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DOCKET NO. 56822

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

**MID-SOUTH ELECTRIC COOPERATIVE'S
RESPONSES TO COMMISSION STAFF'S
FIRST REQUEST FOR INFORMATION TO TARGETED ELECTRIC CO-OPS
QUESTION NOS. STAFF 1-1 THROUGH 1-120**

TO: Public Utility Commission of Texas c/o John B. Lajzer, Division Director, P.O. Box 13326,
Austin, Texas 78711-3326

Mid-South Electric Cooperative Association (MidSouth) submits these responses to Commission Staff's First Request for Information (RFI) to Targeted Electric Coops, Question Nos. Staff 1-1 through 1-120 (Staff's First RFIs to Co-ops). Commission Staff requested that responses to Staff's First RFIs to Co-ops be filed by August 30, 2024, thus these responses are timely filed. MidSouth stipulates that all parties may treat these answers as if they were filed under oath. MidSouth reserves the right to object at the time of any hearing to the admissibility of the information produced. Pursuant to Staff's instructions, and the Commission's "Second Order Suspending Rules" in Docket No. 50664, these responses are being filed on the PUC Interchange. However, notice of these responses are not being emailed to any party, as there are no known "parties" to Docket No. 56822 and no known service list or email addresses to which notice should be sent.

Dated: August 30, 2024

Respectfully submitted,

/s/ Kerry Kelton
Kerry Kelton
Chief Executive Officer
Mid-South Electric Cooperative Association
7625 Highway 6
Navasota, Texas 77868
936-825-5100

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. MidSouth conducted an annual Emergency Operations Plan (EOP) roundtable drill on May 14, 2024.
- b. MidSouth's 2024 EOP roundtable drill included general discussion based on past hurricane experiences, such as Ike, Rita, and Harvey. It also included discussions concerning past major storms, including storms that occurred in April 2024. Discussion also included planning for anticipated hurricane and storm response and recovery were discussed.
- c. The EOP roundtable drill conducted in 2024 was discussed in further detail than in previous years and every department in the company was given the opportunity to discuss and update the portion of the confidential EOP they are responsible for. The 2024 drill also included a significant portion of discussion around cyber security. In

addition, to an increased awareness to a potential cyber security attack, a cyber security mock scenario was discussed.

- d. Third party vendors were contacted to confirm readiness for an emergency event, including hurricane, tornado, major storm, or cybersecurity event. These preparations included, without limitation, ensuring and verifying available fuel supplies, material, temporary shelters, mutual aid contracts, and standby agreements with contractors.
- e. Water Utilities that Participated: Crown Ranch Water System (PWS ID No. 1700781), Montgomery Trace Water System (PWS ID No. 1700638), and Stillwater Estates Water System (PWS ID No. 1700677).

Sewer Utilities that Participated: MSEC WWTP No. 1 (EPA ID No. TX0128121) and MSEC WWTP No. 2 (EPA ID No. TX0136191).

Telecommunication Utility that Participated: MSEC Communications, LLC.

Management and staff from the participating utilities discussed how their respective staff would respond to a hurricane, major storm event, or cyber-attack that could cause major power outages. Each utility also discussed how they planned to work to ensure minimal (if any) disruptions to service if a major power outage occurred.

- f. Local government, trade associations, medical and eldercare facilities, community organizations, PGCs, and REPs did not participate in MidSouth's 2024 EOP roundtable drill due to the confidential nature of our business and sensitive information contained in the confidential EOP.
- g. Leadership team at MidSouth evaluates the contracts in place with third party contractors, mandatory participation of each department in the EOP roundtable drill, and addresses areas of opportunity to improve processes identified during this process.
- h. MidSouth continuously evaluates and improves its confidential EOP based off experience and feedback provided throughout the year.

Sponsor: Kerry Kelton

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:

MidSouth's subsidiary water, wastewater, and fiber companies participate in the EOP roundtable drill. MidSouth's subsidiaries are members because they take electric service from the cooperative. No rate payers outside of the cooperative and its subsidiaries participate in annual drills.

Management and staff from the participating utilities discussed how their respective staff would respond to a hurricane, major storm event, or cyber-attack that could cause major power outages. Each utility also discussed how they planned to work to ensure minimal (if any) disruptions to service if a major power outage occurred.

Sponsor: Kerry Kelton

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.

- a. Mid-South's confidential EOP is a living document that has been updated over the years to include storms going back decades.
- b. All previous experiences, regardless of level of storm, are included in the development and execution of the EOP roundtable drill.

Sponsor: Kerry Kelton

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.

RESPONSE:

No electric, water, sewer, or telecommunication utilities invited MidSouth to participate in their 2024 hurricane or major storm drill.

Sponsor: Kerry Kelton

STAFF 1-5

Please identify all resources, internal or external, used for weather or storm tracking purposes before July 8, 2024.

RESPONSE:

MidSouth's System Operations Department monitors regional and local weather on a continuous basis. Forecasts and real-time weather conditions are monitored by staff in the System Operations Department to ensure MidSouth is prepared for any severe weather events. Local weather television stations, National Oceanic and Atmospheric Administration (NOAA) weather data, Alliance for Cooperative Energy Services (ACES), and StormGeo (a private weather forecasting service) are utilized for storm tracking purposes (including before July 8, 2024).

Sponsor: Kerry Kelton

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:

MidSouth tracks all hurricanes as they form. This is typically 8-10 days before they may make landfall and affect MidSouth's service territory. Storms that move into the Gulf of Mexico or that form within the Gulf of Mexico are tracked based on NOAA tropical storm forecasts and modeling (projected storm path, strength, etc.).

Sponsor: Kerry Kelton

STAFF 1-7

How many days before projected landfall did you start tracking the storm eventually named Hurricane Beryl?

RESPONSE:

MidSouth began tracking Hurricane Beryl approximately 8 days prior to landfall when NOAA's forecasts indicated the storm (then a tropical storm) may move into the Gulf of Mexico.

Sponsor: Kerry Kelton

STAFF 1-8

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

RESPONSE:

MidSouth's IT Department regularly checks the functionality and performance of its outage management systems.

Sponsor: Kerry Kelton

STAFF 1-9

How far in advance of landfall did you initiate requests for mutual assistance?

RESPONSE:

All mutual assistance contracts were in place at the beginning of 2024 and are renewed annually. External contractors were placed on standby 4 days in advance of landfall.

Sponsor: Kerry Kelton

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:

Based off data from damage assessment, restoration efforts are prioritized by largest amount of customers affected and shortest amount of restoration time.

Crews and resources were assigned to the largest feeder outages first, then critical loads, and finally, to remaining outages with the largest meter counts still out.

Sponsor: Kerry Kelton

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:

MidSouth's procedures during an emergency with regards to handling complaints and for communications with parties as described in Staff 1-11 are as follows.

Complaints: MidSouth Member Service Representatives (MSRs) and contracted live representatives are available 24 hours a day for the entire duration of the storm. Frontline representatives are the first response to a verbal complaint. If the representative is unable to resolve the concern, the member service manager and Vice President of Member Services are readily available to field calls and address all escalated complaints. Any PUC complaints are addressed promptly with direct correspondence to the member as well as written response to the PUC. Our member service relations manager serves as point of contact for critical load members of which they have open communication with throughout the year.

The Public and Members: To communicate with its members and the public, MidSouth's goal is to post to social media every 2 hours. MidSouth also communicates through text message to its members that have opted in to such form of communication. This allows MidSouth to keep people informed and updated as to restoration efforts and safety.

The Media: MidSouth's Communications Department posts press releases at least once per day on our website and emails those releases to all customers.

The Commission: MidSouth follows the guidelines found in 16 Texas Administrative Code (TAC) § 25.52. *Reliability and Continuity of Service*. MidSouth developed and implemented an Outage Reporting Plan in January of 2021 after the implementation of 16 TAC § 25.52. The plan is also reviewed annually during review of MidSouth's confidential EOP. Any changes needed to the plan are implemented at that time.

MidSouth's Outage Reporting Plan was developed to follow 16 TAC § 25.52 as noted:

Reporting must occur when a **significant interruption** occurs. A significant interruption is defined by 16 TAC § 25.52(c)(5) as:

An interruption of **any** classification lasting **one hour or more** and affecting:

- 1) The entire system;
- 2) A major division of the system;

- 3) A community;
- 4) A critical load;¹ or,
- 5) Service to interruptible customers.

Significant interruptions also include:

- 6) A scheduled interruption lasting more than four hours that affects customers that are not notified in advance;
- 7) A loss of service to 20% or more of the system's customers; and,
- 8) Interruptions adversely affecting a community such as interruptions of governmental agencies, military bases, universities and schools, major retail centers, and major employers.

Reports are to be submitted via the PUC's online portal (<https://puc.texas.gov/portal/Login.aspx>) or via paper if access to the portal is not available or if the person submitting the reports is not an authorized user. Paper reports may be found at:

<http://www.puc.texas.gov/industry/Electric/forms/outage/OutRptForm.pdf>

Submittals are to be emailed to the PUC via email to: outages@puc.texas.gov

Initial Outage Notice §25.52(e)(1)

To be submitted "as reasonably possible after it [*the utility*] has determined that a significant interruption has occurred."

Must Include:

- 1) The general location of the significant interruption;
- 2) The approximate number of customers affected;
- 3) The cause if known;
- 4) The time of the event;
- 5) The estimated time of full restoration;
- 6) The name and telephone number of the utility contact person;
- 7) And, shall indicate whether local authorities and media are aware of the event.

