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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	<u>\$</u>	

BLUEBONNET ELECTRIC COOPERATIVE'S RESPONSE TO COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION TO TARGETED ELECTRIC CO-OPS QUESTION NOS. STAFF 1-1 THROUGH 1-120

TO: John Lajzer, Public Utility Commission of Texas, 1701 N. Congress Ave., Austin, Texas 78711

Bluebonnet Electric Cooperative ("Bluebonnet") files these responses to Commission Staff's First Request for Information to Targeted Electric Co-ops, Question Nos Staff 1-1 through 1-120 ("Staff's First RFIs to Co-ops"). Commission Staff directed that responses to Staff's First RFIs to Co-ops be filed by August 30, 2024, thus these responses are timely filed. Bluebonnet stipulates that its responses may be treated by all parties as if they were filed under oath.

Dated: Aug. 30, 2024, Respectfully Submitted,

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ATTORNEYS FOR UPSHUR ELECTRIC COOPERATIVE CORPORATION

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.

RESPONSE:

- A. Bluebonnet Electric Cooperative (Bluebonnet) has not conducted a major storm response drill in 2024. Per Public Utility Commission of Texas Substantive Rule 25.53, Bluebonnet is not in a hurricane zone as defined by the Texas Department of Emergency Management. Bluebonnet's next drill is scheduled for spring 2025. Additionally, the EOP was activated in 2024, eliminating the need to conduct a drill under 16 TAC 25.53(f).
- **B.** Not applicable
- C. Not applicable
- **D.** Not applicable
- E. Not applicable
- F. Not applicable
- **G.** Not applicable
- **H.** Not applicable

SPONSOR:

Ray Bitzkie

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.

RESPONSE:

No

Sponsor: Ray Bitzkie 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?

RESPONSE:

Yes. Bluebonnet bases its power restoration exercises on experience derived from previous outage restoration events. Conditions and scenarios vary.

- A. Varies, depending on scenario
- B. Not applicable

SPONSOR:

Ray Bitzkie

<u>STAFF 1-4</u> Please identify any electric, water, sewer, or telecommunication utilities that invited you to participate in their 2024 hurricane or major storm drill.

RESPONSE:

None

SPONSOR:

Ray Bitzkie

<u>STAFF 1-5</u> Please identify all resources, internal or external, used for weather or storm tracking purposes before July 8, 2024.

RESPONSE:

See section 5.0 of Bluebonnet's EOP on file with the Public Utility Commission of Texas.

SPONSOR:

STAFF 1-6 How many days before projected landfall do you start tracking storms that could affect or disrupt operations within your service area?

RESPONSE:

As soon as storm systems are identified.

SPONSOR:

<u>STAFF 1-7</u> How many days before projected landfall did you start tracking the storm eventually named Hurricane Beryl?

RESPONSE:

Staff began tracking the system that would become Hurricane Beryl approximately seven days before it made landfall.

SPONSOR:

STAFF 1-8 Do you check the functionality or performance of your outage tracker as part of your regular storm preparation procedures?

RESPONSE:

Yes. Bluebonnet uses its outage management system and outage map 24/7/365. The functionality and performance are continuously monitored. Additionally, Bluebonnet performs system health checks on every major operating system during storm preparation. Any issues with Bluebonnet's public-facing outage map are immediately addressed by its IT team and resolved as quickly as possible.

SPONSOR:

Daniel Fowler

STAFF 1-9 How far in advance of landfall did you initiate requests for mutual assistance?

RESPONSE:

Did not initiate mutual assistance agreements. However, Bluebonnet began contacting select peer utilities and contractors five days prior to landfall to request the release of crews to assist with power restoration within Bluebonnet's service area. Bluebonnet used internal crews and external on- and off-system contract crews for power restoration during Hurricane Beryl.

SPONSOR:

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.

