The Honorable John Shimkus

1. Seeing that you do not support reforming the NSR program to include a maximum hourly emission rate test, do you believe that the maximum hourly emission rate test used under the EPA's New Source Performance Standards has not been successful. Please explain.

Response: I believe that the maximum hourly emission rate test used under the EPA's New Source Performance Standards has not been successful.

A maximum hourly emission rate test measures increases in an emissions unit's potential emissions rate, rather than its actual emissions rate.[1] Accordingly, changes at a facility that do not increase a unit's potential emissions rate may nonetheless increase *actual* harmful air pollutants by very significant amounts and evade air pollution control equipment; avoid air quality impact analyses; escape need for emissions offsets in areas experiencing unsafe air ("nonattainment" areas); worsen local and air quality; and harm public health. Experience with EPA's new source review ("NSR") regulatory and enforcement activities have demonstrated that power plants, for example, have increased actual harmful air pollution by thousands and even tens of thousands of tons, without increasing an emissions unit's maximum hourly emissions rate. Indeed, the NSPS hourly emissions rate test is so extreme and unprotective, that existing

[1] *See, e.g.*, 68 Fed. Reg. 61,248,61,272 (Oct. 27, 2003) ("The NSPS program requires a change to result in an increase in the hourly *potential to emit* of the facility. 40 CFR 60.14(a)-(b). In contrast, under NSR, we require an increase in annual emissions. E.g., 40 CFR 51.165(a)(1)(x).") (emphasis added). Numerous industry statements confirm that maximum hourly emissions rate tests are "potential"-based emissions increase tests. See Joint Brief of Industry Petitioners, *New York v. EPA*, 431 F.3d 801 (D.C. Cir. 2005) ("*New York I*") at 6 (characterizing an increase in a facility's maximum hourly emissions rate as an increase in its existing capacity to emit, and recognizing that to be a modification under NSPS regulations); at 8 (the NSPS modification provision applies to "activities that increase a unit's 'potential' emission rate"); at 9 (for a project to "create 'new' capacity to emit," it "must first increase an existing facility's maximum achievable emissions rate"); *id.* ("Activity that increases an existing facility's maximum achievable emissions rate is referred to hereinafter as 'NSPS modification activity.'"); at 10-11 (equating "potential to emit" with a facility's "existing design capacity."); at 23 (equating a unit "maximum emissions rate" with its "capacity to emit"); at 26 (NSPS regulatory "'modification' is a physical or operational-method change that creates new pollution capacity – i.e., that increases an existing unit's *maximum emissions rate*) (emphasis in original); *id*. (equating the preceding test to a change that "increases the *potential emission rate*" of a regulated pollutant") (emphasis in original); see also Joint Brief of Industry Intervenors, *New York I*, at 3 (Alleging that "EPA established a regulatory definition of "modification" [under NSPS], which provided that the determination of whether an emissions increase occurs is made by reviewing whether maximum emissions after a change would be greater than maximum emissions at full capacity before the change, *i.e.*, a "potential-to-potential" test. 40 C.F.R. § 60.14; s*ee* 67 FR 80,199 (2002)."); & at 11 ("'potential-to-potential' test" compares "maximum emissions before a change to maximum emissions after a change.") & 12 (linking increases in potential emissions rate to operation at full design capacity) & 13 ("increase in a major source's "potential" emissions, *i.e.*, in the source's maximum pre-change emissions level.")

stationary sources could *increase* emissions by orders of magnitude higher than the 100 and 250 ton per year thresholds that Congress specified for *entire* major stationary sources under the Clean Air Act. Clean Air Act § 169(1). Were the NSR program to use the same potential-based, maximum hourly emission rate test employed in the NSPS program, these increases of thousands to tens of thousands of tons of harmful air pollution would evade review, cleanup, and offset, and worsen air quality and public health.

EPA has concluded repeatedly that an hourly emissions test would allow changes that cause actual emission increases to evade review. For example, in 1996, EPA explained that it did not intend to adopt an hourly emissions increase test supported by industry, because:

> For example, assume the emissions unit at the widget factory that is emitting 10 pounds an hour but has historically operated at 40 percent capacity due at first to operating cost, but with age, reduced efficiency and reliability. Under the Exhibit B alternative, the owner could modernize the unit, thus lowering the operating costs and increasing efficiency and reliability. *This change will allow the owner to use the machine at much higher levels (e.g., more hours per day or week) than it had in the past. As a result, actual emissions (measured in tpy) could more than double due to the increase in utilization even though hourly potential emissions remain the same*."

61 Fed. Reg. 38,250, 38,269 (July 23, 1996) (emphasis added). Likewise, when the Bush Administration EPA squarely rejected industry's proposed hourly emissions test in 2002, the agency explained that an hourly test "could sanction greater actual emissions increases to the environment, often from older facilities, without any preconstruction review." 67 Fed. Reg. 80,185, 80,205 (December 31, 2002). *See also, id.* ("actual emissions increases resulting from unreviewed projects could go largely undocumented until a [Prevention of Significant Deterioration ("PSD") review is performed by a new or modified facility that ultimately must undergo review. By that time, however, a violation of an [air quality] increment could have unknowingly occurred."), *id.* ("We agree that a potential-to-potential test for major NSR applicability could lead to unreviewed increases in emissions that would be detrimental to air quality.").

One significant problem with the hourly emissions rate test concerns the vast gulf between actual and allowable emissions in areas that EPA studied. As EPA found following its analysis of Texas and Illinois emissions data:

> The results of the Texas and Illinois analysis indicate that typical source operation frequently does result in actual emissions that are substantially below allowable emissions levels. In these two States, actual emissions represent from 30 to 86 percent of the allowable emissions, depending on source category and pollutant.

61 Fed. Reg. at 38,270; see generally "Results of Data Gathering and Analysis Activities for the CMA Exhibit B Settlement Agreement," Prepared for Dennis Crumpler, U.S. EPA, by Radian Corporation (Nov. 1988), Appendix F. In other words, the delta between actual and allowable emissions under an hourly potential test for NSR would allow individual sources to increase actual emissions by more than a factor of three without triggering NSR.

These data are significant because there was no instance in EPA's analysis in which an electric generating unit ("EGU") would not have been allowed to increase its hourly or annual emissions by at least 50% under an hourly emissions rate test. Again, this is due solely to the delta between actual and allowable emissions, without regard to additional emissions increases that might be allowed from abusive netting or offset practices. Fifty percent increases were on the low end under EPA's study, however, with emissions increases over 100% and 200% more the norm. EPA included this study in the docket for a 2002 Bush EPA NSR rulemaking that rejected an hourly emissions test for NSR.

