



SEPTEMBER 17, 2025

DUQUESNE LIGHT COMPANY AFTER-ACTION REVIEW

FOR STORM EVENT DESIGNATED L9048
ON APRIL 29, 2025



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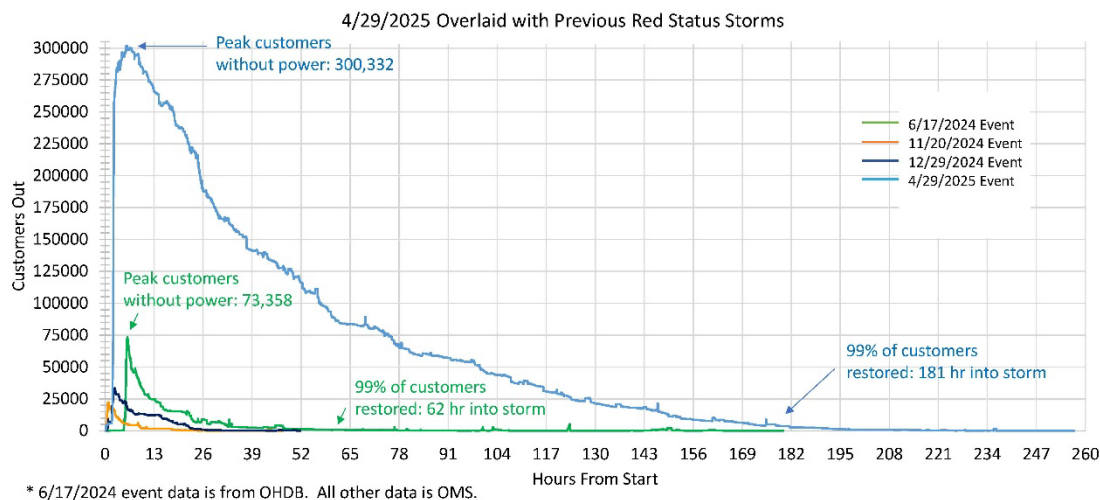
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Executive Summary

After the most serious weather event in Duquesne Light Company's (DLC) 145-year history, one that caused unprecedented damage to the region and company facilities, restoration efforts required an extraordinary and continuous response. The April 29, 2025, storm affected service to approximately 303,000 customers, representing nearly 50% of the customer base. Despite the scale of the damage, 95% of customers were restored by Day 5, with full restoration achieved after nine consecutive days of non-stop work. Additional efforts continued for several weeks to fully stabilize and restore service across all affected areas.

This restoration effort required over 600 mutual assistance contractors, as well as the replacement of nearly 300 transformers, 100 miles of wire and more than 500 utility poles.

Final Customer Outage Report for April 29th Storm



Immediately following the storm, the company organized several focus groups composed of customers who were impacted by the storm to hear directly about their experiences and frustrations. This began a monthslong process of gathering input from customers and stakeholders that included participating in public hearings and meetings, engaging with elected and community leaders, and collecting feedback through customer service channels. DLC also initiated a comprehensive After-Action Review (AAR) to evaluate its response. The AAR process utilized Human-Centered Design (HCD) tools to be inclusive and data-driven, engaging employees across all departments and roles. More than 1,000 employees participated in approximately 40 facilitated workshops focused on successes, opportunities and actions from the storm response, generating over 1,000 action ideas.

Many of the opportunities gathered during the AAR have already been implemented and many more are being used to inform strategic investments, training and process enhancements to ensure even greater preparedness for future events.

Among those opportunities for enhancing future storm response are more extensive customer communication, integrating vegetation management more effectively and refining mutual assistance processes. Other areas that can be improved include clarifying the storm command structure to ensure consistent leadership and decision-making, improving the usability of digital tools and strengthening internal coordination through centralized communication systems.

Additional opportunities include optimizing ticketing and dispatch workflows, expanding storm role training and improving logistics and resource planning by integrating supply chain functions. The AAR also highlighted the need for better real-time data visibility to support decision-making.

To address these opportunities and more, the company has prioritized cross-functional actions for review and implementation. These include aligning restoration priorities, messaging and role assignments across departments to promote integrated execution and improve customer communication. Efforts are underway to improve the accuracy and consistency of local Estimated Times of Restoration (ETRs), enhance coordination with municipalities and provide clearer restoration criteria to both internal teams and the public. The company is reviewing contractor deployment processes to support more efficient integration. Other priorities include clarifying storm roles, reinforcing safety practices, improving damage assessment readiness and ensuring critical infrastructure coordination.

