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(Slip Opinion)

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**BEFORE THE ENVIRONMENTAL APPEALS BOARD  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C.**

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In re: )  
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Tucson Electric Power )  
) PSD Appeal No. 18-02  
PSD Permit No. 1052 )  
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[Decided December 3, 2018]

***ORDER DENYING REVIEW***

***Before Environmental Appeals Judges Aaron P. Avila, Mary Kay Lynch, and Mary Beth Ward.***

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# IN RE TUCSON ELECTRIC POWER

PSD Appeal No. 18-02

## *ORDER DENYING REVIEW*

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Decided December 3, 2018

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### Syllabus

The Sierra Club petitions the Environmental Appeals Board (“Board”) to review a decision by the Department of Environmental Quality for Pima County, Arizona (“Pima County”) to issue a federal Prevention of Significant Deterioration (“PSD”) permit to Tucson Electric Power. The permit authorizes Tucson Electric Power to construct and operate up to ten additional electricity-generating units (“Units”) at its Irvington Generating Station facility. Sierra Club challenges Pima County’s determination that PSD requirements do not apply to the nitrogen oxide (“NO<sub>x</sub>”) emissions from the modified facility. Although the permit contains a cap that limits NO<sub>x</sub> emissions below the level triggering PSD requirements, Sierra Club argues that the permit’s monitoring requirements are not adequate to render the NO<sub>x</sub> emissions cap practically enforceable and thus PSD requirements should apply.

The permit imposes several monitoring requirements to verify compliance with the NO<sub>x</sub> emissions cap. Those requirements include, among other things: (i) biennial performance (stack) tests to determine how much NO<sub>x</sub> each Unit emits; (ii) calculation of monthly and yearly NO<sub>x</sub> emissions using information from the required stack tests and monitoring of ongoing operations; and (iii) monitoring of the pollution control devices for the new Units to ensure that the devices are working properly. Pima County concluded that these compliance monitoring requirements were sufficient to make the NO<sub>x</sub> emissions cap practically enforceable.

Held: The Board denies Sierra Club’s Petition for Review. Sierra Club has not carried its burden of showing that Pima County clearly erred or abused its discretion in determining that the NO<sub>x</sub> emissions cap is practically enforceable.

Sierra Club’s argument that the NO<sub>x</sub> emissions cap is not practically enforceable because the permit’s compliance monitoring requirements rely solely on biennial stack tests lacks merit because monitoring of the facility’s pollution control devices is also an integral part of the permit’s compliance monitoring requirements. Sierra Club’s contention that the monitoring of the pollution control devices does not cure the problem with the permit’s reliance on biennial stack tests was

not preserved for review because that assertion was not raised during the public comment period. In any event, Sierra Club's contention is not responsive to the role of monitoring of the pollution control devices as described by Pima County. Additionally, Sierra Club does not substantiate its argument that Pima County failed to support in the administrative record its conclusion that the method for calculating monthly and yearly NO<sub>x</sub> emissions would likely overstate emissions. Lastly, Pima County adequately responded to Sierra Club's comments on the practical enforceability of the NO<sub>x</sub> emissions cap. Pima County responded to Sierra Club's generalized claims on the inadequacy of biennial stack testing to monitor compliance throughout the year by providing a description of all the elements of the permit's compliance monitoring requirements. Given the general nature of Sierra Club's comments, more was not required.

*Before Environmental Appeals Judges Aaron P. Avila, Mary Kay Lynch, and Mary Beth Ward.*

*Opinion of the Board by Judge Ward:*

I. STATEMENT OF THE CASE

This case involves a challenge by the Sierra Club to a determination in a federal Clean Air Act permit that the Act's Prevention of Significant Deterioration ("PSD") requirements do not apply to the emissions of nitrogen oxides – commonly referred to as NO<sub>x</sub> – from a facility owned and operated by Tucson Electric Power ("Tucson Electric"). Potential NO<sub>x</sub> emissions from the facility are reduced by pollution control devices, and the permit imposes a limit (or cap) on NO<sub>x</sub> emissions consistent with the control devices' ability to reduce emissions. In such circumstances, the applicability of PSD requirements is based on the facility's emission rate, as reduced by the control devices, so long as the cap on the reduced emissions is enforceable as a practical matter. The specific issue presented here is whether the challenged permit's compliance monitoring requirements are sufficient to make the NO<sub>x</sub> emissions cap practically enforceable.