RESPONSE:

During major storm events, including the May derecho and Hurricane Beryl, outages are prioritized and resources are allocated in order to restore power to electric distribution feeders that serve the largest number of meters to get the most members restored as quickly and safely as possible, and electric distribution feeders with critical infrastructure and public-safety and critical-care facilities and members on its critical load registry. Outage duration is another factor considered when allocating resources.

SPONSOR:

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.

RESPONSE:

See Section 2.3 of Bluebonnet's EOP on file with the Public Utility Commission of Texas

SPONSOR:

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.

RESPONSE:

Yes, Bluebonnet has four operating levels.

- Level 1: Normal operations
- Level 2: Pending/potential event operations and power restoration
- Level 3: Major event operations
- Level 4: Catastrophic event operations

For more detail, see Section 4 of Bluebonnet's EOP on file with the Public Utility Commission of Texas

SPONSOR:

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.

RESPONSE:

For more detail, see Section 4 of Bluebonnet's EOP on file with the Public Utility Commission of Texas.

SPONSOR:

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.

RESPONSE:

May 2024 Derecho: Bluebonnet continuously monitors weather forecasts and conditions. Based on weather forecasts, Bluebonnet moved to Level 2 operations at 9:44 a.m., and Level 3 operations at 5:49 p.m., Thursday, May 16. See answer below for more detail. Relevant sections of Bluebonnet's EOP: 3, 4 and 5.

Hurricane Beryl: Began tracking/monitoring tropical system that would become Hurricane Beryl approximately seven days prior to landfall. Moved to Level 2 operations at 1:55 p.m., Sunday, July 7. See answer below for more detail. Relevant sections of Bluebonnet's EOP: 3, 4 and 5.

SPONSOR:

STAFF 1-15 Please provide a timeline of your Company's response to the May 2024 Derecho and Hurricane Beryl.

RESPONSE:

Thursday, May 16 through Sunday, May 19, 2024, derecho

- Moved to Level 2 operations at 9:44 a.m., Thursday, May 16
- First outage occurred approximately 3 p.m.
- Initiated twice-daily operations meetings Thursday, May 16 through Saturday, May 18
- Moved to Level 3 operations at 5:49 a.m.
- Mobilized contractor crews Thursday, May 16
- Final outage restored approximately 4 a.m., Saturday, May 18
- Returned to Level 2 operations at 8:03 a.m.
- Returned to Level 1 operations at 7:24 a.m., Sunday, May 19

Hurricane Beryl:

- Began tracking tropical system that would become Hurricane Beryl approximately seven days before landfall
- Initiated twice-daily operations meetings Friday, July 5 through Tuesday, July 9
- · Mobilized contractor crews Saturday, July 6
- Moved to Level 2 operations at 1:55 p.m., Sunday, July 7
- First outage occurred Monday, July 8
- Final outage restored Tuesday, July 9
- Returned to Level 1 operations at 8:33 a.m., Tuesday, July 9

SPONSOR:

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.

RESPONSE:

May 2024 Derecho

• Total number of outages: 437

• Total number of members affected: 21,122

Member hours: 133,069Minimum hours: 0:45Maximum hours: 33:39

• 6.3-hour average restoration time

Hurricane Beryl

• Total number of outages: 183

• Total number of members affected: 14,918

Member hours: 52,514Minimum hours: 0:28Maximum hours: 15:18

• 3.5-hour average restoration time

SPONSOR:

STAFF 1-17 Provide the following information concerning your service territory:

- a. 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.
- b. 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.
- c. Identify or describe the factors that contributed to the areas identified in response to subparts (a) and (b) as being particularly vulnerable.

RESPONSE:

- A. May 2024 Derecho outages were system wide. The largest concentration of outages was in Washington County with 192 outages affecting 8,540 members.
- B. Hurricane Beryl outages were concentrated on the eastern portion of Bluebonnet's service area. The largest concentration of outages was in Washington County with 142 outages affecting 12,705 members.
- C. Outages during both the May Derecho event and Hurricane Beryl were concentrated in Washington County due to the high wind speeds experienced during both storms, the duration of high winds during Hurricane Beryl, and because the county's population is more dense than in other counties on the eastern portion of our service area.

