

Memorandum on EPA's Proposed Changes to New Source Review in ACE

INTRODUCTION AND OVERVIEW

The Trump administration's Affordable Clean Energy (ACE) Rule proposal to replace the Clean Power Plan (CPP) includes an amendment to the Clean Air Act (CAA) New Source Review (NSR) program that would significantly curtail the applicability of NSR permitting to power plants. In doing so it would weaken a program that the EPA and states have long relied on to ensure that when a new investment is made in a facility any emissions increases that may result are minimized.

Current NSR

Three steps currently determine when a project at a power plant, also called an Electric Generating Unit (EGU), is a "major modification" (triggering certain permitting and control requirements under current NSR regulations):

- Step 1: Is there a physical change or change in the method of operation?
- Step 2: Does the change result in a significant emissions increase? This is determined using the actual-to-projected-actual *annual* emissions test.
- Step 3: Will the change result in a significant *net* emissions increase?

Proposed Change to NSR

EPA's new proposal erects an hourly test between steps 1 and 2 as a gatekeeper or off-ramp in the NSR process before moving on to the existing annual emissions test for whether an emissions increase is "significant." If the change is not projected to increase hourly emissions, then it would not be subject to the major NSR permitting process. The revised steps for determining when a project at a source is a "major modification" subject to the major source NSR permitting process would be as follows:

- Step 1: Does the project cause a physical change or change in the method of operation?
- Step 2 [PROPOSED]: Does it result in an emissions increased based on an *hourly* (as opposed to total annual) emissions increase test? The Proposed Rule outlines three possible alternatives for this test:
 - Alternative 1—Maximum achieved hourly emissions; statistical approach; input basis.
 - Alternative 2—Maximum achieved hourly emissions; one-in-5-year baseline; input basis.
 - Alternative 3—Maximum achievable hourly emissions; input basis.
- Step 3: Does the change result in a significant emissions increase as determined using the actual-to-projected-actual emissions test in the current NSR rules (the *annual* test)?
- Step 4: Will the change result in a significant *net* emissions increase?

Under the ACE proposal, the inquiry ends at Step 2 if there is not an increase in hourly emissions, even if annual emissions are projected to increase.

EPA's Rationale: Alleviating "Burden" without Accounting for Pollution Increases

The proposal states that its aim is to reduce the putative "burden" on plant operators, but pays only fleeting attention, at best, to the burden on local and regional air quality imposed by under-controlled emissions. In fact, the proposal acknowledges that as many as 80 percent of coal fired power plants currently operate with sub-optimal NO_x and SO₂ controls, below what would be required if they underwent NSR permitting. The proposal offers only a brief explanation as to why maintaining this level of emissions under-control is acceptable – notwithstanding the implied expectation that new investment in coal plants will increase their usage and extend their lives.

Specifically, the stated purpose of the proposal is to allow more power plants to make changes, like the heat rate improvement (HRI) projects contemplated by ACE, without having to also upgrade to modern standard emissions control equipment that would minimize increases in other pollutants like oxides of nitrogen and sulfur dioxide, which result in increased concentrations of ozone smog and fine particles in local and regional airsheds.

EPA observes that the projects envisioned under the ACE proposal would cause significant enough emissions increases to trigger the addition of modern pollution controls under the NSR program, or at least a permitting process to determine what, if any, additional controls are needed. Yet, its response is to weaken the trigger for the addition of such controls, allowing older coal-fired power plants to potentially extend their life and utilization without the added cost burden of modern pollution controls.

EPA acknowledges that this creates a more lenient NSR regime than current law but argues that alleviating the burden of New Source Review is critical to facilitating sources' adoption of the "candidate technologies" that states choose to adopt to improve plant heat rates as a result of ACE. Importantly, the proposal does not currently limit the revised NSR determination process to EGUs required to adopt a "candidate technology" as a result of ACE. However, EPA does state that it "is soliciting comment on whether to confine the applicability of the hourly test to a smaller subset of the power sector". 83 Fed. Reg. 44781. Should the final rule remain as written, it would apply the more lenient gatekeeping test to all modifications at all EGUs—potentially allowing operators to make significant life-extending upgrades to electric generating units while avoiding the costly addition of modern control technologies for pollutants like NO_x and SO₂.

Including the proposal as part of ACE all but explicitly concedes that the HRI measures expected as a result of the proposal will increase annual emissions. Without this "relief" from NSR, the plants installing "candidate technologies" would then need to install additional pollution controls for other pollutants like NO_x and SO₂, raising the overall compliance costs of the ACE program or dissuading utilities and states from adopting HRI measures.

