Testimony before the Senate Utilities Committee

Thursday, February 19, 2015

Testimony of Matthew S. Larson
on behalf of Wilkinson Barker Knauer LLP

Senate Utilities Committee

Date: 2-19-15

Attachment #: 4

Chairman Olson and members of the Committee, thank you for this opportunity to appear before you and testify in support of Senate Bill 170.

I am a regulatory attorney at Wilkinson Barker Knauer LLP, based in Denver, Colorado, and along with colleagues Ray Gifford and Greg Sopkin, have authored several white papers regarding the state institutional issues with the Clean Power Plan. Ray and Greg both served as Chairman of the Colorado Public Utilities Commission, and the papers reflect their experience as state commissioners and our collective experience working with the state environmental department and state legislature on regulatory matters. In working through the white papers, we identified several political, logistical, and practical problems that states will have implementing EPA's proposed rules. Summing all of these issues into a single sentence, the Clean Power Plan is an energy policy, not a mere environmental rule, and this has significant consequences to individual states.

This conclusion also confirms the need for state legislation such as Senate Bill 170. Just last week, Chief Deputy Attorney General Jeff Chanay comprehensively and exhaustively laid out the legal infirmities with EPA's proposed rule before this Committee. As the Chief Deputy General described, the legal authority issues are significant and will ultimately be decided by the U.S. Supreme Court. Senate Bill 170 represents a prudent course of action between today and when the U.S. Supreme Court ultimately rules upon the legality of the Clean Power Plan. It first allows for judicial input, and if this judicial input results in the rule being upheld, it allows for legislative input prior to submission of a state plan. Finally, it protects Kansas utility customers and, among other things, allocates review and approval authority to the Kansas Corporation Commission (KCC), which has specialized expertise in this area.

Legislative approval is particularly important given that the proposed rule is an energy policy. Elected officials with accountability to constituents can and should be integrally involved in any state plan prior to submittal to EPA. The involvement of the KCC is also a key aspect of this legislation. As the members of this Committee know given that Commissioner Emler and Commissioner Apple both served as Chairman of this Committee and Chair Feist Albrecht has an extensive background as an environmental and energy attorney and regulator, the KCC has specialized knowledge and expertise that must be drawn upon in drafting, evaluating, and approving any state plan pursuant to the Clean Power Plan. Senate Bill 170 achieves this goal by requiring the KCC to review any state plan and providing important guideposts for that review, including an emphasis on least-cost resource planning that will protect Kansas utility customers.

Senate Bill 170 also requires the KCC and the Federal Energy Regulatory Commission to certify that the implementation of any state plan will maintain electric reliability. Reliability has been a significant concern following the issuance of the proposed rule, and attached to my testimony are two of many analyses of these reliability issues. First, the Southwest Power Pool Regional State Committee (SPP RSC), which includes KCC Chair Feist Albrecht as a member, has raised significant concerns about the reliability implications of the proposed rule. The SPP RSC's concerns about impacts on reliability are summarized as follows: "1) the EPA inadequately considers electric transmission facilities in establishing the timeline for the interim goals in the draft CCP; 2) the energy efficiency assumptions relied upon in the CPP are unrealistic and not sustainable; 3) the CPP's utilization of a 70% capacity factor for combined cycle units is unsound; 4) the CPP's failure to consider the availability of the materials and labor for constructing the electric transmission and generation infrastructure required to comply with the CPP proposed rule; and 5) the short time frame to meet interim goals by 2020 risks the reliability of the bulk electric system."