SPONSOR:

STAFF 1-18 Describe any challenges in restoring operations your Company encountered due to the May 2024 Derecho or Hurricane Beryl.

RESPONSE:

Power restoration challenges during May Derecho and Hurricane Beryl:

- Tree-related outages, predominantly outside utility easements caused by powerful wind speeds
 - Most time- and labor-consuming outage to restore
 - Specialized crew and equipment needed to remove tree before reconstruction of power lines can begin
 - Specialized crew and equipment needed to reconstruct downed power line
 - Rural location makes accessing area, removing trees and reconstructing power lines with heavy equipment difficult or impossible

SPONSOR:

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.

RESPONSE:

After-action assessments were conducted post May derecho and Hurricane Beryl. No written report was produced.

SPONSOR:

STAFF 1-20 Please provide any additional information and describe any concerns that may be helpful to this investigation.

RESPONSE:

No additional information.

SPONSOR:

Electric Utilities Communication and Coordination

- **STAFF 1-21** Provide the following information concerning the communication strategy and policy in place before July 8, 2024:
 - a. 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?
 - b. 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.
 - c. For transmission and distribution utilities, please describe how your company coordinates communication to end-use customers with retail electric providers.

RESPONSE:

- A. See Section 2.3 of Bluebonnet's EOP on file with the Public Utility Commission of Texas.
- B. During major storm events and power restoration efforts, Bluebonnet's member service centers and call center may operate with extended business hours as necessary. Additionally, a team of member service representatives and communications specialists is responsible for direct communications with members affected by power outages via text messages, phone or social media direct messages.
- C. Not applicable to Bluebonnet. Bluebonnet is a NOIE.

SPONSOR:

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.

RESPONSE:

See Section 2.3 of Bluebonnet's EOP on file with the Public Utility Commission of Texas.

SPONSOR:

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.

RESPONSE:

During both the May Derecho event and Hurricane Beryl, member feedback and comments were overwhelmingly positive, grateful and supportive toward the crews working around the clock in difficult conditions, and for the information we were providing through our communications channels throughout both events.

SPONSOR:

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?

RESPONSE:

Communication and coordination were sufficient during the May derecho and Hurricane Beryl. Bluebonnet's EOP operated very well. No changes are necessary at this time.

SPONSOR:

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?

RESPONSE:

Communication and coordination were sufficient during the May derecho and Hurricane Beryl. Bluebonnet's EOP operated very well. No changes are necessary at this time.

SPONSOR:

- a. How many people work in call centers or help desks?
- b. Of these people, please provide the percentage of these employees that are full-time employees (FTE), contracted labor, or temporary/seasonal workers
- c. What is the target wait time or response time for calls?
- d. What is the target resolution time for calls?
- e. 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.
- f. What is the maximum call volume for the call centers of help desks that were available and in operation during or in the aftermath of Hurricane Beryl?

RESPONSE:

- A. 48 member service representatives
- B. FTE: 75 percent, 36 MSRs; Part-time or temp: 25 percent, 12 MSRs
- C. Less than 30 seconds
- D. No target goal for call duration, as long as it takes to provide outstanding service and resolve issue. Average call duration is 4 minutes 30 seconds.
- E. All full-time Member Service Representatives are trained to navigate our internal outage map, utilize calls manager software for reporting and investigating outages and their causes, and handle unresolved calls. Within Member Services, we also have two teams—the Outage Restoration Team and the Member Communication Team—who collaborate with our Control Center and keep our members informed about outages via text messages and phone. Additionally, we hold monthly Member Service labs to update employees on software changes and policy revisions.
- F. Bluebonnet received 1,243 calls on Monday July 8 (Hurricane Beryl). This includes calls coming in from 5 p.m. until 9 p.m., which were extended hours to assist with outage restoration efforts. We had a total of 44 Member Services employees staffed.

