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PROJECT NO. 56822

INVESTIGATION OF EMERGENCY	§	PUBLIC UTILITY COMMISSION
PREPAREDNESS AND RESPONSE BY	§	
UTILITIES IN HOUSTON AND	§	OF TEXAS
SURROUNDING COMMUNITIES	§	

**COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION
TO AEP TEXAS, INC.
QUESTION NOS. STAFF 1-1 THROUGH 1-120**

The Staff (Staff) of the Public Utility Commission of Texas (Commission) submits this First Request for Information (RFI) to AEP Texas, Inc. (AEP). AEP must provide an answer to the questions and sub-questions in the order listed below with sufficiently detailed information to provide a complete and accurate answer to each RFI. AEP must comply with the instructions and definitions described below.

AEP must provide its response to this RFI no later than August 30, 2024 by filing with the Commission solely through the Interchange on the Commission's website and provide notice, by email, to all other parties that the pleading or document has been filed with the Commission, unless otherwise ordered by the presiding officer pursuant to the Order Suspending Rules in Docket No. 50664.

Dated: August 12, 2024,

Respectfully submitted,

PUBLIC UTILITY COMMISSION OF TEXAS

**DIVISION OF COMPLIANCE AND
ENFORCEMENT**

/s/John Lajzer

John B. Lajzer

Division Director

State Bar No. 24074567

1701 N. Congress Ave

P.O. Box 13326

Austin, Texas 78711-3326

(512) 936-7285

(512) 936-7268 (facsimile)

John.lajzer@puc.texas.gov

PROJECT NO. 56822

CERTIFICATE OF SERVICE

I certify that notice of filing of this document was provided to all parties of record via electronic mail on August 12, 2024 in accordance with the Order Suspending Rules, issued in Project No. 50664.

/s/ John Lajzer

PROJECT NO. 56822**COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION
TO AEP TEXAS, INC.****QUESTION NOS. STAFF 1-1 THROUGH 1-120****DEFINITIONS**

- 1) "AEP," "the Company," or "you" refers to AEP Texas, Inc and any person acting or purporting to act on its behalf, including, without limitation, attorneys, agents, advisors, investigators, representatives, employees, or other persons.
- 2) "Document" includes any written, recorded, or graphic matter, however produced or reproduced, including but not limited to correspondence, telegrams, contracts, agreements, notes in any form, memoranda, diaries, voice recording tapes, microfilms, pictures, computer media, work papers, calendars, minutes of meetings or other writings or graphic matter, including copies containing marginal notes or variations of any of the foregoing, now or previously in your possession. In the event any documents requested by this Request for Information have been transferred beyond the Company's control, describe the circumstances under which the document was destroyed or transferred and provide an exact citation to the subject document. In the event that documents containing the exact information do not exist, but documents do exist which contain portions of the required information, or which contain substantially similar information, then the definition of "documents" shall include the documents which do exist and these documents will be provided.
- 3) "CenterPoint" refers to CenterPoint Energy Houston Electric, LLC.
- 4) "Commission" or "PUCT" refers to the Public Utility Commission of Texas.
- 5) "Derecho" or "Derecho Event" refers to the windstorm event that occurred between May 16, 2024, and May 17, 2024, and impacted the gulf coast of the United States, including the city of Houston and surrounding metropolitan area.
- 6) "Electric service provider" refers to the entity that owns the electric meter, poles, and other distribution infrastructure required to serve an end-use customer. An electric service provider may be a municipally owned utility, electric cooperative, or an investor-owned utility, like CenterPoint or Entergy.
- 7) "Entergy" refers to Entergy Texas, Inc.
- 8) "ERCOT" refers to the Electric Reliability Council of Texas, Inc.
- 9) "Hurricane Beryl" or "Beryl" refers to the hurricane or storm that made landfall in the gulf coast of Texas on July 8, 2024. The term also refers to all life cycles of the storm prior to and after July 8, 2024, that was named Hurricane Beryl.
- 10) "Impacted Area" refers to the 121 Texas counties identified in Acting Governor Dan Patrick's July 6, 2024, Amended Disaster Declaration.

