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EPA Administrator
U.S. Environmental Protection Agency
EPA Docket Center (EPA/DC)
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1200 Pennsylvania Ave NW
Washington, D.C. 20460

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Re: Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units ("Clean Power Plan" or "CPP" or "Proposed Rule")[1]

Dear Administrator McCarthy:

OGE Energy respectfully submits these comments on behalf of its wholly-owned subsidiary, Oklahoma Gas and Electric Company ("OG&E"), in response to EPA's Proposed Rule for the reduction of carbon dioxide ("CO_2") emissions from existing electric generating units ("EGUs"). OGE Energy includes comments on EPA's Notice of Data Availability ("NODA") as well.[2]

OG&E is the largest electric utility in Oklahoma, serving more than 800,000 customers across 30,000 square miles in Oklahoma and western Arkansas which includes Ft Smith, Arkansas; Oklahoma state's capital and most populous city, Oklahoma City and covers the electricity demand for some of the region's largest industrial customers. Given OG&E's central role in supplying electricity for so many consumers, we appreciate this opportunity to provide input to the EPA and help ensure that any final rule works to the advantage of all stakeholders. Although the Proposed Rule targets power plants, its impact is sure to be felt much more broadly, affecting OG&E operations, customer consumption, and the economic wellbeing of the entire state of Oklahoma.

OG&E has the often difficult job of providing all the power needed to its growing and thriving service territory demands while maintaining the balance of safety, reliability, affordability and environmental responsibility. OG&E attempts to keep those four things in constant balance. Additionally, OG&E is doing its part to support the nation's electric

[1] Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 79 Fed. Reg. 34,829 (proposed June 18, 2014) (to be codified at 40 C.F.R. pt. 60) (hereinafter "CPP").

[2] Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, Notice of Data Availability, 79 Fed. Reg. 64,543 (October 30, 2014) (hereinafter "NODA").

utility infrastructure through its participation in the multi-state Regional Transmission Organization ("RTO") Southwest Power Pool ("SPP")—a commitment OG&E believes bolsters the energy security of Oklahoma.

Relying on its more than 100 years of experience providing energy to the States of Oklahoma and Arkansas, OG&E believes that a diverse generation portfolio is critical to providing affordable and reliable electricity. Accordingly, OG&E's generation fleet includes the use of low-sulfur western coal and natural gas-fired capacity (combined cycle, combustion turbines and boiler-gas) as well wind which currently accounts for over 15% of Oklahoma's wind generation (MWh), a state with the 4th highest wind generation in the nation[3]. OG&E also has strong demand side and energy efficiency programs and, arguably, the most successful deployment of Smart Meters in the country. The experience with and success of these programs is important to note, as to date, OG&E is on track to fulfill its 2007 commitment not to add any new, incremental fossil generation to its fleet until at least 2020.

I. Summary of OG&E's Position on the Proposed Rule

OG&E opposes implementation of the CPP as proposed which by design, inappropriately creates "winners and losers" among fuels and technologies over an unachievable timeline. This combination creates concerns regarding the reliability of electric supply within the SPP and significant cost impacts to OG&E's customers.

OG&E has preliminarily reviewed the NODA which was recently released and is incorporating that review in these comments. As a general matter, the NODA, which proposes alternative methods of determining a State's target, still relies on the same legally and technically flawed basis and in many regards, creates more uncertainty and more stringent targets:

- Regulating CO_2 as an "air pollutant" under § 111(d) is unreasonable and inconsistent with the design of the Clean Air Act ("CAA"). This expansion of EPA's authority is improper without clear congressional authorization, which EPA lacks.

- CAA § 111(d) prohibits EPA from promulgating existing source performance standards for source categories that have already been regulated under § 112. In 2012, EPA issued the Mercury and Air Toxics Standards ("MATS") under § 112 to regulate emissions from coal-fired EGUs. Thus, the CPP attempts to unlawfully and duplicatively regulate coal-fired EGUs.

- The CPP's method of calculating State emission targets (i.e., its "Building Blocks") is incompatible with the best system of emission reduction ("BSER") required under § 111(d) for two

[3] American Wind Energy Association (AWEA), State Wind Energy Statistics: Oklahoma (April 10, 2014), available at http://www.awea.org/Resources/state.aspx?ItemNumber=5190.

reasons. First, Building Blocks 2, 3 and 4 impose reduction goals that cannot be achieved by individual sources. Second, comprehensive regulation of states' electricity generation systems compels a fundamental redesign of those systems in violation of law.

- The Proposed Rule is not necessary in Oklahoma given the state's documented success in reducing CO_2 emissions on its own initiative. Even if federal regulation were appropriate, the targets and timelines set by the CPP are unrealistic and unreasonable.

