

**BEFORE THE ADMINISTRATOR OF THE
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.**

**In re: Cross State Air Pollution Rule Update for
the 2008 Ozone NAAQS**

EPA-HQ-OAR-2015-0500

**PETITION FOR RECONSIDERATION
SUBMITTED BY
The GRAND RIVER DAM AUTHORITY
and OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
December 22, 2016**

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The Oklahoma Department of Environmental Quality (ODEQ) and Grand River Dam Authority (GRDA) respectfully request that the United States Environmental Protection Agency (EPA) grant reconsideration of the final rule entitled *Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS*, 81 Fed. Reg. 74,504 (Oct. 26, 2016) (CSAPR Update Rule). Specifically, ODEQ and GRDA request that EPA reopen for comment its methodology for setting the state budget for Oklahoma and include updated information about GRDA's under-construction natural gas combined cycle unit at the Grand River Energy Center when calculating the size of Oklahoma's new unit set-aside.

I. INTRODUCTION

GRDA is an agency of the State of Oklahoma, primarily serving public power communities in Oklahoma. Approximately 70 percent of GRDA's total electric energy is generated by the Grand River Energy Center (GREC), a two-unit 1,010 megawatt (MW) coal-fired generating station located near Chouteau, Oklahoma. GRDA is currently in the process of constructing a third unit at GREC, a highly efficient 495 MW natural gas combined cycle unit (GREC Unit 3), and expects that unit to be completed in the second quarter of 2017.

ODEQ and GRDA recognize EPA's efforts to reduce emissions of oxides of nitrogen (NO_x) in key portions of the U.S. using the market-based Cross State Air Pollution Rule (CSAPR). However, in its current form, the CSAPR program—as revised by the CSAPR Update Rule—will reduce operational flexibility for Oklahoma utilities and impact GRDA's ability to most cost-effectively provide electricity to its customers.

ODEQ and GRDA are seeking reconsideration of the CSAPR Update Rule because the revised methodology used to set the Oklahoma state budget was not subject to notice and comment and the new unit set-aside (NUSA) that EPA set for the state fails to account for planned units in Oklahoma such as GREC Unit 3.

II. BACKGROUND

EPA finalized and published the CSAPR Update Rule on October 26. The CSAPR Update Rule largely applies the existing CSAPR program to the 2008 ozone NAAQS. This includes a market-based trading program for ozone season NO_x emissions from electric generating units (EGUs).¹ Following on the methodology of the existing CSAPR program and to ensure implementation of the 2008 ozone standard, the CSAPR Update Rule reduces in most cases the state budgets for ozone season NO_x emissions, starting with the 2017 ozone season.² It also establishes a methodology by which allowances are

¹ CSAPR Update Rule, 81 Fed. Reg. at 74,507.

² CSAPR Update Rule, 81 Fed. Reg. at 74,507-508; *id.* at 74,563.

distributed to individual units out of these budgets starting with the 2017 ozone season.³ EPA's methodology includes a set-aside of allowances to be distributed to "new" units—those that commence operation after January 1, 2015.⁴ This NUSA is calculated on a state-by-state basis, as a 2% floor to account for emissions from projected units plus a state-specific increase based on known "planned" units.

III. REQUEST FOR RECONSIDERATION

For the reasons set forth below, ODEQ and GRDA request that EPA withdraw and re-propose the Oklahoma state budget finalized in its CSAPR Update Rule, and include all available planned, under construction units when setting a revised NUSA for Oklahoma.

Section 307(d)(7)(B) of the Clean Air Act imposes a mandatory duty on EPA to initiate a proceeding to reconsider rulemakings under certain circumstances. EPA must grant reconsideration when:

the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule.⁵

EPA has taken the view that an objection is of central relevance to the outcome of the final rule only if it provides substantial support for the argument that the promulgated regulation should be revised.⁶

ODEQ and GRDA also respectfully request that EPA undertake an expedited review of this petition for reconsideration given that the Oklahoma state budget and the allowance allocations for the 2017 NO_x ozone season will need to be revised by May 2017 to address the shortcomings of the state budget and NO_x allowance allocations made in the 2016 CSAPR Update Rule.⁷

³ CSAPR Update at 74,563. Actual allocations will be determined at a later date through an EPA-issued Notice of Data Availability (NODA). States are free to adopt an alternative allowance allocation methodology, but may only do so starting in 2018. CSAPR Update at 74,569.

⁴ CSAPR Update Rule at 74,565.

⁵ 42 U.S.C. § 7607(d)(7)(B).