- 11) "Medical and Eldercare Facilities" refers to hospitals, medical clinics, dialysis centers, assisted living or nursing home facilities, rehabilitation centers, hospice facilities, or other similar facilities.
- 12) "Mutual Assistance" or "Mutual Aid" refers to aid and resources such as personnel, equipment, and expertise provided and received by members of a mutual assistance program in response to a member's request for assistance.
- 13) "Mutual Assistance Program" or "Mutual Aid Program" refers to a cooperative agreement or agreements between utilities where participants agree to provide aid and resources to each other in restoring and/or maintaining utility service during emergencies or other occurrences in which emergency assistance is necessary.
- 14) "Power Generation Company" or "PGC" refers to a person, including a person who owns or operates a distributed natural gas generation facility, that: generates electricity that is intended to be sold at wholesale, including the owner or operator of electric energy storage equipment or facilities; does not own a transmission or distribution facility in this state other than an essential interconnecting facility, a facility not dedicated to public use, or a facility otherwise excluded from the definition of "electric utility" under this section; and does not have a certificated service area, although its affiliated electric utility or transmission and distribution utility may have a certificated service area.
- 15) "TDEM" refers to the Texas Department of Emergency Management.
- 16) "TNMP" refers to Texas-New Mexico Power Company.
- 17) "Utility" or "Utilities" refers to a person or entity providing electric, water, sewer, or telecommunications service.

**COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION
TO AEP TEXAS INC.
QUESTION NOS. STAFF 1-1 THROUGH 1-120**

INSTRUCTIONS

- 1) Pursuant to 16 TAC § 22.144(c)(2), Staff requests that answers to the attached questions be made under oath.
- 2) Please identify the question number and, if applicable, the relevant subpart(s) above the answer to each question. State the name of the witness who will sponsor the answer to the question and can vouch for the truth of the answer.
- 3) Where appropriate in answering the attached questions, please provide a citation to the relevant section of your emergency operations plan that was in effect at the time of the event in question.
- 4) These questions are continuing in nature, and if there is a relevant change in circumstances, please submit an amended response, under oath, as a supplement to your original response.
- 5) Words used in the plural shall also be taken to mean and include the singular. Words used in the singular shall also be taken to mean and include the plural.
- 6) The present tense shall be construed to include the past tense, and the past tense shall be construed to include the present tense.
- 7) If any document is withheld under any claim of privilege, please furnish a list identifying each document for which a privilege is claimed, together with the following information: date, sender, recipients or copies, subject matter of the document, and the basis upon which such privilege is claimed.
- 8) Pursuant to 16 TAC § 22.144(h)(4), if the response to any request is voluminous, please provide a detailed index of the voluminous material.
- 9) Staff requests that each item of information be made available as it is completed, rather than upon completion of all information requested.
- 10) You must file your responses under Project No. 58622 through the Commission's Interchange.

Electric Utilities – Emergency Planning and Event Response

- Staff 1-1** Provide the following information concerning the last hurricane or major storm drill conducted in 2024:
- a. The date the drill was conducted;
 - b. The category of hurricane drilled and any conditions (e.g., where the hurricane made landfall, date hurricane made landfall, status of infrastructure and vegetation management activities in affected area, aid received vs aid requested from mutual assistance programs, total number of customers in anticipated affected area) used in the drill;
 - c. A description as to how the drill conducted in 2024 differed materially from the previous annual drill;
 - d. The identity of all third-party vendors that assisted in either conducting or preparations for the 2024 hurricane drill;
 - e. The identity of all other electric, water, sewer, or telecommunication utilities that were invited to participate in your 2024 hurricane drill and a description of their participation;
 - f. The identity of all local government, trade associations, medical and eldercare facilities, community organizations, PGCs, and REPs that were invited to participate in your 2024 hurricane drill and a description of their participation;
 - g. How performance during the 2024 hurricane drill was measured; and
 - h. Any feed-back whether internally or externally from a third-party vendor or party invited to participate in the 2024 hurricane drill.
- Staff 1-2** Do you ever seek participation of your customers during a hurricane drill? If yes, please provide a description of their level of involvement.
- Staff 1-3** Are actual events and conditions experienced during a previous hurricane or storm used in the next year's hurricane or major storm drill? If yes:
- a. How long would an actual storm be used to set the conditions for future hurricane drills?
 - b. What hurricanes and major storms were used to set the conditions for the 2024 hurricane drill?
- Staff 1-4** Please identify any electric, water, sewer, or telecommunication utilities that invited you to participate in their 2024 hurricane or major storm drill.
- Staff 1-5** Please identify all resources, internal or external, used for weather or storm tracking purposes before July 8, 2024.

