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<b>PROJECT TO SUBMIT</b>	<b>§</b>	<b>PUBLIC UTILITY COMMISSION</b>
<b>EMERGENCY OPERATIONS PLANS</b>	<b>§</b>	
<b>AND RELATED DOCUMENTS</b>	<b>§</b>	<b>OF TEXAS</b>
<b>UNDER 16 TAC § 25.53</b>	<b>§</b>	

**SOUTHWESTERN ELECTRIC POWER COMPANY**

**ELECTRIC SERVICE EMERGENCY OPERATIONS PLAN**

**PURSUANT TO**

**16 TEX. ADMIN. CODE § 25.53**

**April 18, 2022**

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## **EXECUTIVE SUMMARY**

This executive summary of Southwestern Electric Power Company's ("SWEPCO" or "the Company") Emergency Operations Plan ("Plan" or "EOP") includes four parts, consistent with 16 Texas Administrative Code § 25.53 ("the Rule"). It includes:

1. A description of the contents and policies contained in the EOP;
2. A reference to specific sections and page numbers of the EOP that correspond with the requirements of the Rule (see Table of Contents);
3. A record of EOP distribution consistent with the Rule; and
4. The affidavit required under the Rule.

### **A. Contents and Policy Contained in the EOP**

The EOP for SWEPCO is a proactive strategy to anticipate, prepare, and initiate remedial activities before and after an emergency event occurs. The EOP recognizes many types of emergencies and uses prior experience and "lessons learned" to effectively prepare and safely respond to emergencies and minimize the impact to customers. During any emergency event, safety is the number one priority during the Company's response.

### **Environment, Safety & Health Philosophy**

No aspect of operations is more important than health and safety. SWEPCO customers' needs are met in harmony with environmental protection.

### **Event Analysis**

SWEPCO routinely engages in event analysis, which involves performing a detailed review to identify how and why an emergency event occurred. Results of the review are used to mitigate recurrence by analyzing lessons learned and implementing corrective and preventive actions. Preventive actions can include modifications to design and construction standards to ensure the Company's facilities can maintain service during most events that are expected to occur.

The emergency response described in each Annex represents a reasonable course of action that will manage the event and facilitate the restoration of electric service to customers as safely and as quickly as possible.

### **Incident Command System**

The Incident Command System (ICS) is a standardized, on-scene, all-hazard incident management tool that allows responders to manage both small and large emergencies such as outages related to major storms and other events requiring quick responses. Its key element is a common chain of command where the roles are clearly defined. The benefits of the ICS include that it:

- Establishes consistent roles and responsibilities;
- Separates key restoration roles, i.e., operations, planning, logistics, finance, and safety;
- Limits spans of control;
- Clearly defines and limits the focus of employees' responsibilities during the restoration or emergency response;
- Provides standardized terminology that will allow for effective and efficient communication internally and with local, state, and federal government agencies; and
- Allows the Company to share resources efficiently and effectively regardless of the incident size and transition employees throughout the service area during events.

The ICS is the same process used by other utilities and agencies such as the military and local and state government emergency responders in responding to emergencies. The ICS is

applicable to all emergency events and establishes the foundation for response and communication.

**B. Record of Distribution**

Consistent with the Rule, SWEPCO has filed the required record of distribution separately from this EOP.

**C. Affidavit**

Consistent with the Rule, SWEPCO has filed the required affidavit separately from this EOP.

## **I. Approval and Implementation**

### **A. Introduction**

Southwestern Electric Power Company (“SWEPCO” or “the Company”) is a fully integrated investor-owned electric utility providing generation, transmission, and distribution services in the Southwest Power Pool (SPP) region. SWEPCO is a wholly owned subsidiary of American Electric Power Company, Inc. (AEP) and is required to provide service to the public within its certificated service area.

In accordance with 16 Tex. Admin. Code § 25.53 (TAC), SWEPCO files its Emergency Operations Plan (“Plan” or “EOP”). The primary objective of SWEPCO’s Plan is to establish an emergency operations organization that will efficiently utilize all available resources to resolve an emergency situation. The second objective of the Plan is to provide for the timely collection of accurate assessment reports for management, employees, and customers. The information is further used in aid of establishing the necessary liaisons among the SWEPCO Incident Command structure, media, state, local, and federal agencies.

As addressed below, SWEPCO’s Plan encompasses other plans to address specific areas during emergency events. The separate plans are identified below. The guidelines and procedures of each plan are followed during emergency events ranging from small emergencies handled by local level employees to major events handled by the larger incident management team and the Incident Command System (ICS).

SWEPCO has adopted the ICS for management of significant emergency events. The positions required to adequately staff a safe and efficient service restoration effort are dependent on the level of the event. The SWEPCO ICS structure begins with the Incident Commander and its Staff. The Staff of the Incident Commander includes the Public Information Officer, Liaison



Officer, Safety and Environmental Officer, Operations Section Chief, Planning Section Chief, Logistics Section Chief, and the Finance and Administration Section Chief. Each Section Chief and Officer has its own Staff to respond to an emergency event.

**B. Maintaining, Implementing, and Changing the EOP**

Consistent with the Rule, below is a list of individuals responsible for maintaining and implementing the EOP, and those who can change the EOP.

President and Chief Operating Officer

Vice President, Distribution Region Operations

Vice President, Generating Assets

Vice President, Energy Delivery Operations

Vice President and Chief Security & Privacy Officer

Director, Regulatory Services

Director, Case Support & Special Projects

**C. Revision Control Summary**

This is the first EOP filed in compliance with the Rule as amended effective March 20, 2022.

**D. Required Statement**

This is the first EOP filed in compliance with the Rule as amended effective March 20, 2022.

**E. EOP Approval Date**

This EOP was most recently approved by SWEPCO on April 14, 2022.

## **II. Communication Plan**

### **A. Overall Electric Operations**

SWEPCO's overall electric operations provides several important functions during an emergency event. Generally, SWEPCO has divided the communication plan into three separate phases: Pre-Event, During an Event, and Post Event. Pre-Event refers to potential, upcoming events in SWEPCO's service territory. During the event refers to SWEPCO's strategy after an event has occurred. Post-Event refers to SWEPCO's efforts after the event is no longer active. The phases and activities are described below.

#### **Pre-Event**

When possible, before an event occurs, the Company activates its Central Emergency Organization and the overall electric operations and begins to coordinate event response and communication needs. The overall electric operations provides information on event preparedness and incorporates feedback from the field into its work with appropriate parties to resolve any pre-event issues.

#### **During the Event**

During the event, the Company continues to hold meetings to prepare and coordinate the response effort and begin restoration efforts if and where possible. The overall electric operations provides initial information on event damage and/or outages and incorporates feedback from the field into its work with appropriate parties to resolve issues. Additionally, the overall electric operations coordinates with Community Affairs Managers, Customer Services, and Field Media Coordinator to provide detailed local restoration information to be communicated to state and local elected officials, county emergency coordinators, and critical load customers. The overall electric operations identifies other issues – including safety – that may require special emphasis in communications, assists Community Affairs and Corporate Communications with arrangements

for media interviews at restoration work sites, staging areas or AEP facilities, plus other opportunities to highlight the restoration effort, receives feedback from the field, and works with appropriate parties to resolve issues.

Overall electric operations coordinates with SWEPCO Regulatory Services to inform the Commission of the event in accordance with regulatory requirements. They provide restoration information throughout the duration of the event and strive to keep the Commission informed as the event transpires. Additionally, SWEPCO Regulatory Services is primarily responsible for communicating with the Office of Public Utility Counsel (OPUC). SWEPCO Regulatory Services responds to inquiries from OPUC throughout the emergency with information such as the areas impacted and the number of outages.

#### **Post-Event**

After the event has occurred, the overall electric operations continues restoration activities and holds meetings to provide information on event damage, outages, restoration estimates, number of employees and outside crews working, and other relevant matters.

#### **B. Corporate Communications**

The following table generally describes the Company's communications responsibilities.

