

Grid Resilience Tools

Innovative Solutions for Extreme Weather and Storm Preparedness

ACCLIMATE

Extreme Weather Critical Infrastructure Resilience Modeling Tool

Purpose

- Helps electric utilities assess risk long-term risk to power systems from extreme weather.



Key Features

- Integrates weather science, infrastructure vulnerability, and economic modeling.
- Provides customizable risk analysis for threats, vulnerabilities, and consequences.
- Translates environmental risk into asset-level impact and cost estimates.

Capabilities

- Forecasts severity and frequency of hazards over time.
- Predicts asset failure and system impacts using fragility curves.
- Estimates financial losses and recommends resilience improvements.

Benefits

- Supports planning, mitigation, and recovery strategies for utilities and policymakers.



Learn More



Storm-DEPART

Storm Damage Estimate Prediction and Recovery Tool

Purpose

- Predicts near-term storm-related damage and estimates recovery needs for critical infrastructure.

Key Features

- Combines weather forecasts with infrastructure data for accurate damage predictions.
- Models real and hypothetical storm scenarios for planning purposes.

Capabilities

- Assesses potential wind damage to generation, transmission, and distribution assets.
- Provides restoration estimates including time, materials, and resources.

Benefits

- Enables rapid decision-making, resource allocation, and improved resilience posture before and after severe storms.



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