In 2005, EPA issued a proposed rulemaking, entitled "Prevention of Significant Deterioration, Nonattainment New Source Review, and New Source Performance Standards: Emissions Test for Electric Generating Units," proposing hourly emissions rate approaches for NSR. See 70 Fed. Reg. 61,081 (October 20, 2005). Section IV.F of the proposal contained a section entitled "Benefits of Maximum Achievable Hourly Emissions Test." *See id*. at 61,093. The most glaring characteristic of this section is the fact that not even EPA itself could ascribe a single air quality or public health-related benefit to its proposed maximum hourly emissions rate tests. For the most sweeping revision to the way that emissions increases are calculated under the NSR and NSPS programs, it was highly revealing that EPA identified only air quality disbenefits. Instead of public health or air quality benefits, EPA described benefits that redound entirely in favor of industry and against Americans' health and environment: the agency claimed the proposals will "promote the safety, reliability and efficiency of EGUs," and improve facilities' "productive capacity." *Id.* at 61,094.

EPA conducted a briefing for the public about the 2005 NSR proposal on October 14th, 2005 in the EPA headquarters building at Ariel Rios. I attended that briefing. At this briefing, I posed a series of questions to agency officials about the 2005 proposal, the 2002 NSR analysis discussed above, any new analysis conducted by EPA since then in support of its proposal, and the agency's regulatory experience with the NSPS modification provision. I relate my questions and the responses by the agency's officials here.

I asked the EPA officials whether the agency had conducted any new analysis or data gathering similar to the 2002 NSR analysis examined here, to determine what the gap might be for EGUs between actual emissions, and allowable emissions under an hourly emissions rate test. The EPA official admitted that the agency had not.[2] I have confirmed that there was no such analysis or data in the 2005 docket apart from the 2002 analysis, which showed very substantial gaps between actual and allowable emissions for EGUs.

I asked the EPA officials whether the agency knew what the average or typical delta was between actual and allowable emissions for EGUs. The EPA official admitted that the agency did not know. I asked whether the agency had evaluated the issue with respect to any power

[2] Unless otherwise noted, the responses to these questions were all provided by Mr. William Harnett, who participated in the briefing by telephone from North Carolina. At the time, Mr. Harnett was the Director of the Information Transfer and Program Integration Division in the Office of Air Quality Planning and Standards, Office of Air & Radiation, Environmental Protection Agency.

plants and, if so, for how many. The EPA official admitted that the agency had evaluated none. I confirmed that there was no such analysis or data in the 2005 docket apart from the 2002 analysis.

I asked the EPA officials whether the agency had conducted any analysis to refute the data and conclusions underlying the 2002 analysis. The EPA official admitted that the agency had not. I confirmed that there is no such analysis or data in the 2005 docket apart from the 2002 analysis.

Considering that the agency was proposing to extend the NSPS hourly emissions modification test to EGUs under the NSR program, I asked the EPA officials whether the agency knew how many NSPS modifications had been undertaken by power plants over the lifetime of the program. The EPA official admitted that the agency did not evaluate this issue. I asked the EPA officials how many modifications the agency projected under the NSR program if any one of the proposals were adopted. The EPA official admitted that the agency did not evaluate this issue. I confirmed that there was no analysis or data in the 2005 docket concerning these questions.

I asked the EPA officials whether the agency was aware of *any* instance of a power plant having triggered the NSPS modification provision during the lifetime of the program. The officials declined to respond. Following my insistence, the officials still refused to respond. I confirmed that there is no analysis or data in the 2005 docket disclosing any instance of a modification by an EGU triggering the NSPS modification provision.

EPA well knows that maximum achievable emissions tests are a function of potential emissions—that are rarely if ever exceeded: "[t]he 'achievable' test is a measure of the 'potential' emissions of a source ... in the classic and historic sense of the use of that term." Memorandum from Adam M. Kushner, Director of EPA's Air Enforcement Division, Office of Enforcement and Compliance Assurance, to William Harnett, dated August 25, 2005, at 9 (hereinafter "EPA Enforcement Memo."). In a case study undertaken by EPA's enforcement office, "the achievable hourly emission rate was calculated to be *more than ten times higher* than the average hourly emission rate in the five-year period prior to the change." EPA Enforcement Memo at 3 (emphasis added).

A series of utility industry case studies accompanying the EPA Enforcement Memo, as well as the Memo itself, confirm that hourly emissions rate approaches would result in actual annual emissions increases wildly in excess of existing NSR "significant" emission thresholds. See, *e.g.*, 40 C.F.R. §52.21(b)(23)(identifying "significant" emissions increase thresholds for "modifications" in attainment areas, such as 40 tons per year for NO_x and SO_2). Examining actual emissions data for EGUs from the Clean Air Markets Division, the EPA enforcement office concluded that the maximum hourly achievable emissions rate test proposed in 2005 would have failed to control actual annual emissions increases of 50 tpy of SO_2 and 978 tpy of NO_x in one case study (EPA Enforcement Memo attachment, at 10); *13,096 tpy* of SO_2 in another case study (*id.* at 2); 939 tpy of SO_2 and 1,405 tpy of NO_x in another (*id.* at 20); and 1,700 tpy of SO_2 and 507 tpy of NO_x in a fourth case study (*id.* at 27). See also EPA Enforcement Memo at 3.

In the 13,096 tpy example, the annual SO_2 emissions increase that escapes control is over 327 times the "significant" emissions threshold for SO_2. As discussed elsewhere, these exempted pollution increase levels are significantly higher than even the major stationary source threshold for new power plants (100 tpy), that EPA continues to recognize should be subject to Best Available Control Technology ("BACT") and Lowest Achievable Emissions Rate ("LAER"). And in many cases, these uncontrolled emissions *increases* are well above the *total* SO_2 and NO_x emissions from EGUs that EPA's Clean Air Interstate Rule would have covered in 2020. In the case study, even though sulfur dioxide emissions increased by 13,096 tons per year, the maximum achievable hourly rate did not increase.[3] *Id.* Attachment to EPA Enforcement Memo, at 2 (Case Study #1) (emphasis added). Based on this analysis, the EPA enforcement office found that "one can only conclude from application of the so-called 'achievable' test that *no 'change' causing an emissions increase . . . at an EGU would trigger NSR. . . .*" *Id.* at 5 (emphasis added).