Regulated businesses and prior Republican administrations have long sought an hourly rather than annual emissions test for determining when NSR permitting is required for plants that undertake modifications. Versions of the hourly test and other exclusions of power plant modifications from NSR pollution controls were proposed multiple times during the Bush administration. The current proposal reprises various alternatives proposed by EPA in 2007 that were never finalized.

This memorandum outlines in more detail below the primary arguments and justifications for this change to NSR regulations furnished by EPA in its [Proposed Rule](#) issued on August 31, 2018. While this document focuses exclusively on the portion of the proposal dedicated to the NSR change, our program has also prepared a summary of the primary arguments in the larger proposal that is available [here](#) and an extensive step-by-step lay-out of the legal arguments advanced in the ACE and the CPP repeal proposals available to download [here](#).

UNDERSTANDING CURRENT NSR REGULATIONS AND THEIR RELEVANCE TO THE ACE RULE

Current New Source Review regulations subject an existing source to NSR permitting when it undergoes a “major modification.” A major modification occurs when an EGU (1) undertakes a physical change or change in method of operation that would result in (2) a significant emissions increase from all emission units that are part of the project (determined by an annual emissions rate test) and (3) significant net emissions increase from the source (considering creditable emission increases and decreases at the source as a result of other projects over a 5-year contemporaneous period).

The emissions increase from a proposed project is currently calculated by comparing the “projected actual emissions” (PAE) with the “baseline actual emissions” (BAE). The PAE is the maximum *annual* rate the modified unit is projected to emit of a pollutant in any one of the 5 years (or 10 if design capacity increases) after the project, excluding any increase in emissions that (1) is unrelated to the project and (2) could have been accommodated during the baseline period. The BAE is the average *annual* rate of actual emissions during any 24-month period within the last 5 years (for electric utility steam generating units (EUSGU)) or within the last 10 years for non-EUSGUs.

EPA’s proposed ACE rule designates heat rate improvements (HRI) as the best system of emission reduction (BSER) for existing coal-fired electric utility generating units for reducing CO₂ emissions. EPA acknowledges that HRI projects adopted under the rule could trigger major New Source Review permitting. EPA highlights the likelihood that HRI projects could improve power plant efficiency in ways that result in improved economics of those units relative to others on the grid, leading to increased generation, and projected emissions, beyond historical levels as those more economic units would then be utilized more.

Pointing to these considerations, EPA included a proposal to revise NSR regulations such that they avoid triggering major NSR permitting. The proposal adds a preliminary hourly emissions rate increase test for all projects. The agency argues the cost burdens of the NSR process justifies the change and argues such a change in the calculation of what is considered a major modification under the NSR program is within the discretion afforded the agency under *Chevron* deference.

SUMMARY OF EPA’S 2018 NSR PROPOSAL

EPA’s new proposal to add an additional gatekeeping step to the NSR regulations based on an hourly emissions increase test revives part of a 2007 proposal (as well as similar proposals put forth in various forms in the early 2000s). As was described in the introduction to this memo, after identifying a physical change or change in the method of operation (such as an HRI project), the proposal requires a new hourly emissions test before moving on to the current annual emissions test for determining if the change would result in a significant emissions increase requiring NSR preconstruction permitting. The proposed ACE Rule includes a narrower set of alternatives than those proposed in the 2007 Supplemental Notice of Proposed Rulemaking, which was never finalized. EPA includes only three alternatives of the twelve originally presented in 2007.

The existing language in the NSR regulations would not change. EPA proposes adding a new provision in Subpart I of Part 51—Review of New Sources and Modifications (§ 51.167) and a parallel provision (§ 52.25) in Part 52—Approval and Promulgation of Implementation Plans, which applies to any State Implementation Plan (SIP) disapproved for Prevention of Significant Deterioration (PSD) of air quality in any portion of the state in which the existing air quality meets the NAAQS.

The new § 51.167, titled “Preliminary major NSR applicability test for electric generating units (EGUs),” would set out the proposed two-step process for determining if a change to an EGU is a modification.

