a checklist addendum is provided for the condensate, demin, boiler feed water and circwater systems which is to be immediately performed to prevent freeze damage from occurring to facility piping and equipment.

The system checks provided herein shall be implemented as rising ambient air temperatures are predicted to rise above 105°F.

1. Verfiy building/room air conditioners throughout the facility are operational.

2. Verify any temporary air conditioning units are operational.

3. Verify all GSU/auxilarary transformer fans are operational.
4. Verify cooling tower fan amps are within specifications.
5. Verify building louvers are open and fan operational.
6. Review lube oil temperatures.
7. Review closed cycle cooling fluid temperatures.
8. Review Srevice water/Grey water pressures.

Addendum OP-105-1

System drainage check list

CONDENSATE SYSTEM

- _ Shutdown Condensate pumps 1A-1B.
- _ Open condenser hotwell drain FWC-66 to drain hotwell
- _ Open Condensate pumps strainer drains.
- _ Check open Condensate pumps seal water and canister vents are open.
- _ In manual open pump discharge valves FWF-ABV-3 and 5.
- _ Open Condensate recirc valve, FWC-ACV-51 to 100% in manual.
- _ Open drain valve FWF-64.
- _ Open Gas preheater temperature control valve, FWC-ACV-30 to 100% in manual.
- _ Open drain valve FWC-71.
- _ Open FWC-ACV-55 to 100% in manual.
- _ Open drain valve FWC-65
- _ Open SGJ-ACV -27 to 100% in manual.
- _ Open drain valve SGJ-32.
- _ Open FWC-ACV-47 to 100% in manual.
- _ Open drain valve FWC-73
- _ Open Gland Steam Condenser inlet and outlet drains, FWC-72 and 89.
- _ Open gland steam skid attemperator supply line ACV drain.
- _ Open Fuel Gas Leak Detector vent valve FWC-70.
- _ Open Fuel Gas Leak Detector drain valve FWC-94.
- _ Open Rotor Air Cooler drain.
- _ Open Rotor air pressure control valve to 100% in manual.
- _ Open Rotor Air Cooler supply drain.
- _ Open LP economizer recirc pump 1B casing discharge drain valve.
- _ Open LP economizer recirc control valve FWC-ACV-23 100% in manual.
- _ Open FWC-ABV-24 100%
- _ Open FWC-ACV-34 100% in manual.
- _ Open manual drain valves 3125 and 3126.

DEMIN CYCLE MAKEUP SYSTEM

_ Shutdown Demin water makeup pumps 1A-1B.
_ Isolate pump suction valve FWF-BV-3.
_ Put FWF-ACV-17 in manual control open at 100%.
_ Open bypass valve FWF-BV-19.
_ Open drain valve FWF-24.
_ **WITH CONDENSATE SYSTEM SHUT DOWN,** Open FWF-BV-31 and 32.

BOILER FEEDWATER SYSTEM

_ Shutdown Boiler feedwater pumps 1A and 1B.
_ Open BFP's drain valves 107/108.
_ Open BFP 1A recirc drain valve 116.
_ Open BFP 1B recirc drain valve 117.
_ Open FWA-ACV-16 100% in manual.
_ Open FWA-ACV-44 100% in manual.
_ Open BFP 1A HP discharge MOV and drain valve 111.
_ Open BFP 1B HP discharge MOV and drain valve 112.
_ Open BFP 1A IP discharge MOV and drain valve 113
_ Open BFP 1B IP discharge MOV and drain valve 114
_ Open BFP 1A and 1B suction drain valves 107 and 108.
_ Open IP feedwater low point drain valves 2024/2025.
_ Open **ALL** attemperators to 100% in manual.

CIRC WATER SYSTEM

_ When oil temps allow shutdown circ pumps.

- _ Start wet down pump in basin recirc configuration.
- _ Close isolation valve HRC-BV-34.
- _ Open blowdown control valve HRC-ACV-16 to 100% in manual.
- _ Shut city water make up isolation WSA-BV-23.
- _ Open city water drain valve WSA-DR-33.
- _ Shut grey water make up isolation valve WSB-BV-13.
- _ Open grey water make up drain WSB-DR-14.
- _ Open water box drains.