⁶ *See, e.g.*, EPA, Basis for Denial of Petitions to Reconsider the CAA Section 111(b) Standards of Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Fossil Fuel-Fired Electric Utility Generating Units 2-3 (Apr. 2016), https://www.epa.gov/sites/production/files/2016-04/documents/111b_recondocument_april2016.pdf (citing EPA's Denial of the Petitions to Reconsider the Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202 of the Clean Air Act, 75 Fed. Reg. 49,556, 49,561 (Aug. 13, 2010); *Coalition for Responsible Regulation v. EPA*, 684 F.3d 102, 125 (D.C. Cir. 2012)).

⁷ CSAPR Update Rule at 74,568.

A. The CSAPR Update Rule Final Budget for Oklahoma Represents a Significant Change from its Proposal and Should be Reconsidered

The proposed CSAPR Update Rule would have set the Oklahoma NO_x budget at a reasonable level of 16,215 tons.⁸ This level was consistent with Oklahoma's and GRDA's operational needs and so did not raise concerns. However, in issuing the final CSAPR Update Rule, Oklahoma's budget was reduced by 28%—by far the largest decrease among the seven states that saw their budgets reduced—to 11,641 tons.⁹ This is substantially lower than even the “more stringent alternative” approach EPA proposed in the CSAPR Update Proposed Rule.¹⁰

The magnitude of this change will reduce the operational flexibility of Oklahoma utilities, such as GRDA, to most cost-effectively comply with the final CSAPR Update Rule. For example, in 2015, GREC Units 1 and 2 emitted 1,953 tons of NO_x. EPA's proposed allocation would have provided 1,983 allowances.¹¹ However, based on the changes to the Oklahoma state budget established in the final CSAPR Update Rule, GRDA will only receive 1,330 allowances.¹² This 32% decrease in NO_x allowances will have an impact on GRDA's ability to implement cost-effective controls at its GREC facility.

This objection is consistent with the comments submitted by ODEQ.¹³ GRDA supports ODEQ's assessment that a state budget of 16,215 tons “represents an achievable target which balances substantial pollutant reductions with concerns about the reliability of the electric utility sector and economic impacts of the CSAPR Update.”¹⁴ However, as ODEQ outlined in their comments, substantially reducing Oklahoma's budget below the proposed 16,215 ton level would impose unacceptable electric sector reliability risks and harsh economic impacts on the citizens and businesses of the state. This is particularly the case when considering the possibility of an unusually hot summer, increased natural

⁸ Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS; Proposed Rules, 80 Fed. Reg. 75706, 75739 (Dec. 3, 2015) (CSAPR Update Proposal).

⁹ CSAPR Update Rule at 74,567.

¹⁰ See EPA, Proposed Cross-State Air Pollution Update Rule - Ozone Transport Policy Analysis TSD Appendix E- Detailed Budget Calculations (XLS) sheet “Budget Calcs for IPMv5.15 cases,” <https://www.epa.gov/airmarkets/proposed-cross-state-air-pollution-update-rule-ozone-transport-policy-analysis-tds> (hereinafter “CSAPR Update Proposed Rule Budget Calculation”).

¹¹ Unit Level Allocations and Underlying Data for the CSAPR for the 2008 Ozone NAAQS, Sheet “Allocations” rows 2001-2002, available at https://www.epa.gov/sites/production/files/2015-11/unit_level_allocations_and_underlying_data_for_the_csapr_for_the_2008_ozone_naaqs_0.xls

¹² Unit Level Allocations and Underlying Data for the CSAPR for the 2008 Ozone NAAQS, Sheet “Final Allocations” rows 1980-1981, available at <https://www3.epa.gov/airmarkets/CSAPRU/Unit%20Level%20Allocations%20and%20Underlying%20Data%20for%20the%20CSAPR%20for%20the%202008%20Oz.xls>.

¹³ See Oklahoma Department of Environmental Quality Air Division, Docket ID No. EPA-HQ-OAR-2015-0500-0268, *Comments on CSAPR Update* at 4-5 (Jan. 29, 2016), <https://www.regulations.gov/document?D=EPA-HQ-OAR-2015-0500-0268> (ODEQ CSAPR Comments).

¹⁴ ODEQ CSAPR Comments at 4.

gas prices, or unexpected outages of low-emitting units in Oklahoma or the Southwest Power Pool. Therefore ODEQ requested in their comments—and GRDA supports—that EPA re-propose the CSAPR Update Rule if the changes made to the state budget methodology would result in a substantial reduction in Oklahoma’s state budget.¹⁵ Given that EPA has, in fact, made such a substantial change, petitioners reiterate that request here.