This 2-step process must be completed *before* determining if the modification is a *major* modification requiring NSR permitting in accordance with § 51.165 or § 51.166. The EGU owner or operator first confirms that the action is a physical change or change in the method of operation that does not fall within an exemption listed under § 51.167(e) (**Step 1**). If it is, the owner must then determine if the change “increases the amount of any regulated NSR pollutant emitted to the atmosphere” by implementing an hourly emissions increase test defined in § 51.167(f) (**Step 2**). The proposal includes three potential alternatives for the Step 2 hourly emissions test. One is based on a comparison of the emissions rate calculated using continuous emissions monitoring systems (CEMS) or predictive emissions monitoring systems (PEMS) data to a projection of the post-change maximum actual hourly emissions rate, another compares pre-change maximum hourly emissions rate calculated using one of a number of types of “best data available” listed in the proposal to a projection of the post-change maximum actual hourly emissions rate, and the third compares the maximum *achievable* hourly emissions rates before and after the change. (See the [Appendix](#) for additional details on these three alternative proposals)

Once the source completes these initial two steps, it then continues to the current annual emissions test (**Step 3**) and netting test (**Step 4**) to determine whether it requires a major NSR permit only if the new hourly test indicates the project will cause an hourly emissions increase. The proposal requires the source to maintain a file of all modification determinations made for five years after the EGU resumes regular operation or five years after the date of measurements, maintenance, reports, and records, whichever is later.

EPA JUSTIFICATIONS FOR AND ARGUMENTS IN SUPPORT OF THE NSR PROPOSAL

In the proposed ACE Rule EPA reviews prior efforts at reform intended to loosen NSR applicability in the early 2000s, 2005, and 2007. The agency argues that due to cost concerns it should return to options it previously considered to adopt an hourly emissions rate test for NSR applicability. 83 Fed. Reg. 44777. EPA says it will “help promote energy efficiency and the effectiveness of implementing the ACE rule, while at the same time being consistent with the NSR provisions in CAA and past judicial decisions interpreting those provisions.” 83 Fed. Reg. 44778.

EPA refers multiple times to the 2007 Supplemental Notice of Proposed Rulemaking (SNPRM), incorporating by reference the legal analysis in that prior proposal. The 2007 SNPRM in turn refers in various places to the legal analysis in the 2005 Notice of Proposed Rulemaking (NPRM). These prior proposals are more carefully articulated, if not better supported, than the legal arguments presented in the ACE proposal and help explain the justifications provided in the 2018 preamble.

The primary justifications for the proposed NSR revisions are discussed below and include: (1) concern for the cost burden on power facilities (and to a lesser extent, permitting agencies), (2) the assertion that supposed system-wide emissions reductions justify emissions increases from specific power facilities, and (3) an argument that EPA has broad discretion under the *Chevron* doctrine to make such a change.

I. POTENTIAL COSTS TO POWER FACILITIES ARE EPA’S PRIMARY JUSTIFICATION FOR ADDING AN HOURLY EMISSIONS RATE INCREASE TEST TO NSR.

EPA’s primary stated reason for its revision of NSR regulations is to avoid the additional costs and time imposed if a required HRI project triggers the NSR preconstruction permitting evaluation process. EPA expects HRI projects to result in greater unit availability and reliability, which would in turn result in lower operating costs, causing the unit

to be dispatched with increasing frequency. See 83 Fed. Reg. 44775. EPA notes the RIA showed that heat rate improvements would lead to increased generation beyond historical levels and associated increases in emissions potentially significant enough to trigger NSR requirements. *Id.* EPA's concern is that when an air agency requires an affected sources to undergo HRI projects to comply with the new emission guidelines such modifications could trigger major NSR requirements.

EPA repeatedly stresses in the preamble the "substantial extra time and cost of applying for a major NSR permit prior to undertaking the HRI project." 83 Fed. Reg. 44775. EPA argues that the required nature of the HRI projects means the NSR applicability concerns (and costs) "take on even greater significance" under the ACE rule than they did under the CPP because they "may not be as easily avoided." *Id.* Because "sources cannot choose to forego" a project required by a state's 111(d) plan, EPA says the need for NSR reform "takes on a new character" and that the CPP approach of providing flexibility to states to minimize triggering NSR "does not appear to be a sufficient solution." 83 Fed. Reg. 44777.

EPA observes that the projects envisioned under the ACE proposal would cause significant enough emissions increases to trigger the addition of modern pollution controls under the NSR program, or at least a permitting process to determine what, if any, additional controls are needed. Yet, its response is to weaken the trigger for the addition of such controls, allowing older coal-fired power plants to potentially extend their life and utilization without the added cost burden of modern pollution controls.

