



DTN Weather Hub for Utilities



Predict outages earlier. Restore power faster. Protect what powers communities.

The challenge

Every severe storm, heatwave, or ice event now tests grid resilience. North American utilities face increasing pressure to restore power faster, meet stricter reliability metrics (SAIDI, SAIFI), and deliver transparent post-event reporting. Crew capacity is limited, and customers expect real-time accuracy during outages. To stay compliant and resilient, utilities need actionable weather intelligence that directly links forecasts to operational decisions.

The solution

DTN Weather Hub gives utilities the foresight and confidence to act proactively before weather impacts operations. Designed for electric and gas utilities, it combines predictive planning, modeling, impact intelligence, asset resilience and operational readiness into one powerful platform.

Severe storms cost investor-owned utilities (IOUs) tens of millions of dollars per storm for preparedness and restoration. These costs include repairing and replacing infrastructure like poles and lines, deploying emergency crews, and procuring equipment, as outlined by ACRT. The costs can be passed on to consumers through higher rates or impact the utility's budget, affecting funds for modernization, according to ACRT.

Predictive weather intelligence for confidence

- **Crew optimization:** Use Storm Impact Analytics (SIA) and the industry-first Gridded Risk Scoring Map to align crews to the most vulnerable zones.
- **Asset-level forecasting:** Forecasts are precisely aligned to your infrastructure with flexible point, line, polygon-based assets that improve reliability and minimize damage risk.
- **Real-time targeted alerting:** Instant, multi-parameter notifications for severe weather threats such as lightning, high winds, flooding, and extreme temperatures, ensuring immediate awareness and faster protective action.
- **Weather forecast insights:** Probabilistic forecasts for scenario planning
- **System Integration:** Feed forecast intelligence directly into OMS, ADMS, and SCADA to automate workflows and dispatch actions.

Operational planning intelligence for efficiency

- **Gridded risk scoring map:** Translate complex weather forecasts into actionable insights based on utility operation plans and configurable thresholds. **NEW**
- **Probabilistic forecast:** Highlight the percentage probability that the forecast exceeds configured operational thresholds
- **Probabilistic risk scores:** View multiple scenarios to adjust staging based on risk tolerance.
- **Asset based alerts:** Automated forecast triggers for storms, lightning, high wind, or temperature extremes to keep field teams protected.
- **Crew deployment tools:** Prioritize and dispatch based on live risk scoring for efficient restoration.

Impact intelligence for reliability & compliance

- **Outage prediction (out to 7 days):** Identify high-risk circuits and substations to pre-stage crews and resources ahead of impact.
- **Outage forecast drivers:** Interactive dashboard highlighting key drivers of outage forecasts based on the weather forecast
- **Confident storm preparedness:** 20%+ reduction in unnecessary crew dispatches
- **Faster restoration:** Decision-grade insights reduce outage duration and improve ETR accuracy.
- **24/7 human interface:** Certified DTN meteorologists support real-time storm response and decision assurance.
- **Regulatory confidence:** Automatically generate validated, audit-ready reports for NERC and PSC requirements to avoid regulatory penalty
- **AI virtual DTN weather assistant:** Ask natural-language questions ("Should we retain mutual assistance crews tomorrow?") for instant, data-backed answers.

ConEd faces \$102M penalty, possible license revocation for Hurricane Isaias response. Some customers were without power for about a week following the storm, and an expedited investigation concluded utilities failed to follow regulator-ordered emergency response plans.

~Utility Dive

Optional add-ons

- **Risk communicator:** Access (CCM) Certified DTN meteorologists 24/7 during live events and post-storm reviews.
- **Peril intelligence:** Advanced modeling for thunderstorms, floods, wildfire, and extreme temperature threats.
- **API integration suite:** Full interoperability with OMS, ADMS, SCADA, and crew management systems.

Why Utilities Choose DTN Weather Hub

- **Proven results:** Utilities using DTN Weather Hub have achieved up to 33% faster restoration times and 20% fewer unnecessary dispatches.
- **Trusted expertise:** Decision-Grade Data and certified meteorological insight trusted by 80% of major North American utilities.
- **Prediction accuracy:** Up to 92% accuracy in outage prediction 7-days in advance of Hurricane Milton
- **Four decades of utility partnership:** Backed by 40+ years of data science, Decision-Grade weather data and intelligence, AI forecasting, and Certified Consulting Meteorologists.
- **Meteorologist Human in Loop:** 120 subject matter experts + certified meteorologists
- **Integration built for operations:** Scalable APIs link forecasts to OMS, ADMS, SCADA, and crew systems—reducing time-to-action from hours to minutes.

Power through every storm with confidence

DTN Weather Hub turns weather uncertainty into operational advantage. Empower your grid operations team to plan smarter, act faster, and restore sooner.

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