- Staff 1-6** How many days before projected landfall do you start tracking storms that could affect or disrupt operations within your service area?
- Staff 1-7** How many days before projected landfall did you start tracking the storm eventually named Hurricane Beryl?
- Staff 1-8** Do you check the functionality or performance of your outage tracker as part of your regular storm preparation procedures?
- Staff 1-9** How far in advance of landfall did you initiate requests for mutual assistance?
- Staff 1-10** Provide information as to how restoration efforts are prioritized, and resources are allocated following a hurricane or major storm. For purposes of this question, please provide how these prioritizations and allocation guidelines were used in practice during your response to Hurricane Beryl.
- Staff 1-11** Describe the procedures during an emergency for handling complaints and for communicating with the public; the media; customers; the commission; the Office of Public Utility Counsel (OPUC); local and state governmental entities, officials, and emergency operations centers, the reliability coordinator for your Company's power region; and critical load customers directly served by the entity.
- Staff 1-12** Does your company use an operating condition system? If yes, define each level of the operating condition system and actions taken at each level. Please include citations to the relevant section(s) of your EOP filed with the PUCT when answering this question.
- Staff 1-13** Explain the system and tools used to manage all emergency response assignments. Your response should include management of mutual assistance and contract personnel and consider needed food and lodging facilities.
- Staff 1-14** How far in advance of the May 2024 Derecho and Hurricane Beryl did you initiate emergency preparations? Describe the timeframes for the preparation work in anticipation of emergency operations plan activation. Please include citations to the relevant section(s) of your EOP filed with the PUCT when answering this question.
- Staff 1-15** Please provide a timeline of your Company's response to the May 2024 Derecho and Hurricane Beryl.
- Staff 1-16** Please detail the extent and duration of outages experienced by your customers during and in the aftermath of the May 2024 Derecho and Hurricane Beryl. Include the total number of customers affected; minimum, maximum, and average hours of service interruptions; and maximum and average time to service restoration in your response.

- Staff 1-17** Provide the following information concerning your service territory:
- Identify the geographic areas that experienced the highest number of outages and longest duration of outage due to the May 2024 Derecho. Your response should identify the neighborhood, city, zip code, and county if possible.
 - Identify the geographic areas that experienced the highest number of outages and longest duration of outage due to the Hurricane Beryl. Your response should identify the neighborhood, city, zip code, and county if possible.
 - Identify or describe the factors that contributed to the areas identified in response to subparts (a) and (b) as being particularly vulnerable.
- Staff 1-18** Describe any challenges in restoring operations your Company encountered due to the May 2024 Derecho or Hurricane Beryl.
- Staff 1-19** Please provide a copy of the after-action reports or provide a date by when the action reports will be completed for the May 2024 Derecho and Hurricane Beryl.
- Staff 1-20** Please provide any additional information and describe any concerns that may be helpful to this investigation.

Electric Utilities Communication and Coordination

- Staff 1-21** Provide the following information concerning the communication strategy and policy in place before July 8, 2024:
- What consideration is given to local governments, community organizations, and other electric, water, sewer, and telecommunication utilities concerning your communication strategy after a hurricane or major storm in your service territory?
 - Describe any augmentation to staffing at call centers or help desks that would occur in advance of or after a hurricane or major storm entered your service territory.
 - For transmission and distribution utilities, please describe how your company coordinates communication to end-use customers with retail electric providers.
- Staff 1-22** Describe your communication strategy with the public before, during, and after the May 2024 Derecho and Hurricane Beryl and by what means these communications were conducted.
- Staff 1-23** Please provide any available data regarding customer feedback you received in response to your service restoration efforts during and in the aftermath of Hurricane Beryl.

- Staff 1-24** What steps are being taken to improve coordination and communication with local governments, medical and eldercare facilities, community organizations, trade associations, and other similar organizations for future significant weather events?
- Staff 1-25** What steps are being taken to improve coordination and communication with other electric, water, sewer, and telecommunication utilities for future significant weather events?
- Staff 1-26** Provide the following information concerning call centers and help desks used by your company before July 8, 2024:
- How many people work in call centers or help desks?
 - Of these people, please provide the percentage of these employees that are full-time employees (FTE), contracted labor, or temporary/seasonal workers.
 - What is the target wait time or response time for calls?
 - What is the target resolution time for calls?
 - Provide a detailed description of company-specific training provided to call center and help desk operators concerning major outages and major weather events including, but not limited to, hurricanes and high wind events.
 - What is the maximum call volume for the call centers or help desks that were available and in operation during or in the aftermath of Hurricane Beryl?
- Staff 1-27** Provide the daily average and peak call volume to your call centers or help desks during or in the aftermath of Hurricane Beryl. For purposes of this question, please provide responses for each day from July 8, 2024, through the date power was restored to at least 99% of the customers in the service territory in the Impacted Area.
- Staff 1-28** Describe how you communicated and shared information on recovery resources and updates with local and state leaders as well as your customers during leading up to, during, and in the aftermath of Hurricane Beryl.
- Staff 1-29** Please indicate whether calls incoming to your call centers, help desks, or priority call desks are recorded, and if so, provide your retention schedule for the captured calls.
- Staff 1-30** If calls incoming to your priority call desks are not recorded, please indicate if incoming calls are logged or otherwise tracked. If tracked or logged, please provide a copy of all logged or otherwise tracked calls to the priority call desk during or in the aftermath of Hurricane Beryl.
- Staff 1-31** Please provide an audio copy and transcript of any pre-recorded messages related to either the May 2024 Derecho or Hurricane Beryl used by your call centers or help desks and the date these messages were utilized.