- Imposition of the Proposed Rule's Building Blocks will create significant compliance cost and reliability issues as determined by the SPP, Oklahoma's RTO. Briefly stated, its regulatory impact is too much, too soon—a concern echoed by both MISO[4] and ERCOT.[5]

- Costs associated with the premature retirement of a significant number of coal-fired EGUs and the rushed construction of replacement infrastructure, in the form of natural-gas and renewable-energy generation units, transmission & pipeline will ultimately be borne by Oklahoma and its ratepayers.

- Recently issued EPA-support documents fail to provide adequate notice to interested parties or a reasonable opportunity to draft and submit comments. Certain late-issued "notices", including EPA's NODA and Technical Support Document ("TSD"), are vague and do not provide a clear rule to respond to or time to prepare appropriately tailored comments.

II. Discussion

A. EPA Lacks Authority to Implement the Proposed Rule

The proposed Clean Power Plan imposes unparalleled restrictions on the operation of existing fossil fuel-fired EGUs that extend far beyond the scope of any previous regulation promulgated by EPA under § 111(d). Section 111(d) authorizes EPA to establish a procedure for states to design their own emission-reduction programs. The Proposed Rule represents more than this type of "procedure"; rather, it mandates specific

[4] Midcontinent Independent System Operator, Inc., *Analysis of EPA's Proposal to Reduce CO2 Emissions from Existing Electric Generating Units* (Nov. 2014), *available at* http://www.adeq.state.ar.us/air/branch_planning/pdfs/carbon_pollution/adeq_apsc_cpc_10-1-14.pdf (hereinafter "MISO Analysis").

[5] Electric Reliability Council of Texas, *ERCOT Analysis of the Impacts of the Clean Power Plan* (Nov. 17, 2014), *available at* http://www.ercot.com/content/news/presentations/2014/ERCOTAnalysis-ImpactsCleanPowerPlan.pdf (hereinafter "ERCOT Analysis").

limits that an entire state is required to meet and then effectively redesigns each states' electricity generation system in order to meet those limits.

1. The CPP Violates the Limits of Statutory Interpretation Established in *UARG v. EPA*

In *UARG v. EPA,* the Supreme Court held that EPA cannot "bring about an enormous and transformative expansion in EPA's regulatory authority without clear congressional authorization."[6] In that case, the Court responded to EPA's attempt to use its interpretive authority over the CAA to broadly regulate CO_2. The Court greeted "with a measure of skepticism" EPA's attempt "to discover in a long-extant statute an unheralded power to regulate a significant portion of the American economy."[7] Again, EPA re-writes a statutory provision that long-ago established the proper, balanced relationship between EPA and the states.

2. EPA Cannot Regulate Sources Under § 111(d) that are Already Covered by Section 112

Section 111(d)(1)(A)(i) states:

> *Each State shall submit to the Administrator a plan which establishes standards of performance for any existing source for any air pollutant . . . which is not . . . emitted from a source category which is regulated under section 7412 of this title.*[8]

EPA has recognized on at least two occasions—in a previous rulemaking and in its Legal Memorandum for this Proposed Rule—that "a literal reading of [§ 111(d)(1)(A)(i)] would mean that EPA could not regulate any air pollutant from a source category regulated under section 112."[9] The Supreme Court has accepted this reading, noting that "EPA may not employ § 7411(d) if existing stationary sources of the pollutant in question are regulated under . . . the 'hazardous air pollutants' program, § 7412."[10]

In 2012, EPA adopted the MATS under the authority of § 112 for the purpose of controlling emissions of mercury and other hazardous air pollutants from fossil fuel-fired EGUs. OG&E has diligently pursued compliance with MATS and will spend significant sums to install control equipment for mercury on its five coal-fired units prior to the April 2016 deadline. Since EPA has already imposed regulatory requirements on OG&E's

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[6] 134 S. Ct. 2427, 2444 (2014).

[7] *Id.* at 2440, 2442.

[8] 42 U.S.C. § 7411(d)(1)(A)(i) (2012).

[9] U.S. Envtl. Prot. Agency, *Legal Memorandum for Proposed Carbon Pollution Emission Guidelines for Existing Electric Utility Generating Units* 26 (June 18, 2014), *available at* http://www2.epa.gov/sites/production/files/2014-06/documents/20140602-legal-memorandum.pdf; *see also* 70 Fed. Reg. 15,994, 16,031 (March 29, 2005) (noting that under a literal reading of the House amendment, a standard of performance under § 111(d) cannot be established for *any air pollutant* emitted from a source category regulated under section 112) (emphasis added).

[10] *Am. Elec. Power Co. v. Connecticut*, 131 S. Ct. 2527, 2537 n.7 (2011).

fossil fuel-fired EGUs in this manner, it is precluded from using the CPP to impose additional restrictions on them under § 111(d).

3. Even if EPA has Some Authority Under § 111(d), the Proposed Rule Exceeds that Authority

In making its BSER determination, EPA incorrectly considered emission reductions beyond those that are achievable by individual sources within the affected source categories. Section 111(d)—by its own terms—requires EPA to develop a BSER based on emission reductions that are attainable at each affected source.[11] EPA has demonstrated the unambiguous nature of § 111(d) by promulgating emission reduction standards for almost 40 years with an understanding that such standards must be achieved by individual sources.