EPA cites a Nicholas Institute report concluding 80 % of non-retiring coal-fired units would have to install additional controls if HRI projects triggered NSR applicability. 83 Fed. Reg. 44775. The agency again highlights the substantial time, effort and money to comply with major NSR requirements, but does not discuss health impacts of allowing such additional emissions. The Nicholas Institute numbers cited by EPA could just as easily support an argument that EPA should *not* loosen NSR as it would allow a significant number of plants to avoid installing controls. EPA never acknowledges that the proposal amounts to a trade-off between facilitating HRI and requiring upgrades in pollution control equipment or attempt to justify the trade-off.

Instead, EPA simply acknowledges that its focus on NSR costs in the ACE proposal runs counter to how the agency has historically considered the impacts of its proposals. The agency acknowledges that it "has historically not considered the costs of complying with other CAA programs, like NSR, when determining BSER for a source category under section 111." 83 Fed. Reg. 44777. EPA explains away the break with past practice by arguing it is appropriate "due to the nature of the electric utility industry and the types of candidate control measures being considered in this proposal". 83 Fed. Reg. 44777.

It also explains the break with prior practice as being a necessary outgrowth of courts negating its prior policy of excluding pollution control projects from NSR. EPA attempted to turn what it described as an internal policy into regulation in a 2002 rulemaking that excluded all EGUs designated as "Clean Units" under the regulation from NSR review. The D.C. Circuit struck down the exclusion in *New York v. EPA*, 413 F.3d 3, 41 (D.C. Cir. 2005) (*New York I*) ("Absent clear congressional delegation, however, EPA lacks authority to create an exemption from NSR by administrative rule."). The D.C. Circuit found Congress intended that *actual emissions* serve as the basis for determining NSR applicability, although it did not dictate a calculation method. See *Id.* at 40 ("the plain language of the CAA indicates that Congress intended to apply NSR to changes that increase actual emissions instead of potential or allowable emissions"). Allowing for exclusion of an EGU from NSR evaluation because of its status as a "Clean Unit" ran counter to the requirement that actual emissions determine NSR applicability. *Id.* (vacating the Clean Unit provision of the 2002 rule). The court determined 111(a)(4)'s reference to "the amount of any air pollutant emitted" "plainly refers to actual emissions" and cannot encompass potential emissions. *Id.*

BURDENS ON PERMITTING AGENCIES ALSO REFERENCED AS JUSTIFICATION, A SOMEWHAT DISENGENOUS CONCERN.

The NSR proposal limits states' flexibility and authority while expanding state control over environmental outcomes by not establishing firm emissions guidelines. In addition to the costs and burden on companies that EPA voices significant concern for in its proposal, EPA points to the potential for burdening permitting agencies by requiring them to conduct an NSR review for EGUs that initiate HRI projects due to ACE. See 83 Fed. Reg. 44776. The agency notes "it would likely be difficult for a state to adequately predict and quantify the effect of a HRI on an EGU's operational costs, change in dispatch order, and other variables that would factor into whether the source needs a major NSR permit or, perhaps, a minor NSR permit." 83 Fed. Reg. 44777. Even if a state reasonably predicts the emissions increase, EPA argues it would be "difficult to predict the expected permitting costs since the emission control and other permitting requirements are case-by-case determinations." *Id.* EPA argues "the case-by-case nature of the NSR program can lead to uncertainty for a state that is creating its 111(d) plan and wanting to ensure that the plan fully appreciates the projected compliance costs for its affected EGUs." *Id.* "While EPA supports states having the primary authority to implement the air programs, state agencies should not be burdened with having to determine a 'work around' for the NSR program requirements." 83 Fed. Reg. 44777.

The agency does not appear to show an equivalent concern for the EGU-by-EGU review the ACE proposal asks permitting agencies to pursue for HRI projects. On the one hand, the agency argues that states should make case-by-case determinations for each EGU regarding whether an HRI is warranted. On the other, it paints the current case-by-case determination for NSR applicability as too challenging for states. This argument is particularly interesting given that EPA is removing the flexibility the CPP offered states for implementation and NSR.

A MISPLACED FOCUS ON DISCRETIONARY PROJECTS BELIES TRUE INTENT OF THE PROPOSAL.