- Staff 1-32** Provide the following information concerning the outage tracker in use on July 8, 2024:
- The date the outage tracker was rolled out to customers.
 - The last date the software underpinning the outage tracker was updated.
 - whether the outage tracker was functioning during the May 2024 Derecho and Hurricane Beryl as intended or provide an explanation as to why not.
 - Whether the outage tracker was mobile-friendly;
 - the languages supported by the outage tracker;
 - Whether the outage tracker captured circuit-specific or meter-specific information or both.
 - Whether the outage tracker was cloud-based or operated through an on-premise server?
 - The maximum number of simultaneous users the outage tracker was designed to accommodate.
 - Whether you had internal facing redundancies/contingencies for outage tracking, and if so if these redundancies/contingencies were utilized during your response to Hurricane Beryl.
 - The date of the last stress or load test of the outage tracker.
- Staff 1-33** Provide daily total and peak numbers of users accessing your outage tracker in the greater Houston area during each day of the May 2024 Derecho event.
- Staff 1-34** Provide the daily total and peak number of users accessing your outage tracker in the Impacted Area starting from July 8 through the date service was restored to 100% of your service territory.
- Staff 1-35** Describe any processes or policies adopted by your company as contingencies to inform customers about service outages and estimated restoration times in the event the outage tracker is offline.
- Staff 1-36** Please indicate if the processes or policies described in your response to Staff 1-35 were utilized during either the May 2024 Derecho event or in the aftermath of Hurricane Beryl. If they were, please identify the dates the identified processes and policies were activated.
- Staff 1-37** Please provide a breakdown of smart meters currently in service for each county in your service territory that was included within the Impacted Area. In providing a response to this question, please provide both raw numbers and answers as a percentage of total customers in each county.
- Staff 1-38** Provide the date and method (e.g., email, phone call, text message) you initially contacted local governments in the Impacted Area.

- Staff 1-39** Describe what processes, if any, you had in place on or before July 8, 2024, to contact medical and eldercare facilities or critical infrastructure (e.g., police stations, firehouses, TV stations) in advance of a hurricane or major storm. Please include citations to the relevant section(s) of your EOP filed with the PUCT when answering this question.
- Staff 1-40** If your company has a process to contact critical care facilities, provide the date and method (e.g., email, phone call, text message) you initially contacted medical facilities, eldercare facilities, or critical infrastructure (e.g., police stations, firehouses, TV stations) in advance of Hurricane Beryl.
- Staff 1-41** Please describe how you communicate and with what frequency you communicate with critical care and at-risk customers about service outages and restoration efforts.
- Staff 1-42** For ERCOT-located utilities, please describe any communication with interconnected power generation companies regarding their operational status during Hurricane Beryl.

Electric Utilities – Customer Restoration Workflow

- Staff 1-43** Please state whether you have a service restoration plan regarding service outages caused by extreme or emergency weather events. If you do, please provide a copy of that plan(s). Please include citations to the relevant section(s) of your EOP filed with the PUCT when answering this question.
- Staff 1-44** Please describe the procedures followed for customer restoration of service, including prioritization criteria and timelines for restoration or service. Please note if these policies may lead to quicker restoration of service for an area of your service territory relative to the others and why.
- Staff 1-45** Please describe and explain any changes or modifications made to your service restoration plan(s) during and in the aftermath of the May 2024 Derecho or Hurricane Beryl.
- Staff 1-46** Please provide a county-by-county summary of date on which and number of damage assessment, vegetation, and linemen crews that you deployed to assess and begin service restoration efforts after Hurricane Beryl made landfall in the Impacted Area.
- Staff 1-47** Please provide a county-by-county summary of the percentage of your customers that did not have service due to outages caused by Hurricane Beryl for each day from the day Hurricane Beryl made landfall in the Impacted Area to when service was fully restored to your customers.
- Staff 1-48** Please describe how calls received by your call centers during and after Hurricane Beryl were incorporated in your service restoration workflow and processes.

