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

ELECTRIC TRANSMISSION TEXAS, LLC

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 Electric Transmission Texas's ("ETT" 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 EOP for ETT is a proactive strategy to anticipate, prepare, and initiate remedial activities before and after an emergency event occurs. ETT utilizes the resources of American Power Electric Service Corporation and AEP Texas (jointly referred to as AEP), both subsidiaries of American Electric Power in the execution of its EOP. 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 response.

Environment, Safety & Health Philosophy

No aspect of operations is more important than the health and safety of people. ETT's reliability responsibilities are met while ensuring safety and in harmony with environmental protection.

Event Analysis

ETT 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. Its key element is a common chain of command where the roles are clearly defined. The benefits of the ICS process 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 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 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. ETT utilizes the resources of AEP in the execution of the ICS.

B. <u>Record of Distribution</u>

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

C. <u>Affidavit</u>

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

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

A. Introduction

ETT is jointly owned by subsidiaries of American Electric Power and Berkshire Hathaway Energy. ETT owns Texas facilities and equipment to transmit electricity in the Electric Reliability Council of Texas ("ERCOT") region. ETT is authorized under certificate of convenience and necessity number 37457 to provide service as a transmission utility in ERCOT. ETT's transmission assets are operated and managed by AEP.

In accordance with 16 Tex. Admin. Code § 25.53 (TAC), ETT files its Emergency Operations Plan ("Plan").

The primary objective of ETT'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 ETT ICS, media, state, local, and federal agencies.

As addressed below, ETT'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 such as a tropical storm or hurricane, which are handled by the larger incident management team and the ICS.

ETT 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 ETT ICS structure begins with the Incident Commander and its Staff. The Staff of the Incident Commander includes the Deputy Incident Commander, 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. <u>Maintaining, Implementing, and Changing the EOP</u>

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

- ETT President
- ETT Vice President, Operations
- ETT Vice President, Regulatory and Finance
- AEP Vice President, Energy Delivery Operations
- AEP Vice President and Chief Security and Privacy Officer (includes physical security)
- AEP Director, Case Support and 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. <u>EOP Approval Date</u>

This EOP was most recently approved by ETT on April 18, 2022.

II. <u>Communication Plan</u>

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

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

Pre-Event

When possible, before an event occurs, AEP activates 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 receives feedback from the field and works with appropriate parties to resolve any pre-event issues.

During the Event

During the event, AEP 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 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, 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 to lead conference calls, provides information on event damage, outages, restoration estimates, number of employees and outside crews working.

The following table generally describes the communications responsibilities.

Responsible Party	Work Locations	Communications	Primary Audiences
Central Emergency Organization	Overall Electric Operations	Ongoing emergency operations, meetings, conference calls, radio, other electronic	All AEP groups with communication responsibilities shown in this table

