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PROJECT TO SUBMIT EMERGENCY OPERATIONS PLANS AND RELATED DOCUMENTS UNDER 16 TAC § 25.53 PUBLIC UTILITY COMMISSION

OF TEXAS

# AEP TEXAS INC.

# **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 AEP Texas Inc.'s ("AEP Texas" or "the Company") emergency operation plan ("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. <u>Contents and Policy Contained in the EOP</u>

The Emergency Operations Plan (EOP) for AEP Texas 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. AEP Texas customers' needs are met in harmony with environmental protection.

#### **Event Analysis**

AEP Texas 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 include modifications to design and construction standards to ensure the Company's facilities can maintain service during most events that are expected to occur. Corrective actions or the prepared responses are documented in each Annex summary described in this EOP. The 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. The key element is a common chain of command where roles are clearly defined. The benefits of the Incident Command System 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 employee's 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 Incident Command System 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. <u>Record of Distribution</u>

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

# C. <u>Affidavit</u>

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

#### I. <u>Approval and Implementation</u>

#### A. Introduction

AEP Texas is a wholly owned subsidiary of American Electric Power Inc. (AEP) that owns and operates facilities and equipment in Texas to transmit and distribute electricity in the Electric Reliability Council of Texas (ERCOT) region. AEP Texas is authorized under certificate of convenience and necessity numbers 30028 and 30170 to provide service to the public within its certificated service area.

In accordance with 16 Tex. Admin. Code § 25.53 (TAC), AEP Texas files its Emergency Operations Plan ("Plan"). The primary objective of AEP Texas' 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 AEP Texas Incident Command System (ICS), media, state, local, and federal agencies.

As addressed below, AEP Texas' Plan encompasses a series of plans which 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 such as a tropical storm or hurricane, which are handled by the larger incident management team and the ICS.

AEP Texas 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 AEP Texas 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.

Operating Company President and Chief Operating Officer

Vice President, Distribution Region Operations

Vice President, Energy Delivery Operations

Vice President and Chief Security and Privacy Officer (includes physical security)

Director, Regulatory Services

Director, Case Support & Special Projects

# C. <u>Revision Control Summary</u>

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

# D. <u>Required Statement</u>

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 AEP Texas on April 18, 2022.

#### II. Communication Plan

#### A. <u>Overall Electric Operations</u>

AEP Texas' overall electric operations provides several important functions during an emergency event. Generally, AEP Texas has divided the communication plan into three phases: Pre-Event, During an Event, and Post Event. Pre-Event refers to potential, upcoming events in AEP Texas' service territory. During the event refers to AEP Texas' strategy after an event has occurred. Post-Event refers to AEP Texas' efforts after the event is no longer active. The phases and activities are described below. Also, there is communication that takes place with ERCOT throughout the entirety of an event.

#### **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. Meetings begin to start preparing for the event. The overall electric operations provides information on event preparedness and receives feedback from the field and works 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 receives feedback from the field and works 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 operation information 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, receive feedback from field and work with appropriate parties to resolve issues.

Overall electric operations coordinates with AEP Texas 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, AEP Texas Regulatory Services is primarily responsible for communicating with the Office of Public Utility Counsel (OPUC) as necessary. AEP Texas Regulatory Services responds to inquiries from OPUC throughout the emergency with information such as the areas impacts and the number of outages.

#### **Post-Event**

After the event has occurred, the overall electric operations continues necessary activities as a result of the event. Overall electric operations holds meetings and provides information on event damage, outages, restoration estimates, number of employees and outside crews working. Internal and external communications continue as needed.

#### B. <u>Corporate Communications</u>

The following table generally describes AEP's communications responsibilities.