If the duration of the significant interruption is **greater than 24 hours**, the utility **shall update this information daily** and file a summary report.

Summary Report (if the significant interruption is greater than 24 hours) §25.52(e)(2)

To be submitted within **5 working days** of outage restoration.

Must Include:

- 1) The date and time of the significant interruption;
- 2) The date and time of full restoration;
- 3) The cause of the interruption;
- 4) The location, substation and feeder identifiers of all affected facilities;
- 5) The total number of customers affected;

¹ **Critical Loads** - Loads for which electric service is considered crucial for the protection or maintenance of public safety; including but not limited to hospitals, police stations, fire stations, critical water and wastewater facilities, and customers with special in-house life sustaining equipment (16 TAC § 25.52(c)(1)).

- 6) The dates, times, and numbers of customers affected by partial or step restoration;
- 7) The total number of customer-minutes of the significant interruption.

Local Governmental Entities and Officials: Initial contact was made with elected officials and local government entities by Sunday, June 7. The message was that Beryl was going to directly impact MidSouth's service area and that MidSouth had already initiated our emergency operations plan. Updates were provided by email in the morning and evening during the recovery effort. Follow up meetings are in process to recap the event.

Emergency Operations Centers: Texas Electric Cooperatives (TEC) had a presence in the state emergency operations center to represent all electric cooperatives and reported updates directly from MidSouth.

MidSouth updated local emergency operations centers twice a day.

The Reliability Coordinator: MidSouth is a distribution only electric provider and did not have direct communication with ERCOT or MISO.

Sponsor: Kerry Kelton

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:

MidSouth's System Operator utilizes weather forecasts to determine emergency levels and the need to activate and deploy resources and personnel. The System Operator communicates with the on-call Supervisor to make the determination. The emergency levels as described in MidSouth's confidential EOP (page 3, "Emergency Levels") are used by the System Operator and MidSouth management to appropriately prepare for and respond to emergency conditions.

The EOP is filed confidentially with the PUCT.

Sponsor: Kerry Kelton

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:

MidSouth renews its external contractor agreements on an annual basis and already has rates set for emergency situations. Mutual assistance is based on an on-going agreement among cooperatives and would require MidSouth to opt out to no longer participate. Accommodations for mutual assistance crews were in place prior to Hurricane Beryl. Food was provided to all personnel responding to Hurricane Beryl on behalf of MidSouth.

Sponsor: Kerry Kelton

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:

As an electric utility, MidSouth is in a constant state of preparedness.

Please see:

- MidSouth confidential EOP, page 3, Emergency Levels: *Pre-Storm Watch*
- MidSouth confidential EOP, page 23, Emergency Response Staffing

Sponsor: Kerry Kelton

STAFF 1-15

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

RESPONSE:

May 2024 Derecho

MidSouth was impacted by the May 2024 Derecho at approximately 7:30 am on May 16, 2024. MidSouth crews first assessed damage to the system and planned a response based on those assessments. Electric line crews worked through the night of May 16th into the 17th and throughout the day on May 17th. Significant restoration was achieved by 10:00 pm on May 17th.

Hurricane Beryl

Hurricane Beryl entered MidSouth's service territory at approximately 6:30 am on July 8, 2024. The first recorded outage occurred at 6:58 am. The initial outage from Hurricane Beryl was 29,540 meters. Once the storm had passed through MidSouth's service territory and it was safe to do so, crews were deployed to begin damage assessments.

33% of meters were restored by the end of day 1;
75% of meters were restored by the end of day 2;
96% of meters were restored by the end of day 3;
99.6% of meters were restored by the end of day 4; and,
All meters were restored by 12:00 pm on day 5 (July 12th).

Sponsor: Kerry Kelton

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.

RESPONSE:

May 2024 Derecho

TOTAL CUST AFFECTED	5,557	
MIN_INTERRUPTION		9
MAX_INTERRUPTION		5,347
AVG_INTERRUPTION		492
WEIGHTED_AVG		518

Hurricane Beryl

TOTAL CUST AFFECTED	29,540	
MIN_INTERRUPTION		5
MAX_INTERRUPTION		6,018
AVG_INTERRUPTION		1,723
WEIGHTED_AVG		1,745

Sponsor: Kerry Kelton

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.

Outage Record ID	Duration in Minutes	Meters Affected	County	ZIP	City
2024-05-17-1633	60	3	Montgomery	77316	
2024-05-17-1631	109	1	Montgomery	77316	
2024-05-17-1623	257	8	Walker	77320	
2024-05-17-1622	189	4	Grimes	77830	
2024-05-17-1621	293	1	Walker	77340	
2024-05-17-1616	266	1	Montgomery	77356	
2024-05-17-1615	151	1	Grimes	77861	
2024-05-17-1614	435	1	Montgomery	77316	
2024-05-17-1613	140	2	Walker	77320	
2024-05-17-1612	363	2	Walker	77320	
2024-05-17-1611	1053	1	Montgomery	77354	
2024-05-17-1610	223	1	Grimes	77830	
2024-05-17-1609	381	1	Walker	77320	
2024-05-17-1607	370	7	Montgomery	77356	
2024-05-17-1604	65	1	Walker	77340	
2024-05-17-1603	143	1	Montgomery	77356	
2024-05-17-1602	99	4	Grimes	77830	
2024-05-17-1599	846	1	Montgomery	77873	
2024-05-17-1598	495	7	Montgomery	77316	
2024-05-17-1597	119	2	Walker	77340	
2024-05-17-1596	185	1	Grimes	77830	
2024-05-17-1594	491	2	Montgomery	77356	
2024-05-17-1593	482	1	Grimes	77356	

2024-05-17-1591	420	3	Montgomery	77316	
2024-05-17-1590	196	7	Montgomery	77316	
2024-05-17-1589	763	5	Walker	77340	
2024-05-17-1588	1622	1	Walker	77340	
2024-05-17-1585	823	1	Walker	77320	
2024-05-17-1583	564	1	Montgomery	77316	
2024-05-17-1581	726	6	Walker	77320	
2024-05-17-1580	204	3	Walker	77340	
2024-05-17-1578	589	2	Montgomery	77356	
2024-05-17-1576	971	13	Walker	77340	
2024-05-17-1574	1008	8	Montgomery	77316	
2024-05-17-1572	455	5	Grimes	77868	
2024-05-17-1571	88	1	Grimes	77868	
2024-05-17-1570	193	30	Montgomery	77873	
2024-05-16-1567	60	2	Grimes	77831	
2024-05-16-1528	434	20	Walker	77320	
2024-05-16-1526	1127	33	Montgomery	77873	
2024-05-16-1523	79	1	Grimes	77831	
2024-05-16-1522	79	1	Grimes	77831	
2024-05-16-1516	227	52	Walker	77320	
2024-05-16-1503	121	1	Grimes	77831	
2024-05-16-1502	22	66	Walker	77320	
2024-05-16-1498	477	9	Waller	77363	
2024-05-16-1494	154	70	Montgomery	77873	
2024-05-16-1493	1172	61	Grimes	77363	Todd Mission
2024-05-16-1489	24	66	Grimes	77873	
2024-05-16-1488	246	63	Grimes	77868	
2024-05-16-1487	464	3	Grimes	77363	Plantersville
2024-05-16-1484	558	3	Montgomery	77304	
2024-05-16-1479	349	2	Grimes	77868	
2024-05-16-1473	624	25	Montgomery	77304	
2024-05-16-1470	1340	2	Montgomery	77354	
2024-05-16-1452	377	7	Montgomery	77316	
2024-05-16-1446	329	1	Grimes	77830	
2024-05-16-1437	887	1	Walker	77340	
2024-05-16-1435	149	2	Grimes	77830	
2024-05-16-1431	252	421	Montgomery	77316	Conroe
2024-05-16-1414	326	1	Grimes	77831	
2024-05-16-1395	779	1	Walker	77320	
2024-05-16-1394	134	403	Montgomery	77356	

2024-05-16-1388	430	24	Grimes	77868	
2024-05-16-1380	331	36	Grimes	77831	
2024-05-16-1377	675	9	Grimes	77363	Plantersville
2024-05-16-1360	309	1418	Montgomery	77304	
2024-05-16-1358	1319	3	Montgomery	77316	Conroe
2024-05-16-1357	521	2	Grimes	77363	
2024-05-16-1355	682	13	Walker	77340	
2024-05-16-1349	314	166	Montgomery	77316	
2024-05-16-1348	609	9	Montgomery	77316	
2024-05-16-1347	542	13	Montgomery	77356	
2024-05-16-1346	425	6	Montgomery	77316	
2024-05-16-1345	162	48	Grimes	77861	
2024-05-16-1344	439	5	Grimes	77868	
2024-05-16-1343	1137	3	Madison	77872	
2024-05-16-1342	1297	3	Montgomery	77356	
2024-05-16-1341	512	49	Montgomery	77316	Conroe
2024-05-16-1340	1522	25	Walker	77320	
2024-05-16-1338	651	6	Montgomery	77356	
2024-05-16-1334	533	30	Montgomery	77316	
2024-05-16-1332	599	11	Montgomery	77316	
2024-05-16-1324	381	100	Montgomery	77316	
2024-05-16-1322	1668	47	Walker	77358	
2024-05-16-1320	332	16	Grimes	77363	
2024-05-16-1316	1205	10	Montgomery	77356	
2024-05-16-1314	601	73	Montgomery	77316	
2024-05-16-1312	1348	2	Montgomery	77356	
2024-05-16-1311	1669	412	Walker	77340	
2024-05-16-1310	604	4	Walker	77340	
2024-05-16-1309	562	22	Montgomery	77356	
2024-05-16-1303	437	53	Montgomery	77316	
2024-05-16-1302	528	2	Walker	77831	
2024-05-16-1290	237	1	Grimes	77861	
2024-05-16-1289	954	15	Grimes	77831	
2024-05-16-1286	283	34	Walker	77320	
2024-05-16-1282	435	18	Montgomery	77356	
2024-05-16-1279	558	67	Montgomery	77356	
2024-05-16-1278	1054	4	Grimes	77830	
2024-05-16-1277	150	85	Montgomery	77830	
2024-05-16-1269	1000	153	Montgomery	77873	
2024-05-16-1265	311	27	Grimes	77830	