The North American Electric Reliability Council (NERC), a non-profit entity and international regulatory authority aimed at assuring the reliability of the North American bulk power system, and SPP have also raised significant reliability concerns beyond those raised by the SPP RSC. Specifically, SPP performed a two-part Transmission System Impact Analysis and found that "[a]s a result of the assumed EPA retirements with no resource additions, the SPP network was so severely stressed by large reactive deficiencies that the software used in the analysis was unable to produce meaningful results, which is generally indicative of voltage collapse and blackout conditions." The second part of its analysis, where SPP used optimal generation resource plans and existing wind resources to mitigate any generation shortfalls, revealed significant transmission overloads, including severe overloading in western Kansas: "These overloaded elements were identified in the portions of six states – Arkansas, Kansas, Louisiana, Missouri, Oklahoma, and Texas – that operate within the SPP region. Portions of the system in the Texas panhandle, western Kansas, and northern Arkansas were so severely overloaded that cascading outages and voltage collapse would occur." NERC raised a number of reliability concerns stemming from EPA's assumptions for the four Building Blocks and "[d]eveloping suitable replacement generation resources to maintain adequate reserve margin levels may represent a significant reliability challenge, given the constrained time period for implementation ...." I have attached a compilation of NERC and SPP comments to my testimony. I am neither an engineer nor an electric reliability expert; however, these impacts and consequences should be thoroughly examined by the Committee and relevant experts, and Senate Bill 170 accomplishes these ends.

While much of the discussion around Senate Bill 170 may be whether it will result in the failure to timely submit a state plan and result in the imposition of a federal plan, the Committee should also consider whether the state can submit an enforceable plan that relies on each of the four Building Blocks at all. This investigation is imperative because a noncompliant state plan can also result in the imposition of a federal plan. The primary difference between this scenario and the Senate Bill 170 scenario is that the state will have expended significant resources in developing the state plan and reached the same result, *i.e.,* a federal plan.

Enforceability is one of the four general criteria EPA will consider in evaluating state plans. The proposed rule provides as follows: "The EPA is proposing to evaluate and approve state plans based on four general criteria: 1) enforceable measures that reduce EGU CO_2 emissions; 2) projected achievement of emission performance equivalent to the goals established by the EPA, on a timeline equivalent to that in the emission guidelines; 3) quantifiable and verifiable emission reductions; and 4) a process for biennial reporting on plan implementation, progress toward achieving CO_2 goals, and implementation of corrective actions, if necessary." Enforceability and state institutional authority issues arise for Kansas and may not allow the state to submit a state plan that can be approved by EPA. With regard to Building Block 1, this source-based regulation falls within the traditional authority of the Kansas Department of Health and Environment (KDHE). However, the so-called 'outside the fence' elements of the proposed rule are more problematic. Building Block 2 is inapplicable in Kansas because there are no natural gas combined-cycle units subject to the Clean Power Plan in the state. KDHE has no enforcement authority over Building Block 3 (renewable energy deployment) and Building Block 4 (energy efficiency), and has notified EPA of this limitation in its comments on the proposed rule dated November 17, 2014.

KCC has authority under existing state law to enforce the state renewable energy standard, but that authority is limited to only investor-owned utilities and electric cooperatives. Because municipal utilities are not subject to the renewable energy standard of 20 percent by 2020, there is an enforcement gap and the KCC lacks jurisdiction over all utilities with regard to Building Block 3. If renewable energy adoption is relied upon in any state plan as a CO_2 reduction measure, EPA may find that these measures are not enforceable; even if EPA somehow managed to determine that these measures are enforceable notwithstanding the authority issues, this would raise equity concerns since utility customers of investor-owned utilities and electric cooperatives would bear *all* of the costs associated with these CO_2 reduction measures while municipal utility customers would bear *none*.

Building Block 4 is even more problematic from an enforcement standpoint, and KDHE summarizes the issue clearly and concisely in their comments to EPA:

> The Kansas legislature passed House Bill 2482 in the 2014 session. The new law provides utilities the opportunity for cost recovery for demand side management programs. It establishes a voluntary program that is in the initial stages of implementation. It has no compliance provisions that could be adapted into a state 111(d) plan. Transitioning from a voluntary program in its developmental stages to regulatory program with hard targets to meet the interim goals contained in the proposal would be a great challenge.

In addition to being a challenge, it would almost certainly require new legislation. KDHE properly points out that absent enforcement authority and non-voluntary compliance provisions, these measures cannot be relied upon in a state plan because they do not meet EPA's enforceability criterion.