Responsible Party	Work Locations	Communications	Primary Audiences
		Channels	
Central Emergency	Overall Electric	Ongoing emergency	All AEP Texas groups
Organization	Operations	operations, face-to-face meetings, conference calls, radio, other electronic means	with communication responsibilities shown in this table
Corporate	Overall Electric	Communications Strategy,	All AEP Texas groups
Communications	Operations, Home	Coordination and Message	with communication
	Office, Austin State	Development – Phone,	responsibilities shown

# **Communications Responsibilities – Overview**

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

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, the team activates a Teleconference Bridge for county emergency coordinators, and assists Community Affairs with set-up for post-event briefings (target daily). Typically, an AEP Texas Regulatory Services representative is located in the State Operations Center.

Additionally, Corporate Communications provides information to its customers and the public. Corporate Communications distributes news releases on event preparedness and the activation of the Central Emergency Command Center. Corporate Communications also posts event preparedness messages on AEPTexas.com (Storms & Outages page and/or news releases), as well as posts messages on Facebook and Twitter. Corporate Communications uses and promotes this internet site as a primary source of current information. Corporate Communication prepares to activate, if warranted, a special event web page to replace AEPTexas.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, makes arrangements for video/photo documentation of event damage and restoration efforts. In addition, Corporate Communications contacts external agencies to stand by for possible ad placement, places ads on event preparedness, and provides internal news updates for intranet (AEP Texas Now and AEP Now). Corporate Communications then monitors feedback and identifies issues needing attention. Corporate Communications also 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 representative(s) present with overall electric operations and participates in the 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 AEPTexas.com (Storms & Outages page and/or news releases). AEP Texas uses and promotes this internet site as a primary source of current information. In addition, AEP Texas posts messages on Facebook and Twitter. If warranted, Corporate Communications will activate special event web page to replace AEPTexas.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). AEP Texas Regulatory Services representatives remain in the State Operations Center. Corporate Communications remains available, as conditions permit, for media inquiries, tracks media contacts and coverage, provides internal news updates, if available during event, for intranet (AEP Texas Now and AEP Now), monitors feedback and identifies issues needing attention. Corporate Communications continue to evaluate team member assignments, including any necessary additional resources that may be needed.

#### Post-Event

Corporate Communications implements team member assignments, scheduling and adds additional resources from unaffected areas as needed. Corporate Communications continues to provide 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 AEPTexas.com (Storms & Outages page and/or news releases). AEP Texas uses and promotes this internet site as a primary source of current information. If warranted, Corporate Communications activates special event web page to replace AEPTexas.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). AEP Texas Regulatory Services representative remains in the State Operations Center as needed. Corporate Communications works closely with Community Affairs and AEP Texas Distribution to provide local media in impacted area with information such as maps and specific response details that can be conveyed to the public. Corporate Communications works to ensure the local media gets information on a regular basis. As resources permit, Corporate Communications will travel to storm recovery sites, staging areas, or AEP Texas 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 the President/COO, VP External Affairs, and Distribution 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 as well as reports or responses to regulators. Corporate Communications will also track media contacts and coverage, provide internal news updates for intranet (AEP Texas Now and AEP Now), monitor feedback, and identify issues needing attention. Corporate Communications works with the appropriate parties to resolve issues reported through feedback from community, evaluates the use of other media during restoration process as a means of communicating with the public - including radio and social media.

#### C. <u>Customer Solutions and Customer Service</u>

The Customer Solutions and Customer Service provides various customer support services and is composed of customer representative staff. The main function is to manage all customer contacts before, during, and after the event.

#### **Pre-Event**

Customer Solutions and Customer Service participates (through designated representatives) in the overall electric operations meetings. In addition, Customer Solutions and Customer Service prepares and implements storm-related scripts for up-front recorded messages. As customers call in, Customer Solutions and Customer Service conveys key messages about AEP Texas' storm preparations and need for customers on life support or with other special medical needs to make arrangements in the event of an extended power outage. Customer Solutions and Customer Service monitors feedback and identifies issues needing attention. Customer Solutions and Customer Service also makes initial contacts with key accounts regarding storm preparations and restoration priorities. They also determine team member assignments and whether additional resources from unaffected areas will be needed.