SPONSOR:

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.

RESPONSE:

Call Center statistics for July 8-9, 2024:

- Monday, July 8: 1,134 calls handled, 87% (phones remained open until 9 p.m.), 157 calls handled during peak hour at 3 p.m.
- Tuesday, July 9: 689 calls handled, 97%, 89 calls handled during peak hour at noon

SPONSOR:

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.

RESPONSE:

Bluebonnet followed its procedures outlined in section 2.3 in its EOP on file with the Public Utility Commission of Texas. Direct communication with members was through text messages, phone – proactive and through our call center – and social media messages. Mass communication with members and the public was via social media posts and legacy media.

SPONSOR:

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.

RESPONSE:

Yes, calls are recorded. Retention schedule is seven years.

SPONSOR:

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.

RESPONSE:

Not applicable

SPONSOR:

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.

RESPONSE:

Not applicable

SPONSOR:

STAFF 1-32 Provide the following information concerning the outage tracker in use on July 8, 2024:

- a. The date the outage tracker was rolled out to customers.
- b. The last date the software underpinning the outage tracker was updated.
- c. whether the outage tracker was functioning during the May 2024 Derecho and Hurricane Beryl as intended or provide an explanation as to why not.
- d. Whether the outage tracker was mobile-friendly;
- e. the languages supported by the outage tracker;
- f. Whether the outage tracker captured circuit-specific or meter-specific information or both.
- g. Whether the outage tracker was cloud-based or operated through an onpremise server?
- h. The maximum number of simultaneous users the outage tracker was designed to accommodate.
- i. 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.
- j. The date of the last stress or load test of the outage tracker.

RESPONSE:

- A. 2012
- B. March 27, 2024
- C. Yes.
- D. Yes.
- E. English is native language for outage tracker. All major languages translation available through Google Chrome.
- F. Outage tracker shows specific data without reference to circuit or meter locations. Such information is available on internal outage reports.
- G. On-premise.
- H. No limit.
- 1. Redundant data centers are utilized.
- J. July 30, 2024.

SPONSOR:

Daniel Fowler

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.

RESPONSE:

Not applicable. Bluebonnet does not have territory in the greater Houston area.

SPONSOR:

Daniel Fowler

STAFF 1-34 Provide the daily total and peak number of users accessing your outage tracker in the Impacted Area starting from July 8, 2024 through the date service was restored to 100% of your service territory.

RESPONSE:

Daily: 3,023; Peak: 1,868

SPONSOR: Daniel Fowler 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.

RESPONSE:

Bluebonnet sent automated text messages to members affected by a power outage, and an automated power restored text messages. In between the automated messages, a team of member service representatives sends status updates with, if known, the cause of the outage, description of work being done to restore power and estimated time of restoration.

SPONSOR:

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.

RESPONSE:

Yes. Bluebonnet's outage map was fully operational during the May Derecho and Hurricane Beryl. We were also sending direct text messages to members affected by outages during both events. Such processes have been in place since 2019.

SPONSOR:

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.

RESPONSE:

100 percent of Bluebonnet's meters are on an AMR platform, recording data and communicating via powerline carrier. Meters by county as of July 2024:

Austin: 1,820 Bastrop: 41,931 Burleson: 8,726 Caldwell: 14,159 Colorado: 154 Fayette: 2,577 Gonzales: 76 Guadalupe: 3,233 Hays: 5,667

Hays: 5,667 Lee: 9,159 Milam: 28 Travis: 28,355

Washington: 16,447 Williamson: 989

SPONSOR:

STAFF 1-38 Provide the date and method (e.g., email, phone call, text message) you initially contacted local governments in the Impacted Area.

RESPONSE:

Bluebonnet's Manager of Public Affairs, Manager of Community and Economic Development, Community and Economic Development Representatives and Emergency Operations Management Plan Administrator were in contact with local government officials via text message and/or phone prior to and during the May derecho and Hurricane Beryl as necessary.

