Westar Energy is an investor-owned electric utility providing generation, transmission and distribution services to nearly 700,000 customers in east and east-central Kansas. Westar Energy is dedicated to operating a best-in-class electric utility by providing quality service at below-average prices. Our energy centers in 11 Kansas communities generate more than 7,000 megawatts of electricity. The maintenance and reliability team manages more than 12,000 assets fleet-wide. Reliability in a regulated industry requires careful balancing to make sure the needs of customers and shareholders are served. Environmental stewardship also figures prominently into that balance. Westar continually benchmarks itself against its industry peers to make sure the balance is being achieved.

The Westar reliability journey began in 2001. Predictive technologies, planning and scheduling, CMMS development and precision maintenance built the foundation. The company uses a variety of tools to build on that foundation, including RCM, RCA, criticality assessment, PdM optimization, PM optimization, bad actor RCAs, new predictive technologies and statistical analyses. Reliability progress has been methodical with a focus on continuous improvement. Building a strategy that sustains continuous improvement is crucial, as a high percentage of Westar’s workforce is nearing retirement age. The next generation of employees is being introduced to new skill sets targeted at meeting tomorrow’s challenges. Building a grassroots reliability culture into the incoming workforce sets the stage for future success. Cost-effective, sustainable and targeted improvement in reliability is the ultimate goal. Near-term expansion of reliability efforts will focus on better use of performance-monitoring technologies, enhanced data-mining capability and “precision” operations.

The correlation between safety and reliability is well established, and Westar Generation recently achieved 1.5 million hours worked without a recordable injury. Despite a sustained period of austerity, Westar’s generating stations have continued to reduce unplanned outage events, setting the stage for some record run times. The past year yielded the best reliability results in company history. There is still ample opportunity for improvement throughout the maintenance and reliability program but the overall strategy is moving us forward. This award does not define the finish line. It will serve to strengthen our resolve to continue to improve our business processes and to ensure that Westar will continue to provide reliable, low-cost energy to its customers.

CMMS, Reliability software, Predictive Maintenance Instruments and Associated Software

CMMS:
- Oracle Work Asset Management CMMS
- OSI Systems and Processbooks

Reliability Software:
- Reliasoft Suite (RCM++, Weibull++, RGA, Block Sim)
- TagCheck (Root Cause Analysis)

Predictive Maintenance Instruments and associated software:
- Assure
- Emerson Machinery Health Management Software and six 2130 vibration analyzers
- ME Scope Modal and QDS software
- Bentley Nevada System 1 continuous online vibration monitoring software

CI5 5200 Mini-cell Lab with digital viscometer
- OSA3 MicroLab On-Site Oil Analyzer with on board particle counter and viscometer
- Flotec i-Lab 556
- Flotec RILEUR CE320
- HAC Portable Oil Diagnostic (PODS) unit
- OFI Corona Camera
- Flir PM695 general purpose camera
- Flir GF390 for through flame burner scans
- Two UE Ultrapore 10,000’s and one 5,000
- Four PDMA MCEmax motor circuit testers
- One Roll Bowl Cup Tester for inspection of coal mills
- OSI PI Systems and Processbooks
- Teledyne MOV testing

Best Maintenance Reliability Program

Westar Energy