Despite the clear requirements of § 111(d), the Proposed Rule includes emission reduction standards based almost entirely on measures that cannot be incorporated or achieved by individual units. Specifically, three of the four Building Blocks that comprise EPA's proposed BSER—increased gas-fired generation dispatch, renewable energy generation, and demand-side energy management—are not directed at existing coal-fired EGUs. Such an approach drastically departs from previous § 111(d) rules, instead invoking a system-wide approach that inappropriately commingles all elements of electricity production and distribution into a single "source category." Crucially, EPA's "outside-the-fence" measures in the final three Building Blocks rely on regulatory authority that EPA does not have.[12]

The Proposed Rule's Building Blocks illegally intrude into state authority over utility regulation. The United States Court of Appeals for the District of Columbia ("D.C. Circuit") recently prohibited efforts made by FERC that, similar to the Proposed Rule, sought to encourage demand side management programs. The court found that these efforts encroached upon powers that are within the exclusive purview of the states.[13]

The Proposed Rule impermissibly encroaches on these same powers. The Federal Power Act ("FPA") "split[s] [jurisdiction over the sale and delivery of electricity] between the federal government and the states on the basis of the type of service being provided and the nature of the energy sale."[14] The Proposed Rule ignores this distribution of authority and instead enables EPA to take actions that fall within the exclusive and traditional power of the states. This concern was highlighted recently in Congressional

[11] 42 U.S.C. § 7411(d)(1)(A), § 7411(d)(1)(B) (2012).

[12] This is especially problematic given that EPA's regulations require each state to demonstrate, in its state plan, that it has the legal authority to carry out the plan. *See* 40 C.F.R. § 60.26. Because individual facilities cannot implement Building Blocks 2 through 4 under any circumstances, there is nothing that states can require of facility owners and operators that will enable compliance with the Proposed Rule.

[13] *See Electric Power Supply Ass'n v. FERC,* 753 F.3d 216 (D.C. Cir. 2014).

[14] *Id*. at 219.

testimony by FERC Commissioner Tony Clark who warned that states risk losing autonomy to EPA.[15]

EPA should not be able to take a greater amount of power from the states than the D.C. Circuit allowed FERC to take. In fact, the limitations that the Constitution and the Clean Air Act put on EPA's authority to compel states to implement specific pollution control measures were confirmed almost 40 years ago,[16] and the Supreme Court is prepared to exercise its authority to prevent the unconstitutional coercion of state power and authority by the federal government.[17]

If EPA is right that it has authority to treat the electric grid as a single system or source in establishing BSER, it still cannot require a fundamental redesign of the system. In *UARG,* the Court noted that "it has long been held that [Best Available Control Technology or] BACT cannot be used to order a fundamental redesign of the facility."[18] BACT is at least as stringent as BSER. Accordingly, if BACT cannot be used to compel a fundamental redesign, then neither can BSER.

Looking at electricity generation and distribution as a single system as EPA did in developing the Building Blocks, the proposed BSER represents a redesign of Oklahoma's system that could cause the closure of several existing EGUs, including those currently operating in OG&E's fleet. The CAA simply does not authorize the EPA to manipulate states' internal electric generation systems in such fundamental and perverse ways, especially when the result could be stranded assets that were created for the main purpose of achieving compliance with other EPA rules.

4. Oklahoma Cannot Administer the Proposed Rule

The state agency EPA tasks with enforcing the CAA—Oklahoma's Department of Environmental Quality ("ODEQ")—lacks its own authority to oversee compliance of Building Blocks 2, 3 and 4.[19] EPA tries to account for this with its statement that the CPP becomes "federally enforceable" in such situations "in the same manner as the provision

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[15] Specifically, Mr. Clark noted that, to the extent the state plan "becomes blessed by EPA and submitted and approved by EPA . . . [the state] will have lost that opportunity [to modify its plan] because it will have become a part of a Federally-approved plan and [the state] would then need to seek approval from the EPA." *FERC Perspectives: Questions Concerning EPA's Proposed Clean Power Plan and Other Grid Reliability Challenges*: *Hearing Before the H. Subcomm. on Energy & Power of the H. Comm. on Energy*, (2014) (statement of Tony Clark, Chairman, FERC), *available at* http://energycommerce.house.gov/hearing/ferc-perspectives-questions-concerning-epa%27s-proposed-clean-power-plan-and-other-grid.

[16] *Dist. of Columbia v. Train*, 521 F.2d 971, 974 (D.C. Cir. 1975).

[17] *Nat'l Fed'n of Indep. Bus. v. Sebelius*, 132 S. Ct. 2566, 2601-04, 2656-66 (2012).

[18] 134 S. Ct. 2427, 2448 (2014); s*ee also Sierra Club v. EPA*, 499 F.3d 653, 655 (7th Cir. 2007) (affirming the Environmental Appeals Board's issuance of a permit for a new coal-fired plant did not violate BACT requirement because "to convert the design from that of a mine-mouth plant to one that burned coal obtained from a distance would require that the plant undergo significant modifications.").