- Staff 1-49** Please describe your coordination efforts with local, state, and federal agencies, as well as any other stakeholders regarding service restoration before, during, and after Hurricane Beryl. Please provide details of any formal agreements or understandings with these parties.
- Staff 1-50** Excluding the need to clear significant volumes of vegetation, please identify and described any major challenges you experienced during the process of restoring service to your customers before, during, and after Hurricane Beryl and any solutions implemented to address those challenges.
- Staff 1-51** Please describe any lessons learned about restoring service to customers during Hurricane Beryl and how what you learned will inform restoration efforts in the future.
- Staff 1-52** Does your utility employ the National Incident Management System? If yes, please provide the date on which your utility starting using NIMS as its framework for managing emergency event response.
- Staff 1-53** Are your emergency response personnel trained in Incident Command System processes? If not, please describe any training your emergency event management personnel have received and how they interact with local and state officials and other utilities.

Distribution Infrastructure

- Staff 1-54** Please explain your process for evaluating and replacing distribution poles. Please include an explanation for the following in your response:
- How frequently this evaluation is conducted;
 - What criteria you utilize for this evaluation; and
 - When you decide to replace the distribution pole.
- Staff 1-55** Please provide your minimum required right-of-way (ROW) width for both 3-phase and single-phase distribution lines.
- Staff 1-56** Identify all feeders on your distribution system affected by Hurricane Beryl or the May 2024 Derecho and provide the following for each identified feeder in MS Excel format:
- The quantity and percentage of each installed pole type (e.g., wood, composite, steel, concrete, other) on the feeder before Hurricane Beryl;
 - The quantity and percentage of pole failures, by pole type, due to Hurricane Beryl;
 - Identify the primary cause of failure for each pole type on the feeder (e.g., trees, branches, wind, or other);

- d. Identify the primary point of failure of the poles (e.g., crossarm failure, pole leaning, pole break, or other);
- e. NESC construction strength and overload factors the feeder is currently built to;
- f. Identify which feeders are in your plans to rebuild to a higher wind loading standard; and
- g. Provide an estimate for when identified rebuilds will commence.

Staff 1-57 If your distribution system includes feeders with poles taller than 60-feet above ground level, please provide the following:

- a. Identify each feeder that has any number of poles meeting this criteria;
- b. Explain the damage experienced on these lines due to either the May 2024 Derecho or Hurricane Beryl; and
- c. Explain the design criteria for these types of lines.

Staff 1-58 Please explain your standard for distribution pole embedment. In your response, please explain if this standard has changed in the last 10 years.

Staff 1-59 Please provide the standard distribution pole size and class for both single and three phase lines on your system within the Impacted Area.

Staff 1-60 Please explain the NESC construction strength and overload factors your distribution lines were built to in the past.

Staff 1-61 Please explain any new NESC construction strength and overload factors you adopted for distribution lines in the last two years to improve system resiliency.

Staff 1-62 Please provide the following information regarding distribution feeders in the Impacted Area that did not lose power during Hurricane Beryl and the May 2024 Derecho:

- a. Provide the designed criteria for these lines;
- b. The type of poles installed;
- c. The ROW widths;
- d. Explain if these lines are designed to the latest NESC construction strength and overload factors; and
- e. Explain if any distribution line experienced damage but remained standing.

Staff 1-63 Please provide the number of distribution poles that were in service before the May 2024 Derecho. In your response, please provide quantities by pole type and NESC wind loading criteria of the pole.

- Staff 1-64** Please provide the total number of distribution poles that failed due to the May 2024 Derecho. In your response, please provide separate quantities for each pole type and NESC wind loading criteria for the poles that failed, and separately identify the number of pole failures caused by either high wind or structural loading from vegetation or debris.
- Staff 1-65** Please provide the total number of distribution poles that failed due to Hurricane Beryl. In your response, please provide separate quantities for each pole type and NESC wind loading criteria for the poles that failed, and separately identify the number of pole failures caused by either high wind or structural loading from vegetation or debris.
- Staff 1-66** For each distribution pole that failed due to the May 2024 Derecho or Hurricane Beryl, please provide the date of the last inspection and explain the planned frequency of those inspections. Additionally, please provide the most recent inspection report for each pole that failed.
- Staff 1-67** Should the PUCT require utilities to construct and maintain distribution feeder equipment located in a hurricane prone area to a certain NESC standard? If so, which ones? If no, why not?