In an effort to support excluding more facilities from major NSR permitting requirements, EPA highlights stakeholder concerns that NSR discourages companies from undertaking discretionary energy efficiency improvement projects, resulting in what the agency describes as "less environmentally protective outcomes from a system-wide standpoint." 83 Fed. Reg. 44775.*d.* This focus on discretionary efficiency projects as a justification for limiting the applicability of NSR permitting underscores EPA's intention for this change to apply to all projects, not just those undertaken as a result of ACE. EPA notes "the prospect of a protracted permitting process and a possible requirement to install pollution control equipment at the emissions unit can create a disincentive for sources to voluntarily make energy efficiency improvements." 83 Fed. Reg. 44777-78. The NSR proposal as written applies to all EGUs, although the agency is requesting comments on whether it should limit the NSR change in some way.

Concerns about possible discretionary projects are misplaced because the NSR revisions are ostensibly intended to address burdens imposed by *required* projects. The ACE proposal expects that states will require EGUs to invest in HRI projects that could trigger NSR permitting and which are arguably not happening now because of the potential for additional costs due to NSR. Rather than harnessing the benefit of improved NO_x and SO₂ pollution controls as part of these efficiency upgrades, EPA is effectively sacrificing those improvements in favor of the efficiency upgrades themselves. At no point does the agency offer the argument that might be expected – that efficiency upgrades yield across-the-board pollution reductions.

EPA provides only a tenuous connection between the rest of the ACE proposal and the NSR proposal. This is a comprehensive change applicable to all projects, not just those initiated as a result of ACE. Ultimately, ACE serves as the vehicle for the broader goal of weakening NSR applicability in a manner that prior administrations have tried but not achieved.

II. EPA ARGUES SYSTEM-WIDE EMISSIONS REDUCTIONS JUSTIFY THE ELIMINATION OF NSR-TRIGGERED POLLUTION CONTROLS BUT DOES NOT CONSIDER LOCAL IMPACTS.

EPA points to supposed system-wide reductions due to efficiency projects to justify narrowing the NSR program's applicability. Although the proposal acknowledges that units adopting HRI measures are likely to increase emissions, EPA merely speculates that the increased use of a unit that has implemented an HRI project in the dispatch order could result in a system-wide emissions reduction because it would displace a less-efficient unit elsewhere. See 83 Fed. Reg. 44775. The proposal offers no analysis comparing projected emissions increases at units adopting HRI with avoided emissions from other units. Nor does the EPA consider the localized impacts resulting from increased emissions without pollution control upgrades.

In fact, the NSR program was created to help nonattainment areas achieve the National Ambient Air Quality Standards (NAAQS) which were developed to protect the public health and welfare. Pollution controls required by the NSR permitting program for pollutants such as NO_x and SO₂ provide significant benefits to local air quality around plants. Even if overall emissions in the system are reduced, air quality could degrade for communities around these plants if they are not required to make pollution control upgrades currently required by NSR regulations. Illustrating this concern and belying the agency's less-efficient unit offset theory is EPA's own analysis, which predicts that ACE will yield a reduction of only 0.7% of SO₂, only 1% of NO_x, and 0.5% of mercury emissions by 2030 as compared to doing nothing (no CPP) ([Regulatory Impact Analysis \(RIA\)](#), Table 3-9 at page 3-17).

Essentially, EPA is choosing to tolerate increased NO_x and SO₂ emissions at the local level for a potential, small emissions-wide reduction. The proposal's [Regulatory Impact Analysis \(RIA\)](#) projects a 7.1-9.2% increase in coal production for power sector use over that expected with the CPP by 2030 (RIA Table ES-16 at page ES-20) and an accompanying 45-53 thousand short tons of increased SO₂ emissions and 32-39 thousand short tons of increased NO_x emissions by 2030 over the CPP (Table ES-7 at page ES-9). The RIA also projects a 0.9%-4.0% increase in coal generation (RIA Table 3-19 at page 3-25) relative to No-CPP in 2030 along with a decrease of only 7-15 thousand short tons of SO₂ and 8-15 thousand short tons of NO_x by 2030 relative to No-CPP (Table ES-8 at page ES-10).

It is worth noting that the agency's highlighting a supposed system-wide emissions reduction, including for CO₂, seems at odds with its position that the CPP's system-wide approach to BSER is outside the legal bounds of the Clean Air Act (CAA). EPA argues that BSER is limited to inside-the-fenceline reductions, yet it relies on system-wide changes to support its proposed changes to NSR.