Additional actions focus on improving customer experience through expanded outreach and support with community resources. Of particular note is the company's effort to partner with a local retailer to supply ice and bottled water to customers experiencing prolonged outages, a practice followed by others in the industry.

To be clear, successes were identified in the AAR process, as well. No serious injuries to any employees were reported during the restoration process amid consistent adherence to safety protocols across all crews. The use of digital tools enabled real-time job tracking, improved outage location accuracy and streamlined crew deployment. And a fully operational base camp was quickly established for the first time in the company's history to support over 200 contractors, and mutual assistance crews were efficiently onboarded and integrated into operations.

However, DLC's focus now and in the future will be on those opportunities that improve upon the company's commitment to operational excellence, customer care and grid resilience during future storm events. The AAR serves as a foundation for continued improvement, transparency and collaboration with external partners, and will inform future planning, training and investment decisions.

Event Background

On April 29, 2025, a severe storm struck DLC's service area, resulting in widespread power outages across the region. The scale and intensity of the event were unlike anything the utility had previously experienced. Approximately 303,000 customers—nearly 50% of the customer base—lost power, with a handful of outages lasting more than a week due to extensive infrastructure damage.

According to the National Weather Service (NWS), the storm produced sustained winds up to 41 mph and peak gusts reaching 71 mph. Overall, 393 circuits, or 62% of the company's total, experienced full or partial outages as the storm downed power lines, toppled trees and caused significant damage to poles and equipment. Both Allegheny and Beaver counties were heavily affected.

Preparedness & Pre-Storm Actions

Forecast Overview

Leading up to April 29, 2025, the National Weather Service issued warnings for severe weather across DLC's service area. Forecasts included:

- Large hail and damaging winds, initially predicted at 50-60 mph and later updated to 60-70 mph
- Sustained winds expected in the 20-40 mph range during peak hours
- Potential for isolated tornadoes north of Pittsburgh
- Storm activity anticipated to begin mid-afternoon and continue through the evening, with lingering effects until midnight

Operational Preparedness

In response to the forecast, DLC implemented a series of proactive measures to ensure readiness:

- **Operations Center**
 - Increased staffing in anticipation of severe weather
 - Reviewed scheduled work and implemented proactive adjustments
 - Operations Center staffing was increased overnight (April 29-30) to manage potential outage volumes
 - Each Service Center provided full backshift coverage and added an extra crew for continued support through the morning of April 30
 - An additional troubleshooter was deployed in each district
 - One Protection & Control (P&C) crew was held per territory to ensure availability
- **Personnel Readiness**
 - Employees with designated storm roles were notified and placed in a state of readiness in case of storm activation

Pre-Storm Communications

The Company initiated pre-storm communications with internal and external stakeholders:

- Warned customers to prepare for severe weather via multiple channels including email, social media and press release; the email was sent on April 28 at 6 p.m. to over 360,000 email addresses.
- Notified the Public Utility Commission (PUC) of anticipated customer outage impacts and outlined preparedness actions.
- Distributed internal communication via email and Teams to inform employees of the forecast and readiness plans.

After-Action Review

Methodology

The After-Action Review (AAR) was conducted using Human-Centered Design (HCD) tools through a series of 39 facilitated, in-person workshops involving approximately 1,100 employees. Participation was open to every employee involved in the storm response effort.

Workshops were held from late May through the end of June 2025 and generated nearly 1,100 ideas based on employees' experiences with this weather event and others. These ideas were added to findings from the customer focus groups and synthesized and organized into dozens of thematic actions. To prioritize these actions, a 2x2 matrix was used, with the x-axis representing ease of implementation and the y-axis representing restoration impact—a weighted average of speed to restoration, customer communication effectiveness, and affordability.

Many ideas were modifications or expansions of existing company procedures and protocols that will further improve DLC's performance in future severe weather events. Also, while the majority of these actions are related to internal processes that may be unfamiliar to the average person, we expect each of these enhancements to improve the overall recovery time for weather events, thus improving customer experience.

Using the prioritization matrix, actions were categorized into four groups:

- Evaluate Now: Ownership assigned and next steps being identified
- Strategically Plan: Ensuring resourcing in business plan and assigned organizational ownership
- Do As We Can: Ownership assigned to service centers and relevant business units
- Monitor: Business units will track progress over time

The Evaluate Now category includes the highest-priority actions identified through the AAR process. These actions have been assigned to owners and are actively being pursued for execution.

Evaluate Now

1. **Cross-Functional Alignment:** Make sure all teams are on the same page during storm recovery by coordinating messages, priorities, roles, and communication. This includes keeping customers updated and matching people's skills with the right tasks.