#### **During the Event**

Customer Solutions and Customer Service participates (through designated representatives) in the overall electric operations meetings and prepares and implements stormrelated scripts for up-front recorded messages. Customer Solutions and Customer Service conveys key information about AEP Texas' storm preparations and restoration priorities, handles initial outage calls (although customers will be asked not to report outages until the storm has passed), and monitors feedback and complaints. Customer Solutions and Customer Service conveys issues needing attention to overall electric operations. Customer Solutions and Customer Service remains available, as conditions permit, for key account contacts and continues to evaluate team member assignments including any necessary additional resources that may be needed.

#### Post-Event

Customer Solutions and Customer Service participates (through designated representatives) in the overall electric operations meetings, prepares and implement storm-related

scripts for up-front recorded messages, uses latest information from the overall electric operations on damage and restoration estimates to inform customers, monitors feedback, and conveys issues needing attention to overall electric operations. Customer Solutions and Customer Service works with appropriate parties to resolve issues reported through feedback from community, implement team member assignments, scheduling and acquires resources from unaffected areas as needed. Customer Solutions and Customer Service travels to key account locations as needed and as conditions permit, serves as primary liaison with key accounts, working with the overall electric operations to provide detailed restoration information, continues to emphasize key information about restoration efforts and safety.

#### D. <u>Energy Delivery Operations</u>

Energy Delivery Operations (EDOps) is responsible for the transmission operations, Realtime 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 should 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. AEP Texas stores 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 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 items used during the early stages of restoration. The materials list is developed with different assumptions depending on the event type, as well as projected daily usage, and is continuously refined and updated as materials become obsolete and replaced with new technology or specifications.

#### IV. <u>Staffing During Emergency Response</u>

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 prior to an event. AEP is a member of several Regional Mutual Assistance Groups, including Texas Mutual Assistance Group, Midwest Mutual Assistance Group, Great Lakes Mutual Assistance Group, and Southeastern Electric Exchange. (There are currently seven Regional Mutual Assistance Groups 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.

American Electric Power 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 an AEP Texas 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

AEP Texas has an emergency operations plan to establish procedures to assist in the restoration of electrical service to all AEP Texas 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 inclement weather situations as possible. To have that insight, AEP has a staff of in-house meteorologists that continuously monitor weather patterns and conditions for all of AEP's seven Operating Companies. AEP Meteorology creates forecasts using a combination of weather data such as realtime 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 provides 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.

Each district within AEP Texas has a unique set of weather variable thresholds due to differences in population, climate, and vegetation. AEP Texas Senior Management is apprised of weather situations and changing conditions in a timely fashion. The AEP meteorology team provides a variety of communication tools to AEP Texas leadership. AEP Meteorologists created a number of tools to be used when impactful weather may be headed to AEP Texas 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 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 if the model is over-predicting damage or under-predicting damage based on experience. An email is sent out daily M-F to the storm coordinators.
- Text messages sent directly to AEP Texas' 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, when a final decision has been made, 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 AEP Texas 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. <u>Annexes for Responses to Specific Types of Emergencies</u>

#### A. <u>Weather Emergency Annex</u>

In preparation for extreme weather events that have been communicated by the weather services or through ERCOT's energy emergency alert (EEA) process, AEP Texas 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 work to 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 will implement the 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 practicing for an event. Many of these items are just extensions of AEP Texas' everyday operation.

# Having a plan

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

#### **Organizing Resources**

Once the AEP Emergency Operations Plan has been established, the resources required to implement the plan need to be 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 needs to identify 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 are 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, drones, and crew/material marshaling areas.