Reevaluation of the state budget methodology, and reopening it for public comment, is justified for a number of reasons. First, the 28% decrease in the budget allocation to Oklahoma underscores that the methodology applied by EPA is the result of fundamental changes to EPA’s budget-setting methodology between the CSAPR Update proposed rule and the final rule.¹⁶ These are changes for which the public has not had the opportunity to comment.

In particular, it is important to consider EPA’s development of the state budget for Oklahoma. The proposed rule calculated Oklahoma’s base case 2017 emissions budget at 19,620 tons; the \$1300 per ton of NOx cost threshold resulted in a budget of 16,215 tons.¹⁷ The final rule base case 2017 emissions budget is 13,747 tons; and, the \$1400 per ton of NOx threshold run resulted in a 2017 state budget of 11,641 tons.¹⁸

EPA explains the significant change in the Oklahoma budgets in the Ozone Transport Policy Analysis.¹⁹ The formula used in the proposed rule was as follows:

*State 2017 OS²⁰ NOx Budget = 2015 State OS heat input * State 2017 IPM OS NOx emissions rate*

In response to commenters’ concern that this approach may project a “substantially cleaner generation profile within the state than might be possible to achieve in the relatively short timeframe of this rule,”²¹ EPA changed the formula in the final rule to:

*State 2017 OS NOx Budget = 2015 State OS heat input **

(Adjusted 2015 OS NOx State Emissions Rate –

(2017 IPM Base Case OS NOx Emissions Rate – 2017 IPM OS NOx emissions rate))

¹⁵ ODEQ Comments at 4.

¹⁶ Compare EPA, Ozone Transport Policy Analysis Final Rule TSD (Aug. 2016) <https://www3.epa.gov/airmarkets/CSAPRU/Ozone%20Transport%20Policy%20Analysis%20Final%20Rule%20TSD.PDF> (hereafter “OTPA”) with EPA, Ozone Transport Policy Analysis Proposed Rule TSD (Nov. 2015), https://www.epa.gov/sites/production/files/2015-11/documents/ozone_transport_policy_analysis_tsd.pdf (hereafter “Proposed Rule OTPA”).

¹⁷ OTPA Proposed Rule TSD at 9.

¹⁸ OTPA at 15.

¹⁹ See OTPA.

²⁰ Note that “OS” denotes “ozone season.”

²¹ OTPA at 11.

The “adjusted 2015 OS NO_x State emissions rate” is a state’s 2015 actual NO_x emissions rate from affected units that has been manipulated by five separate operations.²² Not only is the equation for calculating a state’s budget substantially different between the proposed and final rule, but the equation in the final rule also introduces this not-previously seen term. For Oklahoma, the change in the NO_x budget formula had the opposite result than what EPA stated was the Agency’s intent, which was to avoid “insufficient tons for a state budget.”²³ Affected entities have not had the opportunity to comment on this important change to the methodology which has a significant impact on Oklahoma’s 2017 NO_x budget and the feasibility and costs of compliance with the rule. This methodological change should be reopened for public comment, at least with respect to Oklahoma’s seasonal ozone budget.

In fact, the Oklahoma 2017 state budget with the 2015 heat input results in a NO_x emissions rate for existing units of 0.067 lb/MMBtu.²⁴ Contrast this rate with the 0.075 lb/MMBtu rate that EPA assumed for new, state-of-the-art selective catalytic reduction (SCR) retrofits that will be in place by 2017²⁵ and the 0.10 lb/MMBtu existing SCR rate on which EPA based the final budgets.²⁶ The entire existing unit fleet budget in Oklahoma is based on an emission rate more stringent than the emission rate EPA assumes for both existing and new SCR systems. EPA’s own analysis shows the substantial difficulty Oklahoma will have in meeting its ozone season NO_x budget. Oklahoma will be required to reduce NO_x emissions 18% *beyond* the level of emissions that would occur under EPA’s “bottom up” analysis of cost-effective emission controls.²⁷ Oklahoma is the only state with such a substantial gap between what EPA deems feasible and what will be nonetheless required by the CSAPR Update Rule.

Second, in setting the Oklahoma state budget, EPA set the state’s emissions budget based on its 2015 level of operations, not at the level of emissions it would be required to meet based on its CSAPR Phase 2 NO_x ozone season emission budget. This approach fails to account for the wide variety of reasons that Oklahoma’s operations and emissions may have been abnormally low in 2015. Moreover, to the extent that Oklahoma’s emissions

²² OTPA at 12.

²³ OTPA at 11.

²⁴ Calculated from Allowance Allocation Final Rule TSD

<https://www3.epa.gov/airmarkets/CSAPRU/Unit%20Level%20Allocations%20and%20Underlying%20Data%20for%20the%20CSAPR%20for%20the%202008%20Oz.xls>

²⁵ OTPA at 12.