- a. The Company has introduced a storm dashboard to improve information sharing across teams, though it has not yet been tested in a live storm environment. Efforts are ongoing to explore technological solutions that enhance situational awareness and support a unified operating picture across storm roles.
 - b. In terms of role alignment, the Company continues to evaluate and refine storm roles to better match skills to tasks. This work began after a severe storm in June 2024 and is expected to take up to 24 months to complete.
2. **Customer Experience and Communication Enhancement:** Make storm-related communications clearer and more helpful for customers. This includes better education, support for vulnerable individuals, improved digital tools and stronger follow-up after the storm.
 - a. Initial steps to improve communication are already underway, including efforts to update crew statuses on the outage map for clearer customer messaging.
 - b. Support for vulnerable individuals will require collaboration with community partners, as this area extends beyond the company's sole responsibility. Post-storm evaluation remains ongoing.
 - c. The company expanded the number of available ports in the automated phone system, enabling more customers to be serviced simultaneously during major storms.
 - d. A website enhancement was implemented to automatically update the homepage with storm-related resources as soon as storm protocol is activated.
 - e. The company is refining its customer messaging strategy through ongoing campaigns, and customers are encouraged to update their contact information to receive timely storm and outage updates.
 - f. Proactive educational campaigns are being prepared to inform customers about:
 - Storm preparedness (e.g., food safety, outage reporting, electrical hazards)
 - Restoration priorities
 - Vegetation management
 - Emergency planning
3. **Field Operations and Public Communication Enhancement:** Support field teams with clear tools and training while keeping the public informed through straightforward communication via news, community group and customer channels.
 - a. Plans are underway to develop a corporate strategic approach to storm training, with initial discussions scheduled to explore a unified training framework for storm roles. Anticipated full rollout of this program is 12-24 months.
 - b. Evaluations of tools to improve crew coordination and resource management are taking place.
 - c. Other solutions or Outage Management System (OMS) enhancements are being evaluated to support both internal teams and external contractors.
4. **Role Clarity and Access Enablement:** Make storm roles clear and scalable by defining responsibilities, giving support teams the access they need and improving communication to keep everyone coordinated.
 - a. A role teardown and rebuild process is underway to clarify responsibilities and improve scalability. Projected to be completed in 12-24 months.

- b. A comprehensive training and exercise program is in development to support storm role readiness.
 - c. Access needs (physical and technological) are being identified as part of the role redesign effort.
 - d. A review of the company's Blue/Yellow/Red protocol is in progress to refine activation, escalation and storm classification processes. Projected to be completed in early 2026.
- 5. **Safety Practices and Communication:** Keep crews safe by following energization rules, ensuring rest during long shifts and sharing consistent safety messages through daily updates and campaigns.
 - a. A new Circuit Quarantine procedure is in development to address safety ambiguities experienced during the storm; it is expected to be completed by the end of September.
- 6. **Storm-Resilient Customer Digital Experience:** Ensure customer-facing websites and applications are working during storms by load testing them regularly, monitoring performance to avoid outages and ensure access to important services.
 - a. In September 2025, the company partnered with a third party on an 8-week initiative to evaluate our storm-related capacity across digital customer channels (web, mobile, IVR). The engagement includes a full architectural assessment of the supporting systems to ensure scalability and reliability during high-impact events. Recommended improvements will be available in Q4 2025.
- 7. **Critical Infrastructure Coordination:** Keep essential services running during storms by working with critical facilities to make sure they have backup power, get priority repairs and have clear ways to report urgent needs.
 - a. A review of the "critical customer" definition is planned to ensure accuracy and relevance.
 - b. The project will clarify distinctions between "critical" and "high-priority" customers, update flags in internal systems and improve internal processes for handling urgent requests from these facilities.
 - c. Estimated timeline for completion is 6-12 months to ensure thorough execution.
- 8. **Damage Assessment Readiness and Execution:** Speed up and improve damage checks after storms by growing and training the assessment team, setting clear timelines and streamlining how information is collected and shared.
 - a. OMS access was granted to damage assessors after the storm to reduce reliance on phone coordination. In addition, the damage assessment matrix has been streamlined to decrease the time needed to complete assessment and assign work.
 - b. Ongoing review and improvement of damage assessor and line sitter training is part of the broader storm role and training overhaul.
 - c. The damage assessor role is expected to be among the first to receive updated training under the new storm training approach, with a target timeline of approximately 6 months.