In August 2018, the Department of Environmental Quality for Pima County, Arizona ("Pima County") issued a federal PSD permit ("Permit") to Tucson Electric authorizing the construction and operation of up to ten additional electricity-generating units ("Units") at Tucson Electric's Irvington Generating Station facility. Although the expanded facility would emit several pollutants above levels that trigger PSD requirements, the Permit imposes certain requirements as to NO<sub>x</sub> emissions that bring those emissions below levels that trigger such requirements. Specifically, the Permit requires two existing electricity-generating units at the facility to be shut down, mandates the use of pollution control devices on the new Units that reduce NO<sub>x</sub> emissions, and imposes a NO<sub>x</sub> emissions cap consistent with that reduction.

The Permit further imposes monitoring and recordkeeping requirements to verify compliance with the NO<sub>x</sub> emissions cap. Those compliance monitoring requirements include, among other things: (i) biennial performance (stack) tests to determine how much NO<sub>x</sub> each Unit

emits; (ii) calculation of monthly and yearly NO<sub>x</sub> emissions using information from the required stack tests and monitoring of ongoing operations; and (iii) monitoring of pollution control devices to ensure that they are working properly. Finding that these compliance monitoring requirements made the NO<sub>x</sub> emissions cap practically enforceable, Pima County concluded that PSD requirements do not apply to the new Units as to their NO<sub>x</sub> emissions.

In its Petition for Review, Sierra Club argues that the NO<sub>x</sub> emissions cap is not practically enforceable – that is, compliance with the cap cannot be verified – because the stack tests are conducted too infrequently, the monthly and yearly emission calculations rely solely on these infrequent stack tests, and the monitoring of pollution control devices does not cure the problem with the infrequent stack tests. As a consequence, Sierra Club contends that PSD requirements should apply to the facility’s increased NO<sub>x</sub> emissions resulting from its proposed expansion.

We conclude that Sierra Club has not carried its burden of showing that Pima County clearly erred or abused its discretion in determining that the NO<sub>x</sub> emissions cap is practically enforceable. The Petition for Review is therefore denied.

## II. PRINCIPLES GOVERNING BOARD REVIEW

In considering a petition filed under 40 C.F.R. § 124.19(a), the Board first evaluates whether the petitioner has met threshold procedural requirements such as timeliness, standing, issue preservation, and specificity. *In re Indeck-Elwood, LLC*, 13 E.A.D. 126, 143 (EAB 2006). For example, a petitioner must demonstrate that any issues and arguments it raises on appeal have been preserved for Board review (i.e., were raised during the public comment period or public hearing on the proposed permit), unless the issues or arguments were not reasonably ascertainable at the time. 40 C.F.R. §§ 124.13, .19(a)(4)(ii); *see, e.g., In re City of Attleboro*, 14 E.A.D. 398, 405-06, 444 (EAB 2009); *In re City of Moscow*, 10 E.A.D. 135, 141, 149-50 (EAB 2001).

Under part 124, the petitioner bears the burden of demonstrating that review is warranted. *See* 40 C.F.R. § 124.19(a)(4). Ordinarily, the Board will deny review of a permit decision and thus not remand it unless the petitioner demonstrates that the permit decision is based on a clearly erroneous finding of fact or conclusion of law or involves a matter of policy or exercise of discretion that warrants review. *Id.* § 124.19(a)(4)(i)(A)-(B); *see, e.g., In re La Paloma Energy Ctr., LLC*, 16 E.A.D. 267, 269 (EAB 2014). The Board’s power to grant review “should be only sparingly exercised,” and “most permit conditions should be finally determined at the [permit issuer’s] level.” Consolidated Permit Regulations, 45 Fed. Reg. 33,290, 33,412 (May 19, 1980); *see also* Revisions to Procedural Rules Applicable in Permit Appeals, 78 Fed. Reg. 5281, 5282 (Jan. 25, 2013).

When evaluating a permit decision for clear error, the Board examines the administrative record that serves as the basis for the permit to determine whether the permit issuer exercised “considered judgment” in rendering its decision. *See, e.g., In re Steel Dynamics, Inc.*, 9 E.A.D.

165, 191, 224-25 (EAB 2000); *In re Ash Grove Cement Co.*, 7 E.A.D. 387, 417-18 (EAB 1997). Similarly, the Board will uphold a permitting authority's exercise of discretion if that decision is cogently explained and supported in the record. *See, e.g., La Paloma Energy Ctr.*, 16 E.A.D. at 270, 284, 292. The Board does not find clear error or an abuse of discretion simply because petitioner presents a difference of opinion or alternative theory regarding a matter. *See In re Town of Ashland Wastewater Treatment Facility*, 9 E.A.D. 661, 667 (EAB 2001); *In re NE Hub Partners, L.P.*, 7 E.A.D. 561, 567-68 (EAB 1998), *review denied sub nom. Penn Fuel Gas, Inc. v. EPA*, 185 F.3d 862 (3d Cir. 1999). And on matters that are fundamentally technical or scientific in nature, the Board typically defers to a permit issuer's technical expertise and experience, as long as the permit issuer has adequately explained its rationale and supported its reasoning in the administrative record. *See, e.g., In re FutureGen Indus. All., Inc.*, 16 E.A.D. 717, 733-35 (EAB 2015), *review dismissed as moot sub nom. DJL Farm LLC v. EPA*, 813 F.3d 1048 (7th Cir. 2016).