[19] See EPA's 111(d) Clean Power Plan Rule: A DEQ Perspective, September 24, 2014, available at, http://www.deq.state.ok.us/aqdnew/RulesAndPlanning/cleanpower111d/DEQpresentation_111(d)_092414xlbk.pdf

of an approved [State Implementation Plan] under CAA section 110."[20] Essentially, this means that in the event a state cannot or does not grant its own agency authority to enforce the CPP, enforcement prerogatives shift to either the federal government or third-parties through litigation. As the industry has experienced in connection with Federal Implementation Plans (FIP) within the National Ambient Air Quality Standards ("NAAQS") and Regional Haze, the regulatory and operational uncertainty that is associated with the legal process will burden regulated entities and the consumers they serve.

B. The Proposed Rule is an Unnecessary and Unreasonable Attempt at Curbing CO_2 Emissions

EPA's Proposed Rule combines a list of overly-aggressive mandates that are unnecessary and unrealistic, threaten system reliability, and impose unreasonable costs on ratepayers.

1. CO_2 Emission-Reduction and Efficiency Mandates are Unnecessary in Oklahoma

Oklahoma utilities have steadily achieved meaningful reductions of CO_2 emissions and improved the efficiency of their power-generation fleets without federal interference. Currently, nearly 15% of Oklahoma's electricity generation comes from wind, the 4th highest State in the U.S[2122]. Indeed, OG&E was one of the first companies to build wind generation and now accounts for the largest share of utility-owned and operated wind generation in the state. In 2013, OG&E-owned wind capacity accounted 15% of the state's wind generation. Importantly, OG&E and other state utilities were able to incorporate wind generation into their portfolios in a carefully balanced manner that maintained fuel diversity, sensitive to regional variables, the practicality of implementation timelines, reliability, and the impacts to ratepayers. OG&E and its customers recently invested in a major transmission line between Oklahoma City and Woodward, Oklahoma to tap into the wind energy potential in Northwest Oklahoma.

In 2012, the carbon intensity (CO_2lb/MWh) of Oklahoma's utility sector-had been reduced by an impressive 18% since 2005[23]. Emissions are anticipated to drop even further as Oklahoma implements its Regional Haze plan and participates in the new SPP Integrated Market which dispatches generation over a multi-state area, capitalizing on generation efficiency.

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[20] CPP, at 34,833.

[21] See *Supra* note 3

[22] The Department of Energy, Energy Information Administration Form 923, 2013.

[23] EPA Acid Rain Program data for 2005 & 2012 and the 2012 EIA data for wind generation

2. The Proposed Rule's Building Blocks are Unrealistic

The CAA authorizes EPA to implement a best system of emission reduction as part of state guidelines. Citing that authority, EPA devised a system to calculate state emission-reduction targets, referred to as its four Building Blocks. Those four Building Blocks are:

- Building Block 1 – Improve heat rates at coal-fired EGUs by 6 %;
- Building Block 2 – Increase operation of existing natural-gas combined cycle units ("NGCCs") to a 70% capacity factor (up from a state average of 43% in Oklahoma);
- Building Block 3 – Increase deployment of zero-emitting renewable energy ("RE") generating resources (up to 20% in Oklahoma);
- Building Block 4 – Offset fossil-based generation by increasing deployment of end-use energy efficiency ("EE") measures (up to 10% for Oklahoma)[24]

Oklahoma's overall state target is a 43% reduction below the 2012 baseline rate.[25] That number was reached after EPA chose to set targets in accordance with the high end of ranges established within each Building Block. Once the Building Blocks were added up, the result is an unrealistically high and largely unattainable state goal that does not provide Oklahoma or its EGUs with meaningful flexibility in their compliance efforts. A better approach would be for EPA to support compliance by setting lower targets in line with results achieved by demonstrated technology and in keeping with § 111(d) language. Then, if it wants to, EPA could incentivize higher rate reductions without compromising much needed flexibility.

In principle, OG&E can support the concept of a phased-in compliance target and multi-year compliance effort. However, it objects to the Proposed Rule's targets and timelines in light of the magnitude of the reductions required, the new infrastructure contemplated, and the regulatory approvals needed throughout the compliance process.

EPA anticipates finalizing the CPP in June 2015 and will allow up to two years for states to submit plans. Optimistically assuming it takes one year for EPA to approve Oklahoma's plan, companies like OG&E will have to comply with 85% of Oklahoma's

[24] In its NODA, EPA proposes modifications to Building Blocks 2, 3 and 4 that will have the effect of increasing the stringency of those blocks. Regarding Building Block 2, EPA proposes establishing a minimum level of electric generation that must shift from coal-fired sources to natural gas-fired sources. Regarding Building Blocks 3 and 4, EPA proposes adjusting the method used to calculate each state's emission target in a way that compels the reduction of coal-fired generation. Individually and taken together, these modifications compound the concerns OG&E has regarding the potential impact of the Building Blocks.