#### **Communications Responsibilities – Overview**

<b>Responsible Party</b>	<b>Work Locations</b>	<b>Communications Channels</b>	<b>Primary Audiences</b>
Central Emergency Organization	Overall Electric Operations	Ongoing emergency operations, face-to-face meetings, conference calls, radio, other electronic means	All SWEPCO groups with communication responsibilities shown in this table
Corporate Communications	Overall Electric Operations, Home Office, Austin State Office (and storm recovery sites if resources permit)	Communications strategy, coordination, and message development – Phone, teleconference, email, text messaging or PIN, internet, intranet (and face-to-face media interviews as resources permit)	All SWEPCO groups with communication responsibilities shown in this table, as well as the news media, customers, and the general public

Community Affairs	Storm recovery sites, staging areas, local emergency operations centers, local officials' offices	Primary media relations (field) – Face-to-face, phone, teleconference, detailed restoration information for local officials, media interviews	Local elected officials, county emergency coordinators, Red Cross/relief agencies, critical load customers, customers, news media, and the general public
Governmental Affairs	Austin State Office	Phone, face-to-face, updates / summaries	Legislators, staff, governor, and other state/federal elected officials
Regulatory Services	Home Office, assisted by Austin State Office (and at State Operations Center)	Phone, teleconference, face-to-face, email, updates / summaries	Regulators, state Division of Emergency Management (State Operations Center)
President/COO and External Affairs VP	Home Office, Austin State Office, Overall Electric Operations, and storm recovery sites as needed	Phone, face-to-face, media interviews as needed, and other means as needed	Key state officials, state Division of Emergency Management, customers / public and news media
Customer Solutions Center	Call centers (Shreveport, Corpus Christi, and other AEP sites)	Phone (first-person, automated and up-front recorded messages)	Customers / public
Customer Services	Offices / field	Phone, face-to-face, and other means as needed	Key accounts, critical load customers
T&D Field Employees	All service centers, staging areas and storm recovery sites	Face-to-face and other means as needed	Customers / public and news media, Energy Delivery senior management
Regional Environmental Coordinators	Storm recovery sites, service centers, Home Office	Phone, face-to-face, updates / summaries	Environmental regulatory agencies

Corporate Communications is responsible for overseeing a wide range of communication activities before, during, and after the event.

### **Pre-event**

Corporate Communications provides communications strategy, coordination and message development, consults with overall electric operations regarding initial communication needs, gathers information, prepares updates, and distributes to other groups for communication to their assigned audiences. If warranted, Corporate Communications activates a Teleconference Bridge for county emergency coordinators and assists Community Affairs with set-up for post-event briefings (target daily). Additionally, Corporate Communications provides information to its

customers and the public. Corporate Communications distributes news releases on storm preparedness and activation of Central Emergency Command Center, and posts event preparedness messages on SWEPCO.com (Storms & Outages page and/or news releases) – promoting use of this internet site as a primary source of current information. Corporate Communications prepares to activate, if warranted, a special event web page to replace SWEPCO.com home page, along with link from AEP.com home page, works with Community Affairs to respond to media inquiries about event preparedness, tracks media contacts and coverage, and makes arrangements for video/photo documentation of event damage and restoration efforts. In addition, Corporate Communications contacts advertising agencies to stand by for possible ad placement on event preparedness, provides internal news updates for intranet (SWEPCO Now and AEP Now), monitors feedback and relates to overall electric operations those issues needing attention, and determines team member assignments and whether additional resources from unaffected areas will be needed.

### **During the Event**

During the event, Corporate Communications provides communications strategy, coordination, and message development. Corporate Communications provides a representative(s) present with overall electric operations and participates in overall electric operations meetings to consult on communication needs, gather information, prepare updates, and distribute to other groups for communication to their assigned audiences. Corporate Communications posts updates on SWEPCO.com (Storms & Outages page and/or news releases) and, if warranted, activates a special event web page to replace SWEPCO.com home page, along with link from AEP.com home page. Corporate Communications can activate the Teleconference Bridge for county emergency coordinators, and assist Community Affairs with set-up for post-storm briefings (target daily). Corporate Communications remains available, as conditions permit, for media inquiries, to track

media contacts and coverage, to provide internal news updates including intranet (SWEPCO Now and AEP Now), to monitor feedback and relate to overall electric operations those issues needing attention, and to continue evaluating team member assignments including any necessary additional resources from unaffected areas.

### **Post-Event**

Corporate Communications implements team member assignments, scheduling, and back-up from unaffected areas as needed. Corporate Communications provides communications strategy, coordination, and message development. Corporate Communications has representative(s) present in overall electric operations meetings to consult on communication needs, gather information, prepare updates, and distribute to other groups for communication to their assigned audiences. Corporate Communications posts updates on SWEPCO.com (Storms & Outages page and/or news releases) and, if warranted, activates a special event web page to replace SWEPCO.com home page, along with link from AEP.com home page. Corporate Communications activates the Teleconference Bridge for county emergency coordinators and assists Community Affairs with briefings (target daily), working closely with Community Affairs and SWEPCO Distribution to provide local media in impacted area with specific response details that can be conveyed to the public. If resources permit, Corporate Communications travels to storm recovery sites, staging areas, or AEP facilities to assist Community Affairs as they escort media, conduct/arrange media interviews, communicate key messages, and utilize the media to inform the public. Corporate Communications will engage employees as conditions warrant for media interviews. Corporate Communications will escort videographers and take still photos to document storm damage and restoration efforts for internal and external communication. Corporate Communications tracks media contacts and coverage, provides internal news updates for intranet (SWEPCO Now and AEP Now), monitors feedback and relates to overall electric

operations those issues needing attention, works with appropriate parties to resolve issues reported through feedback from community, and evaluates the use of informational advertising during restoration process as a means of communicating with the public, with emphasis on radio.

**C. Customer Solutions Center and Customer Service**

The Customer Solutions Center is a part of the company dealing with customer interaction and customer satisfaction and is composed of customer representative staff. The main function is to manage all customer contacts before, during, and after the event. Customer Service manages communication with key accounts.

**Pre-Event**

Customer Solutions and Customer Service participate (through designated representatives) in overall electric operations meetings. In addition, Customer Solutions and Customer Service prepare and implement storm-related scripts for up-front recorded messages. As customers call in, they relate key messages about SWEPCO's storm preparations and need for customers with life-sustaining equipment or other special medical needs to make arrangements in the event of an extended power outage. Customer Solutions and Customer Service monitor feedback and relate to overall electric operations those issues needing attention, make initial contacts with key accounts regarding storm preparations and restoration priorities, and determine team member assignments and whether back-up from unaffected areas will be needed.

**During the Event**

Customer Solutions and Customer Service participate (through designated representatives) in overall electric operations meetings and prepare and implement storm-related scripts for up-front recorded messages. Customer Solutions and Customer Service relate key messages about SWEPCO's storm preparations and restoration priorities, handle initial outage calls (although customers will be asked not to report outages until the storm has passed), and monitor feedback

and complaints. Customer Solutions and Customer Service convey issues needing attention to overall electric operations. Customer Solutions and Customer Service remains available for key account contacts and continue to evaluate team member assignments including any necessary additional resources that may be needed.

### **Post-Event**

Customer Solutions and Customer Service participate (through designated representatives) in overall electric operations meetings. They prepare and implement storm-related scripts for up-front recorded messages, use latest information from overall electric operations on damage and restoration estimates to inform customers, and monitor feedback and convey issues needing attention to overall electric operations. Customer Solutions and Customer Service work with appropriate parties to resolve issues reported through feedback from community, and implement team member assignments, scheduling, and back-up from unaffected areas as needed. Customer Service travels to key account locations as needed and as conditions permit, and serve as primary liaison with key accounts, working with overall electric operations to provide detailed restoration information including key messages about restoration efforts and safety.