### III. STATUTORY AND REGULATORY HISTORY

The PSD provisions of the Clean Air Act govern air pollution both in "attainment" areas, where the air quality meets or is cleaner than the Environmental Protection Agency's ("EPA") national ambient air quality standards, and in "unclassifiable" areas where EPA has not categorized the air quality as having attainment or nonattainment status. Clean Air Act ("CAA") §§ 160-169, 42 U.S.C. §§ 7470-7479; *see also In re Palmdale Energy, LLC*, PSD Appeal No. 18-01, slip op. at 4-7 (EAB Oct. 23, 2018), 17 E.A.D. \_\_\_\_ (providing in-depth description of the PSD program). In both these areas, the PSD program requires that new "major stationary sources" of air pollutants or "major modifications" to such sources obtain a permit prior to construction.<sup>1</sup> *See* CAA § 165, 42 U.S.C. § 7475; 40 C.F.R. § 52.21. Among other things, an applicant for a PSD permit must show that its facility will achieve emission limits attainable by the "best available control technology" for pollutants emitted from the facility above designated levels. CAA § 165(a)(4), 42 U.S.C. § 7475(a)(4); 40 C.F.R. § 52.21(b)(23), (j)(2)-(3).

Under the regulations implementing the PSD program, a "major stationary source" is, among other things, any source from certain source categories (including fossil fuel-fired steam electric power plants such as the facility here) that have the "potential to emit" 100 tons per year

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<sup>1</sup> The actual term in the PSD statutory provisions is "major emitting facility." *See* CAA § 169(1), (2)(C), 42 U.S.C. § 7479(1), (2)(C). The related term "major stationary source" is used elsewhere in the Clean Air Act, *see* CAA § 111(a), (f), 40 U.S.C. § 7411(a), (f). The Act recognizes the similarity between the two terms by defining "major stationary source" and "major emitting facility" as synonymous "[e]xcept as otherwise expressly provided." CAA § 302(j), 42 U.S.C. § 7602(j); *see Chevron, U.S.A., Inc. v. NRDC, Inc.*, 467 U.S. 837, 860 (1984). In implementing the PSD program, EPA uses the terms "major stationary source" and "major modification," 40 C.F.R. § 52.21(b)(1), (2), and, therefore, the Board will use that terminology as well. *See* U.S. EPA, *New Source Review Workshop Manual*, at A.1 (draft Oct. 1990).

or more of any of several regulated pollutants, including NO<sub>x</sub>.<sup>2</sup> 40 C.F.R. § 52.21(b)(1)(i). A “major modification” is “any physical change in or change in the method of operation of a major stationary source” that would result in: (1) a “significant emissions increase” of any of such pollutants; and (2) a “significant net emissions increase” of any of such pollutants. *Id.* § 52.21(b)(2)(i). The regulations define a significant emissions increase and significant net emissions increase on a pollutant-by-pollutant basis. *Id.* § 52.21(b)(23), (40). For NO<sub>x</sub>, a significant increase and a significant net increase are both defined as an increase of 40 tons per year. *Id.*

A critical aspect of determining whether a new source or the modification of a source would be a major source or major modification, respectively, is ascertaining the new source or modification’s “potential to emit” pollutants and whether that potential meets or exceeds designated levels. “Potential to emit” has been defined by regulation as requiring consideration of “[a]ny physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment.” *Id.* § 52.21(b)(4). However, the definition makes clear that a pollution control device’s limitation on capacity can only be considered in determining a facility’s potential to emit “if the limitation or the effect it would have on emissions is federally enforceable.” *Id.*