The enforcement office also found that these changes would have produced annual emissions increases well in excess of the "significant" emissions thresholds under a maximum hourly achieved emissions rate test. See EPA Enforcement Memo attachment at 5, 8, 14, 18, 22, 25, 29 & 32). Had SO_2 controls been installed, in contrast, the EGU's *total emissions* – not just the emissions increase magnitude – were assumed to be reduced by 95%. For NOx controls, the assumed reduction was to a BACT level of 0.100 lb/MMBtu. See, *e.g.*, *id.* at 6, 9.

Similarly, experience with EPA's NSR enforcement cases against coal-fired EGUs demonstrate the enormous levels of SO_2, NO_x and PM emissions increases that would escape control under a maximum achievable hourly emissions rate test. These levels are well in excess of the regulatory significant emissions increase levels, representing in some instances nearly *530 times* the significance thresholds.

For example, maximum hourly emissions rate tests would have exempted the $23 million equipment replacement project undertaken by TVA at Unit 1 of its Cumberland plant, since that project did not experience an increase in maximum achievable or maximum achieved hourly emissions rates. Final Order on Reconsideration in *In re Tennessee Valley Authority*, (EPA Environmental Appeals Board, September 15, 2000). That projected resulted in an NO_x emissions increase of 21,187 tpy—nearly one-and-one-half times the total amount of NO_x emitted annually by all sources in the District of Columbia. 21,187 tpy of NO_x is approximately 530 times the 40 tpy NO_x "significant" emissions threshold for modifications, and nearly 212 times the 100 tpy statutory threshold for new "major emitting facilities." CAA § 169(1). See 68 Fed. Reg. at 61,272 ("500 tpy is far above any level EPA has ever thought justifiable as *de minimis*. *E.g.*, 40 CFR § 51.166(b)(23)(i) (definition of "significant").")

Analysis of the NSR enforcement cases against coal-fired power plants reveals that *none* of those cases would have been viable under maximum hourly emission rate approaches; indeed, that is precisely why industry was relying upon their hourly-potential emissions increase defenses to avoid liability. *See* EPA Enforcement Mem. at 13 ("This is Duke's, and every other

[3] The enforcement office used actual operating data to perform the case study analyses. EPA Enforcement Memo, at 3.

Defendant's, favorite defense in the NSR enforcement cases: we have not expanded capacity and, consequently, NSR was not triggered.") That is also why the government stipulated that the projects at issue in the Duke Energy NSR enforcement case would not have "caused an increase in the maximum hourly rate of emissions at any of Duke's units."[4] Tens of thousands of tons of illegal NO_x and SO_2 emissions increases were at issue in the Duke Energy case, and all of those increases would have been permissible under maximum hourly emission rate approaches —since EPA was not contending there was any maximum hourly rate increase, and was instead alleging significant net emissions increases in actual, annual emissions (the PSD/NSR test) at the units from modifications that resulted in the units' post-change, increased utilization. Thus, it's easy to see why the enforcement office conclude that basing emissions increases only upon increases in maximum hourly emission rates would be "fatal" to its enforcement cases. See EPA Enforcement Memo, at 13.

Finally, the enforcement office concluded that application of the maximum hourly achievable emissions rate test would be "largely unenforceable." *Id.* at 2. Their analysis found the baseline "achievable" level to be so high that very few changes increasing emissions substantially could possibly result in emissions levels that would surpass it. For example, the enforcement office's first power plant case study found the achievable hourly emission rate to be more than *ten times higher* than the average hourly emission rate in the five-year period prior to the change. *Id.* (emphasis added). Thus, unless the utility were to increase its actual emissions *by an order of magnitude*, it would not be considered a regulated modification under NSR. In the case study, even though sulfur dioxide emissions *increased by 13,096 tons per year*, the maximum achievable hourly rate did not increase. *Id.* Attach. A to EPA Enforcement Memo, at 2 (Case Study #1). Based on this analysis, the enforcement office found that "one can only conclude from application of the so-called 'achievable' test that *no 'change' causing an emissions increase . . . at an EGU would trigger NSR . . . .*" *Id.* at 5 (emphasis added).

In its 2005 NSR proposal, and a subsequent 2007 supplemental NSR proposal to adopt an hourly emissions rate test, 72 Fed. Reg. 26,202 (May 7, 2007), the administrative records for both proposals failed to identify a single instance in which an EGU owner/operator *would* install controls, or would *need* to install controls, under any of the proposed hourly emissions rate tests, when the owner/operator would not also *need* to install controls under the annual test. The NSPS hourly emissions rate test is so extreme and, therefore, ineffective, that in the real world industrial sources simply do not experience hourly potential emissions increases in a manner that would trigger NSPS controls for existing sources. Extending this NSPS approach to the NSR modification program would thwart the very purposes of the NSR program, result in substantial emissions increases, worsen air quality and harm Americans' health. *See* EPA, Respondent Brief in *New York v. EPA*, D.C. Cir. Case No. 02-1387 (Aug. 9, 2004), at 74 ("the purpose of New Source Review is to require that facilities making changes that increase their emissions meet emission limits that reflect state-of-the-art control technology, analyze the increased emissions from their facilities to ensure that they will not adversely affect air quality, and, in nonattainment areas, offset their emissions increases with emission reduction credits.")

[4] *United States v. Duke Energy Corp.*, Civil Action No. 1:00 CV 1262Order and Final Judgment, at 2 (M.D.N.C. April 15, 2004).

For all of these reasons, as well as others discussed in comments submitted to EPA on the agency's 2005, 2007 and 2018 NSR proposals, I believe that the maximum hourly emission rate test used under the EPA's New Source Performance Standards has not been successful.

The Honorable Frank Pallone

1. Did EPA conduct any sort of public health study or analysis of the changes proposed in the December 7th Memo?

There is no public indication, of which I am aware, that the EPA conducted any sort of public health study or analysis of the changes in the December 7th Memo. The Memo does not say that EPA conducted any study or analysis, nor did any EPA spokesperson say so when the Memo was released. There is no evidence of any public health study or analysis in any regulatory docket, for the Memo or otherwise.

2. Did EPA take into account the disproportionate impact air pollution has on the most vulnerable among us; children, minority communities or outdoor workers?

There is no public indication, of which I am aware, that the EPA took into account the disproportionate impact air pollution has on the most vulnerable among us. The Memo does not say that EPA took this into account, nor did any EPA spokesperson say so when the Memo was released. There is no evidence of EPA taking this into account in any regulatory docket, for the Memo or otherwise.

3. Mr. Holmstead's written statement said that the best approach would be to make clear that there is not a 'major modification' under NSR is there is not a 'modification' as defined under NSPS. Thus, companies (and EPA) would evaluate a project to determine whether it would increase the maximum hourly emission rate at the plant. If not, then the project does not trigger NSR."

Do you agree? Please explain.