[25] Proposed Rule at. 34,958.

target within the interim period, starting in 2020.[26] This is simply unattainable given the magnitude of reductions called for and the infrastructure required to achieve them.

Additionally, Oklahoma faces substantial regulatory obstacles. The SPP concluded that transmission line approval and construction alone could take as many as eight and a half years to complete.[27] Factoring in approval processes required by other agencies—such as the U.S. Fish and Wildlife Service's protection of endangered species—will result in an even lengthier compliance process, not to mention potential delay caused by the interaction with other EPA's proposed rules, including the Waters of the U.S. rule.[28]

Oklahoma has been diligent in assessing its ability to comply with the CPP and has concluded that full compliance is not reasonably possible.[29] Recent experience confirms this. Oklahoma's Regional Haze SIP began development in 1998, was submitted for approval in 2010, and was resolved only this year. That is a full 16 years between development and compliance. EPA is attempting to compel states to develop comprehensive plans to regulate a new pollutant in a way that requires unprecedented and ill-defined collaboration among several agencies and possibly other states—all within two years after the rule's finalization. Given all that is asked, Oklahoma and its EGUs cannot meet the Proposed Rule's level of expediency.

(a) Building Block 1

In developing Building Block 1, EPA performed statistical analyses on 2002-2012 data, found statistically significant variability in heat rates across existing coal-fired EGUs, and concluded that, on average, gross heat-rate improvements of 4% are feasible among those EGUs. EPA then used a 2009 Sargent & Lundy study of potential equipment upgrade options and other reports to suggest that additional improvements of 2% are possible. Adding the two together, EPA established Building Block 1 and its mandate of an annual 6% heat-rate improvement.[30]

In principle, heat-rate improvements are not objectionable and, in fact, energy companies routinely strive for them without being told to do so by EPA. Heat-rate

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[26] *E*lectric Utility Generating Units, Technical Support Document: State Goal Computation. *Available at* http://www2.epa.gov/sites/production/files/2014-06/20140602tsd-state-goal-data-computation_1.xlsx

[27] Southwest Power Pool, Comments of the Southwest Power Pool, Inc., Docket ID No. EPA-HQ-OAR-2013-0602, 8 (Oct. 9, 2014), *available at* http://www.spp.org/publications/2014-10-09_SPPComments_EPA-HQ-OAR-2013-0602.pdf (hereinafter "SPP Comments"), at 8.

[28] Definition of "Waters of the United States" Under the Clean Water Act, 79 Fed. Reg. 22,188 (proposed April 21, 2014) (to be codified at 40 C.F.R. pts. 110, 112, 116, 117, 122, 230, 232, 300, 302, and 401).

[29] *See Supra* note 19.

[30] GHG Abatement Measures, Carbon Pollution Guidelines for Existing Power Plants: Emission Guidelines for Greenhouse Gas Emissions from Existing Stationary Sources: Electric Utility Generating Units, Technical Support Document, 2-1—2-43 (June 10, 2014), *available at* http://www2.epa.gov/sites/production/files/2014-06/documents/20140602tsd-ghg-abatement-measures.pdf ("GHG Abatement Measures").

improvements translate to greater efficiency which translates to lower operating costs which translates to lower customer rates. However, there are limits to these benefits, some of which come incidental to agency involvement. For example, several types of projects routinely undertaken across the industry to improve heat-rate performance have been subject to enforcement actions or threats of enforcement actions by EPA. These challenges often take years to resolve, achieve mixed results in the courts, and leave operators reluctant to attempt projects that could improve heat-rate efficiency.

Building Block 1 reflects EPA's lack of understanding of the nature of heat-rate improvements. EPA's theoretical model assumes that heat-rate improvements, once made, are always effective and create permanent emission reductions. In reality, improvements tend to diminish over time as operations continue and equipment becomes fatigued. Additionally, EPA incorrectly assumes that the component and maintenance improvements discussed by Sargent & Lundy can be freshly implemented at regulated EGUs. At OG&E, several of these improvements were implemented prior to the 2012 baseline year and therefore cannot help the company meet its targets.

(b) Building Block 2

For Building Block 2, EPA determined that existing, less carbon-intensive NGCCs could be utilized to a greater extent, thereby displacing more carbon intensive, coal-fired EGUs. EPA then announced its assumption that a "70% [capacity factors is] a reasonable fleet-wide ceiling for each state"[31] and set its target accordingly. This target disregards FERC-established economic, market and practical considerations that make disparities between unit availability and operation net-beneficial. Units are not operated to their full capability due to a number of reasons, including economic price signals in the market. Units are also limited by certain other factors such as demand, transmission constraints, fuel availability, interaction with other sources on the electric grid, weather, efficiency, maintenance outages, etc.