9. **Contractor and Mutual Assistance Integration:** Make storm recovery smoother by creating consistent processes for bringing in and supporting outside help. This includes better planning for crew camps, access to systems and coordination so teams can work safely and efficiently on their own.
- a. Technology solutions are being explored to improve contractor resource management.
 - b. A team is evaluating the use and strategy for “bird dogs”—DLC team members who oversee work being done by outside contractors—to enhance coordination.
 - c. A new base camp plan/template was developed by a summer intern group and may be feasible with adjustments.
 - d. Mutual assistance improvements—including onboarding, documentation, base camp planning and support role development—are expected to take 12–18 months to fully implement.

These improvements will allow DLC to scale up our storm response efforts and enable the company to bring in a significantly larger number of mutual assistance crews if needed.

10. **Strengthening Communication Processes:** Eliminating gaps in sharing information both internally and externally—with customers, emergency agencies, elected officials and other—and better aligning words with actions will speed restoration efforts and give the community a better understanding of the overall situation as well as their own individual circumstances.
- a. DLC will continue to refine the process for determining the most effective communication channels for each customer (social media, TV, radio, email, etc.) and tailor messages accordingly.
 - b. The company is currently building campaigns to encourage customers to update their contact information, ensuring they receive timely updates during storms.
 - c. Customer communication will be integrated into training for line sitters (field staff who interact with customers during outages), including providing them with talking points, FAQs and printed materials to answer common questions and explain restoration steps.
 - d. After-action and storm plans will be sent directly to customers, summarizing what was done and what to expect next. DLC will also develop a repeatable program for surveying customers about their outage experience, using feedback to drive improvements, pending onboarding of a new vendor.
11. **Expanding Education and Outreach:** Creating a better understanding of how grid infrastructure operates, and how the company responds to severe weather events, among stakeholders will lead to more accurate expectations and better coordination in future storms.
- a. DLC will create and distribute media explaining storm safety, downed wires, tree trimming, and the restoration process. These materials will be available in multiple languages and formats (print, digital, video, YouTube series).

- b. DLC will expand outreach to schools and community groups, educating the public about storm preparedness, electrical safety, and the specialized work required for storm restoration.
 - c. Customers will be provided with clear information on what DLC can and cannot fix, rules and processes, and how to prepare for storms (including food safety and wiring approvals).
 - d. DLC will offer annual training touchpoints for media to explain restoration processes and share information regarding storm preparedness, with a specific emphasis on how to read our outage management map.
12. **Enhancing Digital Tools and Self-Service:** Leveraging existing and new technology to put more power into customers' hands to share their issues with service as well as learn more specific information as they need it.
- a. The company is piloting a chatbot function on DuquesneLight.com to speed up customer interactions for services that do not require more in-depth assistance. This function was launched in August 2025.
 - b. DLC will continue to enhance its messaging on the outage map and outage alerts sent to customers using technology, including planned updates to outage causes and crew statuses.

Do As We Can

1. **Customer Support Readiness:** Prepare customer service teams to handle storm-related calls by providing additional training on key systems and improving their process for entering outage tickets.
 - a. The Operations Center is working on phone system improvements; RFPs are being assembled with deployment anticipated in 2026.
 - b. Additional training needs for the Contact Center are recognized and will be explored further.
2. **Drone and Field Technology Integration:** Use drones and other technology tools to assess damage faster, keep workers safe and make storm recovery more efficient.
 - a. A business case is currently being developed to expand the use of drone technology.
3. **Flexible and Transparent Storm Scheduling:** Make shift planning easier and fairer by considering crew availability, allowing flexible hours and designing overlapping shifts to reduce fatigue and ensure smooth transitions.
 - a. Storm roles typically follow 12-16 hour shifts, with a preference for 12-hour schedules when possible.
 - b. Opportunities for improvement primarily relate to damage assessment and line sitting; these areas will be explored further over the next 6–9 months.

Note: Flexible hours may not be feasible during large-scale storm events.
4. **Hospitality Planning and Support:** Care for crews during storm work by organizing food and break plans early, making sure meals are fairly distributed and keeping morale high with consistent support.
 - a. The expansion of hospitality services to include service centers is being considered as part of the storm role teardown and rebuild.

- b. A multi-year, phased effort is underway to revamp mutual assistance procedures, including hospitality planning.
 - c. Break planning is complex and must be tailored to specific roles; internal crew improvements may be feasible within 6-12 months, while external crew support may take 12-18 months due to broader mutual assistance updates.
- 5. **Internal Recognition and External Coordination:** Build a strong storm response culture by celebrating employee efforts and working closely with local governments and partners to stay coordinated.
 - a. Planning is underway with the Government Affairs team to strengthen relationships with elected officials and government agencies at the local, state and federal levels during storms.