2024-05-16-1264	233	1	Grimes	77861	
2024-05-16-1260	464	57	Montgomery	77356	
2024-05-16-1253	277	5	Grimes	77873	
2024-05-16-1252	232	17	Montgomery	77356	
2024-05-16-1251	233	23	Walker	77320	
2024-05-16-1250	1397	85	Montgomery	77873	
2024-05-16-1248	219	16	Grimes	77873	
2024-05-16-1244	415	5	Madison	75852	
2024-05-16-1243	737	23	Grimes	77861	
2024-05-16-1241	233	23	Grimes	77830	
2024-05-16-1238	60	16	Grimes	77830	
2024-05-16-1237	220	28	Grimes	77830	
2024-05-16-1235	117	5	Grimes	77861	
2024-05-16-1234	288	620	Walker	77320	
2024-05-16-1227	118	34	Madison	77864	
2024-05-16-1219	221	1	Grimes	77861	
2024-05-16-1218	176	1	Walker	77320	
2024-05-16-1215	60	3	Grimes	77831	
2024-05-16-1214	197	1	Walker	77340	
2024-05-16-1212	429	1	Walker	77320	
2024-05-16-1211	148	1	Grimes	77868	
2024-05-16-1208	66	1	Montgomery	77356	

b.

Outage Record ID	Duration in Minutes	Meters Affected	County	ZIP	City
2024-07-10-1630	5	75	Waller	77363	
2024-07-09-1122	6	56	Grimes	77830	
2024-07-10-1525	6	283	Montgomery	77316	
2024-07-11-1723	10	33	Walker	77340	
2024-07-09-0961	30	114	Walker	77320	
2024-07-10-1418	31	72	Montgomery	77316	
2024-07-11-1816	34	19	Grimes	77868	
2024-07-11-1775	58	2	Grimes	77868	
2024-07-09-1130	61	29	Walker	77320	
2024-07-12-1847	64	1	Montgomery	77304	
2024-07-10-1417	64	40	Montgomery	77316	
2024-07-11-1804	65	1	Montgomery	77304	
2024-07-10-1562	67	36	Montgomery	77316	Conroe
2024-07-09-1128	68	30	Walker	77320	

2024-07-10-1415	71	31	Walker	77831	
2024-07-11-1811	74	1	Montgomery	77316	
2024-07-10-1557	76	32	Montgomery	77316	Conroe
2024-07-09-1231	78	20	Walker	77320	
2024-07-11-1686	78	38	Montgomery	77356	Conroe
2024-07-12-1849	79	1	Grimes	77831	Bedias
2024-07-12-1835	79	1349	Montgomery	77316	
2024-07-11-1765	84	2	Walker	77340	
2024-07-10-1436	86	1	Montgomery	77316	
2024-07-10-1435	86	72	Montgomery	77316	
2024-07-11-1768	87	3	Montgomery	77316	
2024-07-11-1794	90	1	Grimes	77830	
2024-07-11-1769	93	1	Grimes	77363	
2024-07-09-1217	93	17	Walker	77320	
2024-07-10-1584	94	1	Grimes	77831	
2024-07-09-1190	100	37	Montgomery	77354	
2024-07-11-1731	101	1	Montgomery	77316	Conroc
2024-07-10-1459	109	9	Grimes	77830	
2024-07-09-1238	114	34	Walker	77320	
2024-07-09-1196	115	5	Walker	77320	
2024-07-11-1825	118	1	Montgomery	77304	
2024-07-10-1514	124	2	Montgomery	77304	
2024-07-12-1845	126	1	Montgomery	77304	Conroe
2024-07-11-1789	126	2	Montgomery	77316	Conroc
2024-07-11-1759	128	6	Grimes	77868	
2024-07-11-1782	129	1	Montgomery	77316	Conroe
2024-07-10-1419	129	3	Montgomery	77316	
2024-07-08-0603	129	115	Madison	77864	
2024-07-11-1748	134	1	Grimes	77830	
2024-07-11-1739	140	8	Grimes	77861	
2024-07-12-1834	141	1	Grimes	77830	
2024-07-09-1236	142	5	Walker	77320	
2024-07-10-1440	143	3	Montgomery	77304	
2024-07-10-1439	144	3	Montgomery	77304	
2024-07-11-1784	146	1	Grimes	77831	
2024-07-11-1680	148	1	Walker	77831	
2024-07-10-1438	148	3	Montgomery	77304	
2024-07-10-1494	148	244	Montgomery	77316	
2024-07-11-1799	149	1	Montgomery	77316	
2024-07-10-1607	149	2	Montgomery	77316	

2024-07-09-1151	150	27	Grimes	77830	
2024-07-10-1447	151	7	Grimes	77873	
2024-07-11-1682	159	53	Montgomery	77316	
2024-07-11-1717	163	1	Grimes	77868	
2024-07-11-1795	166	9	Montgomery	77316	
2024-07-09-1295	186	31	Walker	77320	
2024-07-10-1429	189	32	Montgomery	77316	
2024-07-11-1791	207	1	Montgomery	77356	
2024-07-11-1761	212	2	Montgomery	77316	
2024-07-10-1536	218	11	Grimes	77868	
2024-07-09-1256	218	53	Montgomery	77316	
2024-07-10-1506	221	28	Grimes	77830	
2024-07-10-1608	224	1	Montgomery	77316	
2024-07-10-1553	224	8	Grimes	77830	
2024-07-10-1412	231	2	Montgomery	77304	
2024-07-10-1524	234	3	Grimes	77831	
2024-07-09-1123	235	154	Walker	77320	
2024-07-09-1223	241	144	Montgomery	77316	
2024-07-11-1744	248	2	Montgomery	77316	
2024-07-10-1527	248	34	Montgomery	77316	
2024-07-10-1518	257	1	Grimes	77830	
2024-07-09-1242	257	8	Montgomery	77316	
2024-07-11-1722	267	1	Grimes	77873	
2024-07-11-1702	268	1	Brazos	77868	
2024-07-10-1512	276	2	Montgomery	77304	
2024-07-10-1450	283	1	Montgomery	77304	
2024-07-11-1733	294	1	Montgomery	77316	Conroe
2024-07-08-0462	296	35	Madison	77864	
2024-07-11-1755	305	77	Walker	77340	
2024-07-12-1833	306	2	Montgomery	77316	
2024-07-11-1734	312	2	Montgomery	77316	
2024-07-11-1705	313	4	Walker	77320	
2024-07-11-1767	325	3	Montgomery	77316	
2024-07-08-0463	331	27	Walker	77320	
2024-07-08-0311	340	306	Brazos	77868	
2024-07-11-1728	341	1	Montgomery	77316	
2024-07-11-1750	346	4	Montgomery	77356	
2024-07-10-1392	349	19	Grimes	77830	
2024-07-10-1507	361	10	Grimes	77830	
2024-07-09-0877	374	434	Walker	77320	Huntsville

2024-07-10-1390	386	7	Walker	77320	
2024-07-10-1403	387	622	Montgomery	77316	
2024-07-10-1457	390	1	Montgomery	77304	
2024-07-11-1766	392	1	Madison	77831	
2024-07-11-1695	394	1	Grimes	77363	
2024-07-11-1752	402	11	Walker	77358	
2024-07-11-1753	402	21	Walker	77358	
2024-07-11-1704	422	11	Grimes	77868	
2024-07-11-1749	445	2	Montgomery	77356	
2024-07-09-0841	457	101	Montgomery	77316	
2024-07-11-1678	464	1	Grimes	77363	Plantersville
2024-07-08-0326	489	51	Montgomery	77316	
2024-07-10-1391	491	3	Walker	77320	
2024-07-11-1669	492	2	Grimes	77873	
2024-07-09-0849	497	562	Montgomery	77316	
2024-07-08-0401	502	1325	Walker	77320	
2024-07-10-1396	513	3	Montgomery	77304	
2024-07-08-0293	521	91	Montgomery	77356	
2024-07-11-1736	522	2	Montgomery	77316	
2024-07-11-1754	534	47	Walker	77358	
2024-07-10-1467	539	35	Montgomery	77316	
2024-07-11-1718	541	3	Montgomery	77356	
2024-07-11-1830	558	1	Montgomery	77316	Conroe
2024-07-09-0842	565	53	Montgomery	77316	
2024-07-08-0352	576	353	Grimes	77831	
2024-07-11-1663	594	4	Montgomery	77316	
2024-07-11-1684	600	1	Grimes	77831	
2024-07-10-1387	615	1	Montgomery	77304	
2024-07-11-1827	624	16	Montgomery	77316	Conroe
2024-07-11-1658	625	1	Montgomery	77316	
2024-07-09-0951	634	41	Walker	77320	
2024-07-10-1416	638	7	Grimes	77830	
2024-07-08-0228	638	1374	Montgomery	77304	
2024-07-10-1596	642	1	Walker	77320	Huntsville
2024-07-10-1432	649	7	Grimes	77868	
2024-07-08-0226	656	1368	Montgomery	77304	
2024-07-10-1372	659	3	Montgomery	77304	
2024-07-09-0950	674	8	Walker	77320	
2024-07-08-0230	674	1268	Walker	77320	
2024-07-10-1437	695	7	Grimes	77830	

2024-07-09-1338	696	53	Walker	77831	
2024-07-11-1700	697	26	Montgomery	77873	
2024-07-11-1653	698	3	Grimes	77356	
2024-07-08-0279	722	61	Montgomery	77304	
2024-07-08-0739	738	17	Grimes	77830	
2024-07-08-0185	739	404	Montgomery	77316	
2024-07-10-1389	742	9	Walker	77831	
2024-07-10-1377	744	1	Montgomery	77304	Conroc
2024-07-08-0254	789	22	Montgomery	77356	
2024-07-09-1336	795	4	Walker	77831	
2024-07-09-0955	797	9	Walker	77320	
2024-07-10-1635	800	20	Montgomery	77316	
2024-07-10-1622	833	2	Montgomery	77316	
2024-07-10-1623	836	2	Montgomery	77316	
2024-07-09-1328	837	137	Grimes	77873	
2024-07-08-0168	844	510	Montgomery	77304	
2024-07-08-0742	872	201	Grimes	77831	
2024-07-10-1609	884	33	Grimes	77873	
2024-07-11-1821	888	1	Montgomery	77316	
2024-07-11-1822	888	2	Montgomery	77316	
2024-07-08-0295	891	101	Montgomery	77316	
2024-07-09-1317	897	2	Montgomery	77316	
2024-07-09-0863	900	7	Montgomery	77316	
2024-07-09-1361	905	4	Montgomery	77316	
2024-07-09-1305	908	4	Walker	77320	
2024-07-09-1307	924	2	Walker	77320	
2024-07-11-1649	942	2	Montgomery	77356	Conroe
2024-07-10-1618	946	2	Montgomery	77316	Conroc
2024-07-09-1356	954	174	Walker	77340	
2024-07-08-0252	957	111	Montgomery	77316	
2024-07-11-1732	959	1	Montgomery	77316	Conroc
2024-07-08-0829	968	408	Montgomery	77316	
2024-07-08-0190	970	602	Montgomery	77316	
2024-07-09-0864	971	72	Montgomery	77316	
2024-07-11-1721	973	1	Montgomery	77316	Conroc
2024-07-08-0831	975	49	Montgomery	77316	
2024-07-09-1306	983	5	Walker	77320	
2024-07-11-1693	988	1	Montgomery	77316	
2024-07-10-1564	994	25	Grimes	77830	
2024-07-11-1652	1014	1	Montgomery	77316	

2024-07-08-0166	1042	724	Montgomery	77316	
2024-07-10-1636	1056	2	Grimes	77363	Todd Mission
2024-07-11-1707	1059	3	Montgomery	77316	Conroe
2024-07-08-0751	1080	13	Walker	77831	
2024-07-10-1526	1101	2	Montgomery	77316	
2024-07-09-0844	1108	53	Montgomery	77316	
2024-07-09-1337	1123	2	Grimes	77831	
2024-07-11-1656	1170	1	Montgomery	77316	
2024-07-08-0746	1171	23	Montgomery	77316	Montgomery
2024-07-09-0845	1198	30	Montgomery	77316	
2024-07-11-1655	1210	3	Montgomery	77316	Conroc
2024-07-09-1165	1213	90	Grimes	77868	
2024-07-09-1301	1237	29	Montgomery	77316	
2024-07-08-0415	1245	21	Madison	77864	
2024-07-09-1365	1247	31	Walker	77320	
2024-07-08-0747	1253	4	Montgomery	77316	
2024-07-11-1654	1263	1	Montgomery	77304	
2024-07-09-1300	1277	1	Walker	77320	
2024-07-11-1785	1283	1	Montgomery	77304	
2024-07-10-1513	1291	1	Grimes	77363	
2024-07-11-1743	1306	1	Montgomery	77304	
2024-07-10-1561	1322	2	Montgomery	77316	
2024-07-11-1662	1323	1	Grimes	77830	
2024-07-09-1311	1324	7	Walker	77320	
2024-07-10-1605	1363	2	Walker	77340	
2024-07-10-1591	1389	1	Walker	77320	
2024-07-08-0726	1411	75	Grimes	77363	
2024-07-09-1360	1431	13	Montgomery	77316	
2024-07-08-0382	1432	70	Grimes	77831	
2024-07-10-1542	1456	1	Montgomery	77304	
2024-07-10-1554	1457	1	Walker	77320	
2024-07-08-0437	1484	13	Montgomery	77316	
2024-07-10-1455	1518	3	Montgomery	77316	
2024-07-08-0351	1529	74	Walker	77831	
2024-07-10-1505	1564	1	Montgomery	77316	
2024-07-09-1152	1574	63	Grimes	77868	
2024-07-09-1150	1575	72	Grimes	77868	
2024-07-09-1157	1576	40	Grimes	77868	
2024-07-09-1183	1579	52	Walker	77320	
2024-07-08-0474	1583	19	Grimes	77831	

2024-07-08-0398	1594	30	Brazos	77868	
2024-07-09-0954	1595	49	Madison	77872	
2024-07-11-1746	1603	3	Montgomery	77316	
2024-07-10-1453	1609	1	Grimes	77868	
2024-07-08-0363	1609	42	Grimes	77831	
2024-07-09-1345	1610	7	Grimes	77868	
2024-07-10-1388	1621	4	Grimes	77830	
2024-07-09-0892	1633	70	Grimes	77830	
2024-07-09-1178	1637	44	Walker	77320	
2024-07-08-0294	1650	73	Montgomery	77316	
2024-07-11-1756	1657	1	Montgomery	77316	
2024-07-09-0953	1689	1	Walker	77320	
2024-07-10-1452	1689	2	Montgomery	77316	Conroe
2024-07-08-0209	1703	512	Walker	77320	
2024-07-09-1076	1711	7	Montgomery	77316	
2024-07-10-1568	1712	2	Walker	77340	
2024-07-10-1508	1733	3	Montgomery	77316	
2024-07-09-1069	1741	3	Grimes	77861	
2024-07-08-0459	1750	12	Walker	77320	
2024-07-09-1075	1755	3	Montgomery	77316	
2024-07-08-0353	1757	84	Walker	77831	
2024-07-10-1624	1765	3	Montgomery	77316	
2024-07-08-0374	1769	205	Grimes	77830	
2024-07-09-1119	1785	1	Montgomery	77304	
2024-07-09-1089	1787	1	Walker	77320	
2024-07-08-0291	1797	323	Walker	77320	
2024-07-08-0285	1812	60	Walker	77320	
2024-07-10-1627	1828	1	Montgomery	77304	
2024-07-08-0260	1840	117	Grimes	77868	
2024-07-08-0180	1867	313	Montgomery	77316	
2024-07-08-0396	1899	138	Walker	77320	
2024-07-08-0453	1944	35	Grimes	77831	
2024-07-08-0301	1948	8	Montgomery	77873	
2024-07-09-1335	1957	9	Walker	77320	
2024-07-08-0385	1966	36	Walker	77320	
2024-07-09-0851	1969	5	Montgomery	77316	
2024-07-09-1284	1971	19	Grimes	77363	
2024-07-09-1221	1990	69	Grimes	77830	
2024-07-08-0319	2001	28	Grimes	77831	
2024-07-10-1370	2012	14	Montgomery	77316	

2024-07-08-0392	2013	99	Grimes	77830	
2024-07-08-0393	2052	26	Grimes	77831	
2024-07-08-0383	2054	282	Walker	77340	Huntsville
2024-07-08-0371	2059	7	Grimes	77831	
2024-07-08-0221	2107	65	Montgomery	77316	
2024-07-08-0211	2122	108	Montgomery	77316	
2024-07-08-0310	2128	1	Montgomery	77356	
2024-07-08-0223	2135	171	Grimes	77363	
2024-07-08-0322	2140	246	Walker	77340	
2024-07-08-0741	2145	187	Grimes	77830	
2024-07-08-0236	2153	328	Grimes	77830	
2024-07-10-1532	2154	1	Grimes	77868	
2024-07-10-1599	2158	8	Walker	75852	
2024-07-09-0952	2167	9	Walker	77320	
2024-07-08-0201	2176	92	Grimes	77868	
2024-07-10-1531	2212	3	Grimes	77868	
2024-07-09-1316	2265	2	Waller	77363	
2024-07-08-0181	2287	244	Montgomery	77316	
2024-07-09-0895	2302	15	Grimes	77868	
2024-07-09-1315	2308	2	Waller	77363	
2024-07-08-0220	2397	714	Montgomery	77304	
2024-07-09-1342	2413	1	Montgomery	77316	
2024-07-10-1474	2436	26	Grimes	77868	
2024-07-09-1158	2457	60	Walker	77320	
2024-07-09-1312	2465	1	Waller	77363	
2024-07-10-1373	2468	2	Grimes	77868	
2024-07-08-0175	2499	850	Montgomery	77304	
2024-07-09-1363	2503	1	Montgomery	77316	
2024-07-08-0734	2514	8	Walker	77831	
2024-07-09-1289	2515	29	Grimes	77363	
2024-07-09-1362	2549	1	Montgomery	77316	
2024-07-09-1261	2587	1	Walker	75852	
2024-07-09-1204	2591	1	Montgomery	77316	
2024-07-08-0606	2597	2	Walker	77320	
2024-07-08-0794	2607	45	Montgomery	77356	
2024-07-09-1161	2660	4	Montgomery	77316	
2024-07-08-0485	2672	46	Madison	77864	
2024-07-09-0846	2675	40	Montgomery	77316	
2024-07-10-1638	2716	8	Waller	77363	
2024-07-09-1294	2730	16	Grimes	77363	

2024-07-10-1569	2738	5	Walker	77340	
2024-07-09-1287	2782	32	Grimes	77363	
2024-07-08-0572	2786	3	Grimes	77861	
2024-07-09-1349	2786	9	Grimes	77363	
2024-07-08-0303	2798	77	Walker	77831	
2024-07-08-0300	2799	78	Montgomery	77304	
2024-07-09-1109	2807	11	Walker	75852	
2024-07-08-0333	2810	118	Grimes	77830	
2024-07-09-1099	2822	1	Montgomery	77316	
2024-07-09-1162	2825	3	Montgomery	77316	
2024-07-09-1156	2826	2	Montgomery	77316	
2024-07-09-1288	2826	10	Grimes	77363	
2024-07-09-1254	2829	1	Montgomery	77316	
2024-07-08-0454	2839	43	Grimes	77830	
2024-07-09-1285	2854	12	Grimes	77363	Todd Mission
2024-07-08-0486	2866	15	Grimes	77861	
2024-07-08-0630	2867	1	Grimes	77861	
2024-07-09-1095	2871	1	Madison	77831	
2024-07-10-1471	2893	6	Grimes	77868	
2024-07-08-0377	2901	2	Montgomery	77356	
2024-07-08-0379	2906	23	Grimes	77831	
2024-07-08-0281	2918	44	Grimes	77830	
2024-07-09-1147	2921	9	Montgomery	77354	
2024-07-09-1344	2925	1	Grimes	77363	
2024-07-08-0349	2942	2	Walker	77320	
2024-07-09-1155	2950	9	Montgomery	77316	
2024-07-08-0365	2957	7	Grimes	77831	
2024-07-10-1469	2966	3	Grimes	77868	
2024-07-08-0318	2979	24	Grimes	77873	
2024-07-08-0191	2981	349	Montgomery	77316	
2024-07-10-1566	2989	2	Walker	77340	
2024-07-08-0570	3010	3	Walker	77320	
2024-07-09-1172	3012	2	Montgomery	77316	
2024-07-11-1667	3023	1	Montgomery	77316	
2024-07-08-0602	3023	4	Walker	77320	
2024-07-09-1127	3037	1	Montgomery	77356	
2024-07-08-0336	3047	64	Grimes	77830	
2024-07-08-0399	3060	5	Walker	77320	
2024-07-08-0627	3063	5	Grimes	77873	
2024-07-08-0341	3070	6	Grimes	77861	

2024-07-08-0232	3071	111	Grimes	77868	
2024-07-10-1567	3076	10	Walker	77340	
2024-07-08-0561	3079	1	Grimes	77861	
2024-07-08-0167	3088	407	Grimes	77868	
2024-07-09-1171	3089	2	Montgomery	77316	
2024-07-08-0207	3089	27	Grimes	77830	
2024-07-08-0484	3106	42	Grimes	77868	
2024-07-08-0219	3107	753	Montgomery	77316	Conroc
2024-07-10-1533	3120	24	Grimes	77868	
2024-07-08-0265	3121	17	Grimes	77363	
2024-07-11-1747	3138	3	Montgomery	77316	
2024-07-11-1776	3140	1	Montgomery	77316	
2024-07-08-0194	3141	1296	Montgomery	77316	
2024-07-09-1203	3144	1	Montgomery	77354	
2024-07-09-1068	3144	2	Montgomery	77316	
2024-07-09-1202	3146	16	Montgomery	77354	
2024-07-10-1380	3147	1	Walker	77320	
2024-07-08-0631	3151	32	Brazos	77868	
2024-07-08-0633	3169	20	Brazos	77868	
2024-07-09-0896	3216	8	Montgomery	77316	
2024-07-08-0208	3216	33	Grimes	77873	
2024-07-08-0243	3226	12	Grimes	77868	
2024-07-08-0320	3227	14	Grimes	77868	
2024-07-10-1378	3232	1	Walker	77320	
2024-07-08-0216	3263	9	Walker	77831	
2024-07-08-0222	3268	461	Montgomery	77316	
2024-07-09-1091	3270	2	Montgomery	77316	
2024-07-08-0202	3273	28	Grimes	77868	
2024-07-08-0264	3283	35	Grimes	77831	
2024-07-09-0965	3295	4	Montgomery	77316	
2024-07-09-0939	3300	1	Grimes	77830	
2024-07-10-1546	3304	2	Montgomery	77304	
2024-07-08-0227	3304	4	Grimes	77868	
2024-07-08-0452	3307	2	Montgomery	77356	
2024-07-09-1244	3311	1	Walker	77320	
2024-07-09-0898	3325	1	Montgomery	77316	
2024-07-08-0225	3338	95	Montgomery	77316	Conroe
2024-07-08-0288	3350	313	Grimes	77873	
2024-07-08-0390	3353	11	Walker	77340	
2024-07-09-0847	3355	3	Montgomery	77304	

2024-07-09-0897	3381	1	Montgomery	77316	
2024-07-09-1293	3388	1	Grimes	77363	
2024-07-08-0188	3405	1010	Walker	77873	
2024-07-08-0198	3407	541	Montgomery	77316	
2024-07-08-0337	3414	6	Grimes	77873	
2024-07-08-0234	3427	13	Montgomery	77873	
2024-07-08-0334	3451	10	Montgomery	77356	
2024-07-08-0290	3474	17	Montgomery	77356	
2024-07-08-0189	3493	264	Montgomery	77316	
2024-07-08-0195	3585	106	Grimes	77868	
2024-07-08-0840	3610	7	Montgomery	77304	
2024-07-08-0240	3647	68	Montgomery	77873	
2024-07-09-1088	3663	1	Grimes	77861	
2024-07-09-0885	3698	11	Grimes	77363	
2024-07-08-0255	3784	78	Montgomery	77356	
2024-07-08-0239	3839	57	Montgomery	77356	
2024-07-10-1367	3875	1	Montgomery	77316	
2024-07-10-1470	3924	9	Grimes	77868	
2024-07-08-0838	3937	3	Montgomery	77304	
2024-07-09-1262	3962	1	Grimes	77830	
2024-07-09-0843	3971	3	Montgomery	77316	
2024-07-08-0628	4122	1	Grimes	77868	
2024-07-08-0629	4161	2	Brazos	77868	
2024-07-08-0316	4251	9	Walker	77831	
2024-07-08-0569	4260	4	Walker	77320	
2024-07-08-0653	4262	9	Walker	77873	
2024-07-08-0619	4265	2	Montgomery	77356	
2024-07-08-0748	4280	1	Montgomery	77316	
2024-07-08-0275	4349	20	Grimes	77356	
2024-07-08-0193	4365	47	Montgomery	77356	
2024-07-08-0312	4437	60	Montgomery	77356	
2024-07-08-0182	4455	20	Montgomery	77356	
2024-07-08-0184	4467	7	Montgomery	77316	
2024-07-08-0242	4472	12	Montgomery	77356	
2024-07-08-0238	4499	1354	Montgomery	77304	
2024-07-08-0378	4502	5	Montgomery	77356	
2024-07-08-0327	4511	589	Walker	77873	
2024-07-08-0605	4523	1	Montgomery	77316	
2024-07-08-0500	4572	2	Montgomery	77356	
2024-07-08-0170	4587	85	Montgomery	77830	

2024-07-08-0173	4603	895	Walker	77340	
2024-07-08-0206	4609	3	Montgomery	77316	
2024-07-08-0287	4645	30	Montgomery	77316	
2024-07-08-0314	4687	4	Montgomery	77316	
2024-07-08-0257	4703	9	Montgomery	77356	
2024-07-08-0375	4791	3	Montgomery	77356	

- c. The large number of downed trees from outside the Right-of-Way (ROW) and downed powerlines created a challenge for restoration during Hurricane Beryl.

Sponsor: Kerry Kelton

STAFF 1-18

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

RESPONSE:

During the May 2024 Derecho, localized flooding and road damage that prevented MidSouth line crews from accessing multiple locations created a challenge for restoration efforts.

The large number of downed trees from outside the ROW and downed powerlines created a challenge for restoration during Hurricane Beryl.

Sponsor: Kerry Kelton

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:

MidSouth conducted after-storm debriefs with management and key personnel in which responses to the May 2024 Derecho and Hurricane Beryl were discussed. The discussions included ways in which MidSouth could improve storm response.

Sponsor: Kerry Kelton

STAFF 1-20

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

RESPONSE:

Not Applicable.

Sponsor: Kerry Kelton

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. Relationships with elected and local officials are established and maintained on a consistent basis to provide the necessary information before, during, and after major power restoration efforts.
- b. Preparation meetings are held prior to storms to determine timeline of the approaching storm. All member service representatives are reassigned to the call center as the primary efforts transition to storms. We ensure all representatives have access to multiple office locations that will have emergency power and internet services to ensure their availability for taking calls. Non-payment disconnects are halted as all resources are focused on fielding storm related calls. Extended call center hours are implemented from early morning to late evening with increased live call representatives available. Once the call volume decreases, MidSouth's contracted overflow call center continues to provide a live representative 24 hours a day. Extended hours are implemented as the storm approaches and continues, not only until power is restored, but until storm related calls become minimal. MidSouth's contracted overflow call center increases staffing levels during storms.
- c. As a distribution electric cooperative, all communication with the end-use customers, which are members of the cooperative, is direct.

Sponsor: Kerry Kelton

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:

Prior to potential storms, MidSouth will share weather forecasts and updates to keep members informed and give them time to prepare. In addition, MidSouth links to its Severe Storm Preparation page on the MidSouth website.

During a storm and post restoration efforts, MidSouth monitors social media and Facebook messenger to field any questions and/or comments which are then reported to the appropriate department. MidSouth also posts frequent updates during the assessment and restoration process. Email updates and press releases are sent and/or posted to our website regularly giving status updates on damage assessments and restoration.

Following a storm, MidSouth continues to offer public education on what to expect and how to report isolated outages which may occur.

Sponsor: Kerry Kelton

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:

MidSouth is proud to report that we received no PUC complaint submissions in reference to restoration efforts and the aftermath of Hurricane Beryl. MidSouth's call center received numerous calls from members expressing their appreciation for its response time and efforts throughout the storm. Throughout the storm and after the storm MidSouth's Facebook page provided updates to our members. With those updates we received many appreciative posts as well as appreciation on other community Facebook pages. MidSouth believes the positive member feedback is attributable to the restoration efforts and communication strategy executed during Hurricane Beryl.

Sponsor: Kerry Kelton

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:

Mid-South's Communications and Government Relations departments are working together to improve press releases and reports to local governments.

MidSouth continues to foster relationships within our communities to keep lines of communication open with all organizations.

Follow up visits have been completed and others are in process, to recap the event and gather feedback to identify areas of opportunity for improved partnerships.

Sponsor: Kerry Kelton

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:

MidSouth constantly takes steps to maintain its relationships with its counterparties and receive updated contact information. MidSouth relies on TEC to maintain mutual aid agreements and coordination with electric cooperatives throughout Texas and neighboring states.

Sponsor: Kerry Kelton

STAFF 1-26

Provide the following information concerning call centers and help desks used by your company before July 8, 2024:

- 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 or help desks that were available and in operation during or in the aftermath of Hurricane Beryl?

RESPONSE:

- a. Internal Call Center: 16 Member Services Representatives and 3 supervisor/management personnel
Contracted Call Center: 80-93 representatives available
- b. All Member Service Representatives and management are full-time employees
- c. Less than 5 minutes
- d. Less than 3 minutes
- e. Prior to storm related events all computer applications are verified to be functioning at full capacity. Processes are reviewed in relation to information needed to assist with outage and restoration efforts. Procedures are reviewed for concerns in relation to downed lines, energized lines, temporary disconnects due to damage, and safety to be conveyed to members. Procedures are updated as needed throughout the storm depending on the needs and damage within MidSouth's service territory.
- f. All call center representatives remained available throughout Hurricane Beryl. During Hurricane Beryl there were no limits on calls that were placed in queue. MidSouth also utilized a contracted call center to allow for overflow as well as 24x7 support.

Sponsor: Kerry Kelton

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:

Date	Total calls	Peak Call Volume
July 8, 2024	4,896	158
July 9, 2024	2,031	119
July 10, 2024	1,104	109
July 11, 2024	623	94

Additional outage reporting resources include, an automated call system, mobile application, text notification, and online portal to report outages.

Sponsor: Kerry Kelton

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:

Initial contact was made with elected officials and local government by Sunday, July 7, 2024. The message was that Beryl was going to directly impact MidSouth's service area and that MidSouth had already initiated its emergency operations plan. Updates were provided by email each morning and evening during the recovery effort. Follow-up meetings have been completed and are in process to recap the event.

MidSouth's Communications Department utilized social media, email, website posts, press releases, and local television news to communicate with its members.

Sponsor: Kerry Kelton

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:

Incoming calls are recorded and retained for 90 days.

Sponsor: Kerry Kelton

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:

All incoming calls are recorded.

Sponsor: Kerry Kelton

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:

Because MidSouth's call center was staffed with live representatives 24 hours a day throughout the storm, the use of pre-recorded messages was not utilized only as-needed. When call volume increased, MidSouth modified and utilized the message below for members to receive as they waited in the queue for a live representative. This message was added on the afternoon of July 8, 2024, and was removed July 11th.

"Thank you for calling MidSouth. Crews have been mobilized to restore power to our service area following the significant damages caused by Hurricane Beryl. This restoration effort is expected to be a multi-day event. Providing restoration times following a storm of this magnitude is not possible at this time. All of our agents are currently assisting others. Please remain on the line for the next available agent."

Sponsor: Kerry Kelton

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 on-premise 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. Outage tracker is available year-round and has been available for approximately 20 years.
- b. 2024
- c. Yes
- d. Yes
- e. English
- f. Both
- g. On-premise server
- h. MidSouth has never experienced a maximum amount of simultaneous users that affected the availability of the outage map.
- i. Yes. All systems were available during Hurricane Beryl so there was no need to utilize redundancies or contingencies.
- j. MidSouth has not stress tested the outage tracker in a lab environment. However, MidSouth has never experienced an issue with the outage map even through major outages.

Sponsor: Kerry Kelton

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:

MidSouth does not track daily total or peak numbers of users accessing its outage tracker.

Sponsor: Kerry Kelton

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:

MidSouth does not track a daily total or peak numbers of users accessing its outage tracker.

Sponsor: Kerry Kelton

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:

MidSouth maintains relationships with radio stations and newspapers across our territory for the purpose of potential storm related communication, if needed. In addition, MidSouth maintains a relationship with KBTX television station for the same purpose.

MidSouth would also utilize social media, text messaging, and/or email.

Sponsor: Kerry Kelton

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:

The processes and policies described in Staff 1-35 were not utilized during either the May 2024 Derecho event or in the aftermath of Hurricane Beryl. MidSouth's outage tracker was not impacted by the May 2024 Derecho or Hurricane Beryl.

Sponsor: Kerry Kelton

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: All MidSouth meters are smart meters.

County Name	Active meter Counts	% of total
MADISON	2,210	5.41
GRIMES	9,034	22.12
WALKER	8,184	20.04
MONTGOMERY	20,857	51.07
BRAZOS	490	1.20
WALLER	64	0.16
Total	40,839	100

Sponsor: Kerry Kelton

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:

MidSouth began communication via email and phone on July 7, 2024, with elected and local officials.

Sponsor: Kerry Kelton

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: MidSouth Electric communicated storm preparations to all members prior to the arrival of Hurricane Beryl including medical and eldercare facilities and critical infrastructure. In accordance with our confidential EOP, critical care loads are identified and coded as critical on MidSouth's customer information system and this database is reviewed regularly. These accounts can be identified by both System Operations and member relations teams. In the event of extended outages, direct communication with these members are completed by the member relations team, system operations supervisors or designated personnel to provide approximate restoration times and restoration efforts. MidSouth's member service relations manager serves as the point of contact for critical load members of which they have open communication throughout the year.

Sponsor: Kerry Kelton

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: MidSouth Electric communicated storm preparations to all members prior to the arrival of Hurricane Beryl including medical and eldercare facilities and critical infrastructure.

In accordance with MidSouth's confidential EOP, critical care loads are identified and coded as critical on MidSouth's customer information system and this database is reviewed regularly. These accounts can be identified by both System Operations and member relations teams. In the event of extended outages, direct communication with these members are completed by the member relations team, system operations supervisors or designated personnel to provide approximate restoration times and restoration efforts. MidSouth's member service relations manager serves as the point of contact for critical load members of which they have open communication throughout the year.

Sponsor: Kerry Kelton

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:

Pre-storm information was communicated on July 5, 2024 prior to the arrival of Hurricane Beryl. Critical Care facilities have direct contacts for communication accessible with the member relations team that manage key critical load members. In addition, live representatives were available through the call center and would be escalated in the event additional information needed to be communicated.

MidSouth communicated to its entire membership on July 8th that it would be a multi-day outage and that any member that required electricity for medical necessity should seek alternate arrangements.

Sponsor: Kerry Kelton

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 – MidSouth does not have any power generation companies interconnected to its distribution facilities.

Sponsor: Kerry Kelton

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:

MidSouth utilizes standard operating procedures for service restoration regarding services outages caused by extreme or emergency weather events. The procedures used are defined in MidSouth's EOP filed confidentially with the PUCT on page 35, *Priorities of Restoration Services*.

Sponsor: Kerry Kelton

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:

MidSouth utilizes standard operating procedures for customer restoration of service, including prioritization criteria and timelines for restoration or service. The procedures used are defined in MidSouth's EOP filed confidentially with the PUCT on page 35, *Priorities of Restoration Services*.

Sponsor: Kerry Kelton

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:

No changes or modifications were made to MidSouth's service restoration plan during or in the aftermath of the May 2024 Derecho or Hurricane Beryl.