While implementing Building Block 2 threatens to prematurely close several of OG&E's coal-fired EGUs by requiring greater utilization of existing NGCCs, EPA's NODA proposes modifications to the CPP that would almost certainly lead to closures. These measures contravene § 111(d) by forcing displacement of coal-fired EGUs with significant remaining useful lives. Section 111(d) requires EPA to take into account the "remaining useful lives of the sources" it regulates.[32] Despite this provision, EPA did not assess the remaining useful lives of OG&E's and others' coal-fired EGUs that are poised for closure under the Proposed Rule.

Shutting down OG&E's coal-fired EGUs will cause untold damage to local communities, including job losses at OG&E facilities and elsewhere in the supply chain, stranded investments, and reductions in revenue. The abruptness of the transition risks destabilizing energy production and threatens reliability. This scenario can and should be avoided, particularly since OG&E realizes the value of a diverse portfolio of electricity

[31] *Id,* at 3-9.

[32] 42 U.S.C. § 7411(d)(2) (2012).

generation methods and has taken a leadership role across Oklahoma by pioneering utilization of NGCCs. In fact, OG&E owns and operates two NGCCs that run at the highest capacity factors in the state and some of the highest levels in the SPP[33]. What concerns OG&E are the unintended consequences sure to flow from the imposition of an arbitrarily high and hastily imposed shift from coal-fired to natural gas-fired generation.

(c) Building Block 3

In developing Building Block 3, EPA arbitrarily grouped states into six designated regions and set targets for the use of renewable energy ("RE") sources based on the assumption that each state can evolve to meet the average level of RE use in its region[34]. Oklahoma, Texas, Louisiana, Arkansas, Kansas, and Nebraska are grouped together in the "South Central Region," yet significant differences in energy generation strategies exist across those states that render Building Block 3 an arbitrary, meaningless and impractical method for reducing CO_2 emissions.

EPA's 20% renewable-use goal that the Proposed Rule applies to all states in the region mirrors Kansas's renewable energy standard ("RES"). However, EPA does not appear to recognize that Kansas' RES goal is based on peak demand *capacity* (measured in MW) since Block 3 imposes state targets based on *net* electricity *generation* (measured in MWh).[35] Capacity (MW) and generation (MWh) are two very different values: generation-based targets will require higher amounts of capacity to meet a targeted generation given that wind turbines have an operational capacity factor (annually) that is less than 100%. Wind in Oklahoma generally operates at about a 40% capacity factor[36], which means that achieving a generation-based target as set in Block 3 requires two and half times the actual turbine infrastructure. Consistent and predictable correlations between renewable capacity (MW) and renewable utilization (MWh) are challenging in developing an enforceable compliance plan among utilities.

In Oklahoma, the Block 3 target translates into an 83% increase from the 2012 baseline levels.[37] EPA essentially presumes that all generation growth during this timeframe will be provided by RE sources. This is both unrealistic and underestimates the need to shore up variable renewable resources with new, reactive fossil generation — a dynamic which is exacerbated by the NODA's proposal to further force coal-based

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[33] In 2012, OG&E's two NGCC facilities, rated at 594 net MW & 354 net MW, operated at an average 61.5% & 85.8% capacity factor respectively[33], leaving no room to practically improve performance to comply with Block 2 which further exacerbates the stringency & compliance inflexibility created by setting the State target cumulatively, at the highest levels of each block.

[34] *See supra* note 28, page 4-13

[35] Database of State Incentives for Renewables & Efficiency, Renewable Energy Standards: Kansas (last reviewed Oct. 31, 2014), *available at* http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=KS07R.

[36] Department of Energy, Energy Information Administration, Form923. 2012.

[37] *See supra* note 28, at 4-23

reductions, already marginalized due to the Block 2 increase in NGCC utilization, in order to accommodate yet more renewables (wind) generation-based gains[38].

In addition to problems inherent in the terms of Block 3, its application highlights the precarious position States may find themselves in with respect to energy reliability.

(d) Building Block 4

In developing Building Block 4, EPA looked to "leading states" and determined that individual states can achieve emission reductions through the implementation of end-use efficiency measures of approximately 9-12% (setting Oklahoma's goal at 9.97%).[39] Based on its experience designing and implementing demand response ("DR") and energy efficiency ("EE") programs for over 30 years, OG&E concludes that EPA's target is not reasonably attainable.

OG&E's highest priority is providing cost-effective and reliable power to its customers. Over the years, the company has cultivated a great deal of trust with its customers, earning several industry-wide honors, including Electric Light & Power magazine's 2011 Utility of the Year Award and recognition in J.D. Power and Associates' 2014 Electric Utility Residential Customer Satisfaction Study. In fact, OG&E ranks highest in customer satisfaction among large utilities in the South for a second year in a row.