Transmission Infrastructure

- Staff 1-68** Please explain your process for evaluating the hardening of transmission lines. If you file an annual storm hardening report under 16 TAC § 25.95, do not merely recite information provided in those filings. In your response, please include an explanation for the following:
- a. How frequently this evaluation is conducted?
 - b. What criteria is utilized for this evaluation?
 - c. When do you decide to harden transmission lines?
- Staff 1-69** Please provide the number of transmission structures that were in service before the May 2024 Derecho. In your response, please provide quantities by structure type and NESC wind loading criteria of the structure.
- Staff 1-70** Please provide the total number of transmission structures that failed due to the May 2024 Derecho. In your response, please provide separate quantities for each structure type and NESC wind loading criteria of the structure, and separately identify the number of structure failures caused by either high wind or structural loading from vegetation or debris.
- Staff 1-71** Please provide the total number of transmission structures that failed due to Hurricane Beryl. In your response, please provide separate quantities for each structure type and NESC wind loading criteria of the structure, and separately identify the number of structure failures caused by either high wind or structural loading from vegetation or debris.

Staff 1-72 For each transmission structure that failed due to the May 2024 Derecho or Hurricane Beryl, please provide the date of the last inspection and explain the planned frequency of those inspections. Additionally, please provide the most recent inspection report for each structure that failed.

Vegetation Management

Staff 1-73 Provide the following information concerning your vegetation management staff:

- a. Provide the current size of your vegetation management staff. Your response should include a separate figure for full-time staff and independent contractors.
- b. Provide the average size of your vegetation management staff over the last 5 years. Your response should include a separate figure for full-time staff and independent contractors.
- c. Please explain how you determined the appropriate level of full-time vegetation management staff for each of the last 5 years.
- d. Provide the cost difference per circuit-mile between using contractors versus in-house vegetation management crews.
- e. Whether you retain an arborist as part of your permanent vegetation management staff or have an arborist consult with your vegetation management crews.

Staff 1-74 Please describe the minimum clearance standard for vegetation along transmission and distribution power lines at various voltage levels and how these clearances were derived based on your service territory.

Staff 1-75 Does your company incorporate any inspection of high customer count circuit segments to proactively identify problematic vegetation for circuits that may be outside their normal cycle period?

Staff 1-76 Please provide inspection logs and field reports from workers who performed VM services in the Impacted Area for the past five years.

Staff 1-77 Does your company conduct proactive vegetation management on feeders located in hurricane prone areas? If so, how far in advance of hurricane season do you send out vegetation management crews?

Staff 1-78 Please provide a list of the circuits that experienced a vegetation-related outage during the May 2024 Derecho and Hurricane Beryl, and provide the following information pertaining to the circuits identified:

- a. The name of the circuit(s);
- b. The date, time, and duration of the outage;
- c. The voltage of the circuit(s);

- d. A description of the cause of the outage; and
- e. The NERC category (Grow-In, Fall-In, Blow-In) associated with the outage.

Staff 1-79 Please provide aerial maps of circuits and their easements that experienced a vegetation-related outage during the May 2024 Derecho and Hurricane Beryl. Overlay the map with the circuits that received vegetation management treatment for the past 5 years, using a distinct color code for each year. Provide any additional information or details to show clarity.

Staff 1-80 For the May 2024 Derecho and Hurricane Beryl, please provide the percentage of forced interruptions that were related to vegetation issues.

Staff 1-81 What steps are being taken to address vegetation management and infrastructure issues that contributed to outages or were identified during restoration after the May 2024 Derecho and Hurricane Beryl?

Staff 1-82 When did you last substantively review, augment, or modify your vegetation management plan before July 8, 2024?

Staff 1-83 What percentage of vegetation-related outages were caused by trees or branches outside of the easement or right of way? In responding to this question, please provide both an overall percentage and a breakdown for each county within your service territory that was affected by the May 2024 Derecho or within the Impacted Area for Hurricane Beryl.

Staff 1-84 Describe your programs or initiatives that are designed to work with property owners to address potentially hazardous vegetation management issues that are outside of the utility easement or right of way.

Staff 1-85 Identify the number of staff that participate in any program or initiative designed to address vegetation management hazards outside of the utility easement or right of way.

Staffing and Mutual Assistance

Staff 1-86 Please state whether you participated in or were a member of any mutual assistance programs on or before July 8, 2024. If yes:

- a) Please identify all mutual assistance programs you participated in or were a member of on that date;
- b) Please provide copies of any agreements entered as part of your membership or participation in those mutual assistance programs;
- c) Please provide a list of members or participants for each mutual assistance program you are a member or participant in.