Note: Successful coordination will require mutual engagement with external partners, making a timeline estimation challenging.
- 6. **Pre-Storm System Health and Performance Assurance:** Make sure systems and applications work properly during storms by enhancing storm preparedness checks ahead of time, monitoring performance during an event, and fixing technical issues before they cause delays.
 - a. Discussions with IT are underway to improve and enhance health checks; collaboration is needed to identify additional checks that should be implemented.
- 7. **Staffing Strategy and Workforce Engagement:** Ensure resource availability to handle all parts of storm recovery by planning ahead, offering flexible work options and engaging the workforce to support fast and effective repairs.
 - a. Storm roles may be expanded as part of the ongoing storm role teardown and rebuild process.
 - b. Night shift staffing varies by role; some roles are intentionally staffed lightly overnight.
 - c. Surge staffing is being considered for large-scale events, including the use of non-traditional employees for roles like line sitting.
- 8. **Storm Communication Strategy and Readiness:** Create a clear and consistent communication plan for storms by setting standard procedures, improving teamwork, tailoring messages for customers and training teams to respond effectively.
 - a. The company is taking a holistic approach to establishing and communicating Estimated Time of Restoration (ETR), including refining messaging with customer input to ensure clarity and usefulness.
 - b. The company is developing new storm roles and fostering cross-department collaboration to improve the efficiency and clarity of ETR communication, tracking and updates, which will help customers plan during outages better.
 - c. Future enhancements include introducing two-way text messaging, allowing customers to report if they are still without power after receiving a restoration notification, ensuring they remain on the restoration list.
 - d. Efforts are underway to improve support for county 911 and emergency operations centers during storms.
 - e. Role clarification is part of the broader storm role teardown and rebuild initiative.

- f. A new storm role is being launched to improve communication between field teams and the Ops Center.
 - g. Expansion of Outage Management System support to field teams is planned.
 - h. The Blue/Yellow/Red protocol revamp aims to improve communication of expectations and actions based on storm severity levels.
- 9. **Storm Readiness and Logistics Planning:** Prepare for storms by organizing planning data, making sure teams are ready on time and streamlining logistics and supply chain operations for fast and effective response.
 - a. Initial conversations with the supply chain team are underway to define formal storm roles; this effort is ongoing.
- 10. **Storm Role Definition and Alignment:** Make storm roles clear and well-matched to employee skills by documenting responsibilities, setting expectations and providing training based on the severity of the storm.
 - a. Broader improvements to role clarity and training are expected as outcomes of the ongoing storm role teardown and rebuild work.

Strategically Plan

These initiatives will require dedicated resources via the company's long-term business plan and will be assigned organizational ownership in the future.

1. **Crew Deployment and Field Enablement:** Help field crews work faster and safer by giving them better tools to manage jobs in real time, improving visibility and organizing crew assignments to reduce delays and speed up repairs.
 - a. Tactical equipment needs are being reviewed with field teams and procurement.
 - b. Options are being explored to supplement bird dogs with internal resources; staffing discussions are ongoing to determine task alignment across teams.
 - c. Circuit quarantine improvements are expected to support safer and more efficient crew deployment.
2. **Data Integrity and Information Flow:** Make better decisions during storms by ensuring data is accurate, consistent and easy to access. This includes improving field reports, system data and real-time updates, and using analytics to guide actions.
 - a. Multiple OMS enhancements are planned following discussions with vendor.
 - b. Field crews will not be permitted to create their own jobs; however, support within service centers for job creation is being considered.
 - c. OMS training will be improved on a role-by-role basis as part of the broader storm role revamp, helping address data gaps in tickets.
3. **Emergency Resource Integration:** Improve storm response by working more closely with emergency agencies and using insights from first responders to guide operations and track progress.
4. **Inventory Management & Material Readiness:** Ensuring Storm Readiness by keeping key materials and equipment organized, checking team readiness and streamlining how supplies are stored and delivered.
 - a. Near-term improvements are being considered for material delivery and staging processes.