The practical realities of moving forward given these state institutional issues and enforcement gaps are stark. Both KDHE and the KCC have statutorily-defined authorities implicated by the Clean Power Plan. Either of these agencies (or another state agency) may find themselves put in a position where operating outside delegated powers is a potential (though problematic) course of action. For example, KDHE, through new state regulations implementing the Clean Power Plan, could be positioned as the *de facto* electric resource planner for the state, overriding the KCC's statutory authority and creating an unsanctioned regulatory paradigm that is the inverse of that contemplated under existing state law. This approach puts agencies at risk of acting outside of their statutory delegation of authority, and any action based on powers not conferred by statute is *ultra vires* and invalid. Any *ultra vires* action subjects the state to significant litigation risk.

Merely incorporating the proposed federal regulations by reference will not remedy the *ultra vires* action issues and authority and enforcement gaps described above. EPA's proposed regulations at 40 CFR Subpart UUUU do not provide any 'outside the fence' authority for a regulatory agency that does not separately possess this authority under state law. 40 C.F.R. § 60.5750, as proposed, allows the administrator of a state air quality program to "include existing requirements, programs and measures" in a state Section 111(d) plan. 40 CFR § 60.5740(6) requires "[a] demonstration that each emission standard is quantifiable, non-duplicative, permanent, verifiable, and enforceable with respect to an affected entity." Read together, an existing program such as an energy efficiency standard or renewable energy standard may be relied upon, but state law must provide an enforcement mechanism. Kansas state law does not provide comprehensive enforcement mechanisms for activities under either Building Block 3 or Building Block 4, as described in earlier in my testimony.

This closing discussion is meant to illustrate the very real state institutional issues that exist should the state attempt to move forward given the state of existing law. EPA may impose a federal plan if a state plan with any of the enforcement issues and compliance deficiencies described above is submitted to the agency, and merely submitting a state plan does not provide protection from the possible imposition of a federal plan.

Thank you for the opportunity to testify in support of Senate Bill 170, and I welcome any questions.