EPA also reprises an argument found in its 2007 proposal that "proposed changes to the NSR emission/s test were in part justified by the substantial EGU emission reductions from other air programs enacted since 1980." 83 Fed. Reg. 44778. The 2007 SNPRM, in turn, refers to the earlier 2005 NPRM for a more expansive discussion of this argument. In the 2005 NPRM, EPA pointed to "emissions reductions we expect from the Acid Rain, NOX SIP Call, CAIR, and BART programs" noting "to any extent today's revised emissions test would lead to more growth in emissions . . . the emissions increases from that growth would be substantially less than the emissions reductions" from the aforementioned programs. 70 Fed. Reg. 61088. However, EPA does not address the current emissions regulation context. EPA notes this projection reflects expected continued progress on regional haze and ozone NAAQS implementation but does not mention other current regulatory initiatives likely to impact emissions nationwide. NSR is a local airshed NAAQS and PSD program. EPA does not provide an analysis in this or its prior proposals of how overall reductions (taken at face value) would address the needs of local air sheds.

III. EPA ARGUES THE *CHEVRON* DOCTRINE GRANTS IT BROAD DISCRETION TO REVISE ITS INTERPRETATION OF “MODIFICATION.”

EPA’S ARGUES IT HAS BROAD *CHEVRON* DISCRETION TO INTERPRET WHAT IS A “MODIFICATION” FOR NSR PURPOSES THAT ALLOWS IT TO INSERT AN HOURLY EMISSIONS TEST.

EPA’s overarching legal argument outlined in the proposal is that it has broad discretion to change the NSR process, short of evaluating a modification without considering actual emissions.¹ EPA points to *New York I* (*New York v. EPA*, 413 F.3d 3, 41 (D.C. Cir. 2005), discussed above) and *Chevron* to support this argument. 83 Fed. Reg. 44780. EPA notes the D.C. Circuit acknowledged in *New York I* there could be different interpretations of the term “increases” and that they may have different environmental and economic consequences, which EPA has the authority to balance in choosing an interpretation. *Id.* As EPA explains in the preamble:

Because the CAA is “silent on how to calculate . . . ‘increases’ in emissions” for purposes of determining “modification,” the court said, *id.* at 22, EPA has discretion to give meaning to that term by adopting a baseline period that “represents a reasonable accommodation of” the Agency’s environmental, economic, and administrative concerns. *Id.* at 23 (quoting *Chevron*, 467 U.S. at 845).

83 Fed. Reg. 44780 (quoting *New York I*). The D.C. Circuit discussed this in the context of considering EPA’s use of a five year (or 10 year in certain circumstances) look back period for its baseline calculations, which it upheld.

The current proposal also cites the 2007 SNPRM which relies heavily on *Chevron* discretion. EPA argues that the CAA leaves EPA the discretion to determine how emission increases are defined for NSR purposes. In addition to its reference to *New York I*, EPA points to *New York v. EPA*, 443 F.3d 880 (D.C. Cir. 2006) (*New York II*) for support. In *New York II*, the D.C. Circuit vacated a 2003 expansion of the “routine maintenance, repair, and replacement” (RMRR) exemption to NSR major modifications. The D.C. Circuit in *New York II* found that the phrase “any physical change” has broad applicability and only allows for *de minimis* exclusions. EPA points to language in the decision that contrasts the clear meaning of “any physical change” with the use of the word “increase” because the latter “necessitated further definition regarding rate and measurement for the term to have any contextual meaning.” *New York v. EPA*, 443 F.3d at 888-889. As a result, EPA argues that *New York I* and *New York II* together grant it broad discretion in determining *how* emissions increases are defined for NSR modification purposes other than requiring that they be measured in terms of actual emissions. 83 Fed. Reg. 44779 (saying it “has broad discretion to propose a reasonable method by which to calculate the ‘amount’ of an emissions ‘increase’ for purposes of NSR applicability”).

EPA ARGUES IT HAS THE DISCRETION TO INTERPRET “MODIFICATION” SIMILARLY FOR BOTH THE NSPS AND NSR PROGRAMS.