5. **Operational Readiness & Field Support:** Help crews stay focused and safe during storms by providing backup resources, quick guides, and tools that support smart decision-making in the field.
 - a. Developing simple, targeted content to support field crews with fast, practical guidance for repeatable and standard-use case solutions.
6. **Optimize Internal Workforce Structure:** Strengthen storm response by training internal teams, making sure roles match skills and ensuring all workers—including support roles—have the tools and access they need.
 - a. Recognizing the need for more specificity in workforce optimization efforts; leveraging related examples and feedback from other initiatives.
 - b. Considering integration with existing training and role development programs to ensure internal teams are storm-ready.
 - c. Exploring ways to better equip support roles with tools and access needed for effective storm response.
7. **Process Standardization and Automation:** Speed up and simplify storm recovery by automating key steps, using consistent repair procedures and making it easier for the public to understand how restoration works.
 - a. Process documentation is being addressed through the storm role overhaul initiative.
8. **Process Standardization and Communication:** Create clear, consistent storm response plans across teams. This includes better scheduling, confirming outages, managing vegetation and improving communication with internal teams and the public.
 - a. Procurement and supply chain storm roles are slated for development.
 - b. Process documentation will be created as part of the storm role overhaul.
 - c. Storm plan updates will be ongoing throughout the improvement process.
 - d. Right-of-Way (ROW) management opportunities are under consideration; planning is needed to address them.
 - e. The implementation of a dedicated emergency management crew consisting of a line worker crew and a tree crew is in progress.
 - f. The company is actively working to correct master-metered locations, which are locations that currently register as a single customer (one master meter), when in fact they are locations that serve multiple individual customers. This effort aims to improve the accuracy of outage impact reporting by ensuring full visibility of the number of affected customers.
9. **Readiness Planning and Logistics:** Stay prepared for storms by organizing supplies, checking team readiness and ensuring materials and equipment are available as needed.
 - a. Exploring improvements to line sitter check-in procedures to enhance storm readiness and operational efficiency.
 - b. Evaluating options for delivering materials based on crew locations and base camp setups; feasibility to be assessed with Supply Chain and Field teams.
 - c. Potential for improved readiness through an additional service center. Status pending until a proper business plan evaluation.

10. **Resource Readiness and Deployment:** Get crews and equipment where they need to be quickly by organizing people, vehicles and tools ahead of time. This includes defining support roles and making sure everything is ready before the storm hits.
 - a. Developing roles focused on work planning and management to support material coordination and deployment.
 - b. Actively updating the roster of retired employees available for critical storm staffing under union agreement provisions.
 - c. Identifying opportunities to improve coordination between tree crews and overhead line crews; not yet formalized but under consideration.
11. **System Access and Mapping Integration:** Improve coordination during storms by making sure teams have access to mapping and tracking tools, receive proper training and get support at service centers to keep systems running smoothly.
 - a. Aligning with broader storm role training efforts; assessing needs across field teams and the Contact Center.
 - b. Crew status updates are in testing, led by the Customer team to improve real-time coordination.
 - c. Some system access is limited due to system architecture; visibility will expand once our real time SCADA system is split between Transmission and Distribution.
12. **Training and Preparedness Development:** Ensure readiness for storm response through expanded company-wide drills, technical training, leadership development and practice scenarios including weather-specific and safety procedures.
 - a. Aligning with broader efforts to build a structured training and exercise program for storm response.
 - b. Reinforcing technical skills, leadership readiness and safety procedures through coordinated drills and scenarios.
 - c. Considering a company-wide framework to ensure consistent preparedness across roles and regions.
13. **Volunteer Engagement and Coordination:** Create a clear plan for using employees in volunteer roles during storms by defining their duties, outlining how to participate and providing training and communication tools to maintain safety and effectiveness.
 - a. Volunteer roles will be clarified as part of the broader storm role and training program overhaul.
 - b. Currently limited to specific roles (e.g., line sitters); broader use under evaluation.
 - c. Considering quick-deploy options for high-impact storms.
 - d. Contractors will be required to bring their own PPE to preserve volunteer supplies.

Monitor

Business units will track progress over time on these opportunities, but no immediate decisions or actions are required.

1. **Field Data Accuracy and Coordination:** Make field work more efficient by clearly identifying equipment, using consistent documentation and applying mapping tools to coordinate tasks in real time.
 - a. Continuing to reinforce key field behaviors through ongoing training initiatives.