Entity/Other	*Reliability*
SPP	[Reliability Assessment – October 8, 2014] Transmission System Impact Analysis [Part 1 and Part 2] Part 1 of the TSIA was performed using a current 10-year-out summer peak model modified to reflect EPA's projected retirements in the SPP region and surrounding areas. Reactive power limits on remaining generators were increased as necessary to enable a minimally solvable power flow model under system intact conditions and to account for reactive power shortfalls within SPP. Part 2 of the TSIA was performed using an updated 10-year-out summer peak model modified to reflect EPA's projected retirements in the SPP region and surrounding areas. Additionally, new gas-fired and wind generators (see Figure 2) were added within SPP's region and dispatched to offset the majority of the EPA retirements. The generators added to the model were placed in locations based on resource plans developed to support SPP's 10-year transmission planning evaluation. New gas generators, including combined cycle (CC) and combustion turbine (CT), were dispatched at approximately 5,600 MW and new wind generators were dispatched at approximately 300 MW in SPP's model. Wind generation levels at existing plants in SPP were increased by approximately 3000 MW to serve load in SPP and support 2000 MW of transfers from SPP to adjacent areas in Arkansas and Louisiana that would be capacity deficient based on the EPA projected retirements. Additionally, wind resources in MISO were increased to provide 2000 MW of transfers from MISO to these same deficient regions in Arkansas and Louisiana. Both parts of the TSIA identified significant reliability issues. The issues were not mitigated, but actually increased, despite the optimal generation expansion and conservative assumptions used in Part 2 to address EPA retirements. [TSIA Part 1]: ***As a result of the assumed EPA retirements with no resource additions, the SPP network was so severely stressed by large reactive deficiencies that the software used in the analysis was unable to produce meaningful results, which is generally indicative of voltage collapse and blackout conditions.*** In order to enable analytical results, SPP modeled increased reactive limits at remaining generators on the system and was eventually able to achieve analytical results by adding approximately 5,200 MVAR of reactive production to the model during system intact conditions. Because of the arbitrary nature of artificially increasing reactive limits of generators, reliability indicators such as equipment loadings and voltage levels are not accurate and are not presented in this Report. However, this analysis indicates approximately 5,200 MVAR of reactive deficiencies in the SPP footprint during system intact conditions resulting from the modeled EPA generator retirements. Figure 3 shows the reactive power deficiencies within SPP identified by this analysis. The most notable deficiencies were found in Texas and eastern Oklahoma. (emphasis added) [TSIA Part 2]: Part 2 of the TSIA utilized the latest optimal generation resource plans available to SPP as well as existing wind resources to mitigate generation shortfalls within SPP. Existing wind generation in SPP and the northern part of MISO were increased to serve shortfalls in the southern part of MISO. An N-1 assessment revealed 38 overloaded elements. ***These overloaded elements were identified in the portions of six states – Arkansas, Kansas, Louisiana, Missouri, Oklahoma, and Texas – that operate within the SPP region. Portions of the system in the Texas panhandle, western Kansas, and northern Arkansas were so severely overloaded that cascading outages and voltage collapse would occur.*** (emphasis added) [Resource Adequacy Analysis]: The Assessment evaluated the impacts of the projected EGU retirements on SPP's reserve margin. SPP has a minimum reserve margin requirement of 13.6% that every SPP member with load serving responsibilities must plan to meet with appropriate generation capacity. In evaluating the impacts of the projected EGU retirements on SPP's reserve margin, SPP utilized current load forecasts, currently planned generator retirements and additions, as well as the retirements projected by the EPA. The Assessment showed that by 2020, SPP's reserve margin would fall to 4.7%, which is 8.9% below our minimum reserve margin requirement. Out of SPP's fourteen load-serving members impacted by the EPA's projected retirements, nine would be deficient in 2020. Furthermore, SPP found that its anticipated reserve margin would fall to -4.0% in 2024, increasing the number of deficient load serving entities to ten. These anticipated reserve margins represent a generation capacity deficiency of approximately 4.6 GW in 2020 and 10.1 GW in 2024. [Conclusion]: The findings in this Assessment make it very clear that new generation and transmission expansion will be necessary to maintain reliability during summer peak conditions if EPA's projected generator retirements occur. Even the scenario that assumes optimal resource expansion using new natural gas fired resources could be problematic during extreme winter load conditions with gas supply and delivery challenges .... ***Unprecedented coordination and cooperation beyond regional planning efforts will be necessary, but may not be timely given significant challenges with interregional planning and necessary system expansion. In addition, broader system assessments of the bulk power system, and natural gas pipeline and storage systems based on environmental constraints will be required.*** ***

