



- 7) Palo Verde to Westwing 500kV lines are located outside the areas of consideration for air traffic. The elevation of the lines is beyond and beneath the criteria FAA defines for consideration as an obstacle or hazard.
- 8) The isokeraunic level near Palo Verde and Westwing is one of the lowest in the Western US, ranging from 1.0 strikes per square mile per year near Palo Verde to 2.5 strikes per square mile per year near Westwing switchyard.
- 9) The risk of earthquakes in Maricopa County is the lowest in the Western US.
- 10) The risks of flood, snow, and fire are negligible.
- 11) The PV-WW foundations are over designed in the range of 137 to 199%.
- 12) The lattice tower design is conservative for weather related loads.
- 13) Lines are designed with state of the art spacer dampers to control conductor motion.
- 14) The insulation level exceeds EPRI's guidelines.
- 15) Electronic protection is provided by redundant microprocessor based technology with communication via fiber optics and digital microwave systems on independent paths. A third microprocessor based relay system operating in current differential scheme is provided for backup protection.
- 16) SRP aggressively maintains the lines with twice yearly patrols, bird guard systems in place, an insulator-washing program, and a spacer damper replacement program.

In summary, based on an MTBF estimated by traditional statistical reliability analysis of 2824 years and excellent design and maintenance practices, it is recommended that this N-2 outage be moved to Category D (Extreme Events) with no other conditions or requirements.