- b. Promoting standardized documentation practices to improve data reliability.
 - c. Leveraging mapping tools to support efficient task coordination and equipment identification in the field.
- 2. **Line Sitter Program Development and Execution:** Create a more robust program for line sitters by setting clear training, safety rules and communication standards. Make sure they have the tools and support needed to work effectively and safely with the public.
 - a. Exploring more comprehensive training and potential role redesign to improve effectiveness and safety.
 - b. Considering a dedicated effort or team to evaluate and build a reliable, scalable line sitter program.
 - c. Focused on establishing clear safety protocols, communication standards, and ensuring proper tools are available.
- 3. **Operational Structure and Coordination:** Improve storm response by utilizing a more decentralized model, expanding control center capacity, setting clear zones for repairs and boosting teamwork between field crews and control teams for faster, smarter decisions.
 - a. Future-state goal to spread out storm operations; timeline still to be defined.
 - b. Expanding number of Operations Center workstations to increase flexibility.
 - c. Current limitations prevent Operations Center personnel from being deployed to service centers.
 - d. Efforts are aligned with improving coordination between field crews and control teams for faster decision-making.
- 4. **Workforce Support and Administrative Readiness:** Support employees during storm events by improving contractor tracking, simplifying timekeeping and expense processes ensuring fair pay and clear guidance.
 - a. Actively exploring technology solutions to improve visibility and support for contractor work during storm events.
 - b. Focused on streamlining timekeeping and expense reporting to reduce administrative burden and improve accuracy.
 - c. Recognizing the importance of equitable compensation; initiating conversations with HR to align on storm pay policies, with formal review pending.
 - d. Committed to delivering transparent instructions and expectations to all personnel involved in storm response.

Additional Process Improvements

- **Restoration Clarity:** DLC will provide clear messaging about what the company will and will not fix during storm restoration, including rules and processes that can be distributed to our customers.
- **Wiring Approvals:** Customers will receive better communication about requirements for an electrical inspection, i.e. wiring approvals, when customer-owned equipment is damaged during a storm event — what they mean, how to obtain them, and why they are necessary for restoration.

- **Tree Trimming & Vegetation Management:** DLC will educate the public on tree trimming practices and the importance of keeping lines clear, including off-right-of-way areas.
- **Debris Removal:** Post-storm communications will clarify DLC's process for debris removal, so customers know what to expect.

Benchmarking / Learnings from External Parties

To support continuous improvement following the storm, DLC collaborated and benchmarked with industry peers and vendors to identify opportunities for improvement and align with best-in-class storm response practices.

Association of Edison Illuminating Companies (AEIC)

- Adopted AEIC's "18 Storm Best Practices" as our guiding framework for scalable and effective storm response
- Participate in monthly AEIC subcommittee meetings to stay current with industry standards

First Energy (FE)

- Hosted an onsite meeting with utility peer on July 18 to exchange best practices, particularly around ETR strategy, storm roles, and outage management.
 - Key insights included FE's use of global ETR predictors, distributive dispatching, circuit quarantining, and a Storm Management Dashboard
 - Discussed contractor/mutual assistance management, mobile technology, and critical customer prioritization
- Met with FE's Emergency Preparedness Team on Aug. 25.
 - Insights on how the Emergency Preparedness Team oversees day-to-day storm program management, ensuring readiness and coordination across departments
 - Discussed utilizing a dedicated Incident Management Team (IMT) during storm events to streamline decision-making and response
 - Shared information on technology platforms used for storm tracking, resource deployment, and internal communications

ESource

- Met on July 18 to refine our ETR prediction model and explore strategic improvements in ETR communication.

Aspentech

- Held a full-day session on July 24 pm to evaluate our use of the OMS and identify optimization opportunities.

PSE&G

- Met with utility peer on July 25 to review their field management tools and coordination strategies for trouble and storm response.

AEIC Storm Best Practices Alignment

DLC has aligned the company's internal storm response planning and execution with the AEIC's 18 Storm Best Practices, which serve as a comprehensive framework for scalable and resilient operations:

- Scalable Storm Plans
- Post-Event Switching
- Decentralized Operations
- Transfer of Control
- Developing and Maintaining ETRs
- Communication Plan
- Staging / Processing Site and Logistic Plan
- Material Acquisition and Delivery
- Emergency Materials Management
- Pre-Staging Best Practices
- Storm Packets
- Self-contained Storm Teams
- Damage Assessment
- Use of non-T&D Personnel
- Mobile Dispatch Technology
- Road Clearing / Wires Down
- On / Off System Support Resources Readiness
- Communication Wire / Fiber

Customer Focus Groups

DLC conducted focus groups with residential customers who experienced an outage of 12-plus hours during the April 29 storm to better understand their experiences and expectations. Insights from these sessions are guiding improvements in outage response, communication and infrastructure resilience. Additional qualitative research is planned by year-end to further refine messaging and enhance the ETR strategy in partnership with customers. A new outage survey is also planned for implementation in 2026 to measure customer experience during outages and drive continuous improvement.

