

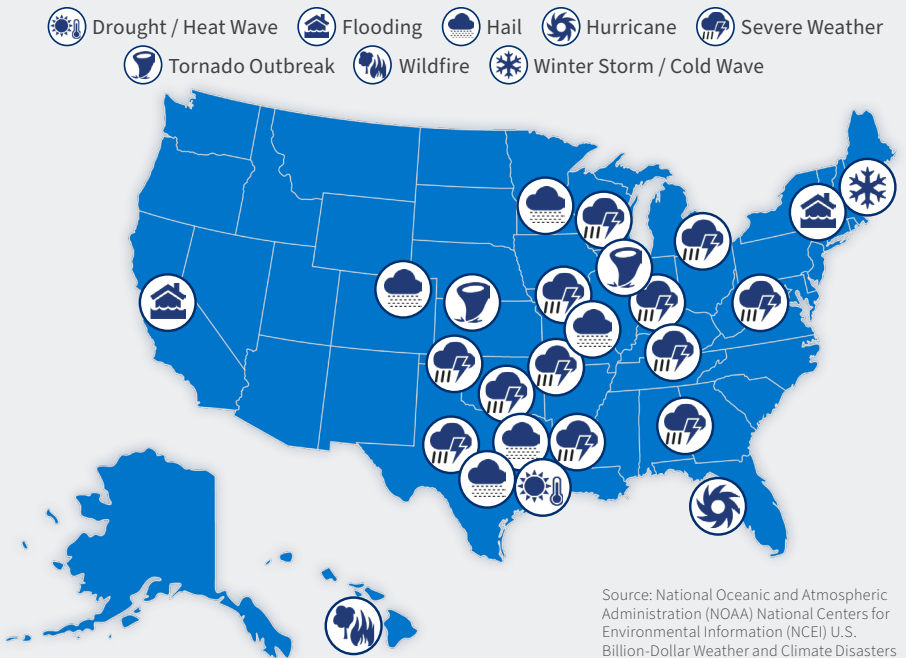
Diagnosing Power Utility Resilience to Navigate the Energy Transition

Tetra Tech's management engineers have been directly involved in utility operations using our resilience diagnostic to help clients respond to historic weather events. We have helped clients respond to storms and floods in Canada; the Thomas Fire in California; and Hurricanes Irma, Maria, Katrina, and Rita in the southern United States and Puerto Rico.

Extreme weather is the new normal. Some [25 separate billion-dollar weather and climate disasters struck the United States in 2023](#), the most of any year on record. A previously unheard-of scale of weather, asset failure, and new electricity demand is sweeping across utility service territories faster than we are prepared to adapt.

As these challenges continue to grow, power utilities will need targeted, well-justified investments to recover capital and manage exponentially rising operational costs.

U.S. 2023 Billion-Dollar Weather and Climate Disasters



Is your utility company climate ready?

Tetra Tech's Resilience Diagnostic Approach

Extreme weather is just one of many resilience hurdles utilities face as they navigate the energy transition. Tetra Tech has identified five primary challenges and designed a resilience diagnostic to help utilities maximize return on investment using our proven utility maturity assessment approach. We help clients address the resilience challenges in Figure 1.

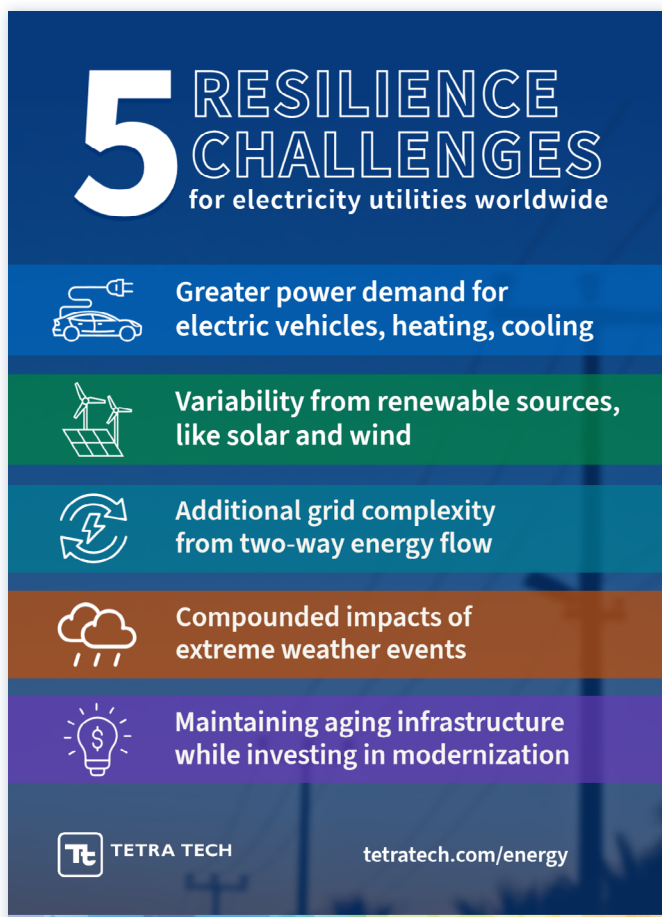


Figure 1: Five resilience challenges for electricity utilities worldwide

Our resilience diagnostic process provides clients with comprehensive risk assessments and actionable insights to prioritize investments in resilience. The resilience diagnostic process is quick, producing a report of findings and a tailored resilience roadmap in **just 6 to 7 weeks**.



Kick-off

In the first 1-2 weeks, Tetra Tech will conduct a joint kick-off workshop to identify the business challenge, project objectives, and expectations. We will assess and analyze existing plans and initiatives to drive resilience, define the project plan, and interview experts.

Deliverable: Project plan subject to sponsor approval

Diagnostic

Following the project plan, our team will conduct interviews and workshops to gather key insights from utility stakeholders and identify areas of improvement. We will conduct follow-up interviews as necessary. This will take approximately 2-3 weeks.

Deliverable: Draft analysis for stakeholder review and consultation

Roadmap

Tetra Tech will conduct a workshop with stakeholder groups to validate findings.

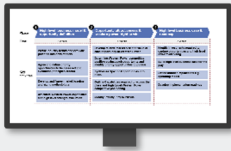
Our team will facilitate prioritization and timing of initiatives to build the resilience improvement roadmap. This will take approximately 1-2 weeks.

Deliverable: Actionable final report guiding resilience improvements

Resilience Diagnostic Process

1 Kick-off

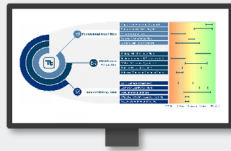
- ✓ Identify the business challenge, project objectives and expectations
- ✓ Assess and analyze existing plans and initiatives to drive resilience
- ✓ Define project plan and interview experts



Project plan subject to sponsor approval

2 Diagnostic

- ✓ Conduct interviews and workshops to gather key insights from stakeholders
- ✓ Identify key gaps and areas of improvement
- ✓ Conduct follow up interviews if and where relevant



Draft analysis for stakeholder review and consultation

3 Roadmap

- ✓ Conduct workshop with stakeholder group to validate findings
- ✓ Facilitate prioritization and timing of initiatives
- ✓ Build resilience improvement roadmap



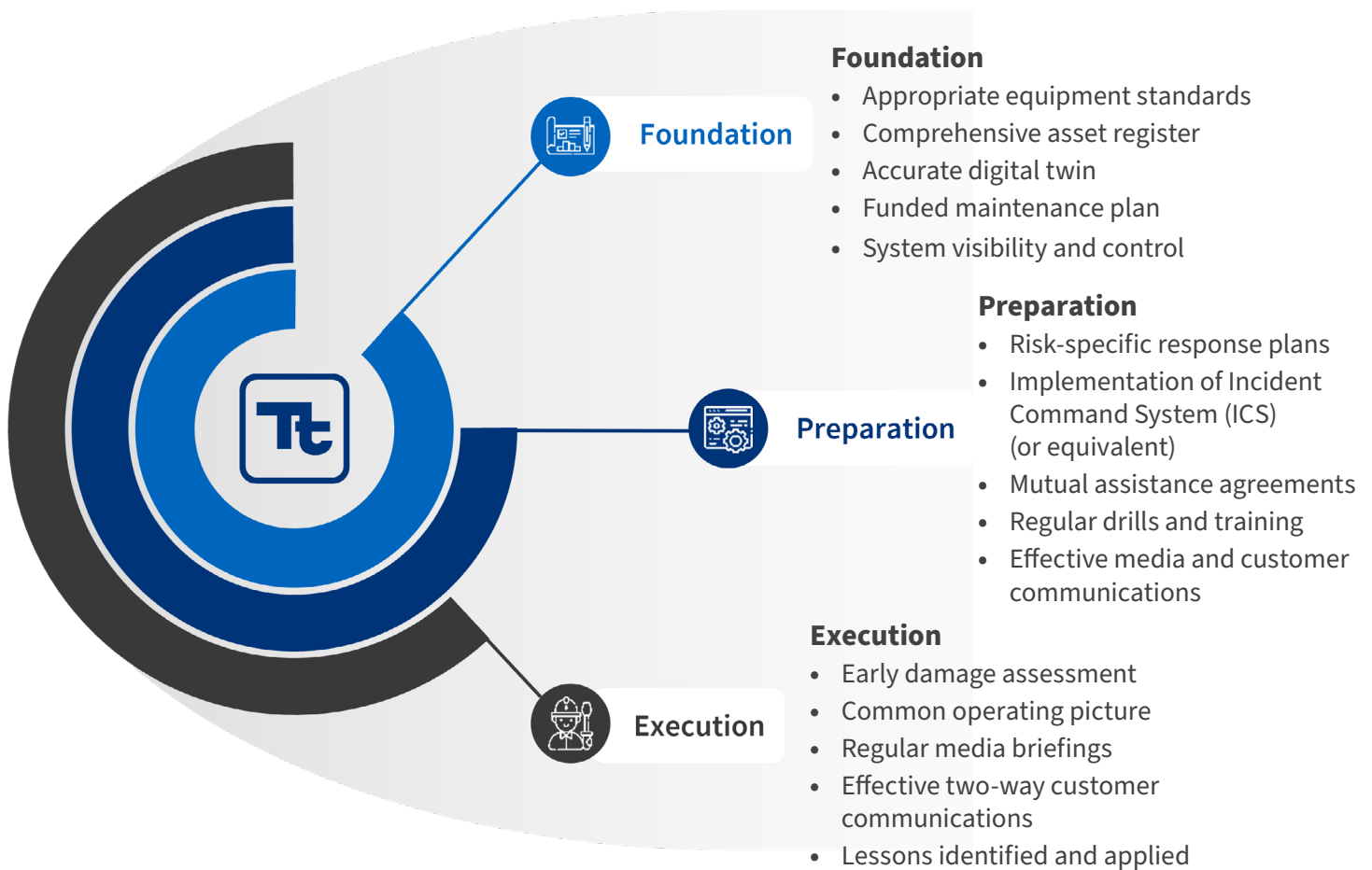
Actionable final report guiding resilience improvements

During the assignment, we work with the utility to evaluate processes, technology, and resources that support emergency management by testing dozens of hypotheses. Industry challenges as well as each utility's unique context will determine the greatest return on investment to maintain safe, reliable, and affordable operations.

As a result, greater coordination and restoration operations can be realized within a year. Immediate improvements to procedures, systems configuration, or investments are made to kick off the utility's multi-phase resilience roadmap.

Once implemented, utilities may achieve shorter restoration times, greater customer satisfaction with service and communications, acknowledgement from regulators and shareholders, and confidence in how the utility will address emerging challenges.

Providing Actionable Insights to Prioritize Resilience Investments



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