### **D. Energy Delivery Operations**

Energy Delivery Operations (EDOps) is responsible for transmission operations, Real-time monitoring, assessment, and grid reliability. Disturbances, destruction, or unusual occurrences that jeopardize the reliability of the Bulk Electric System (BES), or result in system equipment damage or customer interruptions need to be reported to the appropriate entities. Therefore, NERC Reliability Standard EOP-004-4 requires the reporting of certain events. EDOps utilizes the AEP Event Report Operating Plan, a document that summarizes those requirements and sets forth AEP's program to address the requirements. The Department of Energy (DOE) form DOE-417 covers additional reporting requirements such as cyber security events, physical security events,



and loss of electric service to customers. EDOps also has a procedure, detailed in the Notification Procedures document, for notifying EDOps management and other key AEP personnel of important system changes and other critical events.

Notifications to such personnel are necessary for a variety of Real-time and contingency events. Certain critical system disturbances or situations may require follow-up with a telephone call to key AEP management. The groups responsible for sending notifications review each group yearly to maintain accurate lists.

### **III. Pre-identified Supplies for Emergency Response**

When responding to an emergency, the Company has developed a separate logistics organization within the dedicated response team. Within this organization, there are specific roles that maintain and coordinate pre-identified supplies for emergency response:

- Supply Unit Leader – Responsible for reviewing material orders to support the needs during storm operations; responsible for working with Procurement to ensure that material is available to support construction/maintenance needs during storm operations.
- Material Ordering Manager – Responsible for placing orders for supplies and equipment for the incident.
- Ground Support Unit Leader – Responsible for supporting out-of-service resources, transportation of personnel and supplies, and the service and repair of vehicles and ground support equipment.
- Supply Chain and Fleet Branch Director – Responsible for the planning, coordinating, and managing of duties related to materials, supplies, and fleet operations in response of storm operations.

The Company maintains storm stock during each storm season based on anticipated requirements for at least the first 7-10 days of the restoration. This stock is held in central stores and is pre-staged in strategic locations throughout the service territory. SWEPCO puts some of this inventory on pallets for use at staging sites or at service centers. Key suppliers, including our distribution materials distributor, transformer supplier, wire and cable suppliers, key pole line hardware and related material manufacturers, and wood pole supplier are provided with inventory requirements, and in some cases raw material inventory requirements, so that they are able to respond quickly to replenish the Company with materials after the initial five days.

Beyond the basic storm stock, the ICS Material Ordering Manager/Purchasing maintains a storm stock list that anticipates material demands to restore the system. From this list, pallets of the anticipated materials are developed and made ready for delivery to the locations of need. The list also serves as the basis for the initial storm orders of material to replace that used during the early stages of restoration. The materials list is continuously refined and updated as materials become obsolete and replaced with new technology or specifications.

#### **IV. Staffing During Emergency Response**

As stated in Section III., the Company establishes a team with specific roles to address the emergency. Under the logistics organization, there are specific roles that address staffing during an emergency response:

- Resource Acquisition Branch Director – Responsible for the management and oversight of obtaining all needed resources from both internal and external sources. This includes resources within the affected operating company, outside of the operating company, Regional Mutual Assistance Groups (RMAGs), and non-RMAG contractor resources.

- Internal Resource Acquisition Unit Leader – Responsible for obtaining all needed resources within the operating company that can be fulfilled within the operating company.
- External Resource Acquisition Unit Leader – Responsible for requesting external resources.

Arrangements for personnel from other AEP companies, “mutual assistance” utilities, and other contractors are in place. AEP is a member of several RMAGs, including Texas Mutual Assistance Group, Midwest Mutual Assistance Group, Great Lakes Mutual Assistance Group, and Southeastern Electric Exchange. (There are currently seven RMAGs of which AEP is a member of four.) Membership in these groups provides for a potential source of additional assistance from other utilities as needed. Mutual assistance among utilities to facilitate restoration of service as rapidly as possible after a storm or other adverse situation is an important step to reinforce the reliability of service by the individual utilities and the industry.

AEP identifies contractors used by other AEP operating companies and other utilities that would be available to help in the event of a major storm event such as a hurricane. This enables the Company to establish proactive emergency operations contracts with contractors in advance of the storm. This largely eliminated the process of qualifying contractors and negotiating contracts during restoration.

Requests to other utilities are made through the Resource Acquisition Branch Director, who is a SWEPCO employee assigned to that position during an ICS event, after an evaluation of resource needs has been made. The evaluation of resource needs includes a consideration of the severity of outages or imminent weather throughout the system, along with travel time for assisting crews.

## **V. Identifying Weather-related Hazards**

SWEPCO's emergency procedures enable the restoration of electrical service to all SWEPCO assets following weather events in a systematic and efficient manner by utilizing all of the company's human and physical resources, and if necessary by securing and utilizing outside resources.

Weather emergency preparedness includes having as much notice of impending bad weather situations as possible. To have that insight, SWEPCO utilizes a staff of in-house meteorologists that continuously monitor weather patterns and conditions for all of AEP's seven Operating Companies. AEP Meteorology creates its own forecasts using a combination of weather data such as real-time surface observations, radar, satellite, and statistical and dynamical weather models via NOAA (National Oceanic and Atmospheric Administration), ECMWF (European Centre for Medium-Range Weather Forecasts) and Atmospheric G2 (formerly known as WSI). The AEP meteorologists monitor and give advance warning for weather events that may cause significant utility outages due to a tropical storm/hurricane, a tornado outbreak, severe thunderstorms with damaging winds, windstorms, extreme cold weather, ice storms, and snowstorms.

SWEPCO senior management needs to be apprised of weather situations and changing conditions in a timely fashion. The AEP meteorology team provides a variety of communication tools to be used when impactful weather may be headed to SWEPCO's service area including:

- AEP Weather Alerts: Utility specific alerts with maps outlining areas where impactful weather may cause significant utility outages along with a discussion and table outlining timing by districts.

- 5-day weather threat tables: Threat tables for all seven AEP Operating Companies that looks out 5 days and highlights potential weather issues.
- AEP Weather Portal: Internal website available to regulated or shared AEP employees. A plethora of weather information can be found on this site from AEP Meteorology and other weather services including radar, satellite, lightning strikes, forecast temperatures, seasonal outlooks, AEP Weather Alerts, AEP 5-day threat tables, weather data archive, etc.
- A daily tropical weather outlook (during hurricane season): A daily tropical weather outlook map produced by AEP Meteorology during hurricane season that highlights the potential development of tropical waves into tropical storms or hurricanes and their potential paths in the Atlantic Ocean and Gulf of Mexico.
- AEP's storm outage prediction model (SOPM) forecasts and opinions: A machine learning model created in collaboration with the Ohio State University and the University of Michigan that takes historical weather events and utility damage and creates predictions of utility damage due to the weather forecast. AEP Meteorology also takes SOPM predictions and provides their expertise out three days on if the model is over-predicting damage or under-predicting damage based on experience. An email is sent out daily M-F to storm coordinators.
- Text messages sent directly to SWEPCO's storm coordinator: AEP Meteorologists will send a text message to storm coordinators to give advance notice if the team is considering an AEP Weather Alert, final decisions, and when the Weather Alert has been emailed. Text messages and/or phone calls are also used to send updates as needed.

As confidence and predictability of weather events increases, AEP Meteorology may be asked to attend ICS storm calls for preparation ahead of and during the storm, as well as after the storm while restoration efforts are ongoing.

Post-storm weather data is usually provided after major outage events as well. This information assists SWEPCO in the development of lessons learned reporting.

In addition, EDops will monitor weather and emergency situations to control the transmission system in a more restrictive manner when a high probability exists of major events occurring (or having already occurred) that are not ordinarily covered by normal reliability criteria. An example is to determine if any maintenance or testing outage plans on any monitoring, control, or transmission equipment should be deferred or canceled, in accordance with *EDops Conservative Operations Guidelines*.

