RELIABILITY IMPACT
OF EPA'S PROPOSED CLEAN POWER PLAN

SPP Southwest Power Pool

Unless the proposed CPP is modified, the SPP region faces serious, detrimental impacts on reliable operation of the bulk electric system – introducing the very real possibility of rolling blackouts or cascading outages that will have significant impacts on human health, public safety, and economic activity.

The U.S. Environmental Protection Agency (EPA)'s Clean Power Plan (CPP) would cut power-plant carbon emissions 30 percent by 2030. Implementation would be through state-specific, carbon-reduction goals set by the EPA, including final goals to be attained by 2030 and interim goals to be attained over a 10-year period, beginning in 2020. The EPA model projects about 9 gigawatts (GW) of existing coal- and gas-fired generating capacity in SPP will be retired by 2020, 6 GW more than originally planned by SPP members.

IMPACT ON RELIABILITY

SPP has conducted an assessment of the CPP's reliability impact on our region's electric grid. Our analysis revealed the generating-unit retirements expected as a result of the CPP will cause significant reactive power deficiencies and numerous overloaded facilities.

SPP also studied the CPP's impact on the region's reserve margin (the amount of generating capacity above peak electric demand). SPP currently requires a minimum reserve margin of 13.6 percent; with the EPA's projected retirements, SPP's reserve margin falls to 4.7 percent in 2020, and -4.0 percent by 2024.

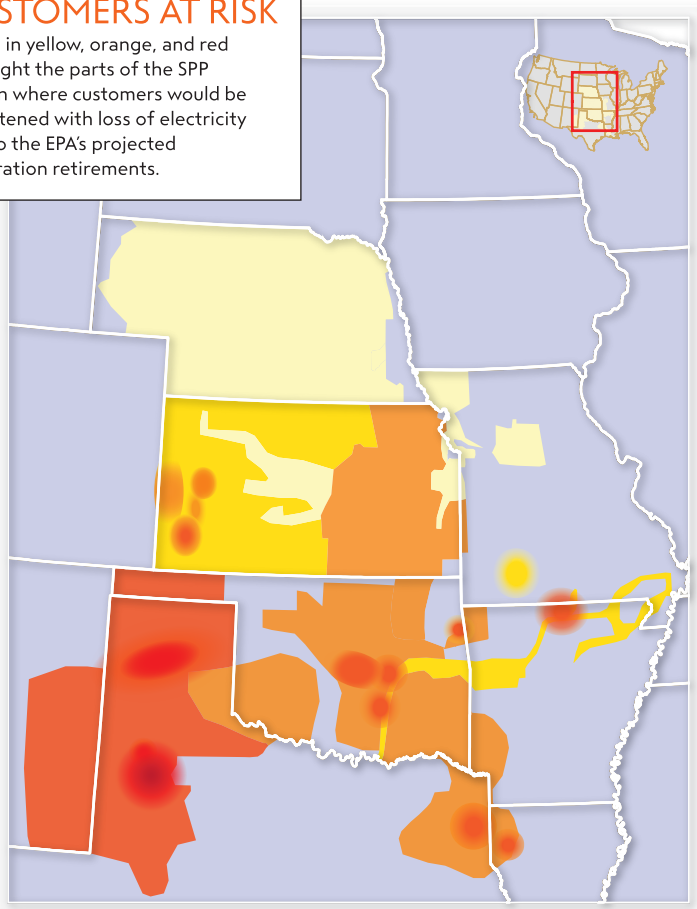
New generation and transmission expansion will be necessary if SPP is to meet its FERC-mandated responsibilities for maintaining system reliability. Because the EPA's interim goals are very close to the final goals, significant measures will have to be taken very early in the CPP compliance period. Analysis indicates there is simply not enough time to compensate for the projected generator retirements by building the generation and transmission infrastructure needed to maintain system reliability. It has taken up to 8 1/2 years to plan, design, and construct transmission facilities in SPP.

SPP RECOMMENDATIONS TO EPA

1. Hold technical conferences on the CPP's impacts on regional markets and power-system reliability.
2. Conduct a NERC-sponsored comprehensive and independent study of the bulk power system before the EPA adopts its final rules.
3. Extend the CPP's interim compliance schedule by at least five years.
4. Adopt the ISO/RTO Council's proposed "reliability safety valve."

CUSTOMERS AT RISK

Areas in yellow, orange, and red highlight the parts of the SPP region where customers would be threatened with loss of electricity due to the EPA's projected generation retirements.



RELIABILITY RISK ASSESSMENT

SIGNIFICANT — SEVERE