I disagree, for all the reasons explained at length in my response, above, to the question from the Honorable John Shimkus.

I agree, instead, with the position and action taken by Mr. Holmstead and the Bush administration EPA in 2002, when Mr. Holmstead headed the agency's Office of Air & Radiation. There, EPA rejected use of a maximum hourly emission rate test for the NSR program because it "could sanction greater actual emissions increases to the environment, often from older facilities, without any preconstruction review." 67 Fed. Reg. 80,185, 80,205 (December 31, 2002). That approach allowed emissions increases to be calculated based on "the unit's pre-change and post-change potential emissions, measured in terms of hourly emissions." *Id.*. at

80,205. EPA's analysis "showed that typical source operation frequently does result in actual emissions that are below allowable emission levels," *id.*, meaning very significant increases in actual emissions could result without exceeding allowable emission levels. *See also, id.* ("actual emissions increases resulting from unreviewed projects could go largely undocumented until a [Prevention of Significant Deterioration] ("PSD") review is performed by a new or modified facility that ultimately must undergo review. By that time, however, a violation of an [air quality] increment could have unknowingly occurred."); *id.* ("We agree that a potential-to-potential test for major NSR applicability could lead to unreviewed increases in emissions that would be detrimental to air quality.").

Mr. Holmstead and the Bush administration EPA understood that these unreviewed emissions increases run counter to the purposes of the NSR program. In EPA's August 2004 response to the legal challenges to the 2002 NSR rule revisions, for instance, EPA concedes that "the purpose of the NSR provisions is . . . to limit emissions *increases* resulting from physical or operational changes." *See* EPA, Respondent Brief in *New York v. EPA*, D.C. Cir. Case No. 02-1387 (Aug. 9, 2004), at 73-74 (emphasis in original); *see also id.*, at 74 ("the purpose of New Source Review is to require that facilities making changes that increase their emissions meet emission limits that reflect state-of-the-art control technology, analyze the increased emissions from their facilities to ensure that they will not adversely affect air quality, and, in nonattainment areas, offset their emissions increases with emission reduction credits.") EPA "also expressed concern about the environmental consequences associated with the Exhibit B provisions. For one, you could modernize your aging facilities (restoring lost efficiency and reliability while lowering operating costs) without undergoing preconstruction review, while increasing annual pollution levels as long as hourly potential emissions did not change." 67 Fed. Reg. at 80,205.

Indeed, in the context of the 2002 NSR rulemaking, EPA itself recognized that focusing the program on increases in potential hourly emissions would not adequately protect co-called pollution "increments," as required by the Clean Air Act. For example, in the rulemaking proposal, the agency observed:

> Finally, one of the most troubling side effects of [a potential-to-potential hourly emissions test] is that it could ultimately stymie major new source growth by allowing unreviewed increases of emissions from modifications of existing sources to consume all available increment in PSD areas. After the minor source baseline date has been established in an area, all increases, whether subject to major NSR or not, consume increment. As illustrated in the example above, under the [the potential-to-potential hourly emissions] test an old grandfathered source could experience a "significant" net increase in annual actual emissions, yet it would not necessarily be subject to review. Since increment consumption after the minor source baseline date is calculated based on actual emissions increases, the "minor" modification of the grandfathered source would still consume increment. If a major new source with state-of-the-art emission controls proposes to locate in an area in which the increment has been consumed in this manner, it would be barred from building unless and until the increment problem was resolved. At the same time, older plants would continue to be able to make changes resulting in significant unreviewed, and possibly uncontrolled, actual emission increases.

61 Fed. Reg. 38,250, 38,270 (Jul. 23, 1996). And later, in its Technical Support Document for the 2002 NSR Rule, EPA continued in a similar vein:

> In the preamble, we discussed our concerns about the environmental effects that could result from the general use of an applicability test based on the CMA Exhibit B approach. We indicated that the approach, based on increases in hourly potential emissions, could result in unreviewed emissions increases on a tons per year basis from modifications of existing sources consuming all available increment in PSD areas. … We continue to believe that the "actual-to-projected actual" test – and not the CMA Exhibit B test – is the more appropriate method for measuring actual emissions increases that result from a physical or operational change, while not counting for applicability purposes.…
>
> With regard to the comment that the CMA Exhibit B approach would not have an impact on increment consumption because permitting, emissions inventories, and SIP's consider potential emissions, we believe that this conclusion overlooks the fact that the regulatory increment consumption process is based on changes in "actual emissions." PSD increment analyses performed with potential emissions tend to be screening analyses, which are accepted if the results show that no violations will result. Hence, while many analyses may be done initially with potential or allowable emissions, PSD applicants always have the ability to perform a more refined analysis should the initial analysis reveal problems meeting the increment. That is, actual emissions increases ultimately may need to be (and in some cases have been) used to determine whether an increment is being violated. This is one reason why we believe that it is important to retain an applicability process that triggers NSR on the basis of actual emissions increases.

Technical Support Document for the Prevention of Significant Deterioration and Nonattainment Area New Source Review Regulations, Nov. 2002, Docket No. A-90-37, at I-6-9.

It is also instructive to know about the emissions impact analysis that Mr. Holmstead and the Bush EPA included in the docket for the 2002 Bush EPA NSR rulemaking that rejected an hourly emissions test for NSR. There was no instance in EPA's analysis in which an electric generating unit ("EGU") would *not* have been allowed to increase its hourly or annual emissions by at least 50% under an hourly emissions rate test. Fifty percent increases were on the low end under EPA's study, however, with emissions increases over 100% and 200% more the norm.

EPA and Mr. Holmstead included this study in the docket for the 2002 NSR rulemaking, and offered no agency criticism of the data or its conclusions. The agency similarly relied upon the study to support its 2002 final rule, rightly rejecting a maximum hourly emissions rate approach. EPA provided no *other* data to contradict the emission's impact data or conclusions—either in the docket for the 2002 rulemaking *or at any time since then*. The only data in the possession of the agency thus belie any suggestion that emissions would not be allowed to increase very significantly, using a maximum hourly emissions rate test instead of the current PSD/NSR test, based on increases in actual, annual emissions to the environment. Allowing actual, annual emissions to increase by a factor of many times even the major stationary source thresholds plainly allows significantly greater environmental and public health hazards to occur than under the prevailing PSD/NSR emissions increase test for modifications.

4. Would this approach allow companies to increase actual air pollution and escape air pollution controls and offsets, when that increased air pollution could require air pollution controls and offsets under the Clean Air Act for "modifications" today?

Absolutely yes, for reasons explained at length in my response, above, to the question from the Honorable John Shimkus. That response mentioned actual examples identified by EPA itself in which a *single emissions unit* could have increased annual SO_2 emissions by 13,096 tons per year under a maximum hourly emissions rate approach now supported by Mr. Holmstead. Another project identified by EPA that would have escaped air pollution controls and offsets under a maximum hourly emissions rate test resulted in smog-forming nitrogen oxides (NO_x) emissions increase of 21,187 tons per year—nearly one-and-one-half times the total amount of NO_x emitted annually by all sources in the District of Columbia. My response above discusses numerous other examples where companies could increase actual air pollution and escape air pollution controls and offsets, when that increased air pollution would require air pollution controls and offsets under the Clean Air Act for "modifications" today.

5. Would this approach allow companies to increase actual air pollution and escape air pollution controls and offsets, when that increased air pollution could require air pollution controls and offsets under PSD/NSR regulations for "modifications" today?

Absolutely yes, for reasons explained at length in my response, above, to the question from the Honorable John Shimkus, as well as responses to prior questions from the Honorable Frank Pallone.

6. Please identify differences that EPA says exist between "modifications" under the NSPS and NSR regulatory programs. Be specific concerning the air pollution increases that EPA says are permissible, or that require air pollution controls and/or emission limitations, under the two programs.

I begin by describing some of the differences between the NSPS and NSR regulatory programs, quoting excerpts from recent comments submitted by NRDC and other public interest groups to EPA, opposing a 2018 rulemaking proposal[5] to eviscerate the NSR modification program for EGUs.

> Congress enacted the Clean Air Act's NSR program in 1977, in order to limit air pollution beyond what had until that time been achieved by the NSPS. That program had not proven as successful at curbing air pollution as had been expected, and the NSR permitting requirements were added to minimize actual pollution emissions increases from new and modified sources. While Congress included a "grandfathering" exemption for existing sources, that exemption was not intended to be permanent, but rather existing

[5] "Emission Guidelines for Greenhouse Gas Emissions From Existing Electric Utility Generating Units; Revisions to Emission Guideline Implementing Regulations; Revisions to New Source Review Program," 83 Fed. Reg. 44,746 (Aug. 31, 2018).

sources were to be brought into the NSR program at the point when they made changes that would "increase emissions."[6]

As the Seventh Circuit stated in its *WEPCO* decision:

> Members of the House recognized that "building control technology into new plants at the time of construction will plainly be less costly then [sic] requiring retrofit when pollution control ceilings are reached." H.R. Rep. No. 294, 95th Cong., 1st Sess. 185, reprinted in 1977 U.S. Code Cong. & Admin. News at 1264. But Congress did not permanently exempt existing plants from these requirements; section 7411(a)(2) provides that existing plants that have been modified are subject to the Clean Air Act programs at issue here.[7]

In fact, beyond balancing the goals of cleaner air for the nation with reduced disruption for older facilities, the modification trigger was, to the Seventh Circuit, a means of "forcing" investment in cleaning the nation's airsheds:

> Congress intended to stimulate the advancement of pollution control technology. See, e.g., S. Rep. No. 91-1196, 91st Cong., 2d Sess. 17 (1970) ("Standards of performance should provide an incentive for industries to work toward constant improvement in techniques for preventing and controlling emissions from stationary sources. . . ."). The development of emissions control systems is not furthered if operators could, without exposure to the standards of the 1977 Amendments, increase production (and pollution) through the extensive replacement of deteriorated generating systems.[8]

The NSR program thus was added as an additional layer of protection, beyond the NSPS, in order to limit or prevent actual emissions increases to a degree greater than had been achieved by the NSPS alone, and to ensure that advances in pollution control since the NSPS was established, and any source-specific pollution control opportunities would be captured. NSPS establishes national pollution limits for categories of sources, established based on an EPA determination of the best system of emissions reduction. NSR is source-specific, to ensure that a source that has potential to adversely impact air quality is required to control its actual annual emissions. Under the current Proposal, however, changes that significantly increase emissions would be exempt from NSR requirements. The Proposal addresses increases in maximum hourly emission rates, but does not limit total emissions or protect NAAQS or PSD increments. It is clear that due to the massive emissions increases that are allowed to result from the proposed rule, this exemption does not in any way comport with the ambient air quality protection purposes of the statute's NSR provisions.

---

[6] *Alabama Power Co. v. Costle*, 636 F.2d 323, 350, 400 (D.C. Cir. 1979).
[7] *WEPCO*, 893 F.2d 901, 909 (7th Cir. 1990) (emphasis added).
[8] *Id.* at 909-10 (citations omitted).

Congress was directing additional air pollution control when it adopted the NSR program. The different focus of the two programs led EPA to conclude that there must be a stronger legal basis for the Agency to promulgate exemptions to the NSR program than the fact that exemptions existed in the NSPS program:

> The PSD review is a tool for air quality management and comprehensive consideration of increases of any pollutant regulated under the Act. The NSPS exemption is inconsistent with this approach. …The fact that both programs use the definition of modification contained in section 111 of the Act is not, in itself, sufficient to prove that Congress intended the NSPS exemptions then in effect would automatically be [sic] incorporated into PSD. … Apparently the only legislative history on the subject is a remark that Congress intended to conform the meaning of "modification" for PSD purposes to "other parts of the act [(1233 Cong. Rec. H11957)]. Given the distinct differences between the NSR regulatory processes promulgated in response to the 1977 amendments and the preexisting NSPS regulations defining "modification," it seems clear that Congress desired to conform the usage of that term only in the broad sense.[9]

The NSPS program, introduced in the 1970 amendments to the Clean Air Act, grew out of Congressional concern that the state planning process then in effect "was insufficient by itself to achieve the goal of protecting and *improving* air quality."[10]

By 1977, however, states had made little headway in the battle for clean air. Congress recognized that the existing NSPS program was not sufficient either to clean the air in the most polluted areas of the country, or to keep the air clean in areas that currently complied with ambient air quality standards. In addition to strengthening the NSPS program, Congress determined that "[s]ome mechanism [was] needed to assure that before new and expanded facilities are permitted, a State demonstrate that these facilities can be accommodated within its overall plan to provide for attainment of air quality standards."[11] Accordingly, Congress adopted the NSR program.[12]

At the heart of NSR is a preconstruction review and permitting program that was rejected as part of NSPS in 1970 because it was viewed as "overly elaborate and would

---

[9] Memorandum from Gerald A. Emison, Director, Office of Air Quality and Planning, U.S. EPA, to Director, Air Management Divisions, Regions I, III, V, and IX[;] Director, Air and Waste Management Division Region II[;] Director, Air Pesticides, and Toxic Management Division Region IV and VI[;] [and] Director, Air and Toxics Division Regions VII, VIII, and X, "Prevention of Significant Deterioration (PSD) Definition of 'Modification,'" at 2-3 (July 7, 1986).

[10] *ASARCO v. EPA*, 578 F.2d 319, 327 (D.C. Cir. 1978) (emphasis in original).

[11] S. Rep. No 95-127, *55 (May 10, 1977).

[12] 42 U.S.C. §§ 7470-7479 (Prevention of Significant Deterioration); 7501-7515 (nonattainment areas).

impose a heavy and unnecessary burden on both the Government and industry."[13] Among other things, the preconstruction permit requires a case-by-case determination of BACT (or LAER if the source is locating in a nonattainment area) rather than the automatic application of NSPS, and a demonstration that emissions from the source will not cause or contribute to the deterioration of air quality.

In addition, Congress chose to place much greater emphasis on public health and impacts on air quality, and less emphasis on economic feasibility, in designing the NSR program. For example, in the Conference Committee Report for the 1977 Amendments, in a discussion of the LAER requirement for the NSR program, the Committee stated that "[i]n determining whether an emission rate is achievable, cost will have to be taken into account, but cost factors in the nonattainment context will have somewhat less weight than in determining new source performance standards under section 111. Of course, health considerations are of primary importance."[14]

Although Congress incorporated the statutory NSPS definition of modification into the NSR program, EPA appropriately adopted different definitions of modification in order to comply with the different statutory purposes of the two programs. Under NSPS, EPA measures an "increase [in] the [emission rate] of any air pollutant" for the purpose of determining whether a modification has occurred in terms of hourly emission rate increases in order to be consistent with the program's industry-wide focus.[15] Under the NSR definition of modification, by contrast, emissions increases are measured in terms of total annual emissions, in order to be consistent with the NSR program's local and ambient air quality-based purpose:[16]

> Courts have long recognized the different purposes and requirements of the NSR and NSPS programs, and have rejected attempts to import provisions and rationales from one program to the other. In *Alabama Power*, the D.C. Circuit upheld EPA's application of the "bubble concept" to calculate emission increases in NSR, after having rejected its use in the NSPS program.[17] As the Court explained: "EPA has latitude to adopt definitions of the component terms of 'source' that are different in scope from those that may be employed for NSPS and other clean air programs, due to differences in the purpose and structure of the two programs."[18]

---

[13] 91 Cong. Senate Debates 1970, at 42490 (letter from Secretary of Health, Education and Welfare).
[14] 95 Cong. Conf. Report H. Rept. 564, 175 (Aug. 3, 1977). See also House Rep. No. 95-294, *214-15.
[15] 40 C.F.R. § 60.14(a), (b).
[16] Id. § 51.165(v), (vi). See 57 Fed. Reg. 32314, 32316 (July 21, 1992) (Emissions increase component of modification definition differs under NSPS and NSR, reflecting distinct purposes of the two programs).
[17] 636 F.2d 323 (D.C. Cir. 1979). *See also ASARCO v. EPA*, 578 F.2d 319 (D.C. Cir. 1978).
[18] *Id.* at 397-98. *See also Potomac Elec. Power Co. v. EPA*, 650 F.2d 509, 518 (4th Cir. 1981) (upholding EPA's different construction of the definition of "stationary source" based on "a

In *WEPCO*, the Seventh Circuit observed that by 1977 the NSPS program, with its focus on hourly rates of emissions, had resulted in "only varying degrees of success in controlling pollution in different parts of the country."[19] Consequently, Congress added the PSD program, "concerned with increases in total annual emissions" from major sources of pollution rather than its hourly rate of emissions, and ensuring that sources "in relatively unpolluted areas would not allow a decline of air quality . . . ."[20] Likewise, the Ninth Circuit has, on at least two occasions, rejected attempts to import provisions and rationales from one program to the other. As stated in *Citizens for Clean Air v. EPA*: "While the NSPS program and the PSD are both interrelated parts of a comprehensive federal legislative effort to protect and enhance this national's air quality, the *two programs play different roles in achieving that broad general goal*."[21]

As the Seventh Circuit has observed:

> To determine whether a physical change constitutes a modification for purposes of NSPS, the EPA must determine whether the change increases the facility's *hourly rate* of emission. . . . For PSD purposes, current EPA regulations provide that an increase in the *total amount* of emissions activates the modification provisions of the regulations.[22]

Likewise, in the preamble to its *WEPCO* rule, EPA pointed to the difference in how the emissions increase is measured as the primary distinguishing characteristic between the two programs: "[The] two-step test for determining whether activities at an existing facility constitute a modification subject to new source requirements . . . [branches apart at the emissions increase step,] reflecting the fundamental distinctions between the … NSPS *and the air quality-based provisions of NSR*."[23]

Accordingly, because of NSR's focus on a source's location and its potential effect on air quality and the environment, the source's hours of operation and overall annual emissions are key factors in determining whether NSR is triggered. Under an NSPS hourly emissions rate approach, a physical change to a source can result in an increase in hours of operation or an increase in production, and accordingly a significant increase in emissions, and still escape NSR.[24]

---

significant difference between the PSD and NSPS programs," noting the emphasis in PSD on new air emissions).

[19] *WEPCO*, 893 F.2d at 904.

[20] *Id.*

[21] 959 F.2d 839, 849 (9th Cir. 1992)(emphasis added).

[22] *WEPCO*, 893 F.2d at 905 (citations omitted, emphasis in original).

[23] 57 Fed. Reg. 32,314, 32316 (July 21, 1992) (emphasis added).

[24] Joint Comments of Environmental and Public Health Organizations on the New Source Review Regulatory Changes Proposed With EPA's Proposed Emission Guidelines for Greenhouse Gas Emissions From Existing Electric Utility Generating Units; Revisions to Emission Guideline Implementing Regulations; Revisions to New Source Review Program, Docket No. EPA-HQ-OAR-2017-0355 (Oct. 31, 2018).

I turn now to the air pollution increases that EPA regulations deem permissible, or that require air pollution controls and/or emission limitations, under the two programs. EPA has established regulatory "significance thresholds," describing the level of actual tons per year increases of air pollutants above which impacts will not be *de minimis* in nature, and therefore would trigger NSR. See 40 C.F.R. § 52.21(b)(23)(i), (establishing 40 tons per year significance thresholds for NO_x and SO_2, for example). In *Alabama Power Co. v. Costle,* the D.C. Circuit Court of Appeals, while recognizing the NSR program's focus on minimizing actual annual emissions increases, indicated EPA could (upon making specified rigorous showings) define levels of actual (tons per year) emissions increases which would produce no regulatory benefit under the statute. See *Alabama Power,* 636 F.2d at 360-61, 400 (describing that authority to craft *de minimis* exemption is potentially available "when the burdens of regulation yield a gain of trivial or no value. That implied authority is not available for a situation where the regulatory function does provide benefits, in the sense of furthering the regulatory objectives, but the agency concludes that the acknowledged benefits are exceeded by the costs.").

Moreover, in the 1990 Clean Air Act amendments, Congress adopted a special *de minimis* rule for sources that emit volatile organic compounds, and couched that rule as well in terms of tons per year increases. See CAA § 182(c)(6), 42 U.S.C. § 7511a(c)(6) (discussing NSR applicability in areas classified as severe for ozone non-attainment). Specifically, that provision states:

> The new source review provisions under this part shall ensure that increased emissions of volatile organic compounds resulting from any physical change in, or change in the method of operation of, a stationary source located in the [serious nonattainment] area shall not be considered *de minimis* for purposes of determining the applicability of the permit requirements established by this chapter unless the increase in net emissions of such air pollutant from such source *does not exceed 25 tons when aggregated with all other net increases in emissions from the source over any period of 5 consecutive calendar years which includes the calendar year in which such increase occurred.*[25]

Immediately following that provision, Congress adopted another provision creating a "special rule for modifications of sources emitting less than 100 tons," which applies whenever such a source makes a change "except for a *de minimis* increase" as established in § 182(c)(6), 42 U.S.C. § 7511a(c)(6). See CAA § 182(c)(7), 42 U.S.C. § 7511a(c)(7). Thus, the applicability of this provision depends on whether a change would lead to more than a *de minimis* increase, which § 182(c)(6), 42 U.S.C. § 7511a(c)(6) defines in terms of the annual tonnage increase resulting from a planned change. *Id.* The same is true for § 182(c)(8), 42 U.S.C. § 7511a(c)(8), which establishes a "special rule for modifications of sources emitting 100 tons or more." These provisions confirm that Congress understood, and intended that NSR would focus on annual actual emissions, not hourly emissions or output.

By contrast, as discussed at length in my response, above, to the question from the Honorable John Shimkus, the NSPS hourly emissions rate test for modifications would allow, and has allowed, actual, annual emissions increases of thousands or tens of thousands of tons per

[25] 42 U.S.C. § 7511(c)(6)(emphasis added).

year. So long as an emissions unit's relevant hourly emissions rate is not exceeded under the NSPS test, air quality may deteriorate by many thousands of tons per year because a physical change to a source can result in an increase in hours of operation or an increase in production, and thereby escape air pollution controls or other pollution mitigation measures.

In his oral statement, Mr. Holmstead said "even if the NSR program disappeared completely tomorrow," that "there would not be any increase in air pollution at all." Do you agree? Please explain.

7. I disagree. Mr. Holmstead's statement is badly, demonstrably wrong.

First, Mr. Holmstead himself acknowledged repeatedly as Assistant Administrator for EPA's Office of Air & Radiation during the Bush administration that merely *weakening* the NSR program, much less eliminating it, would result in increased air pollution. In a 2002 Bush EPA rule issues by Mr. Holmstead's Office of Air & Radiation, EPA rejected use of a grossly weaker maximum hourly emission rate test for the NSR program because it "could sanction greater actual emissions increases to the environment, often from older facilities, without any preconstruction review." 67 Fed. Reg. 80,186, 80,205 (December 31, 2002). This maximum hourly emission rate test is comparable to the deregulatory approaches in H.R. 3127 and H.R. 3128 that I criticized extensively in my February 14, 2018 testimony.[26] See also 83 Fed. Reg. 44, 746 (Aug. 31, 2018) (proposing maximum hourly emission increases tests for NSR for EGUs & pretending they are authorized by the current statute).

Mr. Holmstead's air office also confirmed that "typical source operation frequently does result in actual emissions that are below allowable emission levels," 67 Fed. Reg. at 80,205, meaning very significant increases in actual emissions could result without exceeding allowable emission levels. *See also, id.* ("*actual emissions increases* resulting from unreviewed projects could go largely undocumented until a [Prevention of Significant Deterioration] ("PSD") review is performed by a new or modified facility that ultimately must undergo review. By that time, however, a *violation of an [air quality] increment* could have unknowingly occurred.") (emphases added); *id.* ("We agree that a potential-to-potential test for major NSR applicability could lead to *unreviewed increases in emissions that would be detrimental to air quality*.") (emphasis added). The Bush EPA "also expressed concern about the environmental consequences associated with the Exhibit B [maximum hourly emission rate] provisions. For one, you could modernize your aging facilities (restoring lost efficiency and reliability while lowering operating costs) without undergoing preconstruction review, while *increasing annual pollution levels* as long as hourly potential emissions did not change." 67 Fed. Reg. at 80,205 (emphasis added).

[26] Testimony of John D. Walke, Clean Air Director, before the Subcommittee on Environment, Committee on Environment and Commerce, U.S. House of Representatives, Feb. 14, 2018, *available at* https://docs.house.gov/meetings/IF/IF18/20180214/106852/HHRG-115-IF18-Wstate-WalkeJ-20180214.pdf.

In the proposal that preceded the final 2002 NSR rule, the Bush administration EPA had quoted an earlier agency notice capturing concerns over the emissions increases that could result from the maximum hourly emission rate test: "Finally, one of the most troubling side effects of [a potential-to-potential hourly emissions test] is that it could ultimately stymie major new source growth by allowing *unreviewed increases of emissions* from modifications of existing sources to consume all available increment in PSD areas. … If a major new source with state-of-the-art emission controls proposes to locate in an area in which the increment has been consumed in this manner, it would be barred from building unless and until the increment problem was resolved. At the same time, older plants would continue to be able to make changes resulting in *significant unreviewed, and possibly uncontrolled, actual emission increases*." 61 Fed. Reg. at 38,270 (Jul. 23, 1996) (emphasis added).

Second, for the 2002 EPA NSR rulemaking, Mr. Holmstead's air office performed an emissions impact analysis that was included in the docket for the final rule.[27] There was no instance in EPA's analysis in which an electric generating unit ("EGU") would *not* have been allowed to increase its hourly or annual emissions by at least 50% under an hourly emissions rate test. Fifty percent increases were on the low end under EPA's study, however, with emissions increases over 100% and 200% more the norm. *Id.*

Third, as discussed at length in my response, above, to the question from the Honorable John Shimkus, weakening the NSR emissions increase test with the NSPS hourly emissions rate test would allow, and has allowed, actual, annual emissions increases of thousands or tens of thousands of tons per year. The Bush EPA enforcement office, for example, concluded that emissions increases totaling tens to hundreds of thousands of tons from the coal-fired power plants found to have violated NSR would have been *permissible* under a deregulatory hourly emission rate test for NSR. See EPA Enforcement Memo, at 13; *see also supra* responses to question from the Honorable John Shimkus.