## **VI. Annexes for Responses to Specific Types of Emergencies**

### **A. Weather Emergency Annex**

In preparation for extreme weather events that have been communicated by the weather services or through SPP's Energy Emergency Alert (EEA) process, SWEPCO will take steps to arrange its electrical system to provide the optimal capability based on the existing circumstances of the equipment and circuit's functional status. The following is a general strategy the Distribution Dispatch Center (DDC) follows to prepare and implement an optimal system prior to the weather event:

- Reviews the status of Capital and Maintenance projects and identifies those that have station transformers or equipment that are out of service, as well as, distribution circuits in an abnormal configuration. A decision is made which

projects can be placed back in-service or in a normal configuration. The DDC communicates with various departments involved in the project to:

- Verify status of transformers/equipment/circuit configuration
  - Determine which projects can be placed back in-service or back to normal status, and
  - Determine and implement the switching process to proceed in each case.
- Reviews future planned work to determine which projects will impact the capability or configuration of our electrical system during the forecasted event timeframe and postpone these projects to a future date. The DDC communicates with various departments involved in the project to identify the projects and of changes to the schedule.
  - Reviews the schedule of Dispatcher resources and notifies all department employees to be available.
  - Reviews past experiences of similar events with Field personnel to determine if there are opportunities to reconfigure the system to mitigate possible issues.
  - DDC has prepared a Business Continuity Plan for major events that impact our dispatching operations.

### **Pre-Storm Plans**

Handling an emergency efficiently during the emergency situation is nearly impossible without planning. During emergency situations, the Company intends to react in a pre-planned manner. Prior to any emergency, there are many items that need to be put in place to handle the emergency in the most efficient and effective manner, including but not limited to: having a plan,

organizing resources, training personnel, and practice. Many of these items are just extensions of SWEPCO's everyday operation.

### **Having a plan**

SWEPCO's plan for handling restoration efforts includes annual review and critique to ensure effectiveness. If changes/corrections are needed, they are submitted to ensure that everyone who could be involved is operating under the same plan. A consistent plan provides each participant a better understanding of their role and responsibilities in the emergency efforts.

### **Organizing Resources**

Once a plan has been established, the resources required to implement the plan are identified and organized. Resources fall into the following three categories; people, material/equipment, and facility resources. Each requires unique considerations and will be reviewed separately by the Operating Company and/or District.

#### **People**

Various task/positions and role responsibilities are identified to operate the emergency plan. Each Operating Company and/or District identifies its available human resources and the positions that each will fill during an emergency.

#### **Material/Equipment**

Part of the emergency plan will require the use of material/equipment that is not used during normal business operations. Pre-arrangements to obtain such material/equipment for emergency use need to be made. Some of these items include, but are not limited to the following: maps of the area, communication equipment (radios, cell phones), and vehicles (company and possible rentals).



## **Facilities**

During a restoration effort, depending on its magnitude, many facilities may be required. To the extent possible, pre-arrangement is made for the use of the following facilities: motels/lodging services, restaurants, available helicopter landing sites, base camps, and crew/material marshaling areas.

## **Operational Plans**

SWEPCO uses the ICS organizational approach in planning, preparing, and executing its restoration effort under its EOP. The ICS organizational approach aligns with the ICS used by state and federal governmental organizations under emergency conditions. Using the same ICS organizational approach helps to facilitate communications and coordination of restoration efforts.

The primary objective of the EOP is to establish an emergency operation organization that will efficiently utilize all available resources to resolve the emergency situation. The EOP allows SWEPCO to accomplish the rapid and orderly repair of electric facilities for the protection of public health and safety and the restoration of services to all customers in the minimum time possible.

The second objective of the EOP is to provide for the timely collection of accurate damage assessment reports for management, employees, and the general public. The reports include information such as the extent of any damage to the distribution and transmission systems and the progress made in restoring service. Establishing the necessary liaisons among the SWEPCO ICS, state, local and federal agencies, and the media enhances the ability to accomplish this objective.

When a major emergency or disaster occurs, the first function of AEP personnel is to clear all known public hazards, such as downed power lines, that pose an immediate danger to the public. The second function is to conduct a detailed assessment of the damage to the affected SWEPCO systems so that the Company can procure the necessary resources and management can position

crews appropriately for the efficient restoration of service. The third function is to restore service to the most consumers in the shortest time while keeping in focus restoration of service to vital community services and installations (critical loads). The fourth function is to restore service to all remaining users as quickly as possible.

The Deputy Operation Section Chief (DOSC) Distribution is responsible for the management of all distribution tactical operations. That position activates and supervises the distribution operations section in accordance with the Incident Action Plan (IAP). The IAP is a component of the ICS framework that is used for scaled event response across the organization. The IAP is comprised of a specific set of elements and is tailored and made unique for each operational period of each event. The DOSC Distribution also directs the preparation of the distribution operational plans, requests or releases distribution resources, monitors progress, and provides feedback of DOSC for necessary changes to the IAP.

The Branch Directors are responsible for executing the IAP at the Branch level. These persons monitor Branch progress and provide updates to DOSC or OSC.

The Division Directors are responsible for executing the IAP at the Division level. These persons monitor Division progress and provide updates to the Branch Director.

Field dispatch personnel for each Branch are responsible for local dispatch of outage cases to strike teams or task forces within assigned areas. Strike Team leaders in each Division are responsible for implementing the IAP for an assigned team consisting of like resources, such as resources that focus specifically on overhead primary or secondary type work. Task Force leaders in each Division are responsible for implementing the IAP for assigned teams consisting of multiple different resources.

The Planning Section Chief is responsible for overseeing the preparation of the IAP for

each operational period that directs the daily restoration work to be carried out. There are a number of distribution-specific roles within the Planning Section of the ICS organization who assist with developing the distribution-related aspects of the IAP. For example, within the Planning Section, under the overall Assessment Unit Leader, are the Distribution Assessment Manager, Distribution Damage Assessment Branch Directors, and Distribution Damage Assessment Division Coordinators.

Also within the Planning Section, but under the Situation Unit Leader, the Distribution Situation Manager provides status updates based upon available outage data from the various distribution-related positions that report to the Distribution Situation Manager. The Distribution Work Packet Coordinator and Distribution Dispatch Center Unit Leader also report to the Distribution Situation Manager.

Finally, within the Planning Section, but under the Resource Unit Leader, the Distribution Check In and Out Manager is responsible for establishing and conducting the check-in function and check-out function at designated incident locations.

### **Restoration Priority**

The investigation and mitigation of hazardous conditions has the highest priority. Next are essential services/critical customers. Following that, the priority in the restoration effort would be restoring the largest number of customers served from one isolating device.

The Planning Section will establish the priority order in which assessed outages are worked. The following guidelines are recommended to assist in setting priorities. The order may vary, depending on the specific needs to the outage situation at hand.

### **Based on Safety**

Investigation and mitigation of hazardous conditions with the emphasis on electrical hazards such as downed wires or broken poles.

### **Based on Essential Services**

- Hospitals, institutions, and health support facilities
- Fire, Law enforcement, and essential governmental agencies
- Water and Sewage treatment facilities
- Perishable food processors
- Media communication centers
- FAA Navigational Facilities
- Other institutions whose operation are essential to the safety, health, and welfare of the community

### **Based on circuits (Number of customers involved)**

- Transmission circuits that could result in cascading station outages
- Sub transmission circuits that could result in cascading station outages
- Sub transmission circuits that result in station outages
- Stations
- Distribution Feeder circuits
- Distribution three phase branch circuits
- Two phase and single phase laterals
- Secondary/ Services
- Street lighting

### **Extreme Cold Weather**

Various parts of SWEPCO's service area may experience extreme cold weather that gets below freezing for more than one day. Guidelines to follow under these conditions:

- Review outages and restore necessary circuits.

- Prepare reactive devices to optimize the voltage import limits prior to reaching 80% of the limits or peak load periods.
- Ask the field to prepare available equipment for cold weather if the expected temperature is to be near zero degrees.
- Breaker/transformer heaters, fans, and thermostat settings.

### **EDOps Actions during a Weather Emergency**

In the event of a storm, EDops will operate under the *AEP West/SPP Emergency Operating Plan* (West/SPP EOP), in accordance with NERC standard EOP-011 and will enact conservative operations following the *EDops Conservative Operations Guidelines*. The West/SPP EOP outlines processes to prepare for and mitigate emergencies including:

- Notification to SPP's Reliability Coordinator including current and projected conditions when experiencing an Operating Emergency.
- Cancellation or recall of transmission outages.
- Transmission system reconfiguration.
- Re-dispatch of generation request.
- Provisions for operator-controlled manual load shedding that minimizes the overlap with automatic load shedding and is capable of implementation in a timeframe adequate for mitigating the emergency.
- Reliability impacts of extreme weather conditions.

