



## STATEMENT ON THE RECENT EPA GREENHOUSE GAS EMISSIONS RULE

SPP issues this statement on the final rule the EPA issued on April 25, 2024, regulating greenhouse gas (GHG) emissions from electric generating units under Section 111 of the Clean Air Act (Final Rule).

As a FERC-approved regional transmission organization (RTO), SPP is responsible for maintaining reliability of the bulk electric system in its region covering all or part of 14 states. A key component of SPP's reliability-based responsibilities is assuring that sufficient resources are available when needed to meet expected future demand.

The generating fleet in the SPP region has undergone significant changes in recent years, and SPP has worked to keep pace by adapting its market design, operating processes, and transmission planning practices. Through these adaptations, SPP has facilitated an ongoing transition to carbon-free generation and is supportive of moving further toward a resource mix that reliably reduces emissions as necessary new technology evolves. The SPP region has long been at the forefront of integrating renewable energy, particularly wind generation. In the last decade, SPP has transitioned from a resource fleet that was overwhelmingly made up of traditional generation to a fleet in which wind is the number-one supplier of energy in the SPP region.

SPP's success in integrating significant wind generation has depended largely on having sufficient flexible thermal generation that can be called upon when wind is unavailable. However, the thermal fleet is shrinking. Thermal units are being retired without being adequately replaced, resulting in less total, fuel-assured, ramp-able capacity. Thermal units with these requisite reliability attributes also make up a shrinking percentage of SPP's total available generating capacity, as the growth of variable energy resources is outpacing the addition of new thermal units. The remaining fleet is expected to carry a potentially unsustainable burden of supplying the necessary reliability attributes needed to assure continuous supply of electricity.

SPP sees no slowing in the growth of demand for electricity or in the growth of new load types such as data centers, cryptocurrency mines, and electric vehicle. SPP is concerned that the current pace of new generation development will be insufficient to offset current and projected resource retirement trends and demand increases.

The region has also experienced extreme weather conditions that have impacted SPP's ability to assure energy provision during times when consumers depend the most on continuous supply of electricity. Since Winter Storm Uri in February 2021, during which SPP was forced to interrupt service to customers for short periods of time, Storms Elliott (December 2022) and Heather/Gerri (January 2024) presented similar circumstances. SPP has also experienced extreme heat over the last two summers, contributing to a new summer peak in 2023 that was 10% higher than the one set two summers prior. These challenges underscore the increasing volatility and unpredictability of weather patterns, further highlighting the need for enhanced grid resilience and adaptive strategies to ensure reliable energy provision in the face of such extreme conditions.

As with previous EPA rulemakings, SPP submitted comments to the EPA in the docket for this Final Rule. SPP submitted individual as well as joint comments with other impacted RTOs: Midcontinent Independent System Operator, Inc.; PJM Interconnection, L.L.C.; and Electric Reliability Council of Texas, Inc. SPP also engaged in meetings with EPA staff to discuss issues raised in the comments. SPP's primary goal throughout this engagement was to communicate the trending urgency of resource adequacy in the SPP

region and SPP's sincere concerns about maintaining resource adequacy in the face of thermal generation retirement, an otherwise changing resource mix, increasing demand, and extreme weather trends.

SPP acknowledges and expresses appreciation for EPA staff's consideration of the comments and concerns that SPP and other RTOs presented in the docket and subsequent meetings. SPP notes that the Final Rule reflects changes EPA made from its proposed rule, including removing existing gas generation from the Final Rule's scope and including measures that may provide flexibility in dealing with reliability-impacting events. These changes represent a welcome step toward reflecting the importance of system reliability and the role that existing flexible generation plays toward maintaining that reliability.

SPP remains concerned, however, about the impact the Final Rule may have on the region's ability to maintain resource adequacy and ensure reliability in the SPP region. SPP is concerned that limited technological and infrastructure availability and the compliance time frame will have deleterious impacts including the retirement of, or the decision not to build, thousands of MWs of baseload thermal generation. If sufficient flexible thermal resources are not available to play their critical roles in SPP's resource mix, SPP's ability to maintain regional reliability will be directly impacted. The Final Rule's emissions limits for existing coal and new gas generation are based on the EPA's finding that carbon capture and sequestration (CCS) technology is a viable best source of emissions reduction (BSER) in terms of commercial availability and reasonable cost. SPP continues to be concerned that CCS has not yet been adequately demonstrated at the required capture rate, has not been commercially produced at scale, and will not be widely available and practicable at the level needed for the Final Rule's 2032 compliance time frame. Moreover, while the Final Rule contemplates a natural gas co-firing option for existing coal units that choose to retire before 2039, SPP is concerned about the availability of gas infrastructure necessary to adequately utilize that compliance option in that time frame.

SPP is not expressing these concerns about a hypothetical resource adequacy scenario in the future. SPP and other grid operators are currently working to develop planning and operations policies and practices to deal with resource adequacy issues that have already manifested. SPP's recent Loss of Load Expectation (LOLE) study indicated that, by 2029, as much as a 50% winter season Planning Reserve Margin (PRM) could be necessary to maintain a one-day-in-ten-years LOLE. A PRM of that magnitude would require a significant amount of new capacity to be added in a short time frame. It is important to note that this study considered SPP's existing and projected future resource mix without considering the potential impacts of the Final Rule's 2032 deadline for certain emissions limits. In other words, the study and its projected increase in PRM did not consider the additional at-risk generation that may retire and not be adequately replaced in a relatively short time frame resulting from the compliance time frames contained in the Final Rule. This outcome would further intensify the need for generating capacity and associated transmission upgrades in the SPP region, likely at a pace and cost unprecedented for the industry.

SPP will continue its work to maintain resource adequacy and system reliability. As part of that work, SPP will continue to engage with stakeholders, other RTOs, and the EPA in efforts to address the challenges presented by current and projected trends in resource availability and demand growth.