- Staff 1-87** Please describe, prior to, during, or in the aftermath of Hurricane Beryl how you integrated mutual assistance crews into your existing emergency preparedness and response processes, any coordination challenges you faced in doing so, and how you addressed any such challenges prior to, during, or in the aftermath of Hurricane Beryl.
- Staff 1-88** Please describe the command structure and communication protocols used to manage and direct resources from mutual assistance program(s) you received assistance from prior to, during, and in the aftermath of Hurricane Beryl.
- Staff 1-89** Please describe the process and timeline for requesting or activating assistance as part of your membership or participation in any mutual assistance program(s) prior to, during, or in the aftermath of Hurricane Beryl.
- Staff 1-90** Once you learned of the Hurricane Beryl's potential to affect your ability to provide service to your customers, what specific actions were taken to begin coordinating with and staging mutual assistance resources to respond to service issues resulting from the hurricane?
- Staff 1-91** Provide the following information concerning mutual assistance received in response to either the May 2024 Derecho or Hurricane Beryl:
- Identify all mutual assistance programs from which you requested assistance;
 - Describe the specific assistance, including but not limited to the number of damage assessors, vegetation management crews, linemen, generators, and materials, requested from the mutual assistance program(s); and
 - Provide all documentation of requests made to mutual assistance programs and their responses to your requests.
 - If it is not evident from the documentation provided in response to Staff 1-91(c), please provide the date the request was made, the date the specific assistance requested began arriving in the Impacted Area, and the date by when the specific assistance requested was fully received.
- Staff 1-92** When you receive responses to requests for assistance from other mutual assistance program participants that confirm their ability to provide the requested assistance, are you able to accept or decline resources being offered as needed, or must you accept all assistance provided in response to a request?
- Staff 1-93** What considerations did you give to reimbursement of costs and expenses incurred by participants of mutual assistance programs when making requests for assistance during the events of Hurricane Beryl?
- Staff 1-94** Please provide a list of any hurricane response staging area you established in the lead up to and in the aftermath of Hurricane Beryl. Please include the date the

center(s) was established, the location of the center(s), the day-to-day staffing levels at the center, and types of equipment and personnel staged at the center(s).

Staff 1-95 How did the rollout and deployment of mutual assistance during the events of Hurricane Beryl compare to previous hurricane events during which you requested assistance from mutual assistance programs? In your response, please specifically compare the types and quantities of resources requested, the percentage of request aid provided, the efficacy of coordination between your company and the mutual assistance provider, and the efficiency of staging, deployment, and release of those assistance resources.

Staff 1-96 Please describe what specific actions you took to begin staging internal staff and any responsive mutual assistance crews or resources.

Staff 1-97 Did you have to train or on-board any personnel that was provided in response to your request(s) for mutual assistance during the events of Hurricane Beryl? If yes, please describe what kind of training or on-boarding you provided.

Mobile Generation

Staff 1-98 Please provide details regarding the lease or procurement of each mobile generation facility in the TDU's control, including:

- a. Details regarding the competitive bidding process used or the justification for not using a competitive bidding process;
- b. The size of each mobile generation facility in megawatts (MW);
- c. The initial lease or procurement date of each facility;
- d. The lease term, in months, of each mobile generation facility;
- e. The expiration date of each facility's lease;
- f. The to-date costs associated with each mobile generation facility, including operating, leasing costs, or other capital expense;
- g. The expected costs associated with each lease, including operation and leasing costs; and
- h. The expected return on investment associated with each lease or procurement.

Staff 1-99 Please provide details regarding mobile generation or temporary emergency electric energy facilities (TEEEF):

- a. The control number of the TDU's most recently approved mobile generation or TEEEF cost recovery;
- b. Details regarding whether the mobile generation or TEEEF cost recovery was processed as part of a larger Distribution Cost Recovery Factor proceeding or in a separate contested case;

- c. The revenue requirement associated with the TDU's mobile generation or TEEEF expenses, broken out by rate class; and
- d. The in-force tariffs associated with the TDU's mobile generation or TEEEF rider, broken out by rate class.

Staff 1-100 Provide the following information concerning your customer base:

- a. Total number of customers served by rate class;
- b. Average demand by rate class;
- c. Peak demand by rate class; and
- d. Net peak demand by rate class.

Staff 1-101 Please provide information on the average customer density by circuit mile for the feeders in the Impacted Area.

Staff 1-102 Please provide an explanation of any alternatives to mobile generation facilities considered by the TDU before entering a lease for or procuring mobile generation facilities.

Staff 1-103 Please describe the specific use cases contemplated by the TDU before executing a contract for the lease or procurement of mobile generation facilities.

Staff 1-104 Please provide the following information concerning mobile generation facilities in your possession:

- a. The total capacity, in MWs, of mobile generation facilities leased or procured before July 8, 2024;
- b. The rationale for leasing or procuring that capacity; and
- c. And how mobility and capacity were prioritized when leasing or procuring mobile generation facilities.