Under the *Conservative Operations Guidelines*, EDops organizational needs are established during a major and minor event. This serves to improve internal/external communications and EDops business unit effectiveness during a major event, and helps System

Operations personnel make the best operating determination and take the best action under extreme weather conditions that pose a threat to the reliable operation of the Bulk Electric System (BES).

A conservative operation posture prepares EDOps to control the transmission system in a more restrictive manner when a high probability exists of major events occurring (or having already occurred) that are not ordinarily covered by normal reliability criteria. When a major event occurs, one of the main priorities is to return the system to a known safe operating point, which gives the operators time to determine what may happen or has happened, and what further actions must take place.

## **B. Load Shed Annex**

As described below, SWEPCO's load shed plan includes procedures for controlled shedding of load, priorities for restoring shed load to service, and procedures for maintaining an accurate registry of critical load customers.

In the event that the SWEPCO transmission system is faced with system events that pose a risk to Real-time system reliability as identified by the Transmission System Operators in situational awareness tools, the Transmission System Operators will take the appropriate action. The actions in priority include generation re-dispatch (voltage schedule or MW adjustment through SPP), system reconfiguration or phase shifter adjustments, and load shed. SWEPCO transmission will work at the direction of the Reliability Coordinator (SPP) to execute Operating Instructions to properly manage capacity deficiency events. SWEPCO transmission has established policies and procedures that align with all applicable NERC standard requirements pursuant to the signed Coordinated Functional Registration (CFR) Matrix in place with SPP and related documented Texas operating protocols.

During Real-time system reliability related events, SWEPCO customers may experience

an interruption of electric service resulting from AEP Transmission Operation action or automatic protection system action. The manual and automatic actions are performed to prevent and/or limit outages and expedite restoration of the impacted customers within the SWEPCO transmission operating area. SWEPCO will notify the Department of Energy, SPP, Commission, and other governmental agencies of the emergency conditions as required.

This SWEPCO EOP includes processes to prepare for and mitigate operating emergencies impacting the interconnected bulk electric grid. These processes include provisions for operator-controlled manual load shedding that can be implemented in a timeframe adequate for mitigating the emergency and steps to rotate outages during manual load shed scenarios as system conditions allow.

The Commission and SPP provide guidance on determining critical loads and customer prioritization for service restoration. SPP also requires excluding certain electrical loads identified as critical to the stability of the electrical grid from being operated in load shed plans. SWEPCO implements a process for customer prioritization based on this guidance. Roles and responsibilities are identified for Under-frequency Load Shed (UFLS), Under-voltage Load Shed (UVLS) and Manual Load Shed (MLS) plans along with compliance objectives in accordance with NERC Standards and are discussed in more detail below. Additionally, EDops complies with NERC standard PRC-006 by having a UFLS plan, the *AEP Underfrequency and Undervoltage Load Shedding Program Methodology Guide*.

The Distribution Dispatcher utilizes the Automated Manual Load Shed (AMLS) program in the Alstom SCADA system to perform the Energy Emergency Alert (EEA) Level 3 load shed process. The Distribution Dispatcher receives instructions from AEP Transmission System Control Center (SCC) on the amount SPP has directed SWEPCO to shed. The Distribution

Dispatcher enters the load shed amount into the AMLS system, which automatically allocates the load to each of the areas setup in the system. The load allocation is based on the percent of total SWEPCO load the district serves. Once confirmed, the assigned Distribution Dispatcher executes the command to shed load.

If the AMLS program were unavailable, Distribution Dispatchers will use pre-determined percentages to calculate load to shed for each district based on how load is distributed within SWEPCO.

The AMLS system is pre-programmed with all of the circuit breakers that have been identified, and in the appropriate load shed sequence. Distribution dispatchers are instructed to begin shedding load utilizing the AMLS system, which starts with the first designated circuit for each district, and continues through subsequent circuits per district until SPP directed load shed amount is met. Distribution Dispatchers rotate or roll outages by continuing down through the list of remaining circuits and restoring service to earlier shed circuits while maintaining the SPP imposed shed level.

The following are guidance used in the development of the Under-Frequency Load Shed plan and the Manual Load Shed plan:

1. One purpose of under frequency (UF) load shedding is to save the electrical system from collapse due to a catastrophic loss of generation or transmission by automatically dropping load as the system frequency declines. SPP requires 25% of system load be available to be dropped during a major event.

2. Manual load shedding is a complement to UF load shedding. Its primary purpose is to take preventive action to avert an automatic UF load shed event. Should a generation or



transmission outage(s) imperil the system, dispatchers are directed to open circuit breakers - dropping load - until SPP's generating capacity matches the load being served.

Critical Loads are defined in 16 TAC § 25.52 (c)(1) and (c)(2). For dispatching outage restoration purposes, the DDC has classified these load types as follows:

P1 - Facilities that through loss of electrical service could pose an immediate threat to life. This would include:

Hospitals, Nursing Homes, and End-Stage Renal Facilities

P2 - Facilities that through loss of electrical service could pose a hazard to public safety or a threat to the environment. This would include:

Water treatment/pumping facilities and Wastewater plants & lift stations and Critical Natural Gas Sites.

P3 - Local and state government agencies which would act as First Responders to an emergency or who direct that response. This would include:

City/County headquarters, Police/Sheriff/Fire stations, and EMS facilities.

P4 - Other facilities that would respond to an emergency. These are not critical to protect life or property but would help in the overall recovery. Including:

Shelters, Medical clinics, Physicians office (not trauma centers), Communication centers, FAA navigational facilities, Military installations, Distributed Generation/Distributed Energy Storage Resource (DG/DESR), AEP Facilities, and other facilities important to the maintenance of public safety or well-being.

P5 - Other loads not shown above that need restoration priority.

SWEPCO maintains a critical load database within its Customer Information System (CIS), for which electric service is considered crucial for the protection or maintenance of public safety and welfare. These critical loads include but are not limited to hospitals, nursing homes, assisted living facilities, hospice services, natural gas facilities required for generation and cogeneration, water pumping plants and stations, wastewater plants and lift stations, emergency shelters, physician's offices, customers with life-sustaining equipment, communication centers/towers, Federal Aviation Administration (FAA) navigational facilities, city emergency operations centers, fire departments, and police/sheriff stations. The critical loads are prioritized using the aforementioned system of categories based on criticality.

Annually, SWEPCO's critical accounts list is routed to Customer Service Account Representatives, Customer Service Account Management, Regulatory Pricing and Analysis, and Distribution Dispatch Operations. The list is reviewed for accuracy of the priority codes and updated as necessary. Customers are able to submit their request through the SWEPCO Customer Solutions Center or SWEPCO Customer Service Account Representatives. The critical account information is reviewed to determine the customer's request meets the requirements as defined in 16 TAC § 25.52(c)(1) before a priority code is designated for the account. SWEPCO has implemented procedures for natural gas facility customers that meet the definition in 16 TAC § 25.52(c)(2) to submit an application for review. Such customers have a window of time by which to submit the relevant form to SWEPCO, at which time they are noted and coded in SWEPCO's CIS.

SWEPCO has also participated in recent meetings with the Texas Energy Reliability Council (TERC) where natural gas operators have been encouraged to collaborate with generators, identify key facilities and submit critical load applications to electric utilities. TERC is comprised

of representatives from the Commission, Texas Railroad Commission (RRC), Texas Commission on Environmental Quality (TCEQ), and SPP.

### **C. Pandemic and Epidemic Annex**

#### **Pandemic Procedures**

Pandemic preparedness by SWEPCO has been coordinated on an operating company and AEP system-wide basis. The broader AEP organization supports its operating companies by providing assistance during emergencies and by securing increased efficiencies through coordination of planning, design, construction, maintenance, and operation in all business aspects, including pandemic preparedness.