Moreover, the Bush EPA enforcement office confirmed that deregulatory hourly emission rate approaches for NSR would result in actual annual emissions increases ranging from 50 tons per year of SO_2 emissions at the low end, up to *13,096 tpy* of SO_2 in another case study, based upon actual emissions data for EGUs from the Clean Air Markets Division, in EPA's Office of Air & Radiation. See EPA Enforcement Memo at 3, and Memo attachment at 2, 10, 20 & 27. A deregulatory hourly emission rate NSR test would have allowed NO_x emissions increases of 21,187 tpy by the $23 million equipment replacement project undertaken by TVA at Unit 1 of its Cumberland plant that violated today's stronger NSR safeguards. See Final Order on Reconsideration in *In re Tennessee Valley Authority*, (EPA Environmental Appeals Board, September 15, 2000).

Fourth, when the Bush EPA issued a 2007 supplemental proposal for a deregulatory hourly emissions rate test for NSR, the proposal's Technical Support Document ("TSD") found

[27] Environmental Groups' Comments on EPA's Proposed "Supplemental Notice of Proposed Rulemaking for Prevention of Significant Deterioration and Nonattainment New Source Review: Emissions Increases for Electric Generating Units," 72 Fed. Reg. 26,202 (May 7, 2007), Docket ID No. EPA-HQ-OAR2005-0163, pp. 142-146.

that multiple counties across the United States would experience emissions increases in excess of NSR "significance" thresholds for "modifications" at EGUs under the test. Table 5.3 of the 2007 NSR Proposal TSD found that: 40 counties would experience SO_2 emissions increases between 40 and 1,000 tpy; 9 counties would experience SO_2 emissions increases between 1,000 and 3,000 tpy; and 4 counties would experience SO_2 emissions increases between 3,000 and 34,276 tpy. 2007 NSR Proposal TSD at 5-7. The picture for NO_x was much the same: 30 counties would experience NO_x emissions increases between 40 and 1,000 tpy, and 5 counties would experience NO_x emissions increases between 1,000 and 3,098 tpy. *Id.* at Table 5.4

Notably, neither Mr. Holmstead's written or oral testimony explained what laws, regulations, emissions limits or standards would prevent any increases in air pollution from *every* emissions unit, or even *any* emissions units, at each major stationary source in the U.S. subject to the NSR and PSD programs. The burden lies with anyone making such a claim, erroneous as it is, to demonstrate with particularity, and comprehensively, what laws, regulations, emissions limits or standards would prevent increases in air pollution from every PSD/NSR-covered emissions unit "if the NSR program disappeared completely tomorrow." As noted, Mr. Holmstead's testimony did not even attempt to do so.

The reasons for this failure are obvious: the very structure and requirements of federal, state and local clean air laws do not restrict all increases in air pollution. Few if any emissions units at major stationary sources are subject to hard caps on total annual emissions tied to current emissions levels, that would guarantee "there would not be any increase in air pollution at all" "even if the NSR program disappeared completely tomorrow." No federal Clean Air Act standards impose hard caps on emissions in the manner just described; to the extent that there are caps on annual emissions from individual major stationary sources under some federal standards, like the Cross State Air Pollution Rule, facility operators may purchase and trade allowances to exceed even those so-called 'caps' with actual emissions increases. Nor do State Implementation Plans or individual federal, state or local permits cap total emissions to prevent any and all increases in actual, annual air pollution above current levels. These regulatory tools generally limit emissions *rates*, rather than prohibiting any increases in air pollution, meaning that physical and operational changes would be allowed to result in significant emissions increases "if the NSR program disappeared completely tomorrow."

For these reasons and many more, Mr. Holmstead's statement is wrong.

8. In light of your testimony, how do you understand Mr. Holmstead's statement that "there would not be any increase in air pollution at all" even if the NSR program disappeared completely tomorrow"? Please explain.

As explained in my responses to the prior question, I believe Mr. Holmstead's statement to be wrong and simply not defensible. The statement contradicts numerous statements and conclusions by the Bush Administration EPA both while Mr. Holmstead headed the air office, as well as statements and analyses by EPA before and after Mr. Holmstead was in the administration. The burden lies on someone making such a sweeping, comprehensive statement to back it up, with particularity, but Mr. Holmstead did not do so in either his written or oral

statement. Ordinarily, I would have understood such a statement to be simply rhetorical, in the context of an oral response to a hearing question; but Mr. Holmstead's statement represented both a factual and legal conclusion about the state of U.S. clean air regulation "if the NSR program disappeared completely tomorrow." On both grounds, the statement is wrong and not defensible for the reasons touched upon in my responses to Question 7. I do not recall Mr. Holmstead offering any further explanation for his statement to allow it to be understood better.

9. Would Mr. Holmstead's support for the approach to "modification" used in the NSPS program allow increases in actual air pollution levels from facilities subject, or potentially subject, to the PSD/NSR program?

Absolutely yes, for the reasons discussed at length in my responses, above, to the question from the Honorable John Shimkus, as well as my responses to questions 3, 6 and 7 from The Honorable Frank Pallone.

Mr. Holmstead suggested that there would not be any increase in air pollution "because of the many other programs that regulate the same pollutants from the same facilities."

10. Do you agree?

No, I disagree strongly, for the reasons discussed in my responses to Question 7, above.

11. If the NSR program disappeared from EPA regulations and the Clean Air Act, are there laws and regulations, in place, at the state and/or federal levels, that would prevent any and all stationary sources in the U.S. from experiencing "any increases in air pollution at all," that would otherwise be regulated by NSR?

No, for the reasons discussed at length in my responses, above, to the question from the Honorable John Shimkus, as well as my responses to questions 3, 6, 7 and 8 from The Honorable Frank Pallone. Having been a Clean Air Act attorney for nearly 25 years, I have never heard any government official, or attorney in private, public or public interest practice even suggest that there are "laws and regulations, in place, at the state and/or federal levels, that would prevent any and all stationary sources in the U.S. from experiencing 'any increases at all,' that would otherwise be regulated by NSR." I am not aware of any such laws or regulations, certainly not those that "would prevent any and all stationary sources in the U.S. from experiencing 'any increases at all,' that would otherwise be regulated by NSR."