	[EPA Comments – October 9, 2014] [Addressing TSIA Part 1 and Part 2]: The SPP region will experience numerous thermal overloads and low voltage occurrences under both scenarios studied. Results of the first part of the transmission system impact evaluation indicate that if the assumed EGU retirements were to occur absent requisite transmission and generation infrastructure improvements, the power grid would suffer extreme reactive deficiencies (see Figure 3) that would expose it to widespread reliability risks resulting in significant loss of load and violations of NERC reliability standards .... [Addressing limited scope of reliability analysis]: Based on SPP's reliability impact assessment, it is clear that the proposed CPP will impede reliable operation of the electric transmission grid in the SPP region, resulting in violations of NERC's mandatory reliability standards and exposing the power grid to significant interruption or loss of load. SPP has only been able to perform an initial reliability evaluation of steady-state system response during a "normal" future summer peak condition. SPP has not evaluated the impact of the proposed EGU retirements during other potentially critical scenarios, such as drought and polar vortex conditions or times of limited wind resource availability, which have been experienced numerous times within SPP's region in recent history. [Addressing reliability safety valve concept from ISO/RTO Council]: In addition to more time being needed to develop plans for and construction of necessary infrastructure, a "reliability safety valve", as suggested by the ISO/RTO Council prior to release of the proposed CPP, should be incorporated into the final rule. Such an approach would require that state plans include a process to evaluate electric system reliability issues resulting from implementation of the state plan and require mitigation when needed. [Recommendations to EPA]: SPP is providing four recommendations: 1) a series of technical conferences jointly sponsored by the EPA and FERC; 2) completion of a detailed, comprehensive and independent analysis of the impacts the proposed CPP will have on the reliability of the nation's bulk electric system; 3) extension of the proposed schedule for compliance in order for the necessary electric and gas infrastructure to be identified and constructed; and 4) adoption of a "reliability safety valve".
NERC	[General]: According to the EPA's *Regulatory Impact Assessment*, generation capacity would be reduced by between 108 and 134 GW by 2020 (depending on state or regional implementations of Option 1 or 2). The number of estimated retirements identified in the EPA's proposed rule may be conservative if the assumptions prove to be unachievable. Developing suitable replacement generation resources to maintain adequate reserve margin levels may represent a significant reliability challenge, given the constrained time period for implementation. ... Pipeline constraints and growing gas and electric interdependency challenges impede the electric industry's ability to obtain needed natural gas services, especially during high-use horizons. ... The EPA assumes that the states and industry would rapidly expand energy efficiency savings programs from 22 TWh/year in 2012, to 108 TWh/year in 2020, and reach 380 TWh/year by 2029. With such aggressive energy efficiency expansion, the EPA assumes that energy efficiency will grow faster than electricity demand, with total electricity demand shrinking after 2020. ... Constructing the resource additions, as well as the expected transmission enhancements, may represent a significant reliability challenge given the constrained time period for implementation. The implications of this assumption are complex. If the EPA-assumed energy efficiency growth rates cannot be attained, additional carbon reduction measures would be required, primarily through reduced fossil-fired generation. [Building Block 2]: The EPA estimates that an additional 49 GW of nameplate coal capacity will retire by 2020 due to the impacts of the proposed CPP. When including the 54 GW of nameplate coal capacity already announced to retire by 2020 (mostly due to MATS), the power industry will need to replace a total of 103 GW of retired coal resources by 2020, largely anticipated to be natural-gas-fired NGCC and CTs. Considering the current and ongoing shift in the resource mix, the EPA proposes to further accelerate the shift, lessening the industry's diversification of fuel sources. As observed during the 2014 polar vortex,19 the relationship between gas-fired generation availability and low temperatures challenges the industry's ability to manage extreme weather conditions—particularly when conditions affect a wide area and less support is available from the interconnection. The polar vortex served as an example of how extended periods of cold temperatures had direct impacts on fuel availability, especially for natural-gas-fired capacity. Higher-than-expected forced outages were observed during the polar vortex, particularly for natural-gas-fired generators, as a result of fuel delivery issues and low temperatures. Overall, extreme weather conditions have the potential to strain BPS reliability and expose risks related to natural-gas-fired generation availability (Figure 3). With greater reliance on natural-gas-fired generation, the resiliency and fuel diversification that is currently built into the system may be degraded, which NERC has highlighted in recent gas-electric interdependency assessments. As an example, current and planned pipeline infrastructures in Arizona and Nevada are inadequate for handling increased natural gas demand due to the CPP. Pipeline capacity in New England is currently constrained, and more pipeline capacity additions will be needed as more baseload coal units retire—this is generally occurring as projected and independent of the CPP. Timing of these investments is also critical as it take three to five years to plan, permit, sign contract capacity, finance, and build additional pipeline capacity, in addition to placing replacement capacity (e.g., NGCC/CT units) in service. The proposed CPP timelines would provide little time to add required pipeline or related resource capacity by 2020. [Building Block 3]: A large penetration of VERs [*i.e.,* variable resources] will also require maintaining a sufficient amount of reactive support and ramping capability. More frequent ramping