SPONSOR:

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.

RESPONSE:

See section 2.3 of Bluebonnet's EOP on file with the Public Utility Commission of Texas

SPONSOR:

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.

RESPONSE:

See response to STAFF 1-41 below.

SPONSOR:

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.

RESPONSE:

During every outage event, Bluebonnet communicates directly with members affected by outages via text messages, phone and social media direct messages. Frequency depends on conditions and information available, but occurs at the onset of an outage, approximately every 90 minutes to two hours during an outage, and when the outage is restored. Bluebonnet's Emergency Operations Management Plan Administrator, Member Service Representatives and Economic and Community Development Representatives may also make direct contact with critical care and critical infrastructure members during major outage events.

SPONSOR:

STAFF 1-42 For ERCOT-located utilities, please describe any communication with interconnected power generation companies regarding their operational status during Hurricane Beryl.

RESPONSE:

Not applicable

SPONSOR:

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.

RESPONSE:

See Bluebonnet's EOP on file with the Public Utility Commission of Texas, specifically Annexes A and E.

SPONSOR:

Ray Bitzkie

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.

RESPONSE:

Bluebonnet prioritizes and assigns resources during power restoration activities with consideration to restoring power to the largest number of meters, with consideration of affected public safety facilities, medical care facilities, critical infrastructure and critical-care members.

See response to STAFF 1-10 and Bluebonnet's EOP on file with the Public Utility Commission of Texas.

SPONSOR:

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.

RESPONSE:

None

SPONSOR:

Eric Kocian and Ray Bitzkie

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.

RESPONSE:

Bluebonnet does not dispatch crews by county; therefore, county-by-county data is not available. The majority of crews were deployed to Washington, Austin, Bastrop and Lee counties, where outages were concentrated. Bluebonnet deployed 52 internal two-person power-restoration crews, 35 four- to five-person contractor power-restoration crews, and 35 three- to four-person vegetation management crews during Hurricane Beryl. Including Bluebonnet's Control Center operators and other staff, Bluebonnet had more than 400 employees and contractors working around the clock July 6-9.

SPONSOR:

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.

RESPONSE:

Monday, July 8:

Austin County: 49.95 percent
Bastrop County: 3.09 percent
Burleson County: 1.94 percent
Colorado County: 84.81 percent

• Lee County: 7.7 percent

• Washington County: 55.79 percent

Tuesday, July 9:

Austin County: 0 percent
Bastrop County: 0.28 percent
Burleson County: 0.02 percent
Colorado County: 0 percent

• Lee County: 0.03 percent

• Washington County: 0.78 percent

SPONSOR:

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.

RESPONSE:

Calls received in Bluebonnet's call center before and during Hurricane Beryl were answered by Member Service Representatives who provided outstanding service to members. The only change we made during Hurricane Beryl was to leave the call center operating until 9 p.m. Monday, July 8. See answer 1-27 for call-handling statistics for July 8 and 9.

SPONSOR:

Rachel Ellis

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.

RESPONSE:

No coordination was necessary during Hurricane Beryl, other than to provide information to county emergency coordinators in impacted area when requested.

SPONSOR:

Ray Bitzkie and Will Holford

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.

RESPONSE:

High wind speeds hindered power restoration crews' ability to operate certain equipment and climb power poles, resulting in delays to restore power to some isolated outages.

SPONSOR:

<u>STAFF 1-51</u> 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.

RESPONSE:

Bluebonnet's EOP, operations processes and procedures were adequate to appropriately respond to major storm event. No changes necessary.

SPONSOR:

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.

RESPONSE:

Bluebonnet has used aspects of the National Incident Management System in its major event response plan since approximately 2009. Select employees have been National Incident Management System certified since 2018.

SPONSOR:

Ray Bitzkie

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.

RESPONSE:

Yes. Select employees are certified in the National Incident Command System.