#### **Operational Plans**

AEP Texas uses the Incident Command System (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 AEP Texas 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 AEP Texas 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 AEP Texas 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 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 checkout 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 (As collaboratively determined by community leaders and AEP

Texas)

- 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 AEP West/ERCOT reach peak loads for 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; and
- 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/ERCOT Emergency Operating Plan* (West/ERCOT EOP), in accordance with NERC standard EOP-011 and ERCOT Nodal Operating Guide, Section 8, and the TOP Coordinated Functional Registration (CFR) Responsibility Matrix, but will enact conservative operations following the *EDOps Conservative Operations Guidelines*. The West/ERCOT EOP outlines processes to prepare for and mitigate emergencies including:

- Notification to ERCOT'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. It also 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, AEP Texas' 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 AEP Texas 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

ERCOT), system reconfiguration or phase shifter adjustments, and load shed. AEP Texas transmission will work at the direction of the Reliability Coordinator (ERCOT) to execute Operating Instructions to properly manage capacity deficiency events. AEP Texas 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 ERCOT and related documented Texas operating protocols.

During Real-time system reliability related events, AEP Texas 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 AEP Texas transmission operating area. AEP Texas will notify the Department of Energy, ERCOT, Commission, and other governmental agencies of the emergency conditions as required.

This AEP Texas Emergency Operating Plan 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 rules and ERCOT protocols provide guidance on determining critical loads and customer prioritization for service restoration. ERCOT also requires excluding certain electrical loads identified as critical to the stability of the electrical grid from being operated in load shed plans. AEP Texas 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.

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 ERCOT has directed AEP Texas 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 AEP Texas 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 AEP Texas.

The AMLS system is pre-programmed with all of the CBs 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 ERCOT 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 ERCOT 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. ERCOT 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 ERCOT's generating capacity matches the load being served. However, the manual load shedding process attempts to avoid service interruptions to certain types of load:

- Critical Natural Gas Facilities are defined in Texas Statutes, Utilities Code, Section 38.077, as natural gas facilities and entities associated with providing natural gas in this state as critical during an energy emergency.
- ERCOT's Nodal Protocol Section 3.8.7 prohibits Distribution Service Providers (DSPs) from curtailing a Distributed Generation Resource (DGR) or Distributed Energy Storage Resources (DESR) in a Load-shed event.
- Critical Loads are defined in Commission Substantive Rule § 25.52 (c)(1). For dispatching outage restoration purposes, AEP Texas' DDC 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.

16 TAC § 25.497(a) provides definitions for critical load customers as well as a critical care customer. In accordance with 25.497 (a), a critical load public safety customer is a customer for whom electric service is considered crucial for the protection or maintenance of public safety. A critical load industrial customer is a customer for whom an interruption or suspension of electric service will create a dangerous or life-threatening condition on the retail customer's premises. A critical care customer is a residential customer who has a person permanently residing in his or her

home who has been diagnosed by a physician as being dependent upon an electric-powered medical device to sustain life.

AEP Texas maintains a critical load and critical care database within its Customer Information System (CIS) as qualifying end-use customers apply for a critical load designation or are presented to AEP Texas by the customers' retail electric provider (REP). To assist end-use customers, applications to designate facilities as critical load/care are also available to download at <u>www.aeptexas.com</u>. AEP Texas encourages end-use customers to work with their respective REP to ensure that AEP Texas has received the necessary information related to accounts they deem to be critical. AEP Texas includes in its plan a process for communicating with commercial centers, governmental agencies, emergency facilities, as well as critical care customers during different stages of an emergency event.

AEP Texas maintains critical load information in accordance with 16 TAC § 25.53(c)(1)(A) 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, assisted living facilities, hospice services, nursing facilities, end stage renal disease facilities, natural gas facilities required for generation and cogeneration, water pumping plants and stations, wastewater plants and lift stations, emergency shelters, physician's offices, communication centers/towers, Federal Aviation Administration (FAA) navigational facilities, city emergency operations centers, fire departments, and police/sheriff stations. The aforementioned critical loads are prioritized using a system of categories based on criticality.

In accordance with 16 TAC § 25.497 (b), (d), and (e), a customer wishing to be designated as a critical care customer must complete an application for that designation and it must be submitted by or on behalf of the eligible customer. A REP shall notify each residential applicant

for service of the right to apply for Critical Care Residential Customer designation. Once a critical care application form is submitted by a customer, REP, or a physician, AEP Texas will process that application and then update its CIS system to flag that customer/premise as a critical care customer. A critical care customer designation stays with that customer/premise until the TDU is notified that the designation is no longer needed. In addition, AEP Texas maintains annually the critical care registry, within its CIS, of residential customers who have life-sustaining medical equipment, as required by 16 TAC § 25.497. AEP Texas trains its customer service personnel on the processes and procedures necessary to qualify and code critical accounts.

Each month, AEP Texas' Critical Accounts list is routed to Customer Service Account Representatives, Customer Service Account Management, Billing and Accounts Operations, and Regulatory Pricing and Analysis departments. The list is reviewed for accuracy of the priority codes and updated as necessary. An outreach is also performed to government entities, Emergency Operation Centers, Medical Facilities, and Large Industrial accounts during the year. Customers are able to submit their request through either their REP, a link to the forms located in the AEP Texas website, AEP Texas Call Center, AEP Texas Customer Service Account Representatives, or the AEP Texas Billing and Accounts Office. The Critical Account form is reviewed to determine the customer's request meets the requirements as defined in the Commission Substantive Rule § 25.52(c)(1) before a priority code is designated for the account.

AEP Texas has implemented procedures for natural gas facility customers that meet the definition of the rules adopted under PURA 38.076 for critical load to submit an application for review. The Critical Load Application found in the AEP Texas website has been expanded and revised to encompass critical infrastructure in the natural gas supply chain for generation and cogeneration facilities. AEP Texas has participated in an outreach effort along with other

Transmission and Distribution Utilities (TDUs) to encourage natural gas operators to report critical infrastructure. AEP Texas 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 ERCOT. To raise situational awareness and prepare for new applications from gas industry customers, AEP Texas established a cross functional team to ensure that processes are in place to:

- Receive, review, and code applications for critical load designation, and to communicate with customers,
- Identify distribution circuit breakers serving critical infrastructure, and
- Modify curtailment plans, as appropriate, to remove circuit breakers serving critical infrastructure from MLS and UF.

In addition to the above stated annex, EDOps is in compliance with NERC standard PRC-006 by having an Under Frequency Load Shedding plan, the *AEP Underfrequency and Undervoltage Load Shedding Program Methodology Guide*.

# C. <u>Pandemic and Epidemic Annex</u>

## **Pandemic Procedures**

Pandemic preparedness by AEP Texas 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.

AEP Texas, 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 were to occur. AEP Texas'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 a pandemic were to occur. 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 is necessary that the designed procedures are followed 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 enterprise and its associated support efforts.

One of the tools used by AEP Texas to characterize the severity of the emergency and helps to 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 finical 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 Center for Disease Control or State Department recommendation to active 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 probably that addition 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 AEP infectious Disease Condition 4 meet for 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 AEP infectious disease condition 4 met for 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 that will be used by AEP as a general employee health strategy. Illness etiquette should align to recommended guidance of public health entities. This strategy will require 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 is a work strategy that AEP may use to separate and restrict the movement of essential employees or contractors that support critical AEP 24/7 operations prior to engaging in sequestering activities. Employees or contractors supporting 24/7 operations (to include those within Generation, Dispatch, Generation, 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 its emergency response organization during an event, incident, emergency, or crisis.

#### **Emergency Operation Center**

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

#### D. <u>Wildfire Annex</u>

AEP Texas has an emergency operations plan to establish procedures to assist in the restoration of electrical service to all AEP Texas 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.

Storm preparedness includes having as much notice of impending inclement weather situations including potential wildfires. In order to have that insight, AEP has a staff of in-house meteorologists that continuously monitor weather patterns and conditions for all of AEP' s seven operating companies. AEP Meteorology creates 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 draughts, 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, AEP Texas receives fire risk alerts issued by the 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 TDC and DDC Regions;
- IPS stations, size, drought risk and distance from the identified risk;
- TGIS lines and circuits;
- AEP buildings and proximity to the risk;

- USA 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; and
- A list of the counties covered by the report.

AEP Texas participates in the State of Texas State Operations Center (SOC) calls to learn and share information regarding the potential of severe weather and potential wildfire activity throughout the state.

