

Work Smarter, Not Harder.

How White River Valley Electric Cooperative Uses Data—and AI—to Stop Outages Before They Start

AT A GLANCE

- Established 1939
- 5 Counties, Missouri
- 44,000 meters served
- 2,500 square miles

“We are trying to quantify everything we do so we can know where to prioritize our resources.”

— Beau Jackson, Manager of Engineering, WRVEC

The Challenge

Power outages were increasing nationally and WRVEC was no exception. CEO Chris Hamon knew reactive maintenance wasn't enough. His challenge: get a 44,000-meter cooperative serving 2,500 square miles of Missouri to embrace data-driven decisions—without adding headcount or replacing existing systems.

The PwrMetrix Core

WRVEC deployed PwrMetrix to clean outage data, calculate SAIDI/SAIFI/CAIDI automatically, and run AI-powered outage predictors. The results were immediate. When the system identified the top five feeders most likely to fail in the next 30 days, all five went out in the first week. The team was skeptical until the data proved itself.

Engineering began pairing lightning strike data with fault current records to identify damaged arrestors before they failed—proactively deploying crews in good weather instead of scrambling during storms.

“By fixing the data, our predictive analytics were more accurate and allows us to be more proactive. This is about using the tools to make better decisions.”

— Beau Jackson

5/5

Predicted feeders that failed—
within the first week

0

New staff needed to run AI
predictors

24/7

Automated reporting— even
during storm events

Now Add NORA™

PwrMetrix gives WRVEC the data. NORA™ gives their team instant answers from it. Instead of navigating dashboards or waiting on reports, any team member can simply ask a question in plain language and get an immediate, actionable response.

NORA™ IN ACTION

Prompt: *Which feeders are most at risk this month and what's driving the outages?*

NORA: Based on current outage history and weather data, Feeders 7, 12, and 19 show elevated risk this month. Primary causes are lightning-related arrestor stress on Feeder 7 and vegetation contact on Feeders 12 and 19. Recommend proactive inspection on these circuits before the weekend storm system arrives.

NORA™ IN ACTION

Prompt: *What would our SAIDI look like if we eliminated our top 3 outage causes?*

NORA: Eliminating lightning, vegetation, and equipment failure events would reduce your SAIDI by an estimated 38%, dropping from 187 minutes to approximately 116 minutes annually—bringing you within the top quartile of peer cooperatives.

The Result

WRVEC now operates as a genuinely proactive utility. Crews work during business hours targeting at-risk assets rather than responding to failures at 2 a.m. With NORA™ layered onto PwrMetrix data, even non-technical staff can ask complex operational questions and get board-ready answers instantly—no software training required.

See What NORA™ + PwrMetrix Can Do for Your Co-op

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