The key takeaways from the focus groups include:

- Customer impact
 - Outages caused emotional and physical stress
 - Site conditions presented operational challenges, including exposed electrical components, limited access to water and sewage infrastructure, and intermittent communication capabilities
- Communications
 - Customers received conflicting or unclear updates across channels
 - Outage maps, texts, emails and IVR systems were at times inaccurate or unresponsive

- Customers want location-specific restoration estimates and two-way communication
- Vegetation management
 - Customers view vegetation clearing as the company's responsibility
 - Current efforts are seen as reactive and poorly executed
- Climate resilience
 - Customers understood the need for infrastructure investment but are concerned about cost impacts
 - Some view the company as lagging behind in adopting modern grid technologies
- Perception and recommendations
 - Sentiment is mixed: some recognize the company's efforts, others cite broken trust

The groups also shared things that DLC did well, which can be an opportunity to build on our successes:

- Customers acknowledge our hard-working crews
- They also acknowledged our swift action in bringing in mutual assistance; publicizing that gives recognition to the magnitude of the damage
- They recognized improvement in our communications / information provided between storms pre-OMS and post-OMS implementation

Key suggestions resulting from the focus groups include:

- Accurate, updated restoration timelines
- Prioritizing cell tower restoration
- Address-specific outage tracking
- Compensation for extended outages

Customers value transparency, accuracy and responsiveness. The insights gained from these focus groups have been incorporated into the overall assessments of the AAR.

Key Themes and Findings

Opportunities Identified

Storm Command Structure

Observations indicated variability in leadership roles and decision-making during storm events, which contributed to confusion around responsibilities and escalation paths.

System Usability and Data Integrity

Field efficiency was impacted by usability challenges and data inconsistencies within OMS and ArcFM map platforms.

Internal Communication and Coordination

Communication across storm functions were noted to be fragmented, with opportunities to improve real-time coordination and logistics visibility.

Customer Communication

Customers experienced inconsistent restoration updates, highlighting a need for improved alignment across communication channels and public education efforts.

Vegetation Management Integration

Limited coordination between vegetation management and overhead crews led to idle time and potential safety concerns.

Mutual Assistance Integration

Some mutual assistance crews lacked system access and clarity around operational expectations, which introduced integration challenges.

Ticket Management and Dispatching

The current ticketing process presented opportunities for refinement to enhance dispatch efficiency and job tracking.

Storm Role Training

Feedback suggested that storm role training could be broadened to include additional roles and responsibilities.

Logistics and Resource Planning

Planning for materials, vehicles, and base camp operations were identified as an area with room for deeper integration across supply chain and procurement functions.

Data Visibility and Decision Support

Limited access to real-time data affected visibility into restoration progress and resource utilization.

Employee Wellbeing

Extended shifts and inconsistent relief were noted to impact morale and performance, with observations around workload balance and role clarity.

Operational Successes

Safety Remained a Top Priority

- No serious injuries were reported among employees or contractors.
- Crews consistently followed safety protocols, supported by dedicated safety personnel throughout the response.

Digital Tools Accelerated Restoration

- The Outage Management System (OMS) replaced manual processes, enabling real-time job tracking and coordination.
- Tools like Gridware (field visibility) and E-Map (enhanced OMS map) improved outage location accuracy and streamlined crew deployment.
- Field teams used mobile tools to share updates and job-specific information efficiently.

Company-Wide Mobilization and Teamwork

- Employees across all departments contributed, regardless of role or title.
- Many team members volunteered additional time and supported one another across shifts, united by a shared goal of safe service restoration.

Effective Mutual Assistance and Base Camp Operations

- A fully operational base camp was quickly established to support over 200 contractors.
- Mutual Assistance crews were efficiently onboarded and integrated into operations, with strong collaboration between internal teams and contractors.
- Retirees and union members stepped into key support roles, including birddogging and damage assessment.

Strong Hospitality, Logistics, and Field Support

- Meals were planned 24–48 hours in advance with attention to dietary needs.
- Hospitality, logistics, and fleet teams coordinated seamlessly to support daily operations.
- Asynchronous communication tools kept teams informed and aligned.

Clear Internal Communication and Coordination

- Teams remained connected through dedicated Teams channels, shift notes, and daily huddles.
- Dispatch maintained clear, effective communication with field crews.
- Line sitters and assessors were supported with dedicated communication lines and regular updates.

Conclusion

Duquesne Light Company is committed to learning from each storm and making meaningful changes that benefit customers and the community. The actions outlined above reflect DLC's dedication to transparency, responsiveness and continuous improvement in the face of severe weather. These improvements are designed to make storm response efforts more effective, customer-focused and resilient for the future.