AEP Texas 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 Distribution Vegetation Management Plan. As the work associated with the annual plan is performed, the Company identifies hazard trees and removes them at the time they are identified. Vegetation identified for removal may be located inside and/or outside of the ROW. The identification and mitigation of at-risk trees is part of the day-to-day operations and maintenance of AEP Texas. At-risk tree work is budgeted as part of the long-term and short-term vegetation management work plan budget.

Emergency situations that cause power outages 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. The Company's service areas differ when comparing the geography between south and west Texas. As potential occurrences develop that could impact the AEP Texas 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 System Control Center (SCC) group will monitor fire weather forecast and initiate actions based on the potential impact to the system. No threat (Green) – No action necessary.

## • Potential Threat Index and Actions

- 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. For more information, see *Notification Procedures*.
  - 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 Transmission Distribution Center group (TDC), and 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. For more information, see *Notification Procedures*.
  - 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. <u>Hurricane Annex</u>

Prior to a hurricane making landfall, the Company will monitor storm advisories in coordination with AEP internal meteorologists. The Company uses the Incident Command System (ICS) organizational approach in planning, preparing, and executing restoration efforts under the Emergency Operations Plan (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 AEP Texas 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 such information 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 AEP Texas ICS, state, local, and federal agencies, and the media enhances the ability to accomplish this objective.

If the local or state authorities call for an evacuation, the Company will work with city and county Emergency Operation Centers (EOCs) not to evacuate AEP Texas employees if it is safe to stay and initiate restoration efforts. There is a four-tier system. Company employees who are affiliated with the restoration efforts are considered Tier Two. These employees will be allowed to return into areas affected by the storm as long as the Company works with the county and TDEM. The Company would request to return to the area after the evacuation was lifted after the Tier One first responders have secured the area.

# 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:

Method of Notification	How This Method is Monitored
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 Incident Command System (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. <u>Physical Security Incident Annex</u>

The AEP Texas 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 AEP Texas, outside AEP Texas, 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, and
- 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. Approved methods include: fencing, signage, cabinets, gates, e-locks, e-keys, keys, key pads, AEP badge scanning, or guards. For safety reasons at certain locations, visitors check in at gates with guards, or control room via intercom and camera or Phone and camera.

## H. <u>PURA §39,918 Annex</u>

AEP Texas is partnering with a supplier to lease mobile generation and related services to deploy in emergency situations to restore loads. The generators will be dedicated to AEP Texas and maintained and stored within the AEP Texas's South Texas Territory. The generators will be deployed when the conditions set forth in PURA § 39.918 are present and when the expected time of restoration or Load Shed events exceeds the time to deploy the mobile generation. In Load Shed events, a station not impacted by the load shed event will be disconnected from the grid and energized with the mobile generation to allow a station impacted by the load shed event to be restored that matches the amount of mobile generation deployed. The generators will be interconnected as follows:

Loss of Transmission, Station Transformer, or Load Shed - In this situation, the adequate mobile generation will be deployed to restore loads by interconnecting the Mobile Generation to the Station Buss energizing the Circuits Breakers. If the load exceeds the capacity of the mobile generation, the breakers will be used to rotate outages.

 Loss of Station Equipment (other than Transformer) – In this situation, the adequate mobile generation will be deployed to restore loads by interconnecting at Station Exits energizing Distribution Feeders.

AEP Texas is partnering with a supplier to lease material with long lead times to either expedite the restoration of critical infrastructure or temporarily replace the critical infrastructure. The material identified can either be used to restore a Substation or a Transmission Line. Critical replacement material in the station includes but is not limited to Station Transformers, Station Regulators, and Circuit Breakers. Material that can be used to temporarily replace components includes but is not limited to Mobile Transformers and Skid Stations. Material required to restore transmission lines includes but is not limited to Structure, Poles, and Insulators.

During emergencies, the leased material will be requested from the supplier and the supplier will deliver the material to the site to expedite the restoration.