SWEPCO, in coordination with other AEP companies across the system, continuously plans to protect its workforce and strives to meet the public's expectations to provide reliable electrical service if a pandemic occurs. SWEPCO's Business Continuity Plan (BCP) defines the procedures employed to ensure the timely and orderly resumption of the company's business operations in the event of a pandemic. The BCP outlines procedures to ensure that each organization is prepared to operate during a business disruption to its daily routine. The BCP also reflects the specifics of the organization, focusing on understanding the organization's needs, critical business operations, and their respective dependencies.

AEP's primary objective is to respond to every incident in a safe and coordinated manner, while providing the most effective means to limit the impact and potential escalation of each incident. It follows designed procedures to achieve the most effective response effort. Preparation, planning, and consistent implementation lead to a successful response. The Area Commander is ultimately responsible for coordinating the response across the enterprise and its associated support efforts.

One of the tools used by SWEPCO to characterize the severity of the emergency and

determine the level of response necessary is the Event Level/Activation Triggers Guidelines matrix. The tool uses a five-point scale to describe the levels with a Level 1 (the most severe) characterized as “catastrophic” to Level 5 (the least severe) characterized as “minor.”

### **Event Level/Activation Triggers Guidelines**

#### **Category Level 5, Minor**

##### **Description**

A common event that does not disrupt daily business operations. Common, day-to-day issues that do not adversely impact company functions; typically addressed through normal operating processes. If incidents occur, they are small, isolated, impact a small number of customers, company operations, assets, and are short in duration, resulting in little to no expectation of escalation. No media interest.

##### **Triggers/Conditions\***

Human infection with a new subtype (globally), but no human to human spread, or spread from close contact, or Center for Disease Control (CDC) and/or World Health Organization (WHO) monitoring of possible infectious disease epidemic/pandemic.

#### **Category Level 4, Moderate**

##### **Description**

An event or operating condition, active or transpired, that has the potential to limit the ability to meet customer demand, to cause damage to company assets, or to disrupt business processes. Response efforts can be addressed with normally available resources. The event can be addressed in a time frame that does not significantly disrupt normal processes. There could be media interest. May require activation of incident response processes.

##### **Triggers/Conditions\***

Small cluster (globally) with limited human to human transmission but spread is highly localized, or an AEP employee, contractor, their spouse or household member is diagnosed with, or increased number of people within AEP footprint diagnosed with infectious disease, or negative or overall increase in media, general public and government attention, or vendor confirmation of supply chain shortages for critical processes and function, or negative financial impacts (loss and /or cost).

### **Category Level 3, Major**

#### **Description**

An event that decreases the ability to meet customer demand or carry out critical business processes. The event can impact multiple business operation or processes. Normal processes may not be able to address the response. Likely requires activation of incident response process.

#### **Triggers/Conditions\***

Large cluster (globally) but human to human spread is still localized, or an AEP employee, contractor, their spouse or household member is diagnosed with infectious disease and any of the before mentioned have been on AEP owned or leased property, or 2-200 AEP employee/contractors diagnosed with infectious disease, or the potential need for sequestering at AEP, or increased vendor confirmation of supply chain shortages for critical processes and function, or CDC or State Department recommendation to activate response plans, or predetermined financial loss.

### **Category Level 2, Severe**

#### **Description**

A confirmed, active or transpired event resulting in significant damage-to or loss-of company infrastructure or ability to perform vital business processes. The duration or severity of

the event significantly impacts customers, stakeholders or company reputation. It is highly probable that additional internal and external resources will be required.

**Triggers/Conditions\***

Increased and sustained transmission in general (United States) population, or 201+ AEP employees/ contractors diagnosed with infectious disease, or the need for sequestering at AEP, or impact to multiple critical business processes, or predetermined financial loss.

**Category Level 1, Catastrophic**

**Description**

An event that is extremely disruptive to a wide range of operational and business processes both within AEP, the customer base and peer business. The company cannot meet customer expectations, has lost operation or control of critical infrastructure or systems, and may not be able to maintain business operations. Available resources are typically insufficient to adequately address the response.

**Triggers/Conditions\***

AEP employee/contractor fatality from infectious disease, or impact to majority of critical business process, or predetermined financial loss.

*\*These guidelines only require one of the Triggers/Condition be met for activation considerations.*

**Illness Etiquette**

Illness etiquette is a work strategy used by AEP as a general employee health strategy. Illness etiquette aligns to recommended guidance of public health entities. This strategy requires support from the communications strategy.

- Employees who are ill should stay at home.

- Employees should wash their hands frequently with soap and water or with hand sanitizer if there is no soap or water available.
- Employees should cover coughs and sneezes with a tissue, or cough and sneeze into their upper sleeves if tissues are not available. All employees should wash their hands or use a hand sanitizer after they cough, sneeze or blow their nose.
- Quarantining may be used to separate and restrict the movement of essential employees or contractors that support critical 24/7 operations prior to engaging in sequestering activities. Employees or contractors supporting 24/7 operations (to include those within Generation, Dispatch, and Corporate Support Functions) may be asked to restrict movement to limit potential exposure to an infectious disease with established transmission.
- During emergency operations, line crews practice safety by masking, social distancing, traveling by separate vehicles, and managing work groupings to limit the number of individuals with whom a person comes into close contact.
- Remote workforce strategy may institute recommended telework for all appropriate employees who can perform business functions outside the normal work environment. Employees identified as part of the remote workforce should be identified by their supervisor and expectations should be communicated prior to strategy deployment.

### **Concept of Operations**

Concept of Operations establishes the processes and procedures to operate the Company's emergency response organization during an event, incident, emergency, or crisis.

## **Emergency Operation Center**

SWEPCO maintains primary and backup emergency operations center locations for continuity of operation during emergencies.

### **D. Wildfire Annex**

Storm preparedness includes having as much notice of impending bad weather situations as possible, including potential wildfires. To have that insight, SWEPCO utilizes a staff of in-house meteorologists that continuously monitor weather patterns and conditions for all of AEP's seven Operating Companies. AEP Meteorology creates its own forecasts using a combination of weather data such as real-time surface observations, radar, satellite, and statistical and dynamical weather models via NOAA (National Oceanic and Atmospheric Administration). The AEP meteorologists monitor and give advance warning for weather events that may cause significant utility outages due to droughts, tropical storms/hurricane, a tornado outbreak, severe thunderstorms with damaging winds, windstorms, extreme cold weather, ice storms, and snowstorms.

In addition to the weather updates, SWEPCO receives fire risk alerts issued by our System Control Center (SCC) used to help assess the daily critical fire risk. This report includes:

- Satellite imagery specifying the areas of concern, the location of major lines, and boundaries of AEP operating companies.
- Contact information for the Transmission Dispatch Center (TDC) and DDC Regions.
- IPS stations, size, drought risk, and distance from the identified risk.
- Transmission Geographic Information System (TGIS) lines and circuits.
- Company buildings and proximity to the risk.



- NOAA weather watches and warnings that includes type of warning/watch, severity of the event, a summary of the warning/watch, links to the details of the event, and expiration date and time of the event.
- A list of the counties covered by the report.

SWEPCO participates in the State of Texas State Operation Center (SOC) calls to learn and share information regarding the potential of severe weather and potential wildfire activity throughout the state. SWEPCO uses all of this information to determine the course of action necessary to address the emergency situation anticipated.

### **Preventative Maintenance**

Vegetation identified during circuit patrols as dead or at risk for fire issues is managed through and as part of the regular annual vegetation management plan. As the work associated with the annual plan is performed, the Company looks for hazard trees and removes them. Vegetation identified for removal may be located inside and/or outside of the right-of-way. The identification and mitigation of at-risk trees is part of the day-to-day operations and maintenance of SWEPCO. At-risk tree work is budgeted as part of the long-term and short-term vegetation management work plan budget.

Emergency situations that cause or threaten power outages are managed with a matrix team. The impacted service area will send out an assessment team to determine restoration needs or potential power outage hazards. If vegetation is an issue from an emergency situation, the Company's forestry team will be called into action. As potential occurrences develop that could impact the SWEPCO facilities, it is addressed with the appropriate mitigation plan to help limit the number of outages.