Staff 1-105 Provide the following information for mobile generation facilities already under lease or procured before July 8, 2024:

- a. The size, in MWs, of each deployed mobile generation facility;
- b. The length of time needed to move each deployed mobile generation facility from storage to its designated staging area;
- c. the length of time needed to move each mobile generation facility from staging to its deployment location;
- d. An explanation for how and where the mobile generation facility was used; and
- e. If a mobile generation facility was not used, an explanation as to why.

- Staff 1-106** Please describe all situations in which the TDU's leased or procured mobile generation facilities were deployed before Hurricane Beryl. If applicable, please describe how those previous deployment situations differed from the use cases initially contemplated by the TDU.
- Staff 1-107** Please provide the following information on power restoration plans or procedures regarding critical infrastructure facilities.
- a. Did the TDU develop a list of critical infrastructure facilities within the TDU's service territory?
 - b. Did the TDU develop emergency preparedness plans in collaboration with critical infrastructure facilities in its service territory?
 - c. Did the TDU develop a list of routes for use in reaching critical infrastructure facilities during an emergency or significant power outage?
 - d. Did the TDU identify the specific steps it would take to energize critical infrastructure facilities in its service territory with mobile generation facilities?
 - e. Did the TDU pre-position mobile generation facilities at critical infrastructure facilities in its service territory to respond to significant power outages in a timely manner?
- Staff 1-108** Please provide the following information regarding drills, procedures, and plans to use mobile generation facilities.
- a. Did the TDU develop operating plans or procedures for the deployment of mobile generation? If so, please describe the TDUs strategy for deploying its mobile generation.
 - b. Did the TDU assign specific personnel to manage, either directly or indirectly, the operation and deployment of its mobile generation facilities?
 - c. Did the TDU conduct personnel trainings or preparedness drills for the operation of its mobile generation facilities?
 - d. Please describe any plans or procedures developed in coordination with other TDUs or mutual assistance groups for the operation or deployment of mobile generation.
- Staff 1-109** Please provide the following information regarding each mobile generation facility borrowed during Hurricane Beryl as part of a mutual assistance program or agreement.
- a. How the original request for mobile generation facilities through mutual assistance was made;
 - b. The size, in MW, of each borrowed mobile generation facility;
 - c. The date the mutual assistance program or agreement was entered;

- d. The date the borrowed mobile generation facility was deployed;
- e. The duration, in hours, of the borrowing agreement. Describe whether this duration was for a fixed number of hours or a specific number of operating hours;
- f. The identity of the original owner or lessor of the mobile generation facility subject to the mutual assistance program or agreement; and
- g. Whether obtained mobile generation facilities were used during, or in power restoration efforts following, Hurricane Beryl.
 - i. If the mobile generation facility was not deployed, provide an explanation as to why the mobile generation facility was not deployed; and
 - ii. If the mobile generation facility was deployed, provide an explanation of how it was used.

Staff 1-110 When mobile generation facilities are offered to other TDUs during significant power outages, what information does the loaning TDU require from the borrowing TDU related to the probable operation of the mobile generation?

Staff 1-111 Please describe if any mobile generation facilities in the TDU's control were deployed in the service territories of municipally owned utilities or electric cooperatives during Hurricane Beryl.

Staff 1-112 Please describe how the determination was made regarding when and where to deploy or redeploy each mobile generation facility during, or in response to, Hurricane Beryl.

Staff 1-113 Please describe the number of distribution customers that had power restored by each mobile generation facility leased or procured by the TDU during, or in response to, Hurricane Beryl.

Staff 1-114 Please describe the number of distribution customers that had power restored by each mobile generation facility obtained through mutual assistance during, or in response to, Hurricane Beryl.

Staff 1-115 Please describe the number of transmission customers that had power restored by a mobile generation facility leased or procured by the TDU during, or in response to, Hurricane Beryl.

Staff 1-116 Please describe the number of transmission customers that had power restored by a mobile generation facility obtained through mutual assistance during, or in response to, Hurricane Beryl.

Staff 1-117 If applicable, please note if any fueling problems arose with deployed mobile generation facilities during, or in response to, Hurricane Beryl. If so, please

describe the fueling problems in detail and any action that the TDU took in response.

- Staff 1-118** Please describe all costs incurred by the TDU that were associated with the deployment of mobile generation facilities during, or in response to, Hurricane Beryl.
- Staff 1-119** Please describe any obstacles that limited the deployment of mobile generation facilities during, or in response to, Hurricane Beryl.
- Staff 1-120** Please describe any procedural improvements that the TDU intends to make prior to the next deployment of mobile generation facilities. If available, please reference specific sections of any after action report or lessons learned document the TDU has created.