Communications Responsibilities – Overview

CommunicationsOperations, Home Office, State Office (and storm recovery sites if resources permit)Coordination and Message Development– Phone, teleconference, email, text messaging or PIN, internet, intranet (and face-to-face media interviews as resources permit)Coordination and Message responsibilities shown in this table, plus the news media, customers and the general publicCommunity AffairsStorm recovery sites, staging areas, local emergency operations centers, local officials' officesPrimary Media Relations (Field)– Face-to-face, phone, teleconference, detailed restoration information for local officials, media interviewsLocal elected officials, county emergency coordinators, Red Cross/relief agencies, critical load customers, customers, public and
Office, State Office (and storm recovery sites if resources permit)Development– Phone, teleconference, email, text messaging or PIN, internet, intranet (and face-to-face media interviews as resources permit)community affairsCommunity AffairsStorm recovery sites, staging areas, local emergency operations centers, local officials' officesPrimary Media Relations (Field)– Face-to-face, phone, teleconference, eteleconference, county emergency coordinators, RedLocal elected officials, county emergency coordinators, RedCommunity AffairsStorm recovery sites, staging areas, local emergency operations centers, local officials' officesPrimary Media Relations (Field)– Face-to-face, phone, teleconference, detailed restoration information for local officials, media interviewsLocal elected officials, county emergency coordinators, Red
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centers, local officials'detailed restorationCross/relief agencies, critical load customers, customers / public and
officesinformation for local officials, media interviewscritical load customers, customers / public and
officials, media interviews customers / public and
news media
Governmental Affairs Austin State Office Phone, face-to-face, updates Legislators, staff,
/ summaries governor, other
state/federal elected
officials
Regulatory Services AEP Texas Home Phone, teleconference, face- Regulators, state
Office, assisted by to-face, updates / summaries Division of Emergency
Austin State Office Management (State
(and at State Operations Center)
Operations Center)
President/COO and AEP Texas Home Phone, face-to-face, media Key state officials, state
External Affairs VPOffice, Austin StateinterviewsDivision of Emergency
Office, Overall Management,
Electric Operations customers / public and
and storm recovery news media
sites as needed
Customer Solutions Call centers (Corpus Phone (first-person, Customers / public
Centers Christi, Shreveport automated and up-front
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- 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 Communication 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, gather information, prepare updates and distribute to other groups for communication to their assigned audiences. If warranted, Corporate Communications activates Teleconference Bridge for county emergency coordinators, and assist Community Affairs with set-up for post-event briefings (target daily). Typically, an AEP 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 hurricane preparedness and the activation of Central Emergency Command Center.

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 conference meetings to consult on communication needs, gather information, prepare updates and distribute to other groups for communication to their assigned audiences. 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 Regulatory Services representative(s) remain in the State Operations Center. Corporate Communications remains available, as conditions permit, for media inquiries, track 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 additional resources that may be needed.

Post-Event

Corporate Communications implements team member assignments, scheduling and backup 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 and participate in overall electric operations conference calls to consult on communication needs, gather information, prepare updates and distribute to other groups for communication to their assigned audiences. Corporate Communications activates Teleconference Bridge for county emergency coordinators and assist Community Affairs with briefings (target daily), include Regulatory Services representative in State Operations Center, work closely with Community Affairs and Distribution to provide local media in impacted area with maps and specific response details that can be conveyed to the public. Work to ensure the local media gets the highest level of detail on a regular basis. If resources permit, travel 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 maximize publicity opportunities. The ETT President and ETT VP Operations and Corporate Communications as conditions warrant, avail themselves for media interviews, escort videographer and take still photos to document storm damage and restoration effort for internal and external communication and for reports or response to regulators, 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 the community, evaluates the use of informational publications during restoration process – with emphasis on radio – and place any necessary media announcements.

B. <u>Energy Delivery Operations</u>

Energy Delivery Operations ("EDOps") is responsible for 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. <u>Pre-identified Supplies for Emergency Response</u>

When responding to an emergency, AEP 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. ETT puts some of this inventory on pallets for use at staging sites or at service centers. Key suppliers, including our transformer supplier, wire and cable suppliers, key pole line hardware and related material manufacturers, and wood pole suppliers 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 developed with different assumptions for Category 1 through 5 hurricanes, 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.

ETT's transmission assets are operated and managed by AEP. Arrangements for personnel from other AEP companies, "mutual assistance" utilities and other contractors are in place. 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.

AEP identifies contractors used by its other 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 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

ETT has an emergency plan to establish procedures to assist in the restoration of electrical service to all ETT 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, AEP has a staff of in-house meteorologists that continuously monitor weather patterns and conditions for all of AEP's utilities. 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 company 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.

Each of ETT's regions have a unique set of weather variable thresholds due to differences in population, climate and vegetation. ETT and AEP 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 these key decision-makers at ETT. AEP Meteorologists created a number of tools to be used when impactful weather may be headed to ETT 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 AEP utilities 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, Monday to Friday, to the storm coordinators.
- Text messages sent directly to AEP'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 ETT 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. <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 will take steps to arrange ETT's 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 AEP follows to prepare and implement an optimal system prior to the weather event:

Pre-Storm Plans

Handling an emergency efficiently during the emergency situation is nearly impossible without planning.

During emergency situations, ETT, through AEP, 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 AEP's everyday operation.