SPONSOR:

Ray Bitzkie

Distribution Infrastructure

- <u>STAFF 1-54</u> Please explain your process for evaluating and replacing distribution poles. Please include an explanation for the following in your response:
 - a. How frequently this evaluation is conducted;
 - b. What criteria you utilize for this evaluation; and
 - c. When you decide to replace the distribution pole.

RESPONSE:

- A. Bluebonnet is on a 10-year cycle for pole inspections.
- B. Visual, sound and bore testing, and excavated treatments
- C. Restorable poles are trussed within the calendar year; non-restorable poles are replaced within the calendar year. Priority poles are addressed immediately.

SPONSOR:

<u>STAFF 1-55</u> Please provide your minimum required right-of-way (ROW) width for both 3-phase and single-phase distribution lines.

RESPONSE:

Preferred clearance for rights-of-way is 15 feet of centerline for all electric distribution lines.

SPONSOR:

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:

- a. The quantity and percentage of each installed pole type (e.g., wood, composite, steel, concrete, other) on the feeder before Hurricane Beryl;
- b. The quantity and percentage of pole failures, by pole type, due to Hurricane Beryl;
- c. 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.

RESPONSE:

See Exhibit BLUEBONNET-STAFF 1-56.

SPONSOR:

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.

RESPONSE:

Not applicable

SPONSOR:

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.

RESPONSE:

10% of pole height plus two feet; In areas with poor soil conditions, 10% of pole height plus seven feet; double circuits 10% pole height plus seven feet. No, the standard has not changed.

SPONSOR:

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.

RESPONSE:

Single phase minimum: class six 35-foot pole; average: class five 40-foot pole

Three phase minimum: class six 45-foot pole; average: class four 45-foot pole

SPONSOR:

<u>STAFF 1-60</u> Please explain the NESC construction strength and overload factors your distribution lines were built to in the past.

RESPONSE:

Bluebonnet distribution lines are constructed to NESC grades B and C, and respective strength and overload factors.

SPONSOR:

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.

RESPONSE:

Not applicable

SPONSOR:

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.

RESPONSE:

- A. Bluebonnet distribution lines are constructed to NESC grades B and C, and respective strength and overload factors. NESC standards may be exceeded depending on location and conditions.
- B. Wood, steel and concrete
- C. 10- to 15-feet from center of distribution line
- D. Lines were built to NESC standards at the time of construction or upgrade
- E. Yes

SPONSOR:

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.

RESPONSE:

Pole Type Counts:

Concrete: 91 Fiberglass: 1 Steel: 19,697 Wood: 268,202

NESC Light Loading District (60mph)

SPONSOR:

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.

RESPONSE:

Wood: 23

NESC light loading district (60 mph)

Cause: wind and trees (predominately outside of right of way; see STAFF 1-18)

SPONSOR:

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.

RESPONSE:

Wood: 10

NESC light loading district (60 mph)

Cause: wind and trees (predominately outside of right of way; see STAFF 1-18)

SPONSOR:

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.

RESPONSE:

Data	D-I-	Carrata	Faada.	D=1= #	Data Insurated
Date	Pole	County	Feeder	Pole #	Date Inspected
5/16/2024	1	Bastrop	PG10	565867	2020
5/16/2024	1	Lee	PG10	566398	2020
5/17/2024	1	Travis	MN20	305133	2009
5/17/2024	1	Bastrop	BU50	292583	2011
5/17/2024	1	Washington	GB40	795941	2018
5/17/2024	1	Bastrop	BA110	387815	2019
5/17/2024	2	Washington	ZK40	760358,760359	2019
5/17/2024	1	Washington	ZK70	765229	2019
5/17/2024	1	Washington	GB50	800215	2020
5/17/2024	1	Bastrop	PG10	633609	2020
5/17/2024	1	Bastrop	PG10	566700	2020
5/17/2024	1	Bastrop	PG50	620065	2020
5/17/2024	1	Washington	CH30	780184	2021
5/17/2024	1	Washington	CH50	786602	2021
5/20/2024	1	Fayette	ZK30	755672	2019
5/20/2024	1	Washington	GB50	800351	2020
					•
5/20/2024	2	Austin	WE40	890067,890152	2020
5/20/2024	1	Austin	WE40	891127	2020
5/20/2024	1	Austin	WE40	891591	2020
5/20/2024	1	Washington	CH30	921819	2021
5/20/2024	1	Washington	GH100	821046	2023
7/8/2024	1	Washington	GB40	795405	2018
7/8/2024	1	Washington	SH80	880364	2019
7/8/2024	1	Washington	GB100	815606	2020
7/8/2024	1	Washington	CH10	136104	2021
7/8/2024	1	Washington	SH50	871918	2021
7/8/2024	1	Lee	LX40	561030	2022
7/8/2024	1	Austin	PS60	860298	2022
7/8/2024	1	Washington	GH100	821392	2023
7/9/2024	1	Washington	SH50	871938	2021
7/11/2024	1	Washington	GB100	815276	2020

SPONSOR: Eric Kocian

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?

RESPONSE:

No opinion.

SPONSOR:

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?

RESPONSE:

Bluebonnet utilizes vegetation management and pole inspection best management practices annually to ensure transmission structures are protected and structurally sound. In addition, in 2014, Bluebonnet began an initiative to harden transmission structures by installing structures capable of sustaining higher wind loading.

SPONSOR:

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.

RESPONSE:

714 total structures (one-, two- and three-pole structures)

Wood: 280 Steel: 732 Concrete: 248 Lattice: 13

Transmission structures are designed for heavy loading, 100 mph extreme wind

SPONSOR:

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.

RESPONSE:

None

SPONSOR:

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.

RESPONSE:

None

SPONSOR:

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.

RESPONSE:

Not applicable

SPONSOR:

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.

RESPONSE:

- A. Six internal full-time staff. Independent contractors vary depending on workload, typically 75 to 135 FTEs
- B. Same as above
- C. Based on ability to adequately manage and address workload.
- D. Not applicable
- E. Yes, both

SPONSOR:

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.

RESPONSE:

15 feet independent of distribution voltage; Transmission easement widths are 60 to 120 feet, depending on easement.

SPONSOR:

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?

RESPONSE:

Yes.

SPONSOR:

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.

RESPONSE:

	Event	Veg
Feeder	Affected	Year
BU50	Derecho	2023
CE20	Derecho	2024
PG50	Derecho	2024
PG40	Derecho	2024
PG10	Derecho	2024
GD90	Derecho	2024
GB30	Derecho	2024
ZK70	Derecho	2022
WE50	Derecho	2023
CH10	Beryl	2021
PS60	Beryl	2024
LW110	Beryl	2024
CH30	Beryl	2024
ZK40	Beryl	2024
CH50	Beryl	2022
GB40	Beryl	2020
GB30	Beryl	2024
WE40	Beryl	2023
SW50	Beryl	2024

SPONSOR:

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?

RESPONSE:

Not applicable, per Public Utility Commission of Texas Rule 25.53, Bluebonnet is not in hurricane zone as defined by Texas Department of Emergency Management.

SPONSOR:

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.

RESPONSE:

						e. NERC
a. Name of Circuit	b. Date	Time	Duration	c. Voltage	d. Cause	cat
BU50	16-May	16:14	2:07	24.9 kV	Tree	Fall In
CE20	16-May	16:23	*6:00	24.9 kV	Tree	Blow In
PG50	16-May	16:24	1:48	12.5 kV	Tree	Fall In
PG40	16-May	16:26	1:45	12.5 kV	Tree	Blow In
PG10	16-May	16:31	*24:42	12.5 kV	Tree	Fall In
GD90	16-May	16:55	1:34	12.5 kV	Tree	Blow In
GB30	16-May	17:14	2:26	24.9 kV	Tree	Fall In
ZK70	16-May	17:22	4:24	24.9 kV	Tree	Fall In
WE50	16-May	17:51	6:52	24.9 kV	Tree	Blow In
CH10	8-Jul	7:50	*4:03	24.9 kV	Tree	Blow In
PS60	8-Jul	8:42	*10:04	12.5 kV	Tree	Blow In
LW110	8-Jul	8:59	0:44	24.9 kV	Tree	Fall In
CH30	8-Jul	9:03	*3:35	24.9 kV	Tree	Fall In
ZK40	8-Jul	9:35	1:19	24.9 kV	Tree	Blow In
CH50	8-Jul	9:37	5:00	24.9 kV	Tree	Blow In
GB40	8-Jul	9:56	*3:49	24.9 kV	Tree	Fall In
GB30	8-Jul	10:06	1:08	24.9 kV	Tree	Fall In
WE40	8-Jul	10:33	2:02	24.9 kV	Tree	Fall In
SW50	8-Jul	12:50	*7:09	12.5 kV	Tree	Fall In

^{*}Longest duration of outage, some meters restored with shorter duration

SPONSOR:

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.

RESPONSE:

See Exhibit BLUEBONNET-STAFF 1-79 (Confidential).

SPONSOR:

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

RESPONSE:

May derecho: 62 percent

Hurricane Beryl: 91 percent

SPONSOR:

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?

RESPONSE:

Bluebonnet's current vegetation management and maintenance plans are operating as designed. No changes necessary.

SPONSOR:

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

RESPONSE:

Dec. 18, 2023

SPONSOR:

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.

RESPONSE:

77% of vegetation-related outages during Derecho event and Hurricane Beryl were caused by trees outside of the right-of-way. Derecho event was 79% related to trees outside right-of-way. Hurricane Beryl was 74% related to trees outside right-of-way.

SPONSOR:

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.

RESPONSE:

We work to contact property owners to remove trees outside of our easements that have been identified as potential hazards. If trees pose immediate threat to distribution facilities we remove the trees.

SPONSOR:

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.

RESPONSE:

See response to STAFF 1-73

SPONSOR:

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; and
 - c. Please provide a list of members or participants for each mutual assistance program you are a member or participant in.

RESPONSE:

- A. Texas Electric Cooperative's mutual assistance agreement
- B. See Exhibit BLUEBONNET-STAFF 1-86 (Confidential).
- C. Statewide electric cooperatives

SPONSOR:

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.

RESPONSE:

Not applicable.

SPONSOR:

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.

RESPONSE:

Not applicable.

SPONSOR:

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.

RESPONSE:

Not applicable.

SPONSOR:

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?

RESPONSE:

Not applicable.

SPONSOR:

<u>STAFF 1-91</u> Provide the following information concerning mutual assistance received in response to either the May 2024 Derecho or Hurricane Beryl:

- a. Identify all mutual assistance programs from which you requested assistance:
- b. Describe the specific assistance, including but not limited to the number of damage assessors, vegetation management crews, linesmen, generators, and materials, requested from the mutual assistance program(s); and
- c. Provide all documentation of requests made to mutual assistance programs and their responses to your requests.
- d. 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.

RESPONSE:

Not applicable

SPONSOR:

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?

RESPONSE:

Provision and acceptance of mutual assistance is discretionary.

SPONSOR:

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?

RESPONSE:

Not applicable.

SPONSOR:

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).

RESPONSE:

Not applicable.

SPONSOR:

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.

RESPONSE:

Not applicable.

SPONSOR:

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

RESPONSE:

Bluebonnet staged internal and contractor resources in Giddings, Texas, centrally located in Bluebonnet's service area prior to Hurricane Beryl's landfall and on the perimeter of the expected impact area. No mutual assistance crews or resources were engaged.

SPONSOR:

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.

RESPONSE:

Not applicable

SPONSOR: