

January 2025

AUSTIN ENERGY
WINTER STORM MARA
FOLLOW-UP ACTION COMPLETION REPORT
FINAL Update





| Observation | Follow-Up Action Item Number | Follow-Up Action | Status | Final Update |
|--|------------------------------|---|------------------|---|
| Observation 1 — Establishing Estimated Times of Restoration | 1.1 | Establish and train on a damage assessment process for emergency response. | Completed | To ensure a more complete and efficient damage assessment, Austin Energy established a new emergency response damage assessment process. The utility identified Damage Assessment Leaders and two-person Damage Assessment Teams and defined their roles for the restructured Incident Management Team (IMT). Damage Assessment Teams will report to the Service Branch Directors and will be assigned to provide detailed damage assessments for each impacted area during an activation. These assessments will supplement available situational reports, allowing operations to develop a systemwide estimated time of restoration for events. |
| Observation 1 — Establishing Estimated Times of Restoration | 1.2 | Coordinate with peer utilities to discuss best practices for calculating systemwide estimated times of restoration. | Completed | During 2023, Austin Energy traveled to consult with representatives of utilities with experience in long-duration outage events. Utilities visited included Southern California Edison for their wildfire experience, Jacksonville Electric Authority for their hurricane response experience and Long Island Power Authority for their cold weather and tropical cyclone response experience. During all these visits, Austin Energy consulted on best practices for calculating systemwide Estimated Time of Restoration (ETR) among other relevant topics. Discussions highlighted the importance of conducting a damage assessment, educating, and communicating with the public and other stakeholders on a phased approach to restoration and the careful art of balancing between providing information so customers can make decisions while not overpromising or under-promising restoration times. At Jacksonville Electric Authority, Austin Energy representatives participated in a three-day storm response drill and visited Jacksonville's emergency operations center. Austin Energy is incorporating its learnings through the implementation of other action items from the Winter Storm Mara After-Action Report. |
| Observation 1 — Establishing Estimated Times of Restoration | 1.3 | Establish an operational procedure to produce systemwide estimated times of restoration for long-duration outage events. Consider a phased approach as Austin Energy gains better information about the extent of the damage during an event. | Completed | Since Winter Storm Mara, Austin Energy has implemented new operational procedures and restoration strategies to assist in estimating systemwide restoration times. Improvements include the mobilization of damage assessors and patrollers who evaluate the extent of the damaged equipment and materials. These teams will be deployed as soon as conditions are safe, providing data to the Operations Section of Austin Energy's IMT. By analyzing this data, a systemwide ETR can be developed, then further refined as ongoing assessments and restoration efforts progress. With these procedures and strategies in place, the utility will incorporate this information into its emergency and preparedness communications. The utility will communicate a systemwide ETR through its various channels as soon as one is available and will provide restoration updates as more information become available. |



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| Observation 1 – Establishing Estimated Times of Restoration | 1.4 | Evaluate different Advanced Distribution Management System (ADMS) Storm Mode levels | Completed | Austin Energy stakeholders met in April 2024 to discuss the possibility of using different ADMS Storm Mode Levels as a way to determine ETR for different types of outage events. The group identified several concerns with this proposal including that it has a large margin for error, does not provide clear benefit to the restoration process, and could lead to customer confusion. In addition, Austin Energy completed a review of industry best practices and could find no examples of the use of automatic, system-generated multi-tiered ETRs. It was then determined that a refined process for damage assessment coupled with event-specific communications from the Public Information Office (PIO) to our customers would provide additional ETR information during complex events. Austin Energy will continue to look at industry standards on how utilities create, use and provide ETRs. |
| Observation 2 – Communication Systems and Customer Experience | 2.1 | Increase the customer data roundtrip timeout limit from the outage map to Austin Energy. | Completed | Austin Energy asked its outage map vendor to increase the time for the outage map system to receive and validate customer text reporting or inquiries about an outage. On May 2, 2023, a software update increased the validation time from 4.5 seconds to 30 seconds. This increase has greatly reduced the number of system timeout errors. |
| Observation 2 – Communication Systems and Customer Experience | 2.2 | Evaluate the outage map platform for additional outage alerting capability. | Completed | The Austin Energy Outage Management team reviewed outage map alert capability with its vendor. Austin Energy uses all available alert functionality. |
| Observation 2 – Communication Systems and Customer Experience | 2.3 | Reconfigure the outage map platform notification quota (traffic volume capacity) to max settings. | Completed | The Outage Management team reviewed the outage map alert capability with the vendor. The service cap is now set to the maximum (1750). |
| Observation 2 – Communication Systems and Customer Experience | 2.4 | Review any new outage map platform features list for optimization opportunities. | Completed | Austin Energy completed a comparison study to determine what outage map platform features are offered by other utilities. This study showed that Austin Energy provides industry-standard outage map features to customers. Additionally, Austin Energy's outage map vendor confirmed that Austin Energy uses all currently available outage map technology features to optimize the customer experience. |
| Observation 2 – Communication Systems and Customer Experience | 2.5 | Partner with outage map vendor KUBRA, to identify visual solutions to improve customer experience. | Completed | Austin Energy removed clutter from the outage map and redefined labels to provide more clarity and visually improve the user experience. This allows users to focus on the information they need. |
| Observation 2 – Communication Systems and Customer Experience | 2.6 | Train additional personnel on ADMS modules to establish subject matter experts within essential sections of Incident Command. | Completed | Since Winter Storm Mara, Austin Energy trained additional personnel on ADMS applications to establish subject matter experts within essential sections of the IMT. The System Operations work group has received advanced ADMS training and has additional training available. The Control Engineering work group has been provided access to quick guides and training courses on ADMS applications. Austin Energy has established a Situation Unit Lead position within its IMT that oversees the Engineering Control Center Intelligence unit and provides additional ADMS support. Training on ADMS applications will be delivered on an ongoing basis using these existing training resources. |

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| Observation 2 – Communication Systems and Customer Experience | 2.7 | Ensure essential Austin Energy employees have the capability to access ADMS’s modules. | Completed | Austin Energy Key Accounts personnel (staff assigned to support key Austin Energy commercial and industrial customers) received the appropriate system permissions to directly check Key Account customers’ real-time power status. Their access has been tested and confirmed. This improvement allows Key Account personnel to provide better support to these customers during severe weather events. |
| Observation 2 – Communication Systems and Customer Experience | 2.8 | Evaluate ADMS integrations to optimize communications with interfacing systems, such as Mobile Workforce Management (a work management ticket system also referred to as MWM) and Customer Care and Billing (the customer information system also referred to as CC&B). | Completed | As the integrated software platform providing real-time information for Austin Energy, ADMS integrates with the Austin Energy’s CC&B system and its MWM system. Following Winter Storm Mara, Austin Energy performed an end-to-end evaluation of ADMS’s performance and its current and planned integrations to CC&B and MWM. Austin Energy worked with its ADMS vendor to review and evaluate ADMS’s overall system performance with respect to these integrations. This evaluation confirmed that ADMS’s real-time integration to CC&B, for the purpose of obtaining customer status, is performing as intended. Austin Energy also confirmed that the ADMS integration with MWM to support the verification of planned work on meters is working as intended. These integrations provide necessary information to ADMS to prevent false outage notifications. Additionally, Austin Energy’s evaluation determined that building new integrations to push ADMS data to CC&B would be redundant as Customer Care staff can access ADMS status information through ADMS’s Web CC module. |
| Observation 2 – Communication Systems and Customer Experience | 2.9 | Apply ADMS updates to correct software bug causing unconfirmed outages to show up as restored prematurely. | Completed | A bug in the ADMS caused unconfirmed outages to show up as restored prematurely during Winter Storm Mara. This system allows us to track issues with the distribution network and deploy crews. Austin Energy successfully implemented a system update prior to the end of calendar year 2023 to address this bug. |
| Observation 2 – Communication Systems and Customer Experience | 2.10 | Create a glossary of Advanced Distribution Management System (ADMS) system components and types of outages to assist customer-facing teams within the utility in their communications with customers. | Completed | Austin Energy created a glossary of ADMS terms, components and outages that is available to customer-facing teams. |
| Observation 2 – Communication Systems and Customer Experience | 2.11 | Review and update workflows associated with restoration text alerts. Determine all the causes that can trigger the system to believe an outage is restored, and review operator processes that merge, close or group outage. | Completed | Following Winter Storm Mara, Austin Energy reviewed the workflows and communications associated with restoration text alerts. This review examined all causes that trigger the alert system to register that an outage has been restored, and the associated operator processes. These processes could impact the accuracy of customer restoration notifications as they merge, close or group outage incidents. It was determined that, after Austin Energy operations staff complete a repair and the repair is recognized by ADMS, the outage map is updated, and a corresponding text alert is sent to the associated customer. While the workflows were determined to operate properly, the associated communications could have been clearer in their information. To improve these standard customer alert messages, Austin Energy reviewed and revised these message templates for clarity. The revised and improved message templates are now a part of the application’s product functionality. As the notification workflow was confirmed to operate as intended, the workflow was not changed. |



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| Observation 2 – Communication Systems and Customer Experience | 2.12 | Evaluate and improve upon people, process and technology gaps related to end-to-end technical communication channel monitoring and analysis. | Completed | IT resources have been assigned to regularly monitor our outage application for technical issues that may impact our customers during a crisis. These resources will escalate any errors beyond acceptable thresholds to the product’s vendor. Internal communication related to identification of issues, expected impact and anticipated resolution will be communicated out through the appropriate IMT reporting structure. Austin Energy has also instituted a cadence for sending supplemental messages with additional information to customers, as necessary. |
| Observation 2 – Communication Systems and Customer Experience | 2.13 | Provide advance notification to key technology vendors prior to severe weather or anticipated long-duration outage events so they are available to monitor and adjust configurations if needed. | Completed | As a part of its normal practice, Austin Energy now sends its key technology vendors (including its outage map vendor) advance notification of expected inclement weather or long-duration outage event. This practice will help ensure that Austin Energy’s key vendors will establish heightened awareness during periods of elevated risk to Austin Energy technology and implement measures to monitor and adjust configurations if needed. |
| Observation 2 – Communication Systems and Customer Experience | 2.14 | Ensure data management and governance is established and reinforced across all lines of business. | Completed | The Austin Energy Data Office, led by Austin Energy’s newly hired Chief Data Officer, routinely reminds staff of data discipline practices, and promotes data governance across all workgroups. |
| Observation 2 – Communication Systems and Customer Experience | 2.15 | Review access requirements for internal teams and grant appropriate access to support emergency response. | Completed | Austin Energy reviewed access requirements for outage and restoration information and gave broader access as appropriate. |
| Observation 2 – Communication Systems and Customer Experience | 2.16 | Review and update procedure to validate technology readiness for Incident Command activation. | Completed | Austin Energy’s IT team performed a walk through to assess the hardware used during IMT activation. The transition from desktops to laptops for both rooms has been completed, ensuring a more flexible and efficient setup. All TVs and monitors have been successfully upgraded and installed in both IMT rooms as well. A biannual walkthrough is now established (May/November) to verify the technology readiness of the rooms. |
| Observation 3 – Public Communication | 3.1 | Align with City leadership expectations for news conference protocols in the early stages of an emergency. | Completed | Austin Energy’s Corporate Communications team worked with the City of Austin’s Communications and Public Information Office (CPIO) to develop new emergency communications protocols. These protocols establish expectations around communications. CPIO is the lead department tasked with overseeing this effort and is continuing to refine these emergency procedures. |
| Observation 3 – Public Communication | 3.2 | Participate in the City’s communication plan efforts and drills to improve preparedness and collaboration with other stakeholders involved in emergency response. | Completed | Austin Energy’s Corporate Communications team worked with the CPIO to develop new emergency communications protocols. Austin Energy’s Corporate Communications team has run these protocols, participated in CPIO and Homeland Security and Emergency Management (HSEM) citywide emergency PIO trainings and is ready for when CPIO schedules a drill. CPIO is the lead department tasked with overseeing this effort and is continuing to refine these emergency procedures. |



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| Observation 3 – Public Communication | 3.3 | Designate a single point of contact as part of Incident Command to focus on elected official inquiries, district-specific situational awareness and escalations. | Completed | In 2023, Austin Energy’s IMT established new Liaison Officer and Assistant Liaison Officer positions. These positions will coordinate with elected officials during incident activations. Duties for these new positions include gathering information in response to elected official inquiries and maintaining situational awareness for the region during activations. |
| Observation 3 – Public Communication | 3.4 | Enhance coordination mechanisms with Restoration Operations so they can provide the Austin Energy Public Information team with timely and accurate information from the field and accurate systemwide estimated restoration times for communication with the public. | Completed | The lines of communication within the Austin Energy IMT have been reorganized and improved. Communications from restoration operations flow up through the National Incident Management System Incident Command structure to the Operations Section Chief for dissemination amongst the Command and General staff. These formalized lines of communication encourage efficient, timely and accurate transmittal of information related to outages and restoration timing, which Austin Energy Public Information Office can then share with the public. |
| Observation 3 – Public Communication | 3.5 | Review processes and messaging for Outage Alerts sent during long-duration outages | Completed | Austin Energy’s Corporate Communications, IT and Customer Care teams have reviewed the processes and message flows in place for Outage Alerts during long-duration outages. Updates were made to improve the customer experience in both long-duration and short-duration outages. Both the English and Spanish message flows were updated. The messaging changes were approved, implemented by KUBRA, and tested by Austin Energy. The Corporate Communications team will review all message flows regularly as part of the Emergency Communications planning process. |
| Observation 3 – Public Communication | 3.6 | Establish oversight and ownership of the outage map platform messaging tools, including administrative access, editing, broadcast and reporting. | Completed | Austin Energy reviewed and updated all KUBRA/Notifi Outage Alert message flows and established new oversight of the messaging tools to improve customer communication. Messages are now reviewed regularly by Corporate Communications as part of the Emergency Communications planning process. The IT team manages KUBRA/Notifi administrative access and has reviewed with Corporate Communications team members to ensure that they have the permission level necessary to perform their roles during emergency incidents. In addition, inbound messaging processes triggered by emergency words (like “fire” and “explosion”) were reviewed and updated, and additional trigger words were added, including the words “oxygen,” “breathing,” “medication,” “911,” “emergency,” “danger” and “dangerous.” |
| Observation 3 – Public Communication | 3.7 | Develop messaging and templates specific to long-duration outages. This will allow for quicker dissemination of information, particularly direct customer emails and text messages. | Completed | As a part of its normal operations, the Austin Energy PIO Team regularly reviews and updates its emergency communications templates for news releases, social media messaging, customer emails, digital alerts and broadcast text messages. Subsequent to Winter Storm Mara, the team developed templates for long- duration outages. These templates have been shared with the Communications and Public Information Office. Templates will continue to be reviewed and refined on a seasonal basis. |
| Observation 3 – Public Communication | 3.8 | Re-evaluate coordination with Customer Care to help respond to social media messages during an emergency. | Completed | In order to respond to social media messages more effectively during an emergency, Customer Care identified curriculum training staff who will be reassigned during emergencies to assist with social media monitoring and responses. A process has been established and training has occurred. |



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| Observation 4 – Customer Care | 4.1 | Enhance the inbound customer inquiry and escalation process for storm restoration. Establish a single point of contact and appropriate tracking mechanism. | Completed | To streamline and establish an appropriate tracking mechanism for customer inquiries and escalations from Emergency Operations Center (EOC) responders or members of the Incident Management team during major storm restoration events, Austin Energy established an Operations Escalation Resolution site in Microsoft Teams. This shared site establishes a single source of information and ensures closer collaboration between Austin Energy teams including Restoration Operations, Public Information, Regulatory and Government Affairs and Customer Care. Customer Care's Escalation team has established a process for the use of this Teams site during storm restoration events to assist with the tracking of operational customer inquiries and escalations. Processes to use the Teams site have been documented and will be regularly reviewed and improved to further enhance the storm restoration inbound customer inquiry and operations escalation process. |
| Observation 4 – Customer Care | 4.2 | Ensure essential customer information, such as a customer's full address (including all identifiers like East, West, etc.), is not missing from the outage map platform database. | Completed | Austin Energy worked with its outage map vendor to ensure the customer address reflected in Austin Energy's billing system is also available in its outage map platform. Austin Energy implemented practices to ensure that the platform is regularly refreshed, and customer information is verified during calls with the customer. |
| Observation 4 – Customer Care | 4.3 | Evaluate and improve coordination regarding the Medically Vulnerable Registry (MVR) pre-planning process. | Completed | In order to improve coordination regarding the MVR pre-planning process, Austin Energy established a two-way electronic communication system to quickly reach MVR customers. Through this system, Austin Energy can request and receive information on MVR customers' conditions and needs, and obtain customer authorization to share information with other agencies during an emergency. This communication improvement enables Austin Energy to identify and prioritize needs in accordance with available resources. |
| Observation 4 – Customer Care | 4.4 | Evaluate the MVR wellness check process for collaboration opportunities with other City departments. For example, explore the ability to loan out charging stations to registered MVR customers that can power lifeline communication devices. | Complete | Austin Energy assessed the MVR wellness check process for collaboration opportunities with other City departments. Due to the individual nature of each emergency, it was determined by Austin Energy (after collaboration with departments including the Austin Police Department, HSEM, and Austin Public Health) that the EOC remains the best pathway to collaborate with other City departments and identify resources that may be available based on the situation. Austin Energy staff conducted a Power Station pilot project that explored providing charging stations to MVR customers for lifeline communication devices. Customer feedback was positive, but challenges with storage, charging and device reliability were identified. Austin Energy plans to explore ways to expand the pilot program up to and including seeking a vendor for turnkey delivery and maintenance of charging stations. Additionally, Austin Energy implemented a two-way communications platform for MVR customers, streamlining wellness checks. Staff also modified the MVR enrollment process to obtain proactive consent for sharing household contact information with responding departments during emergencies, facilitating collaboration. |



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| Observation 4 – Customer Care | 4.5 | Evaluate the use of an outreach bus or similar resources for long-duration outage events. Establish agreements, locations and deployment plans as needed. | Completed | Austin Energy evaluated the objectives of having an outreach bus to deploy during long-duration events as well as the resulting community benefits. After doing so, Austin Energy decided not to pursue the purchase of an outreach bus in FY24. Instead, Austin Energy decided to focus on identified solutions already underway and that were faster to deploy in order to meet the needs of our customers. One solution is a supply of 125 NOAA Emergency Weather Radios with portable power banks and solar charging to give to customers during Austin Energy emergency assistance events. Additionally, for long-duration outage events, Austin Energy is supporting the City of Austin with the Resilience Hub Network by providing electrical upgrades, and solar and battery backup to hub locations. Resilience Hubs are a series of community focused physical facilities that support the community before, during, and after a disaster and are intended to complement emergency response and operations. Value may exist in the acquisition of a vehicle to support long-duration outage needs, so we intend to re-evaluate the potential for this sort of resource in concert with a broader evaluation of ongoing departmental outreach to maximize that value. |
| Observation 4 – Customer Care | 4.6 | Conduct outage call refresher training of essential workers and improve agent support | Completed | Austin Energy conducted outage call refresher training for all Customer Care essential workers. Further, each group has completed their support plan based on recent improvements to the IMT and changes in assignments. This was completed by all groups by Jan. 31. To improve agent support during incident activations, non-call center personnel will receive refresher training to handle outage calls and expand call center capability. |
| Observation 4 – Customer Care | 4.7 | Evaluate and optimize Utility Call Center (UCC) escalation case creation during emergency events. | Completed | Austin Energy evaluated the UCC escalation case creation process used during Winter Storm Mara. It was determined the use of case creation by the UCC should be suspended when the UCC becomes part of the IMT activation. In its place, procedures were established and job aids and training were created to provide UCC staff appropriate procedures to follow during emergency activations related to large scale outage events. |
| Observation 4 – Customer Care | 4.8 | Ensure all Customer Support Service personnel who will support Incident Command during emergency response have completed Incident Command trainings. | Completed | Section chiefs and unit leaders of the IMT in Customer Care have successfully completed Incident Command System (ICS) training. Delivered by the Federal Emergency Management Agency (FEMA), this training provides a standardized framework for managing emergencies. It ensures effective resource allocation, clear communication and coordinated responses during incidents. As a result, Customer Care IMT members are equipped to respond more effectively during emergency activations. |



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| Observation 4 – Customer Care | 4.9 | Solicit customer feedback and suggestions for continuous improvement regarding long-duration outage events, and establish a plan to address concerns, as applicable. | Completed | The Austin Energy Corporate Communications team regularly engages with the community to solicit feedback related to both short- and long-duration outages and help inform process improvements in support of continuous improvement. Since Winter Storm Mara, Austin Energy has participated in 33 community events, reaching more than 2,500 customers. These are opportunities for Austin Energy to hear directly from customers about their outage experience and to pass along improvement opportunities to relevant workgroups within Austin Energy. Additionally, beginning in November 2023, Austin Energy initiated a post-outage customer satisfaction survey initiative. This survey (the Chartwell Tranzact Survey) is sent to select customers after they experience an outage. Customers are asked to provide feedback on the automated communications received during an outage, including any estimated time of restoration, and they are asked about their experiences with Austin Energy’s Outage Map and Outage Alert systems. The Tranzact Survey also ends with an open-ended question asking customers if there are “any other ways Austin Energy can communicate with you or take action to better serve you.” Survey results and feedback are reviewed regularly and will be used to identify areas for further communications improvement. |
| Observation 5 – Incident Command Operations | 5.1 | Re-evaluate Incident Command policy and procedures and focus on employee preparedness, emergency response procedures, and training such as conducting dry runs, drills and exercises. | Completed | Austin Energy re-evaluated its Incident Command policy and procedures with a focus on employee preparedness, emergency response procedures and training. Based on this evaluation, Austin Energy made new IMT assignments and released these assignments to the IMT members. In addition to communicating participation expectations and requirements of all IMT members, the IMT prepared and published an Emergency Management Program Training Calendar containing position-specific workshops, drills and exercises to be conducted during calendar year 2024 and beyond. The Emergency Management Program Calendar is shared with all IMT members. |
| Observation 5 – Incident Command Operations | 5.2 | Evaluate activation procedures for gaps and provide refresher training to ensure all Incident Command staff are well trained. This will include conducting dry runs, drills and exercises. | Completed | Austin Energy’s Emergency Management team evaluated the incident activation procedures for gaps and incorporated improvements to the process. The evaluation process included reviews of past Austin Energy activations and processes currently in place, as well as comparisons to other City of Austin activations. The evaluation also included interviews and conversations with Austin Energy staff who were activated during Winter Storms Uri and Mara. Changes implemented include increasing depth on the IMT, mandatory IMT assignments for Austin Energy staff, the use of ICS forms to develop Incident Action Plans (IAP) and the assignment of an Emergency Management Coordinator to coordinate the IMT year-round. Austin Energy is now conducting ICS training in-house, offering instructor-led training for Intermediate and Advanced ICS. The Austin Energy Emergency Management team now publishes an ICS training calendar to ensure that adequate introductory and refresher training is available for IMT staff. This calendar includes position-specific workshops, drills and exercises. It will be updated annually to ensure that all IMT staff are well trained and that participation expectations have been communicated. |



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| Observation 5 – Incident Command Operations | 5.3 | Collaborate with peer utilities to discuss best practices and implement ways to improve emergency response. | Completed | Austin Energy representatives visited utilities with experience in long-duration outage events to discuss best practices and approaches to improving emergency response practices. It is currently implementing learnings from those visits throughout its emergency operations planning and preparedness efforts, many of which are embedded in other action item responses. The following is a list of utilities visited: <ul style="list-style-type: none"> • Southern California Edison to discuss wildfire preparedness in April 2023, • Jacksonville Electric Authority to discuss hurricane preparedness in June 2023, and • Long Island Power Authority to discuss cold weather/tropical cyclones preparedness in August 2023. |
| Observation 5 – Incident Command Operations | 5.4 | Evaluate the essential status of all Austin Energy employees during emergency response and establish appropriate training and communication. | Completed | Austin Energy determined any Austin Energy employee could be deemed essential during an emergency response. Austin Energy is now defining specific roles and will use the terms "assigned" and "unassigned" during an emergency response. Additionally, to establish a clear understanding of expectations, the IMT roster was revised, expanded and disseminated to all IMT members. In addition, IMT members are trained for their roles and responsibilities, and Austin Energy has communicated to all IMT members that they are deemed essential. The utility will continue to expand the IMT roster as it develops additional units and resources, and team education measures will continue to be offered and required of IMT members. |
| Observation 5 – Incident Command Operations | 5.5 | Optimize shifts for each Incident Command section to ensure support, safety, and wellness. | Completed | Austin Energy optimized shifts for each IMT section to ensure support, safety and wellness of the team members. Steps taken include expanding the roster (recruiting and assigning additional IMT members), developing a plan to activate unassigned team members during mobilization and developing standardized shifts during mobilization to ensure team members have appropriate rest and relief. |
| Observation 6 – Emergency Management Administration | 6.1 | Establish and hire a director-level Emergency Management position to lead the Austin Energy Emergency Management team. | Completed | Austin Energy worked with the City of Austin Human Resources Department to create an Austin Energy Emergency Management Director position and job description. This was implemented by Austin Energy Human Resources and the current Director was hired on June 4, 2023. |
| Observation 6 – Emergency Management Administration | 6.2 | Hire additional personnel for the Emergency Management team to support utility preparedness. | Completed | To support utility preparedness, Austin Energy hired additional staff for its Emergency Management team. The expanded team now includes a Director of Emergency Management and three Utility Emergency Management Coordinators. On an on-going basis, Austin Energy will evaluate the need to add additional staff to this workgroup. |
| Observation 6 – Emergency Management Administration | 6.3 | Review and update Austin Energy Operations Plans to reflect changes and current practices. | Completed | Austin Energy Emergency Operations Plan (EOP) documents were reviewed by internal business units and accepted. The EOP review will continue in perpetuity as an annual task. |

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| Observation 7 – Damage Assessment | 7.1 | Establish and train on a damage assessment process for emergency response. | Completed | To ensure damage assessment occurs in a timely manner, Austin Energy established a damage assessment process for emergency response. Damage Assessment Leaders and two-person Damage Assessment Teams have been identified and defined for the restructured IMT. Damage Assessment Teams will report to the Service Branch Directors and will be assigned to provide detailed damage assessments for each impacted area during an activation. Austin Energy provided the Damage Assessment Teams task-specific training to outline roles and responsibilities during activation, aid in process implementation and provide leadership training. |
| Observation 7 – Damage Assessment | 7.2 | Re-evaluate how Austin Energy uses patrollers during these events to maximize productivity and train them accordingly. | Completed | With Austin Energy’s new damage assessment process, the utility developed new strategies for Patrollers and Damage Assessment Teams. These teams will maximize productivity by gathering front-line information for restoration crews. The roles for each group have been identified and defined for the restructured IMT. During activations, Patrollers and Damage Assessment Teams will report to the Service Branch directors to perform initial, mid- and post-damage assessments on impacted circuits identified by System Operations. Approximately 140 employees have received initial damage assessment training. As training materials are further refined and developed, additional and refresher training — including job specific training — will be provided on an ongoing basis. |
| Observation 7 – Damage Assessment | 7.3 | Retrain patrollers on updating ADMS Field Client software properly and establish a verification procedure. | Completed | Since Winter Storm Mara, Austin Energy retrained existing field staff, including patrollers, on ADMS. Additionally, newly hired, promoted or transferred field staff receive initial or refresher ADMS training as appropriate. Austin Energy will conduct ADMS refresher training for field staff at least twice annually, and participants will be trained on various scenarios and live demonstrations of the verification process. |
| Observation 8 – Restoration Coordination | 8.1 | Re-evaluate storm prioritization process and optimize restoration criteria in phases to support emergency response. | Completed | Austin Energy re-evaluated the storm restoration prioritization process to optimize restoration criteria in phases to support emergency response. Austin Energy amended its Energy Control Center Operating Guide with this information. The formalized process in the updated Operating Guide was approved Nov. 20, 2023 and will serve to establish the prioritization process for critical load customers and large-scale customer outages during emergency response restoration. |
| Observation 8 – Restoration Coordination | 8.2 | Conduct ADMS Field Client refresher training. | Completed | Austin Energy conducted an ADMS Field Client Training Refresher for all Field Operations staff. Refresher training will be offered annually. In addition, Austin Energy will routinely offer WebDMD (a read-only module of ADMS used by support staff) training to assist those who deal with customer escalations and improve emergency response safety, efficiency and communications. |



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| Observation 8 – Restoration Coordination | 8.3 | Establish a mechanism to communicate the documentation reporting process to all sections prior to the event | Completed | Since Winter Storm Mara, Austin Energy retrained existing field staff on ADMS. Additionally, newly hired, promoted or transferred field staff receive initial or refresher ADMS training as appropriate. On an ongoing basis, Austin Energy will conduct ADMS refresher training for field staff at least twice annually, and training will include various scenarios and live demonstrations of the verification process. |
| Observation 8 – Restoration Coordination | 8.4 | Evaluate and establish a process to ensure ADMS cross references with Mobile Workforce Management (MWM) incidents. | Completed | During Winter Storm Mara, service dispatch and field service crews engaged in restoration activities used two distinct systems to track and complete work efforts: ADMS and MWM. Austin Energy evaluated the feasibility and potential benefits of establishing a software interface between ADMS with MWM. Establishing this interface was determined to be impractical as it is beyond the current design capabilities of ADMS, would require extensive manual entry during storms and would be cost prohibitive. Beginning in the fall of 2024, service dispatch and field service crews began using ADMS as the single ticketing system during restoration events; MWM is no longer utilized during restoration events for work tracking and completion. This will prevent duplication of ADMS incident issuances and properly track crew locations. A comprehensive ADMS training program was created and delivered to appropriate field operations staff that includes opportunities for refresher training as needed. |
| Observation 8 – Restoration Coordination | 8.5 | Establish a meter removal and installation process for mutual aid personnel and those without access to electronic record systems. | Complete | Austin Energy established a meter removal and installation process for mutual aid personnel and those without access to electronic record systems. During Winter Storm Mara mutual aid crews were not informed of the Austin Energy process for meter installation and removal, creating inconsistencies in meter readings. Austin Energy created a step-by-step process that states responsibilities of mutual aid crews and Austin Energy employees. The meter removal and installation processes will be communicated verbally to mutual aid crews prior to deployment to the field. An Austin Energy representative is also dispatched with these crews to ensure the correct process is followed and will be responsible for ensuring accurate meter information is captured. |
| Observation 8 – Restoration Coordination | 8.6 | Establish a single-ticket restoration process during emergency response events, and establish a standardized tracking mechanism. | Completed | During Winter Storm Mara, MWM and ADMS were both used, which created issues with multiple crews going to the same location. Accordingly, Austin Energy has established a single-ticket restoration process to be in effect during emergency response events. Beginning in the fall of 2024, field operations began using ADMS as the single ticketing system during restoration events. Under this new process, the Energy Control Center will dispatch ADMS incidents directly to Austin Energy patrollers. This will prevent duplication of ADMS incident issuances and properly track crew locations. |



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| Observation 9 – Response Planning | 9.1 | Add more subject matter experts in the Planning section to support Incident Command and operations with engineering expertise. | Completed | In addition to other emergency response improvement actions taken since Winter Storm Mara, the Austin Energy IMT added more subject matter experts with engineering and technical expertise to the Planning Section in support of emergency response management and operations. To further support utility preparedness, the IMT placed a renewed emphasis on training, including position-specific workshops and the overall IMT structure. On an ongoing basis, the Emergency Management team has been directed to maintain IMT staffing and to regularly communicate with Austin Energy leadership when staffing levels are at risk. |
| Observation 9 – Response Planning | 9.2 | Establish a mechanism to communicate the documentation reporting process to all sections prior to the event. | Completed | Following Winter Storm Mara, Austin Energy established a mechanism to communicate the documentation reporting process to all sections. During Incident Command activations, specific units and/or sections within the IMT will be tasked with reporting relevant data. Required reporting is tasked to individuals within units/sections and completion is tracked by the Operations and Planning Sections Chiefs. The IMT Planning Section is responsible for appropriately documenting these reporting statistics for immediate dissemination within the IMT command structure. |
| Observation 9 – Response Planning | 9.3 | Update the Planning section staffing chart to reflect active/current team members and establish a review and notification mechanism. | Completed | The Austin Energy Emergency Management Director has primary responsibility for ensuring the IMT roster is kept up to date with active members and determining the method of communication as the organization changes. To ensure all IMT assignments are current, including the Planning Section, Austin Energy established a review and notification mechanism to update assignments quarterly. The Planning Section assignments were confirmed at the 2023 fourth quarter IMT meeting. |
| Observation 10 – Tree Trimming/Vegetation Management Coordination | 10.1 | Improve tree trimming coordination processes with restoration operations. | Completed | Since Winter Storm Mara, Austin Energy improved its vegetation management (VM) coordination processes with Restoration Operations by establishing the ability to deploy vegetation planners with large restoration teams to assist with vegetation patrols, customer communications and resource determination. A more robust patrolling and damage assessment process, coupled with the direct assignment of vegetation work during storm activations, will improve the efficient coordination of vegetation management resources during storm activations. Trimming crews and Restoration Operations crews serve under the leadership of the Operations Section Chief, who has the responsibility to ensure coordination of efforts suited to the circumstances of the incident. These resources will be requested, coordinated, and communicated during the Tactic's Planning meeting led by the Operations Section Chief. |
| Observation 10 – Tree Trimming/Vegetation Management Coordination | 10.2 | Hire more tree trimming/VM personnel for regular vegetation preventative maintenance work. | Completed | After receiving City Council approval in Summer 2023, Austin Energy added four additional VM companies to perform maintenance cycle planned work. This brings the total number of companies performing this work up to seven contract VM companies. Austin Energy will continue to evaluate its VM program to meet wildfire and reliability concerns. The 2025 budget submission will include the newly increased number of vendors as well as any further increase needed to meet the requirements of the VM program. |



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| Observation 10 – Tree Trimming/Vegetation Management Coordination | 10.3 | Participate in the City Auditor’s evaluation of Austin Energy’s tree trimming/VM program. | Completed | The City Auditors Department conducted and completed its audit of Austin Energy’s tree trimming/VM program. The audit report is available here: https://www.austintexas.gov/sites/default/files/files/Auditor/Audit_Reports/Austin_Energy_Vegetation_Management_September_2023.pdf |
| Observation 10 – Tree Trimming/Vegetation Management Coordination | 10.4 | Describe the potential risks of vegetation near communication lines to carrier companies and communicate the need for them to trim. | Completed | Austin Energy continues to convey the potential risk of vegetation near communication lines to carriers as part of recurring monthly meetings and quarterly all-carrier meetings. Austin Energy’s Pole Attachment Services group also uses the National Joint Utilities Notification System process to communicate with carriers on specific vegetation management concerns, as well as to provide regular communications on the responsibilities of the carriers to perform proper and timely vegetation management. |
| Observation 10 – Tree Trimming/Vegetation Management Coordination | 10.5 | Define and communicate Austin Energy’s responsibilities versus other department and entity responsibilities for debris removal from customer properties. | Completed | Austin Energy will use various communication channels to update the public about current emergency conditions and will share applicable City of Austin information about debris removal through these channels. During emergency activations triggered by widespread storms in which vegetation is a significant factor in power restoration, Austin Energy will generally not remove brush or debris trimmed during electric system repair work. For City of Austin residents, Austin Energy’s tree trimming page — austinenergy.com/trees — has general information about storm response and brush removal, including a link to the Austin Resource Recovery’s residential guidelines and schedule for curbside brush collection. |
| Observation 11 – Mutual Aid Efforts | 11.1 | Establish and update mutual aid agreements and Emergency Electrical Services Contracts as well as a process for maintaining them. | Completed | Austin Energy will continue to use the Texas Mutual Assistance Group during a situation in which our own resources are not adequate to complete the restoration needs in a timely manner. Austin Energy also participates in the Texas Public Power and American Public Power networks for lending and requesting mutual aid. Austin Energy has reviewed its mutual aid agreements and Electrical Services Contracts, ensuring that necessary arrangements are in place for activation when required. The organization also maintains a Mutual Assistance Agreement with the Edison Electric Institute, an association representing investor-owned utilities. Additionally, Austin Energy has a Memorandum of Understanding (MOU) with the Austin Independent School District to establish laydown and staging yards as needed. These agreements undergo annual reviews as part of the organization’s ongoing emergency preparedness efforts |
| Observation 11 – Mutual Aid Efforts | 11.2 | Develop and maintain agreements for scalable, offsite staging areas for emergency management operations including facilities, yards and parking lots as required. | Completed | In order to secure scalable, offsite staging areas for emergency management operations, Austin Energy has developed agreements with local entities. Austin Energy has an MOU with Austin Independent School District for the use of large parking lots at two sites, an MOU for the use of the Travis County Expo Center, and an MOU with the Circuit of the Americas. Furthermore, Austin Energy can utilize property it owns at the Decker Creek Power Station for staging areas if needed. |



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| Observation 11 – Mutual Aid Efforts | 11.3 | Establish contracts for storm contract services as well as a process for billing, communicating objectives, and standardizing close-out requirements for contracts. | Completed | Five contracts have been established to meet emergency catering needs, ensuring the provision of meals for all Austin Energy personnel, as well as any contracted staff required to assist in the restoration of the Austin Energy utility infrastructure. Furthermore we have contracts that include six vegetation management vendors that can be used in an emergency. These contracts clearly outline the objectives, conditions, standard billing procedures and closeout processes. Additionally, Austin Energy has agreements with local restoration vendors that can also be utilized during emergencies. To further enhance resiliency, agreements are currently being developed with nationwide restoration service providers, with finalization expected in 2025. |
| Observation 11 – Mutual Aid Efforts | 11.4 | Define roles and responsibilities for mutual aid demobilization activities. | Complete | The National Incident Management System structure defines the roles and responsibilities of demobilization. Close out for all operations, including mutual aid, is accomplished through the Planning Section as an element of the Demobilization process. As part of Austin Energy's IMT restructure, all IMT members receive position-specific workshops, drills and exercises to be conducted during calendar year 2024 and beyond in order to perform their roles and responsibilities efficiently. |
| Observation 12 – Collaboration with City of Austin Departments and Other Governmental Entities | 12.1 | Develop a better process for Liaisons to obtain and share status updates with Austin Energy Incident Command personnel on EOC requests. | Completed | As part of its IMT restructure, Austin Energy updated the title of this team from EOC Liaisons to EOC Responders. This update reflects the differences between the roles of the Liaison Officer and EOC Responder. During an EOC activation, most inquiries to the EOC Responder primarily concern the status of outages at specific locations. To address those requests, assigned EOC Responders have completed in-person, instructor-led training on WebDMD. This tool is a read-only module of the ADMS used by support staff to assist those who deal with customer escalations and to improve emergency response safety, efficiency and communications. Austin Energy also created a supplemental computer-based training on WebDMD for new or additional EOC Responders on an as-needed basis. |
| Observation 12 – Collaboration with City of Austin Departments and Other Governmental Entities | 12.2 | "Optimize collaboration between Austin Energy and Transportation Public Works (TPW) to mitigate the impacts of power outages on traffic signal operations. TPW is identifying and mapping power source pole locations to expedite." | Completed | Since Winter Storm Mara, Austin Energy initiated several projects with TPW to mitigate the impacts of power outages on traffic signal operations. TPW and Austin Energy conducted a tabletop training to discuss and improve emergency event restoration efforts. TPW also provided Austin Energy with an updated intersection list that identifies intersections that are a priority for public safety. Austin Energy also installed information tags in ADMS for intersections that were identified as the highest priority for visibility during power restoration efforts. Austin Energy and TPW will continue to collaborate to enhance public safety. |
| Observation 12 – Collaboration with City of Austin Departments and Other Governmental Entities | 12.3 | Work with the law enforcement entities to revisit the best way to obtain support for threats and acts of violence against Austin Energy employees during restoration activities. | Completed | Austin Energy reviewed and revised the process of reporting threats and acts of violence against utility employees to streamline how incidents are reported during emergency events and the subsequent engagement of law enforcement. The Austin Police Department has assigned the Austin Regional Intelligence Center as the point of contact for emergency events. The information above is included in Austin Energy's security procedures. |

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| Observation 13 — Logistics Coordination and Supply Chain Management | 13.1 | Identify suppliers/vendors capable of meeting service demands and establish agreements. | Complete | Austin Energy evaluated the capacity of its identified vendors and suppliers to ensure preparedness for IMT activations. The Austin Energy Emergency Management group maintains situational awareness of environmental, public safety and other risks to assess the necessity for vendor support. Austin Energy has identified restoration assistance vendors capable of responding during non-standard events based upon their availability, and is in the process of establishing pre-incident agreements to engage these vendors when needed. The City of Austin Fleet Mobility Services department maintains fuel contracts on behalf of all City of Austin departments. As vehicle service and fuel capacity is critical during an IMT activation, Austin Energy met with Fleet Mobility representatives to collaborate on best practices to meet Austin Energy's fleet service needs. Lastly, the management of Austin Energy's supply chain work group benchmarked its vendor list and processes with those of a similar utility, confirming the effectiveness of its current approach. |
| Observation 13 — Logistics Coordination and Supply Chain Management | 13.2 | Optimize the catering service procurement and coordination process | Completed | Austin Energy has optimized catering services by establishing contracts from a range of caterers that responded to the Request for Bid from the City of Austin competitive process. These contracts will allow Austin Energy to procure catering options for a range of incident needs. |
| Observation 13 — Logistics Coordination and Supply Chain Management | 13.3 | Optimize the lodging procurement and coordination process. | Completed | Austin Energy Emergency Management staff maintains a lodging list for use during an IMT activation that covers service center proximity, cost and quality. Staff continue to investigate and pursue additional lodging and service contract opportunities to expand and coordinate lodging options. Austin Energy also has the ability to use the City of Austin hoteling contract for lodging during IMT activations. |
| Observation 13 — Logistics Coordination and Supply Chain Management | 13.4 | Re-evaluate the identification process and tracking system requirements to manage and coordinate logistic services during emergency response. | Completed | Austin Energy has reevaluated its identification process and tracking system requirements to better manage and coordinate logistic services. As part of the National Incident Management System framework and response, the use of an IAP to track, manage and coordinate services during emergency response can improve Austin Energy's logistics performance. IAPs help facilitate the provision of services (such as the identification of appropriate staff to receive room and board) and the assignment of staff (such as identification of drivers and runners and those available to act as site coordinators during activations). Using a commercially available software application, IAPs can be generated within the system and shared throughout the organization. A project is underway to implement that software application to facilitate the use of IAPs within the utility. As Austin Energy works to obtain the preparedness and response software, the utility is coordinating response activities through multiple mediums to produce IAPs, including face-to-face meetings, Teams and Webex applications, SharePoint and paper hard copies of ICS forms. |

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| Observation 13 — Logistics Coordination and Supply Chain Management | 13.5 | Improve Incident Command sequester support during long-duration outage events. | Completed | Austin Energy examined methods to improve sequester support during long-duration outage events. After determining that the installation of on-site laundry facilities would be cost prohibitive, the IMT staffing roster was expanded to enable appropriate relief scheduling during long-duration outages. To provide additional logistical support to the IMT, the acquisition of contracted laundry services as an emergency assistance contract is under review. |
| Observation 13 — Logistics Coordination and Supply Chain Management | 13.6 | Implement third-party review of Austin Energy critical facility backup generators, and establish a maintenance plan for fuel testing. | Completed | Austin Energy performed a third-party review of backup generators at critical facilities on Nov. 29, 2023. The report states the generators on-site are capable of handling the load at the reviewed critical facilities. It also states the peak demand measured at these facilities meets the minimum loading requirements for the generators as designed. The review also concluded the available capacity of the on-site generators can meet future load growth and a heavy use event. Quarterly preventive maintenance performed under a Citywide contract includes periodic fuel testing. |
| Observation 14 — Financial Management | 14.1 | Establish an Emergency ProCard Readiness Process. | Completed | A standard process has been created to request and approve credit limit increases to ensure the adequate credit availability for emergency purchases. A quarterly audit is in place to confirm available limits. Cardholders and the assigned Austin Energy Emergency Coordinator will be notified of cards with outstanding items during audit reviews. |
| Observation 14 — Financial Management | 14.2 | Establish an Emergency ProCard Incident Command Process. | Completed | Following Winter Storm Mara, Austin Energy created a standard process to request and approve increases to ProCard authority limits when needed to ensure adequate credit availability for emergency purchases. During the initial activation, the Finance Section Chief and/or designee will convey the process verbally, via email and on the event SharePoint site to the Austin Energy Emergency Coordinator and all Emergency ProCard users. Further, Emergency ProCard users are required to complete and sign the Austin Energy Mastercard Purchasing Agreement, as well as read and adhere to Austin Energy's Emergency ProCard Policy. |
| Observation 14 — Financial Management | 14.3 | Establish a protocol to send out reminders about mandatory backup documentation for purchases during emergency events. | Completed | Austin Energy Finance personnel created a template (the Cost Tracking Guidance Template) for tracking backup documentation for all event-related purchases. This template will be customized for each incident or event to track all purchase backup documentation. |
| Observation 14 — Financial Management | 14.4 | Ensure essential and designated response personnel have Emergency ProCards. | Completed | Following Winter Storm Mara, Austin Energy conducted an audit of all existing designated Emergency ProCard holders and identified a need for additional response personnel to receive cards. Applications for additional Emergency ProCards were submitted, received and processed. The Emergency ProCards were issued to the applicants for use during officially declared IMT activations. |



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| Observation 14 – Financial Management | 14.5 | Evaluate and modify the Contractor Work Reporting module in Maximo to require work to be entered by date instead of service period. | Completed | Austin Energy reviewed the Maximo Contractor Work Reporting module with the product support team to determine how best to access information from the system. Contractors will submit timesheets indicating work by day to support the work being invoiced to Austin Energy for the billing period. These timesheets will be retained and used as a reference in circumstances where daily information is required by FEMA from an activation event. Austin Energy will reiterate with vendors to use the special storm work order number to accurately track storm-related work during an activation event. With these changes, affected Maximo users can retrieve the information needed in a usable format. |
| Observation 14 – Financial Management | 14.6 | Establish event time code accountability. | Completed | The City of Austin must activate and authorize earn codes prior to use by Austin Energy. Austin Energy has communicated the need for timely activation, authorization and communication of time codes. |
| Observation 14 – Financial Management | 14.7 | Establish the Event Accounting Codes process. | Completed | Austin Energy Finance creates and communicates internal accounting codes, referred to as "task codes" for Austin Energy use prior to an event. Additionally, the City Controller's office activates an accounting code, referred to as a "project code," to be used by non-Austin Energy City departments. As a result, two separate codes are utilized for tracking storm-related expenses and activities. Going forward, since Austin Energy typically initializes the task code first, Austin Energy will notify the City of Austin Controller's office and the HSEM office that a task code is being established and to request a corresponding project code be established by the City. Once the City activates the event-specific project code, they communicate the code to the other City departments. By following this protocol, the two codes can be associated in the system allowing for reporting on both codes without the need to generate separate reports by Austin Energy task code and City project code. |



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