Having a plan

AEP's plan for handling restoration efforts includes annual review and critique to ensure effectiveness. If changes/corrections are needed, they need to 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

Resources fall into the following three categories; people, material/equipment, and facility resources. Each requires unique considerations and will be reviewed separately.

People

Various task/positions and role responsibilities are identified to operate the emergency plan. AEP has identified its available human resources and the positions that each will fill during an emergency. Additionally, AEP has several emergency contracts for field labor that may be activated pre-event, during the event, and post-event.

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

Depending on the magnitude of the restoration effort, numerous facilities may be required for accommodation, food, transportation and other logistics. To the extent possible, prearrangement 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

ETT uses AEP's 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.

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 ETT systems so that the necessary resources can be procured and crews can be appropriately positioned 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.

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 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 along with AEP)

- 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

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 in the system 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.
- 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

ETT does not serve load as such this annex is not applicable for the company.

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

Pandemic Procedures

Pandemic preparedness by ETT has been coordinated on a company and AEP system-wide basis. The broader AEP organization supports its utilities 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.

ETT, 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'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.

The matrix 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 company operations, assets, and are short in duration, resulting in little to no expectation of escalation. For such minor events, no media interest is expected.

Triggers/Conditions*1

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.

¹ *AEP guidelines only require one of the Triggers/Condition be met for activation considerations.

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 to 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 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 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.

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 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 its emergency response organization during an event, incident, emergency, or crisis.

Emergency Operation Center

AEP, on behalf of ETT, maintains primary and backup emergency operations center locations for continuity of operation during emergencies.

In conjunction with AEP's Pandemic response, EDOps will enact its *Pandemic/Epidemic Response Plan.* This plan applies to all EDOps critical personal and those directly supporting the critical personal. This document serves as a roadmap for the actions and processes for EDOps to prepare for and respond to a pandemic/epidemic event in order to:

- Maintain continuity of critical processes and Real-time monitoring, Real-time assessments, and Support functions for System Operations during pandemic/epidemic events.
- Maintain a healthy work environment for EDOps employees and offer guidance to contain and minimize the spread of contamination in the workplace.
- Protect the health and safety of employees and their families.

This plan includes sequestration phases and requirements of critical employees, supply requirements, infection testing, entering sequestration zones, access to critical areas, and expectations of employees.

D. <u>Wildfire Annex</u>

AEP has an emergency operations plan to establish procedures to assist in the restoration of electrical service to all ETT's 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.²

Storm preparedness includes not only having as much notice of impending bad weather situations, but also potential wildfire information in order.. AEP has a staff of in-house meteorologists that continuously monitor weather patterns and conditions for all of AEP's utilities. 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 company 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, ETT receives fire risk alerts issued from AEP's Security 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 group (TDC) Regions
- IPS stations, size, drought risk and distance from the identified risk
- TGIS lines and circuits

² ETT's transmission assets are operated and managed by AEP.

- 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, on behalf of ETT, participates in the State of Texas State Operations Center ("SOC") calls to learn and share information regarding potential wildfire activity throughout the state.

ETT works with AEP to utilize all of this information to determine the course of action necessary to address the emergency situation anticipated.

EDOps

In the event or threat of a wildfire, the EDOps System Control Center group ("SCC") 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 Dispatch Center group (TDC), and the 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 meteorologists. The Company uses the ICS organizational approach in planning, preparing, and executing restoration efforts under the 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 ETT 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 ETT ICS, state, local, and federal agencies, and the media enhances the ability to accomplish this objective.

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

F. <u>Cyber Security Annex</u>

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 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; and
- Communicate incident details Throughout the response to 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 incident investigation, Incident the response or during an the 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 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 ETT, outside ETT, 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. Approved methods include fencing, signage, cabinets, gates, e-locks, and e-keys.

H. <u>PURA §39.918 Annex</u>

ETT is partnering with other utilities and suppliers to lease material with long lead times to either expedite the restoration of critical infrastructure or temporarily replace the critical infrastructure. The materials 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. Material required to restore transmission lines will 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.