One of the ways OG&E provides such exemplary customer service is through its use of cutting-edge DR and EE programs, proposed and administered under the direction of the Oklahoma Corporation Commission ("OCC"). For example, SmartHours is part of OG&E's Positive Energy Smart Grid Program, which was recently named the world's highest ranked smart grid project by VassaETT.[40] SmartHours offers a Real Time Pricing option which communicates hourly prices to consumers, allowing them to shift their energy use to non-peak periods. Although use of the program does not register a direct and measureable reduction in emissions, it does serve to educate customers about how energy usage compares with pricing, which tends to have a behavioral impact resulting in energy use and emission reductions.

In the area of energy efficiency, OG&E offers several programs its customers can opt into, including programs related to home energy efficiency, weatherization, and commercial lighting. Through December 2013, over 130,000 OG&E customers were enrolled in various EE offerings and the Smart Hours DR program which has resulted in approximately 266 MW of demand savings.

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[38] *See supra note 21*

[39] *See supra* note 28, at 5-48.

[40] VaasaETT, *Smart Grid Global Impact Report 2013* 8*, available at* https://www.smartgrid.gov/sites/default/files/doc/files/globalsmartgridimpact_report_2013.pdf.

All of this effort has allowed OG&E to project an increase in system-wide energy and demand reductions of up to 548 MW and 1,130 GWh over the next ten years.[41] This level of energy GWh reduction amounts to 3.5% of OG&E sales projected for 2024 and likely exceeds levels attainable by other Oklahoma utility companies [42]. If these projections are accurate, the proposed Building Block 4 goal of displacing 9.97% of sales by EE and DR in Oklahoma by 2030 is not reasonably attainable. In fact, OG&E's experience has taught it that the tolerance of customers to EE programs can be low. Particularly where those programs are high-cost, do not provide immediate benefits (such as reduced monthly energy bills) or are offered during economic downturns, consumers often decline to participate. It is not clear how EPA's mandate will change consumer behavior to support its lofty goal.

Additionally, Demand Program rules approved by the OCC are incompatible with Building Block 4. The rules currently have cost caps that limit the monthly cost per residential customer for utility energy efficiency portfolios. These caps would have to be raised significantly to reach the level of energy savings necessary to meet EPA's target by 2030. By forcing OG&E to raise caps, however, EPA threatens substantial savings currently flowing to OG&E's customers, especially low-income customers. Furthermore, the rules allow "high-volume electricity users" the ability to opt out of all or some utility-sponsored DR and EE programs, potentially stifling energy savings and limiting the disbursement of fixed program costs to a smaller group of customers.[43]

Evaluation of "realization rates" has impacted other programs by lowering reported savings more than 50%. OG&E is concerned that enforcement of EE measures under the proposal will be open to challenge if current evaluation and verification ("EM&V") approaches are considered inadequate. The CPP should not be promulgated until EPA guidance on this issue is made available for review and public comment.

3. The Interrelation of the Building Blocks will Produce Harmful Unintended Consequences

Each of the blocks individually has numerous issues that OG&E sees as problematic and impractical but that also have unintended consequences which can significantly impact the feasibility and timing of potential compliance.

(a) Decreased Reliability

Ironically, the RE source utilization that the Proposed Rule and NODA call upon to justify the reduction of coal-fired units rely on those same units to firm their own use and expansion. Wind and solar power generation naturally fluctuate depending on

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[41] Oklahoma Gas & Elec., *Integrated Resource Plan,* 23-24 (Aug. 6, 2014), *available at* http://www.oge.com/investor-relations/Pages/InvestorRelations.aspx under "Regulatory Filings".

[42] *Id.* at 53.

[43] Public Service Company of Oklahoma, 2013 Energy Efficiency & Demand Response Programs: Annual Report 16 (June 1, 2014), *available at* http://www.occeweb.com/pu/DSM%20Reports/2013_PSO_Demand_Programs_Annual_Report.pdf.

weather conditions and therefore require a solid alternative backstop to ensure that OG&E's provision of electricity remains constant. Building Block 3, as amended by the NODA, undermines this security by forcing the reduction of coal-fired EGUs as RE utilization climbs and OG&E needs them most. The significant re-dispatch of NGCCs also takes away some of the margin currently available to firm renewables.

EPA's proposal to nearly double the state's RE sources in Building Block 3 poses additional problems for rules put in place by the SPP to ensure reliable operation of the regional grid. Based on SPP criteria, OG&E can only consider approximately 5% of its wind generation toward its planning capacity margin requirements.[44] So, in order to replace a 500 MW coal plant (such as the Muskogee or Sooner units) with enough wind to meet the capacity requirements of the SPP, OG&E would need to install 10,000 MW of wind generation (which, again, under the Proposed Rule and NODA would mandate the reduction of coal-fired generation, resulting in a vicious cycle).

Additionally, independent analyses of the Proposed Rule have produced reliability findings in stark contrast to those published by EPA. For example, despite EPA projections that the SPP region can expect capacity reserves of 21.21% (well above the 13.6% required by NERC standards), the SPP projects that reserves will fall short by approximately 4,600 MW in 2020 and 10,100 MW in 2024.[45] When it comes to providing energy to a national economy working its way back from recession, reliability is far too important to allow these conflicting reports to go unanswered. EPA should reconsider the structure of its Building Blocks in light of the conflicting views offered by several of the industry's most well-respected consulting organizations.