EPA also distinguishes its proposal to move to an hourly emissions rate pre-test from the outcome of a Supreme Court case that found the NSR use of the word “modification” was not required to be interpreted identically to its use in section 111(b) of the CAA, which establishes the New Source Performance Standards (NSPS). In a 2005 case,

¹ It is also worth noting that EPA does not see its inclusion of a maximum achievable hourly emissions test alternative in addition to the two methods of calculating maximum actual hourly emissions as contrary to this requirement. In the 2007 SNPRM EPA argued a maximum achievable hourly emissions test is equivalent to an actual emissions test because the highest emissions occur during the period of highest utilization. 72 Fed. Reg. 26219.

the Fourth Circuit held that because the CAA cross-referenced to the NSPS definition of “modification” in the NSR regulations, Congress intended the definitions to be applied identically. *United States v. Duke Energy Corp.*, 411 F.3d 539 (4th Cir. 2005). In response, EPA proposed replacing the annual NSR emissions test with an hourly test like that used in the NSPS regulations. However, the Supreme Court reversed that decision two years later. See *Environmental Defense v. Duke Energy Corp.*, 549 U.S. 561 (2007). SCOTUS held that a term used in two distinct sections of a statute does not have to be treated as *per se* synonymous, the context of the section in which it appears influences its interpretation.

In the NSR portion of the ACE proposal, EPA argues the Supreme Court’s decision in *Environmental Defense v. Duke Energy Corp.* does not prevent it from once again trying to adopt an emissions test similar to that in the NSPS regulations. See 83 Fed. Reg. 44779. EPA says the *Duke* decision “left room for” a revised regulation if EPA has a rational basis for it, an argument it made in its 2007 SNPRM as well.² *Id.* EPA relies on an observation in dicta considering whether EPA could require a project to meet the definition of “modification” under the NSPS regulations before going through the “major modification” determination in the PSD regulations (essentially, what EPA proposes now). But the court did not endorse this approach. While it noted it “sounds right” it stated “the language of the regulations does not support it.” *Environmental Defense v. Duke Energy Corp.*, 549 U.S. 561, 581 n.8 (2007). EPA argues that the court was considering whether it was a required interpretation, not whether it would allow (rather than direct) EPA to define modification in the same way under both the NSPS and NSR programs. 83 Fed. Reg. 44779. EPA relies on Justice Thomas’s concurring opinion in which he argues that the cross-reference from the NSR section to the NSPS section signals more than the use of the same words (“carries more meaning than mere repetition of the same word in a different statutory context”). *Id.* At 583. This belief was not reflected in the majority opinion. See *Environmental Defense v. Duke Energy Corp.*, 549 U.S. at 563 (“Nothing in the text or legislative history of the statutory amendment that added the NSPS cross-reference suggests that Congress meant to eliminate customary agency discretion to resolve questions about a statutory definition by looking to the surroundings in which the defined term appears.”).

FINAL THOUGHTS

EPA’s primary legal argument is that adding an hourly emissions increase test to the steps required to determine if a project is a “major modification” under the NSR provisions is within its discretion under *Chevron* because Congress did not say *how* it should measure the amount of the increase in emissions. Prior case law has limited the agency to considering actual emissions and determined the language “any physical change” does not allow EPA to issue wholesale exclusions of categories of modifications without considering their actual emissions.

By requiring an hourly emissions test before the significant emissions and netting tests based on annual emissions, EPA acknowledges that many EGUs that would otherwise have to comply with major-modification NSR permits

² An EPA proposal in 2007 proposed revising NSR provisions to include an applicability test based on maximum hourly emissions. This was an update to the more limited 2005 hourly emissions proposal and a response to the *Environmental Defense v. Duke Energy Corp.* case. The 2007 SNPRM proposed two options with multiple alternatives each. As EPA explains “[t]he proposal included emissions test alternatives based on EGU’s maximum *achieved* hourly emissions rate—applying either a ‘statistical approach’ or a ‘one-in-5-year baseline approach’—and an EGU’s maximum *achievable* hourly emissions rate, which mirrored the NSPS modification applicability test.” It proposed a new § 51.167 that “largely mirrored the NSPS modification provisions in § 60.2 and § 60.14.” 83 Fed. Reg. 44778. The proposal included the option to replace the NSR annual emissions increase test with an hourly test as well as a proposal to keep the annual test but add an hourly test. That second option is what has been revived in the current proposal.

would not need to do so. In fact, that is the stated purpose of the change. Using the hourly test as a gatekeeping function in a preliminary determination of whether a change is a “modification” before considering whether it is “major” may run afoul, however, of the broadly interpreted “any physical change” language. This seeming sleight of hand also may amount to a categorical exclusion that inappropriately changes the meaning of “any physical change”.