## **EDOps**

In the event or threat of a wildfire, the EDOps SCC will monitor fire weather forecasts and initiate actions based on the potential impact to the system.

- **Potential Threat Index and Actions**

- No threat (Green) – No action necessary.
- Elevated (Orange/Brown) – Heightened awareness.
  - The SCC sends notification to Transmission Field Services (TFS) of the impacted area for awareness.
  - No additional actions are required.
- Critical/Extreme (Red/Magenta) – Extreme caution.
  - The SCC sends notification to TFS of the impacted area and associated stations for awareness.
  - EDOps and TFS should consider deferring work that could increase fire potential in an area. Examples include non-reclose/hotline work and any planned outages that may drive actual loading on in-service facilities above 85% of the normal rating.
  - SCC notifies EDOps TDC. TDC disables reclosing on the monitored facilities above 95% (emergency limit) of post contingency flow on transmission line facilities and lines with identified conditions (A1/A2) in vicinity of impacted area. TDC notifies impacted interconnects.
  - SCC enables double circuit tower (DCT) contingency monitoring in vicinity of impacted area for awareness.

- SCC notifies Regional Transmission Organization (RTO) of steps taken.
  - SCC continues to evaluate impacted facilities based on current system conditions. SCC provides notification when threat no longer active and back out possible.
- **Actions Based on Actual Fire Threat**
    - Implement Conservative Operations for facilities in vicinity of fire.
      - The SCC sends notification to TFS of the impacted area and associated stations for awareness.
      - Remove impacted facilities from service, if possible.
      - SCC notifies TDC, and TDC disables reclosing on all other impacted Transmission Line facilities. TDC notifies impacted interconnects.
      - Evaluate all remaining work in the impacted fire area, and cancel work if necessary.
      - SCC to operate to DCT contingencies in the vicinity of the impacted area and coordinate with the RTOs accordingly.
      - SCC notifies RTO of steps taken.
      - SCC continues to evaluate impacted facilities based on current system conditions. SCC provides notification when the threat is no longer active and back out is possible.

**E. Hurricane Annex**

This Annex is not applicable to SWEPCO.

## **F. Cyber Security Annex**

AEP maintains an Enterprise Cybersecurity Incident Response Plan which outlines the processes, protocols, roles and responsibilities when circumstances dictate a response to malicious cyber events. This plan covers all assets and cyber events throughout AEP to include but not limited to the requirements dictated by NERC CIP-008 and CIP-003 R2.

### **Cybersecurity Event Recognition and Reporting**

A Cybersecurity Incident is recognized by an AEP employee, contractor, service provider, or other AEP stakeholder and reported to the AEP Cybersecurity Intelligence and Response Center (CIRC). The AEP CIRC is the primary entry point to the Cybersecurity Incident Response and Reporting process. The CIRC receives notification of Cybersecurity Events from the following sources:

<b>Method of Notification</b>	<b>How This Method is Monitored</b>
Alert or other notification	Analysts monitor enterprise security tools to identify and respond to Cybersecurity Events
Message from the "Report an Incident"	Causes an e-mail to be sent
Phone call to the "Security Hotline"	Physical Security Operations and Event Monitoring
Email	Cybersecurity Staff responds, depending on the type of incident
Technology Major Incident	Manager ( is responsible for setting up and informing affected parties
Direct contact	Staff will determine the proper disposition or escalation

### **Escalation and Evaluation**

Cybersecurity Monitor and Response Tier 2 Staff will conduct additional research and review (research may be initial research if Staff was contacted directly). Staff shall determine if

the incident should be further escalated to Cybersecurity Management.

All malicious incidents involving a Bulk Electric System (BES) Cyber System, Protected Cyber Asset (PCA), Electronic Access Control and Monitoring System (EACMS) or otherwise of a reportable Cybersecurity Incident type (see below) shall be escalated to Cybersecurity Management.

If escalated, Cybersecurity Management will identify an Incident Commander. If not escalated, informs the CIRC of the incident disposition and records the incident in the Alert Management System or other system holding incident details.

### **Incident Response**

The Incident Commander will activate roles in the ICS to perform the following duties:

- Contain the incident – Take actions to ensure that the incident affects the fewest systems possible.
- Eradicate the incident – Take actions to remove or rectify whatever caused the incident.
- Recover from the incident – Take actions to ensure systems can resume normal operations.
- Communicate incident details – Throughout the response to the incident, the Incident Commander and activated ICS roles communicate with the Incident Response Business Stakeholders to determine if the incident is a Reportable Incident and should be reported to the appropriate industry and government stakeholders.

### **Notification and Reporting**

During the incident response or in the course of an investigation, the Incident

Commander/Department Manager shall determine the incident level.

### **Industry Reporting**

During the incident response or during an investigation, the Incident Commander/Department Manager will brief Executive Management or if activated, the Executive Crisis Advisory Board (ECAB), on the incident. The Incident Management Team (IMT) and Incident BU Stakeholders will determine if the incident qualifies for external reporting to NERC/E-ISAC, DHS CISA/ICS-CERT, Federal or State Law Enforcement and State Regulatory). When it has been determined the event is a Reportable Cybersecurity Incident, the Incident Commander/Department Manager will coordinate with BU Stakeholders to prepare and approve reports. Then, they will indicate which external and internal organizations are to be notified and sent copies, if necessary. Initial notification to the E-ISAC and DHS NCCIC, which may be only a preliminary notice, shall not exceed one hour from the determination of a Reportable Cybersecurity Incident and will be communicated using the CIRC's standard external threat reporting distribution. This reporting shall include the following elements as they are known:

- The functional impact;
- The attack vector used; and
- The level of intrusion that was achieved or attempted.

### **G. Physical Security Incident Annex**

The SWEPCO Physical Security team is comprised of Security professionals that are skilled in investigative techniques and event analysis. These Security professionals have developed strong ties to the regulatory and law enforcement communities and are tasked with assessing events and providing pertinent information to stakeholders inside and outside the company.

All employees and contractors are responsible for reporting suspicious activity to Physical Security. If a life safety incident occurs, the employee should access emergency services and report to Physical Security when safe to do so. It is the responsibility of AEP Physical Security personnel to investigate and evaluate all reported events and determine if the event should be reported to stakeholders inside SWECPO, outside SWEPCO, or both.

The Region Security Coordinators work with local, state, and federal law enforcement agencies; AEP Business Units; AEP Corporate Ethics and Compliance; AEP Audits; AEP Legal; and AEP Human Resources when conducting investigations. The Region Security Coordinators will gather information concerning security events and will discuss that information with the Director of Digital Identity & Physical Security or designee to determine if the security event should be reported to internal or external stakeholders or both. Region Security Coordinators will respond as follows when made aware of a security event.

The Director of Digital Identity & Physical Security or designee will ensure that SMS is entered. When reporting is appropriate, the Director of Digital Identity & Physical Security or designee will ensure that reporting to internal and external stakeholders has been completed. The Director of Digital Identity & Physical Security or designee is responsible for determining reporting to internal and external stakeholders.

### **Access Control**

Workplace violence and attacks on our critical infrastructure are realities in our modern world. Many of these incidents are caused by perpetrators who are able to enter facilities because of lax or non-existent access control policies. An industry leading access control policy should include the following:

- A requirement for employees, contractors and visitors to wear an identification

badge in such a manner that others can readily see the badge.

- Enforcement of the policy.
- Recommendations advising employees how to question others who are not wearing their badge in the workplace.
- Recommendations regarding updating badge photographs.
- A requirement to escort visitors.
- Prohibitions against tailgating and propping open secure doors.

### **Low Impact Stations Physical Access Control Methods**

For safety reasons at stations, personnel, individually or as part of a crew, check in with the appropriate Center either by phone or by using an AEP mobile App. This method of check in and out is sufficient to meet the intent of the AEP Access control policy. For safety reasons at plants, visitors check in at gates with guards, or control room via intercom and camera or phone and camera.

### **H. PURA §39.918 Annex**

This Annex is not applicable to SWEPCO.