	needed to provide this capability could increase cycling on conventional generation. This could contribute to increased maintenance hours or higher forced outage rates, potentially increasing operating reserve requirements. While storage technologies may help support ramping needs, successful large-scale storage solutions have not yet been commercialized. Nevertheless, storage technologies support the reliability challenges that may be experienced when there is a large penetration of VERs, and their development should be expedited. Based on industry studies and prior NERC assessments,30 as the penetration of variable generation increases, maintaining system reliability can become more challenging. Additional assessments, including interconnection-wide studies, will be needed as the resource plans unfold to better understand the impacts. [Building Block 4]: The EPA appears to overestimate the amount of energy efficiency expected to reduce electricity demand over the compliance time frame. The results of overestimation have implications to electric transmission and generation infrastructure needs. Substantial increases in energy efficiency programs exceed recent trends and projections. Several sources, including but not limited to NERC, EIA, EPRI, and various utilities, have published reports, analysis, and forecasts for energy efficiency that do not align with the CPP's assumed declining demand trend. [Timing]: Because committed transmission projects typically require three to five years to be completed, and often longer for major projects with significant right-of-way needs, NERC is concerned that reliability-related enhancements may not be able to be completed for a 2020 implementation. [Policy Recommendation]: NERC Reliability Standards and Regional Entity criteria must be met at all times to ensure reliable operation and planning of the BPS. Therefore, NERC supports policies developed by the EPA, FERC, the DOE, and state utility regulators that include a "reliability assurance mechanism," such as a reliability back-stop, to preserve BPS reliability and manage emerging and impending risks to the BPS. [Distributed Generation]: The EPA projects that retail electricity prices will increase by $1/MWh to $18/MWh under the CPP55 as a result of a combination of higher natural gas prices and the implementation of new carbon penalties on impacted fossil-fired generators.56 As retail power prices increase, some existing customers may install DERs, when economically advantageous. Depending on the price advantage, the market penetration of DERs could be substantial, creating potential reliability impacts for grid operators that lack visibility and control of these resources. Given that DERs displace grid retail sales, DERs could become a larger grid capacity planning challenge since the grid will remain responsible for being the DER site's back-up power supplier. Reliability issues with large onsets of non-dispatchable resources have already created operational challenges in California, Hawaii, and Germany. *[<u>NOTE</u>: NERC is planning to issue an evaluation of generation and transmission adequacy in April 2015, a follow on reliability assessment reflecting emerging state plans in December 2015, and a third assessment in December 2016 once state plans are developed.]*

RSC Regional State Committee
FOR THE SOUTHWEST POWER POOL

November 24, 2014

VIA ELECTRONIC FILING

Gina McCarthy, EPA Administrator
Environmental Protection Agency
1200 Pennsylvania Ave NW
Washington, DC 20460

Re: Docket ID No. EPA-HQ-OAR-2013-0602

Dear Administrator McCarthy:

This letter is submitted to the United States Environmental Protection Agency ("EPA") on behalf of the Southwest Power Pool Regional State Committee ("SPP RSC" or "RSC"). The SPP RSC is an independent Arkansas nonprofit corporation comprised of state retail regulators from states within the SPP footprint, including Arkansas, Kansas, Missouri, Nebraska, New Mexico, Oklahoma, and Texas. As a part of SPP's governance structure, the RSC provides input on matters pertinent to the participation of Members in SPP, as well as having certain delegated authorities.[1] The purpose of this letter is to convey some of the RSC's comments on the "Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units" ("Clean Power Plan" or "CPP") proposed rule that was published in the Federal Register on June 18, 2014. By submitting these comments, the RSC is not taking a position on whether the EPA has legal authority to promulgate the CPP, nor are these comments intended to be an all-inclusive list of concerns, nor are they to be viewed to limit in any way comments individual states or state stakeholders may submit.

The RSC is concerned about the impacts on reliability and the timeline associated with the interim goals in the CPP proposed rule. In particular, the RSC is concerned that: 1) the EPA inadequately considers electric transmission facilities in establishing the timeline for the interim goals in the draft CCP; 2) the energy efficiency assumptions relied upon in the CPP are unrealistic and not sustainable; 3) the CPP's utilization of a 70% capacity factor for combined cycle units is unsound; 4) the CPP's failure to consider the availability of the materials and labor for constructing the electric transmission and generation infrastructure required to comply with the CPP proposed rule; and 5) the short time frame to meet interim goals by 2020 risks the reliability of the bulk electric system.

Transmission Considerations

The RSC is concerned that the modeling efforts supporting the CPP proposed rule did not adequately and accurately account for the electric transmission system, as the EPA's models considered

[1] *See* Southwest Power Pool, Inc., Bylaws, First Revised Volume No. 4 § 7.2.

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generation and load, but not the transmission infrastructure necessary. This approach by the EPA is not an accurate portrayal of how our nation's electrical system works.