²⁶ Regulatory Impact Analysis of the Cross-State Air Pollution Rule (CSAPR) Update for the 2008 National Ambient Air Quality Standards for Ground-Level Ozone at 4-13 (Sept. 2016).

²⁷ EPA, EGU NO_x Mitigation Strategies Final Rule TSD at 17 (Aug. 2016),

<https://www3.epa.gov/airmarkets/CSAPRU/EGU%20NOX%20Mitigation%20Strategies%20Final%20Rule%20TSD.PDF>.

were consistently below its CSAPR budget, this approach punishes rather than rewards actions to go beyond what is required.²⁸

Given the substantial changes to EPA's methodology, the fact that affected entities were not able to comment on those changes, and the impact of those changes—the fact that such a decreased budget calls into question whether there will be sufficient allowances for GRDA's GREC units—the reduced Oklahoma state budget should be subject to further notice and comment by affected utility stakeholders in Oklahoma, including GRDA. The grounds for this request arose only at EPA's issuance of the final CSAPR Update Rule, when the Agency revised its methodology and adopted a state budget for Oklahoma that is substantially less than that proposed.

As noted by ODEQ, this decreased budget is not likely to reflect the operational needs of utilities within Oklahoma in situations where there are natural gas price fluctuations, hot summers, or unexpected unit outages. Moreover, EPA failed to fully explain how its changes resulted in such a drastic change in Oklahoma's budget, or to respond to ODEQ's comment that should EPA change its methodology in such a way as to significantly alter the Oklahoma state budget, the Agency should reopen the CSAPR Update Rule for comment.²⁹ This Petition, therefore, is the first opportunity to identify and formally present to EPA the objections to the reduced budget level for Oklahoma and to EPA's failure to explain or respond to relevant comments.

B. EPA Failed to Include All “Under Construction” Units in Oklahoma when Setting the Oklahoma New Unit Set-Aside

Consistent with the approach taken in the original CSAPR rule, the CSAPR Update Rule divides state budgets among existing units, a NUSA, and an Indian Country NUSA. The size of each state's NUSA is the sum of the *expected* percent of emissions from potential new units (as determined by EPA modeling) and the expected emissions from any specific planned units for the state. While ODEQ and GRDA generally support this methodology, EPA has failed to include all planned units when calculating the size of the Oklahoma new unit set-aside. In particular, EPA failed to include the highly efficient

²⁸ The difficulty in Oklahoma achieving this steep NO_x reduction level in such a short timeframe is further underscored by the limits that the CSAPR places on states in using purchased out-of-state allowances. In particular, EPA has established a variability limit calculated at 21 percent of each state's budget, which is roughly equivalent to the budget shortfall resulting from the flaws in the EPA methodology for calculating Oklahoma's final 2017 budget. As a result of this budget shortfall, Oklahoma may be unable to purchase the necessary allowances from other states in order to cover increased emissions resulting from “year-to-year variability in EGU operations ... due to the interconnected nature of the power sector and from changing weather patterns, changes in electricity demand, or disruptions in electricity supply.” 81 Fed. Reg. at 74,566.

²⁹ Compare ODEQ Comments at 4-5 with EPA, Cross State Air Pollution Update Rule - Response to Comment, available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2015-0500-0572>.

natural gas combined cycle unit that GRDA is currently constructing at the Grand River Energy Center (GREC), GREC Unit 3. As such, EPA has underestimated the amount of emissions in Oklahoma for which new units will require allowances. Petitioners urge EPA to reconsider the Oklahoma NUSA, and specifically to include *all* planned units in setting the size of the Oklahoma NUSA.

Under the CSAPR Update state budget methodology, each state's NUSA was determined to be 2% of the state's total NOx emission budget plus "the projected amount of emissions from *planned* units in that state."³⁰ "Planned unit" is not defined in the CSAPR or CSAPR Update regulations. However, the CSAPR Update Allowance Allocations Final Rule Technical Support Document does outline the criteria EPA used for determining whether a unit is a "planned unit:"

"Planned" units, on which the state-specific percentage of the new source set-aside is based, are those units that are already identified in the modeling input because they are specific plants that are already built or are under construction, but that commence commercial operation on or after January 1, 2015. Because the location of these "planned" units is already known and identified in the modeling input, the portion of the new unit set-aside corresponding to these units is state-specific.³¹

GREC Unit 3 clearly meets the substantive criteria identified by EPA when trying to identify the universe of planned units for which the Agency includes allowances in the new unit set-aside.