## **VII. Generation**

### **A. Weather Emergency Annex**

Each generation facility operated by SWEPCO has a site-specific Cold Weather Preparedness & Operation Plan and a separate Hot Weather Preparedness and Operation Plan. Additional detail about Cold and Hot weather Preparedness and Operations Plans can be seen below. Of the generating facilities that SWEPCO operates, one unit has multi-fuel capability. Each year, the facility verifies their ability to operate the unit. This system operates with a mixture of natural gas and fuel oil and cannot burn 100% fuel oil.



## **All Cold Weather Plans contain the following elements:**

### **Site Cold Weather Liability Review**

The Site Cold Weather Liability Review is used to proactively identify liabilities where cold weather can negatively impact the generating facility, identify mitigations against the liabilities, and incorporate these mitigations into plant processes and procedures to insure their placement during cold weather.

### **Site Winter Preseason Preparedness Activities**

Identified preseason activities required to prepare/winterize the facility before the onset of cold weather are set up in Maximo (work management system) using the Maximo Preventive Maintenance (PM) process. This process is used for assigning, tracking, and completion (with history) of the winterization preparedness activities for the facility before the onset of the cold weather season.

### **Cold Weather Preparedness Training**

Facility personnel that have a role or responsibility in the facility Plan must be aware of Plan expectations. This is accomplished as follows on an annual basis:

- A high-level fleet awareness training.
- A site-specific training conducted by the facility.
- Cold weather fleet safety training.

### **Cold Weather Forecasting**

Cold weather forecasting is an integral part of the facility Plan. Accurate forecasting provides for early awareness of impending severe cold weather which provides as much time as possible for necessary facility and personnel preparations. The facilities use the AEP Meteorology

Team for forecasting (see Section V. for specific details) and AEP Market Operations for weather alerts issued by SPP.

### **Cold Weather Operational Matrix**

The Cold Weather Operational Matrix is a visual management tool used by the facility to remind employees of required actions based on specific cold weather conditions. This matrix is posted around the facility to keep the high-level requirements of the Plan in front of employees during the winter season. The matrix includes a high-level summary of requirements that are documented in plant processes, procedures, and check lists, etc. and when they are required.

### **Cold Weather Operating Procedures**

The facility has site specific processes, procedures, checklists, and inspections to mitigate cold weather liabilities and support unit reliability during cold weather. These come from a combination of historical lessons learned and the Site Cold Weather Liability Review.

Check lists are site-specific and are adjusted routinely to incorporate any operational lessons learned from previous weather events to facilitate a continuous improvement process.

### **Certification of the Facility Being Cold Weather (Winter) Ready**

The facilities self-certify that each generating unit is Cold Weather Ready before the onset of cold weather each year. The certification process was developed around the environmental permit requirements. By structuring the process in this manner, SWEPCO makes use of its Enviance system to generate a task to the plant managers to provide the status of the facility as being Cold Weather Ready. Certification is deemed complete if the facility has completed required tasks signifying they are ready for winter weather.

- All training is complete (evidence in Key).

- All pre-winter checks and actions are complete (evidence in Maximo).

This certification is used to inform Generation Management and Market Operations that cold weather preparations & cold weather training have been completed per the Plan and each unit at the facility is ready for cold weather.

### **Confidence of Unit Availability Due to Cold Weather**

Each facility determines when generation may be negatively impacted by cold weather so it can be clearly, accurately, and consistently communicated to SPP. Facilities use the “Confidence of Unit Availability” data sheet in the verification process. This is an operational, experience based evaluation. The goal of this data sheet is to document how cold weather conditions are anticipated to impact the reliability of each unit’s generation at the facility. This data reflects the confidence that the facility has, after all of the identified cold weather mitigations are in place, of the unit being able to successfully operate. It is based on historical operating experience during cold weather. This data is in the form of High, Medium, and Low Confidence based on stated weather conditions and conveys a complete picture of conditions where there is high confidence of successful operation of the units due to cold weather conditions and where there is not.

### **Cold Weather Lessons Learned and Plan Updates**

An integral part of the facility Cold Weather Planning process is routinely updating the Plan and/or associated Plan documents (processes, procedures, check sheets, PMs, etc.) to incorporate learning, resulting in the Plan being better for the following season. This learning potential lies in events and near misses from the facility, from the Fleet, and from the industry.

The facility uses the root cause analysis and corrective action process to document cold weather-related load impacting events, conduct cause analysis around the events, determine corrective actions, and implement the actions if deemed appropriate. (If these actions impact the

Plan then it is updated accordingly.) The root cause describes why the issue is occurring, while the corrective action process represents what will be done to address it and prevent it from happening again. A Corrective Action is designed to correct an immediate problem. A Preventive Action is designed to prevent the problem's reoccurrence. This process is an industry wide accepted practice.

Each facility participates in a post-cold weather season Fleet lessons learned and industry learning discussion where the facilities will present learning from the prior cold weather season. The purpose of this discussion is to share experiences among the Fleet that can be used to improve each facility's Plan.

### **All Hot Weather Plans contain the following elements:**

#### **Hot Weather Forecasting**

The facilities use the AEP Meteorology Team for forecasting and AEP Market Operations for weather alerts issued by SPP for Identification of potentially severe hot weather and drought. See Cold weather forecasting section.

#### **Hot Weather Preparation and Training**

Facilities have developed checklists to address known equipment problem areas and contingencies for known critical failure points. This includes pre-arranged supplies, adequate tools, and resource availability prior to the hot weather season.

In order to ensure employees can work safely in extreme hot weather conditions, facilities provide yearly training to all employees on the dangers of working in hot environments. AEP follows the Occupational Safety and Health Administration (OSHA) guidelines for working in hot environments. Drinking water, electrolytes, and other similar resources are part of the summer

preparation checklists.

### **Hot Weather Operations**

During extreme heat conditions, facilities have prepared site specific checklists to monitor critical parameters, ensure critical cooling fans are in service, and implement other measures to ensure maximum cooling conditions for critical equipment.

All facilities maintain a staff of trained personnel on call and also have contract personnel and other resources available on call to respond to such events.

### **Hot Weather Lessons Learned and Plan Updates**

Facility summer weather plans include provisions for documenting yearly lessons learned and annual updates based on this operational learning.

#### **B. Plant Cooling Water Supply Shortages Annex**

Facility hot weather plans include site specific plans to identify water shortages and contingencies in the event of low cooling lake levels. Plants typically take a level reading every day.

The site specific plans specify any secondary sources of water and the normal range where the pumps are started and stopped. If the secondary source becomes unavailable or insufficient, the plans typically rely on managing the unit load to conserve the limited resource.

#### **C. Restoration of Service Annex**

“Service” in the context of generation resources is the generation of electricity for the Bulk Electric System (BES) per the direction of SPP. In the event of a unit trip or failure to start situation, plant personnel determine the root cause of the event via data review, equipment inspections, and any other necessary diagnostics. Once the cause has been determined, the plants

maintain a staff of trained personnel both at site and available for call out along with contract personnel and other resources available to respond. If the unit is in demand by the system, these conditions are treated with the highest priority and will receive 24/7 dedication in order to restore the unit to operation as quickly as possible.

In some instances, simple repairs are sufficient to then begin following the normal procedures to re-start the unit. In other instances, for example a boiler leak, significant repairs must be made prior to re-starting the unit. Necessary personnel and resources are identified and secured to make the repairs. If multiple work groups are required (such as scaffolding to perform repairs at higher elevations within the facility), the work is sequenced accordingly. Existing planned work is adjusted to accommodate the repair.

Each plant has checklists or written procedures for starting up units. They are extensive and site specific. The level of expertise or resources needed to bring a unit back on line can vary widely based on the nature of the issue that caused the unit to go off line.

**D. Pandemic and Epidemic Annex**

The Pandemic and Epidemic Annex has been previously addressed in Section VI.

**E. Hurricane Annex**

This Annex is not applicable to SWEPCO.

**F. Cyber Security Annex**

The Cyber Security Annex has previously been addressed in Section VI.

**G. Physical Security Incident Annex**

The Physical Security Incident Annex has been previously addressed in Section VI.