Energy Efficiency Assumptions

The CPP assumed a 1.5% annual retail goal for incremental growth in efficiency savings. This goal assumes that states and industry would greatly expand energy efficiency savings programs. The RSC is concerned that this goal is not achievable. First, many states do not have enabling legislation in place requiring energy efficiency goals. Without the necessary legislation to implement such goals, it is unreasonable to assume that this goal will be met. Second, some states have already undertaken significant actions to reduce electricity consumption through state-specific energy efficiency programs. In those states, it will be difficult to achieve further increases, making it unfair to impose the same standard on all states. Finally, if the energy efficient reduction goals are not achievable, it will require that additional carbon reductions are realized from the other "building blocks" contained in the CPP proposed rule.

Combined Cycle Capacity Factor

The EPA assumed that existing natural gas combined cycle ("NGCC") units can be dispatched with a 70% capacity factor. The RSC has concerns with the achievability of this assumption. The ability to run NGCC units at 70% has not yet been studied. Therefore, the reasonableness of this assumption is unknown. Additionally, it is unknown whether there is sufficient electric transmission and gas infrastructure in place to operate these units at that level. To help put this in context, in 2013 gas units in the SPP footprint operated at around a 28% capacity factor, which is well below the 70% assumption used by the EPA in the CPP proposed rule. Finally, the EPA used the nameplate capacity of NGCC units to make this determination instead of using the net dependable capacity, which would be more indicative of the actual capabilities of NGCC units.

Availability of Materials and Labor

The RSC believes there will be significant electric transmission and gas infrastructure build-out required over a short amount of time to meet the 2020 interim goal of the CPP. The RSC believes that the EPA should have considered the impact this build-out will have on the availability of the necessary materials and labor force in the development of the draft CCP. As a result, the RSC has concerns surrounding whether there are sufficient materials and labor available to meet these standards and believes these issues should have been considered by the EPA. In addition, the RSC has concerns about the impacts this demand will create on the cost of labor and materials – costs that will ultimately be borne by ratepayers.

Timeframe for the Interim Goals

Based on the analysis performed by SPP,[2] it is reasonable that additional electric transmission infrastructure will be needed to accomplish the requirements of the CPP proposed rule in light of the projected retirements of existing generating units. In the SPP footprint it takes up to eight years to plan, approve, construct, and place electric transmission facilities in service. This eight-year planning and building cycle does not provide enough time to construct the electric transmission infrastructure needed to maintain reliability and meet the interim goal in the CPP by 2020. In other words, the RSC believes

[2] SPP's Comments were filed with the EPA on October 9, 2014. A copy of SPP's analysis is available on the SPP website at: http://www.spp.org/publications/CPP%20Reliability%20Analysis%20Results%20Final%20Version.pdf.

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the interim goals require a choice between meeting the CPP's proposed standards and maintaining reliability. The current timeline in the CPP proposed rule does not provide enough time to accomplish both. Because of the large magnitude of reduced carbon emissions required early in the 2020 interim goal compliance timeframe, the RSC believes that an extension of the interim goal is necessary. An extension of the 2020 date would allow more time for constructing any needed electric transmission and generation infrastructure, which would allow reliability of the bulk electric system, an electric system that is central to this nation's economy and way of life, to remain intact.

In conclusion, the RSC appreciates the opportunity to provide its comments on the EPA's CPP proposed rule.

Sincerely,

Southwest Power Pool Regional State Committee

Donna L. Nelson, Chairman
Public Utility Commission of Texas
President, SPP RSC

Dana Murphy, Commissioner
Oklahoma Corporation Commission
Vice President, SPP RSC

Patrick H. Lyons, Commissioner
New Mexico Public Regulation Commission
Secretary/Treasurer, SPP RSC

Shari Feist Albrecht, Chairman
Kansas Corporation Commission
Member, SPP RSC

Stephen Lichter, Chairman
Nebraska Power Review Board
Member, SPP RSC

Olan Reeves, Commissioner
Arkansas Public Service Commission
Member, SPP RSC

Steve Stoll, Commissioner
Missouri Public Service Commission
Member, SPP RSC