In the 2005 NPRM EPA noted “[i]n using our discretion for defining the component term “increases in any pollutant emitted” within the definition of ‘modification,’ we are mindful of Congress’ directive that the major NSR program be tailored in such a way as to balance the need for environmental protection against the desires to encourage economic growth.” 70 Fed. Reg. 61099. It argued this balance leaned in favor of a more lenient NSR standard because of the significant air quality improvements that other CAA programs were achieving. The current proposal, by contrast, speaks exclusively to the burdens on and costs to sources (and only briefly permitting agencies) of the program without discussing the air quality, health and environmental impacts on local communities affected by emissions from the facilities. Instead of discussing those impacts, EPA references its 2005 proposal which was prepared in a very different regulatory context. Relying on the balancing conducted in 2005 could be considered an inadequate balancing of these purposes.

EPA has revived its previously stand-alone proposal to relax pollution-control requirements and reincarnated it inside of the proposed ACE Rule—a proposal purportedly aimed at lowering the carbon-intensity of coal-fired power plants. Although the proposal is styled as responding to a need to facilitate compliance with HRI requirements of the ACE proposal, the justifications provided broadcast the agency’s intent to make a change that extends beyond the sources covered by the ACE proposal. EPA’s approach of relying on somewhat out-of-context references to proposals more than 10 years old, and the mismatch between its proffered rationale and the proposed remedy invites the suspicion that ACE is a classic “bait-and-switch”. The proposal makes clear that the broader goal is to reduce the number of existing facilities required to undergo NSR permitting and incorporate modern pollution controls, regardless of whether they are initiating emissions-increasing projects as a result of ACE or for any other reason.

APPENDIX

Additional description of three alternatives for the hourly emissions rate increase test for Step 2 outlined in the proposal.

- Alternative 1—actual to projected using CEMS or PEMS (83 Fed. Reg. 44798-99): Compare pre-change maximum actual hourly emissions rate to a projection of the post-change maximum actual hourly emissions rate in lb/hr for each regulated NSR pollutant with hourly average CEMS or PEMS emissions data with corresponding fuel heat input data.
 - The pre-change rate would be calculated using a data set of hourly average CEMS or PEMS measured emissions rates and corresponding heat input data for a consecutive 365-days within the immediately preceding 5-years. After elimination of certain “unacceptable hourly data” the 10 percent of the data with the highest heat input rates of that period would be used to calculate an average emissions rate.
 - For post-change emissions projections the owner/operator must project the maximum emissions rate that the EGU will actually achieve for any NSR pollutant in any 1 hour in the 5 years following the date it resumes regular operation after the change. If this projection exceeds the pre-change maximum actual hourly emissions rate then there is an emissions increase.
 - Also, an emissions increase has occurred if the rate actually achieved in the 5 years after the change exceeds the pre-change rate, regardless of the preconstruction projections.
- Alternative 2—actual to projected using best data available (83 Fed. Reg. 44799-800): The second alternative would compare a pre-change maximum actual hourly emissions rate to a projection of the post-change maximum actual hourly emissions rate in lb/hr.
 - In this scenario, pre-change emissions would be calculated using the best data available. The pre-change emissions would be the highest emissions rate actually achieved for 1 hour during any time during the immediately preceding five years. The best data available would be the highest available source of data in the following hierarchy listed in the rule (unless the reviewing authority has determined a source lower in the list has better data for that specific EGU):
 - CEMS data
 - Approved PEMS data
 - Emission tests/emission factor specific to the EGU to be changed
 - Material balance calculations
 - Published emission factor.
 - The projected and actual post-change emissions rate provisions of this alternative are the same as for Alternative 1.
- Alternative 3—actual to actual using method of calculating modification under NSPS provision (83 Fed. Reg. 44800): This alternative would compare the maximum achievable hourly emissions rate before the change to that after the change and calculate the two emissions rates according to § 60.14(b) of the chapter, the provision for calculating emission rate under the NSPS regulations.
 - § 60.14(b) requires the rate to be expressed as kg/hr and use the emission factors in EPA’s Compilation of Air Pollutant Emission Factors (AP-42 factors) or other factors the Administrator has deemed superior to EPA’s AP-42 factors.
 - If the Administrator determines the emissions factors don’t adequately demonstrate whether the change will clearly increase or not, or where there are reasonable grounds for dispute, material balances, continuous monitor data, or manual emission tests can be used.

The proposal excludes from use in calculating the emissions rate increase:

- emissions rate data from startups, shutdowns, or malfunctions;
- CEMS or PEMS data from out-of-control periods (periods when the monitoring system fails to meet quality assurance criteria);
- Emissions rate data from periods of noncompliance (when the EGU was operating above a legally enforceable emission limitation); or
- Any data for a period in which the information is inadequate for determining emissions rates.