Sponsor: Kerry Kelton

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: Please see Responses to Staff 1-46, Attachment 1.

Damage assessment and linemen crews were deployed to assess and begin service restoration efforts after Hurricane Beryl made landfall in all counties within MidSouth's service territory simultaneously at approximately 2:00 pm on July 8, 2024.

Sponsor: Kerry Kelton

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:

County	Percent w/o Service – Day 1	Percent w/o Service – Day 2	Percent w/o Service – Day 3	Percent w/o Service – Day 4	Percent w/o Service – Day 5
Brazos	79.6	17.1	11	0.6	0
Grimes	42.3	45.6	29	2.4	0
Madison	9.9	5.3	4.3	0	0
Montgomery	68.1	55.2	44	10.3	0
Walker	87.2	71.4	37.8	22.1	0
Waller ²	0	20.3	100	20.3	0
Total	66	25	4	0.06	0

Sponsor: Kerry Kelton

² Count affected can exceed the total in the county when meters are restored and are then affected by a second outage.

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 our call center are entered within an integrated system to our outage tracker. Details gathered in relation to items such as broken poles, downed trees, downed lines, energized downed lines, and damaged equipment are all gathered and maintained in an outage ticket which is accessible to system operations and damage assessment teams. Location specific information provided by member observation is utilized in situations with an immediate safety concern and is escalated for timely response. In addition, the integrated system is utilized for proactively addressing more isolated issues to prepare crews upon arrival. Being able to utilize detailed information can assist system operations for the type of crew needed in relation to tree removal, line repair, or fuse replacement.

Preparer:
Sponsor: Kerry Kelton

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:

Initial contact was made with elected officials and local government by Sunday, July 7, 2024. The message was that Hurricane Beryl was going to directly impact our service area and that MidSouth had already initiated our emergency operations plan. Updates were provided by email each morning and evening during the recovery effort. Follow-up meetings have been completed and are in process to recap the event.

Sponsor: Kerry Kelton

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:

A major challenge with regards to restoration of service to customers before, during, and after Hurricane Beryl were trees located outside of MidSouth's easements or ROW.

Sponsor: Kerry Kelton

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.

RESPONSE: The experience of Hurricane Beryl reinforced that communication is essential. For example, communicating and educating the public on the full restoration process.

Sponsor: Kerry Kelton

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:

MidSouth employs the National Incident Management System (NIMS) framework for managing emergency event response.

Designated MidSouth employees received Federal Emergency Management Agency (FEMA) NIMS training and certification (specifically IS-100, IS-200, IS-700, and IS-800). The NIMS certified employees will interact with local, state, and federal management employees during emergencies in which NIMS certification is required.

MidSouth starting using the NIMS framework following the certification of designated MidSouth employees in April 2022.

Sponsor: Kerry Kelton

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:

Designated MidSouth employees received Federal Emergency Management Agency (FEMA) NIMS training and certification in 2022 (specifically IS-100, IS-200, IS-700, and IS-800).

Sponsor: Kerry Kelton

STAFF 1-54

Please explain your process for evaluating and replacing distribution poles. Please include an explanation for the following in your response:

- e. How frequently this evaluation is conducted;
- f. What criteria you utilize for this evaluation; and
- g. When you decide to replace the distribution pole.

RESPONSE:

- a) MidSouth Electric utilizes an inspection plan that covers the entire distribution system every 10 years or less.
- b) MidSouth contractors perform pole inspections on behalf of MidSouth. The inspector is responsible for determining the health of a pole by visually inspecting the pole for damage. Any visible damage to the pole above ground that negatively impacts the structural integrity of the pole results in a failure (split pole tops, woodpecker holes, rot/deterioration, etc.). Additionally, the base of the pole is inspected at ground level. If the pole is found to have one-third or less of the original diameter of the pole, it is designated for replacement.
- c) Once a pole fails inspection, it is documented and sent to MidSouth's Engineering and Operations Departments for staking and replacement. The inspector labels the pole as a reject, or a priority reject. Priority reject poles are deemed to be an immediate danger and are scheduled to be replaced within 24 hours of the failed inspection. Reject poles that do not get classified as a priority are scheduled to be replaced as soon as reasonably possible.

Sponsor: Kerry Kelton

STAFF 1-55

Please provide your minimum required right-of-way (ROW) width for both 3-phase and single-phase distribution lines.

RESPONSE:

MidSouth maintains a minimum 20-foot-wide ROW width along the center of the pole line (10 feet on either side of the pole line), unless otherwise mandated by governing entities, such as TxDOT, the railroad companies, counties, or the US Army Corps of Engineers. The minimum required ROW width applies to both single and 3-phase overhead distribution lines within private easements.

Sponsor: Kerry Kelton

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 below

For responses to a and b, please see Responses to Staff 1-56, Attachment 2.

For response to c and d, see below.

Feeder	Type of Pole	Reason	Type of Failure
012403	Wood	Tree	Framing
032414	Wood	Tree	Framing
032414	Wood	Tree	Framing
032414	Wood	Tree	Framing
032422	Wood	Tree	Pole
042412	Wood	Tree	Pole
042412	Wood	Tree	Pole

042421	Wood	Tree	Pole
062401	Wood	Tree	Framing
062401	Wood	Tree	Framing
062401	Wood	Tree	Framing
062401	Wood	Tree	Framing
062404	Wood	Tree	Pole
062404	Wood	Tree	Pole
062404	Wood	Tree	Pole
062404	Wood	Tree	Framing
072401	Wood	Tree	Pole
092411	Wood	Tree	Pole
092411	Wood	Lightning	Framing
122412	Wood	Tree	Framing
122413	Wood	Fire	Pole
122413	Wood	Tree	Framing
122413	Wood	Tree	Framing
122413	Wood	Tree	Framing
122413	Wood	Tree	Framing
132415	Wood	Tree	Leaning
132415	Wood	Tree	Pole
132415	Wood	Tree	Framing
132415	Wood	Tree	Framing
132415	Wood	Tree	Framing

132415	Wood	Tree	Framing
132415	Wood	Tree	Framing
132415	Wood	Tree	Framing
132422	Wood	Tree	Pole
132422	Wood	Tree	Pole
132423	Wood	Tree	Pole
142403	Wood	Tree	Pole
142403	Wood	Tree	Pole
142403	Wood	Tree	#84183: Pole #84182: Leaning
152413	Fiberglass	Wind	Leaning
152423	Wood	Tree	Framing
152432	Wood	Tree	Pole
152432	Wood	Tree	Pole
172412	Wood	Tree	Leaning
172412	Wood	Tree	Framing
172412	Wood	Tree	Pole
172412	Ductile	Tree	Pole
172412	Wood	Tree	Leaning
172412	Wood	Tree	Framing
172412	Wood	Tree	Framing
172413	Wood	Tree	Pole
172413	Wood	Tree	Pole

172413	Wood	Tree	Pole
172422	Wood	Tree	Pole
172422	Wood	Tree	Pole
172422	Wood	Tree	Pole
172422	Wood	Tree	Framing
172424	Wood	Tree	Leaning
172424	Wood	Tree	Pole
182413	Wood	Tree	Framing
182414	Wood	Tree	Framing
182414	Wood	Tree	Framing
182414	Wood	Tree	Framing
182414	Wood	Tree	Leaning
182414	Wood	Tree	Pole
182414	Wood	Tree	Pole
182415	Wood	Tree	Framing
182415	Wood	Tree	Framing
182415	Wood	Tree	Leaning
182415	Wood	Tree	Framing
182415	Wood	Tree	Leaning
182415	Wood	Tree	Pole
182415	Steel	Tree	Framing
182415	Wood	Tree	Framing
182415	Wood	Tree	Framing

182415	Steel	Tree	Framing
202414	Wood	Tree	Pole
222413	Wood	Tree	Framing
222413	Wood	Tree	Pole
262413	Wood	Tree	Framing
262413	Steel	Tree	Leaning
262413	Wood	Tree	Framing
262413	Steel	Tree	Framing
262414	Wood	Tree	Leaning
262414	Wood	Tree	Pole
262414	Wood	Tree	Pole
262415	Steel	Tree	Framing
262415	Wood	Tree	Framing
262415	Wood	Tree	Pole
262422	Wood	Tree	Framing
262422	Wood	Tree	Leaning
262422	Wood	Tree	Framing
262422	Wood	Tree	Pole
262423	Wood	Tree	Framing
262423	Wood	Tree	Framing
262424	Wood	Tree	Framing
262424	Wood	Tree	Pole

- e. MidSouth's service territory is identified as NESC Grade C construction. At times, MidSouth chooses to upgrade to Grade B as defined in the NESC for greater resiliency.
- f. MidSouth is evaluating areas across its service territory for opportunities to provide greater resiliency. MidSouth has applied for grant funds to assist with this cost.
- g. The timeframe is dependent on the availability of grant funds and future workplans.

Sponsor: Kerry Kelton

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:

Feeder	poles > 60'
92411	1
32422	1

- b. MidSouth did not experience any damage to poles over 60 feet.
- c. These poles are primarily used for highway crossings.

Sponsor: Kerry Kelton

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:

MidSouth uses a standard pole embedment of 10% of the pole height plus 2 feet. The minimum burial depth for all poles is 6 feet.

Example: 50-foot pole $(50 * .1) = 5 + 2 = 7$ feet embedment.