(b) Customer Impacts

Under Building Block 3, a rapid expansion of wind generation will require a sizeable capital expenditure in a relatively short period of time. This capital investment includes construction of wind farms and transmission infrastructure to accommodate that new wind generation. The subsequent replacement of these new units in approximately 20 years (the presumed useful life for wind resources) will require a similar investment. Compared to the gradual level of capacity replacement currently taking place in Oklahoma, these abrupt and relatively large expenditures will shock Oklahoma's system, causing demand-related increases in the cost of financing and delays due to shortages of equipment.

Furthermore, under the Proposed Rule, a coal-fired unit for which Building Block 1's heat-rate improvement investment is made will then be forced to run at the reduced output level EPA data suggests in order to accommodate shifts to NGCCs and RE sources contemplated by Building Block's 2 and 3. It defies both fundamental economics and common sense to require utilities to make significant capital investments to improve heat-

[44] SPP's capacity accreditation policy for wind. *Available at http://www.spp.org/publications/SPPCriteria&AppendicesJuly29,2014.pdf*

[45] SPP Comments, at 7.

rate efficiency only to nullify the benefits accrued by forcing the displacement or closure of those same coal-fired units through a mandatory shift to NGCCs.

In addition to wasted investments, Building Block 2 will require incidental investments to be made in areas outside of targeted utilities, such as the natural gas pipelines necessary to accommodate the dramatic level of re-dispatch of NGCCs. Only by upgrading the transmission of natural gas can utilities in the SPP region alleviate congestion and maintain reliability. But, as objectionable as wasted and unnecessary investments are, the brunt of these extra costs will likely fall on Oklahoma ratepayers.

C. Recently Released Support Documents Do Not Provide A Meaningful Opportunity To Comment

Federal agencies are required to provide the public with adequate notice of a proposed rule and a meaningful opportunity to comment on the rule's content. With the Proposed Rule, the EPA is poised to enact arguably, the most consequential and expensive environmental regulation ever imposed on the electric power sector. Affected parties are therefore entitled to a notice-and-comment process in a manner that is respectful of the magnitude and complexity of the rule: a mere 30 days before the comment period is set to close for a NODA along with other material guidance' that address key compliance concerns, is not appropriate.

OG&E supports the inclusion of the option for a state to comply on a mass-emissions basis (tons of emissions) however; even more recently, EPA issued its long-awaited technical support document for the Proposed Rule[46]. In it, EPA outlines two potential ways for authorities to take their state's rate-based emission targets and translate them into mass-based equivalents. But EPA's guidance provides little help at this late juncture in the notice-and-comment process. If any changes are made from the goals set in the Proposed Rule that increase the stringency of the goals or otherwise increase impacts to states, additional opportunity for comment must be provided

III. Recommendations

Based on the foregoing analysis—and if EPA insists on issuing a final rule in the face of insufficient authority—EPA should take the following steps to ensure that that any final rule it enacts sets out reasonable and realistic targets and timelines, and minimizes collateral impacts:

- EPA should allow each state to customize its own program targets and timelines after taking account of its generation portfolio, history of CO_2 reduction measures, potential for renewable generation, and

[46] Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, Technical Support Document. Translation of the Clean Power Plan Emission Rate-Based CO_2 Goals to Mass-Based Equivalents (November 2014).

local economy. Providing states with this small measure of input will go a long way to ensuring EPA targets and timelines are practically achievable. In this effort, EPA should allow credit to regulated entities for emission-reduction steps already taken;

- In establishing measures that will result in the closure or displacement of existing coal-fired EGUs, EPA must consider the remaining useful lives of those sources in compliance with § 111(d);

- EPA should encourage the maintenance of fuel diversity within each states' generation portfolio, rather than choosing winners and losers to the effect of decreased system reliability;

- As a general rule, and to the extent possible, EPA should provide states with compliance flexibility.

- Inclusion of Emergency/Operational Variability Off-Ramps: EPA must allow for a compliance mechanism that allows for year-to-year variations in generation profiles and emissions due to weather, fuel delivery and supply shortages, and reliability concerns, etc

IV. Conclusion

The positions OG&E takes with respect to EPA's Proposed Rule are based in over a century of experience providing power to the bulk of Oklahoma's residential and commercial consumers.

OG&E strives every day to provide customers with a plentiful supply of reasonably priced power produced in a safe and environmentally responsible way. OG&E believes that the rule, as proposed, is flawed and will negatively impact reliability of the electric system as well as drive up the cost to consumers. OG&E appreciates the opportunity to provide comments to this proposed rule and encourages the Agency to give our comments due consideration.

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If you have any questions, please contact me at (405) 553-3633.

Sincerely,

Usha-Maria Turner
Director
Corporate Environmental