Furthermore, GREC Unit 3 meets the "planned" unit requirements in the final rule as it is a specific unit under construction, with a known location, that will commence operation on or after January 1, 2015.³² After ODEQ issued a construction permit on August 28 2014, GRDA started construction activities for GREC Unit 3 at the GREC site.³³ GREC Unit 3 is expected to commence commercial operation in the summer of 2017, substantially after the January 1, 2015 cutoff date.

EPA established a 2% baseline for the new unit set aside based on IPM modeling that showed an expected increase in emissions from new units of 2%. However, because IPM modeling is not state specific, EPA was not able to attribute the additional capacity to any particular state budget. As EPA explained in its TSD, unlike potential units, "planned" units have a specific geographic location and so could be allocated to a particular state's budget. GREC Unit 3 has a specific and known geographic location. As with GREC

³⁰ CSAPR Update Rule at 74,565 (emphasis added).

³¹ CSAPR Update Rule Allowance Allocation TSD at 3.

³² Allowance Allocation Final Rule TSD at 3 (Aug. 2016).

³³ <http://www.grda.com/grda-breaks-ground-on-new-combined-cycle-electric-generation-facility/>

Unit 1 and Unit 2, Unit 3 will be located at the Grand River Energy Center in Chouteau, Oklahoma.

EPA determined which units were “planned” units based on available information, including but not limited to its National Electric Energy Data System (NEEDS) database. That database relies on a number of data sources, including the Energy Information Agency (EIA) Form 860, which includes a list of proposed new units. Publicly available EIA-860 data for 2015, 2014, and 2013, all specifically included GRDA’s GREC Unit 3 in its list of proposed units.³⁴ The Regulatory Impact Analysis to the CSAPR Update Rule indicates that “[o]ther updates to the [IPM] v.5.15 base cases used in this final rule include largely unit-level specifications (e.g., pollution control configurations and emissions rates), and *planned power plant construction* and closures that the *EPA was aware of by February 1, 2016.*”³⁵ EPA clearly should have been aware of GREC Unit 3 by February 2016 based on three years of EIA-860 data. To the extent these more recent EIA Form 860 data were not incorporated into EPA’s modeling, EPA should have done so and should reconsider its final rule allocations in light of this more recent data.

EPA should revise the Oklahoma new unit set-aside to fully account for all planned units in the state. The current set-aside amount is insufficient to cover the expected emissions from new units in the state over the term of this rule. As such, it will serve as a disincentive for the construction of new, highly efficient units such as GRDA’s GREC Unit 3.

Because the NUSA is set as a percentage of the state’s overall budget, this data error is particularly acute in light of the substantial reduction in the overall Oklahoma state budget as outlined above. New units in Oklahoma may have been able to be reasonably accommodated by an allocation constituting 2% of the 16,215 state budget (324 allowances) and the option to purchase in-state allowances. However, the reduction of the state budget to 11,641 tons means that only 233 allowances (inclusive of the Indian Country NUSA) will be available to new units.³⁶ The NUSA at this level is too low for the state of Oklahoma. Therefore, petitioners’ objection is based on the combination of EPA’s data error and the unexpected changes made to the overall Oklahoma state emission budget. As such, they “arose after the period for public comment.” Moreover, as EPA made changes to the “planned unit” universe after receiving comments about

³⁴ <http://www.eia.gov/electricity/data/eia860/> (Available in the “3_1_Generator_Y[YEAR]” spreadsheet)

³⁵ EPA, *Regulatory Impact Analysis of the Cross-State Air Pollution Rule (CSAPR) Update for the 2008 National Ambient Air Quality Standards for Ground-Level Ozone* at 4-10 (Sept. 2016), https://www3.epa.gov/ttn/ecas/docs/ria/transport_ria_final-csapr-update_2016-09.pdf (hereafter “CSAPR Update RIA”) (emphasis added).

³⁶ In fact, only 221 allowances are available to GRDA because 12 allowances are reserved for the Indian country new unit set-aside. See CSAPR Update Rule at 74,565.

excluded planned units,³⁷ it is likely that this objection would have changed the CSAPR Update Rule and so is of central relevance to the outcome of the rule.

IV. CONCLUSION

ODEQ and GRDA appreciate EPA's expedited consideration of this petition. For the reasons discussed above, EPA must reopen for comment and revise the CSAPR Update Rule as it applies to the Oklahoma state budget, including the size of the Oklahoma NUSA.

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³⁷ See Updates to NEEDS v.5.15, CSAPR Update Proposal Comments sheet, rows 1501-1503, <https://www3.epa.gov/airmarkets/CSAPRU/Updates%20to%20NEEDS%20v.5.15%20for%20the%20CSA%20PRU.xlsx>.