This standard has not changed in the last 10 years.

Sponsor: Kerry Kelton

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:

MidSouth maintains a standard engineering design criteria for distribution lines. The standard pole size for single phase primary construction is 40-feet, class 3. The standard pole size for 3 phase construction is 45-feet, class 3.

Sponsor: Kerry Kelton

STAFF 1-60

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

RESPONSE:

MidSouth's service territory is identified as NESC Grade C construction. At times, MidSouth chooses to upgrade to Grade B as defined in the NESC for greater resiliency.

Sponsor: Kerry Kelton

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:

MidSouth has not adopted any new construction strength or overload factors in the last two years.

Sponsor: Kerry Kelton

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. The design criteria for these lines is no different than the rest of the MidSouth system.
- b. Wood, ductile iron, steel, and concrete
- c. MidSouth maintains a minimum 20-foot-wide ROW width along the center of the pole line (10 feet on either side of the pole line), unless otherwise mandated by governing entities, such as TxDOT, the railroad companies, counties, or the US Army Corps of Engineers. The minimum required ROW width applies to both single and 3-phase overhead distribution lines within private easements.
- d. MidSouth designs to NESC grade C standard as required for MidSouth's service territory and upgrade to grade B for improved resilience.
- e. Some distribution lines experienced tree related outages, originating from outside of the ROW, that did not result in infrastructure damage. Trees were removed to facilitate outage restoration.

Some lines had a cross arm or insulator break and those were replaced without having to replace the pole.

Sponsor: Kerry Kelton

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:

- 73,464 total distribution poles in service before the May 2024 Derecho.

Pole Unit	Type	Count
MS30-1F	Fiberglass Light Pole	347
MS30-2W	Wood	2
MS30-3W	Wood	3
MS30-4W	Wood	7
MS30-5W	Wood	38
MS30-6W	Wood	9306
MS30-7W	Wood	1
MS30-CLP	Concrete Light Pole	1250
MS35-2S	Steel	1
MS35-2W	Wood	345
MS35-3D	Ductile	2
MS35-3S	Steel	1
MS35-3W	Wood	60
MS35-4W	Wood	7
MS35-5S	Steel	5
MS35-5W	Wood	21468
MS35S	Steel	118
MS40-1S	Steel	4
MS40-1W	Wood	3
MS40-2D	Ductile	58
MS40-2S	Steel	3
MS40-2W	Wood	17
MS40-3D	Ductile	79
MS40-3S	Steel	19
MS40-3W	Wood	29659
MS40-4W	Wood	22

MS40-5W	Wood	21
MS40-6W	Wood	1
MS40C	Concrete	6
MS40-CLP	Concrete Light Pole	179
MS40S	Steel	718
MS45-1D	Ductile	11
MS45-1S	Steel	1
MS45-1W	Wood	14
MS45-2D	Ductile	486
MS45-2S	Steel	20
MS45-2W	Wood	77
MS45-3D	Ductile	409
MS45-3S	Steel	22
MS45-3W	Wood	5091
MS45-4W	Wood	12
MS45C	Concrete	7
MS45-C-ENG	Concrete	1
MS45-H1D	Ductile	1
MS45-H1W	Wood	4
MS45-H2D	Ductile	1
MS45S	Steel	1144
MS50-1D	Ductile	196
MS50-1S	Steel	7
MS50-1W	Wood	33
MS50-2D	Ductile	137
MS50-2H	#N/A	1
MS50-2S	Steel	7
MS50-2W	Wood	645
MS50-3W	Wood	1
MS50C	Concrete	4
MS50-C-ENG	Concrete	2
MS50-H1D	Ductile	33
MS50-H1W	Wood	8
MS50-H2D	Ductile	14
MS50-H2S	Steel	1

MS50S	Steel	246
MS55-1D	Ductile	33
MS55-1S	Steel	2
MS55-1W	Wood	6
MS55-2D	Ductile	18
MS55-2S	Steel	2
MS55-2W	Wood	84
MS55-3W	Wood	1
MS55C	Concrete	12
MS55-H1D	Ductile	14
MS55-H1W	Wood	4
MS55-H2D	Ductile	12
MS55S	Steel	6
MS60-1W	Wood	1
MS60-2D	Ductile	1
MS60-2W	Wood	7
MS60C	Concrete	2
MS60-C-ENG	Concrete	1
MS60-H1W	Wood	2
MS60-H2D	Ductile	1
MS60S	Steel	25
MS65-1W	Wood	1
MS65-5W	Wood	1
MSVDC-CF1	Steel	62
Primary		306
Secondary		474

Sponsor: Kerry Kelton

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:

Feeder	Type of Pole	Class	Reason	Type of Failure
072401	Wood	3	Tree	Pole
182414	Wood	3	Tree	Pole
182415	Wood	5	Tree	Pole
182415	Wood	5	Tree	Leaning
122413	Wood	5	Tree	Pole

Sponsor: Kerry Kelton

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:

Feeder	Type of Pole	Reason	Type of Failure
012403	Wood	Tree	Framing
032414	Wood	Tree	Framing
032414	Wood	Tree	Framing
032414	Wood	Tree	Framing
032422	Wood	Tree	Pole
042412	Wood	Tree	Pole
042412	Wood	Tree	Pole
042421	Wood	Tree	Pole
062401	Wood	Tree	Framing
062401	Wood	Tree	Framing
062401	Wood	Tree	Framing
062401	Wood	Tree	Framing
062404	Wood	Tree	Pole
062404	Wood	Tree	Pole
062404	Wood	Tree	Pole
062404	Wood	Tree	Framing
072401	Wood	Tree	Pole
092411	Wood	Tree	Pole
092411	Wood	Lightning	Framing
122412	Wood	Tree	Framing
122413	Wood	Fire	Pole
122413	Wood	Tree	Framing
122413	Wood	Tree	Framing
122413	Wood	Tree	Framing
122413	Wood	Tree	Framing
132415	Wood	Tree	Leaning
132415	Wood	Tree	Pole
132415	Wood	Tree	Framing
132415	Wood	Tree	Framing
132415	Wood	Tree	Framing
132415	Wood	Tree	Framing

132415	Wood	Tree	Framing
132415	Wood	Tree	Framing
132422	Wood	Tree	Pole
132422	Wood	Tree	Pole
132423	Wood	Tree	Pole
142403	Wood	Tree	Pole
142403	Wood	Tree	Pole
142403	Wood	Tree	#84183: Pole #84182: Leaning
152413	Fiberglass	Wind	Leaning
152423	Wood	Tree	Framing
152432	Wood	Tree	Pole
152432	Wood	Tree	Pole
172412	Wood	Tree	Leaning
172412	Wood	Tree	Framing
172412	Wood	Tree	Pole
172412	Ductile	Tree	Pole
172412	Wood	Tree	Leaning
172412	Wood	Tree	Framing
172412	Wood	Tree	Framing
172413	Wood	Tree	Pole
172413	Wood	Tree	Pole
172413	Wood	Tree	Pole
172422	Wood	Tree	Pole
172422	Wood	Tree	Pole
172422	Wood	Tree	Pole
172422	Wood	Tree	Framing
172424	Wood	Tree	Leaning
172424	Wood	Tree	Pole
182413	Wood	Tree	Framing
182414	Wood	Tree	Framing
182414	Wood	Tree	Framing
182414	Wood	Tree	Framing
182414	Wood	Tree	Leaning
182414	Wood	Tree	Pole
182414	Wood	Tree	Pole
182415	Wood	Tree	Framing
182415	Wood	Tree	Framing
182415	Wood	Tree	Leaning

182415	Wood	Tree	Framing
182415	Wood	Tree	Leaning
182415	Wood	Tree	Pole
182415	Steel	Tree	Framing
182415	Wood	Tree	Framing
182415	Wood	Tree	Framing
182415	Steel	Tree	Framing
202414	Wood	Tree	Pole
222413	Wood	Tree	Framing
222413	Wood	Tree	Pole
262413	Wood	Tree	Framing
262413	Steel	Tree	Leaning
262413	Wood	Tree	Framing
262413	Steel	Tree	Framing
262414	Wood	Tree	Leaning
262414	Wood	Tree	Pole
262414	Wood	Tree	Pole
262415	Steel	Tree	Framing
262415	Wood	Tree	Framing
262415	Wood	Tree	Pole
262422	Wood	Tree	Framing
262422	Wood	Tree	Leaning
262422	Wood	Tree	Framing
262422	Wood	Tree	Pole
262423	Wood	Tree	Framing
262423	Wood	Tree	Framing
262424	Wood	Tree	Framing
262424	Wood	Tree	Pole

Sponsor: Kerry Kelton

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:

All poles on MidSouth's system were visually inspected from 2019-2022 during the implementation of MidSouth's smart grid fiber project.

Sponsor: Kerry Kelton

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: The NESC sets a minimum standard and MidSouth meets or exceeds the NESC constructions standards.

Sponsor: Kerry Kelton

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:

Not Applicable – MidSouth does not have any transmission lines.

Sponsor: Kerry Kelton

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:

Not Applicable – MidSouth does not have any transmission lines.

Sponsor: Kerry Kelton

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:

Not Applicable – MidSouth does not have any transmission lines.

Sponsor: Kerry Kelton

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:

Not Applicable – MidSouth does not have any transmission lines.

Sponsor: Kerry Kelton

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 – MidSouth does not have any transmission lines.

Sponsor: Kerry Kelton