Whether a physical or operational limitation on a source’s emissions is “federally enforceable” has been interpreted by EPA as meaning that the emission limit reflecting the physical or operational limitation is “enforceable as a practical matter,” or “practically enforceable.” Memorandum from John S. Seitz, Dir., Office of Air Quality Planning & Standards, U.S. EPA, and Robert I. Van Heuvelen, Dir., Office of Regulatory Enforcement, U.S. EPA, to EPA Region 1 Air Div. Directors, Options for Limiting the Potential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Clean Air Act 3 & attach. 3, at 1 (Jan. 25, 1995) (“Seitz Memorandum”); *see also In re Peabody W. Coal Co.*, 12 E.A.D. 22, 32 (EAB 2005). To be practically enforceable, a permit must, among other things, specify “the method to determine compliance including appropriate monitoring, recordkeeping, and reporting.” Seitz Memorandum at 6; *cf.* 40 C.F.R. § 49.152 (defining “enforceable as a practical matter” in a similar manner for air quality planning and management in Indian country). To be appropriate, such monitoring, recordkeeping, and reporting must be sufficient to allow a permitting agency to verify a source’s compliance with the permit’s emission limit. *See In re Shell Offshore, Inc.*, 15 E.A.D. 536, 557, 559 n.25 (EAB 2012) (holding that the permit issuer did not clearly err in concluding that emission limits were practically enforceable because the permit’s monitoring requirements provided “the ability to assess and verify compliance”); *Peabody*, 12 E.A.D. at 39-41 (finding no clear error by

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<sup>2</sup> The applicable regulation defines these pollutants as including “[a]ny pollutant for which a national ambient air quality standard has been promulgated.” 40 C.F.R. § 50.21(b)(50)(i).

the permit issuer in determining that the permittee's proposed monitoring requirements were insufficient to make an emission limit practically enforceable because the requirements did not provide "a reliable method of determining compliance"); *In re Pencor-Masada Oxydol, LLC*, Pet. No. II-2001-05, 2002 EPA CAA Title V LEXIS 44, at \*16 (Adm'r Apr. 8, 2002) (stating that for an emission limit to be practically enforceable, the permit must contain terms and conditions sufficient "to determine whether the limit has been exceeded").

Pima County's Department of Environmental Quality administers the federal PSD permitting program within Pima County, Arizona pursuant to a delegation from EPA. *See* Agreement for Delegation of Source Review under the Federal Prevention of Significant Deterioration (PSD) Program Set Forth in 40 CFR 52.21 by the United States Environmental Protection Agency, Region 9 to the Pima County Air Quality Control District (June 5, 2018). Accordingly, the Tucson Electric Permit is a federally-issued permit appealable to the Board under section 124.19 of Title 40 of the Code of Federal Regulations. 40 C.F.R. § 124.19(a)(1).

#### IV. FACTUAL AND PROCEDURAL HISTORY

##### A. Tucson Electric's Proposed Expansion of the Irvington Generating Station Facility

Tucson Electric is proposing to expand its fossil fuel-fired steam electric power plant, known as the Irvington Generating Station, by building up to ten new internal combustion engine units ("Units"). Pima Cty. Dep't of Env'tl. Quality, *Prevention of Significant Deterioration Air Quality Permit, Permit No. 1052*, at 4 (Aug. 8, 2018) (Administrative Record ("A.R.") 23) ("Permit"). Tucson Electric plans to use these new Units to support increased use of wind and solar-generated electrical power sources. The new Units can compensate for the variability of wind and solar power sources by providing "[r]eliable, efficient, grid-balancing resources which can ramp up quickly and provide 100 percent of their [effective load carrying capability] during multiple peak periods of any length." Tucson Elec. Power, *Application for a Prevention of Significant Deterioration (PSD) Authorization and Significant Revision to Class I Air Quality Permit for Irvington Generating Station 2-2, 2-5* (July 2017) (A.R. 2) ("Permit Application").

The Irvington Generating Station is a major stationary source subject to the Clean Air Act's PSD program and is in an area designated by EPA as in attainment. Permit at 4. Because the proposed addition of ten new Units would significantly increase potential emissions of several regulated pollutants, this expansion of the facility qualifies as a major modification and triggers PSD requirements. *Id.* Accordingly, Tucson Electric applied to Pima County to amend its existing

air quality permit (referred to as a Class I permit) and convert it to a combined PSD permit and Class I permit.<sup>3</sup>

The modified facility would have triggered PSD requirements for its NO<sub>x</sub> emissions; however, Tucson Electric requested a limit on NO<sub>x</sub> emissions – referred to by the parties as a NO<sub>x</sub> emissions cap – for the new Units to keep their emissions below the PSD threshold.<sup>4</sup> *See* Letter from Conrad Spencer, Tucson Elec. Power, to Rupesh Patel, Pima Cty. Dep’t of Env’tl. Prot. (Feb. 23, 2018) (A.R. 13) (requesting NO<sub>x</sub> emissions cap of 170 tons per year). Tucson Electric also identified in its permit application three other aspects of the modified facility that would curtail NO<sub>x</sub> emissions from the new Units or the overall facility. First, each new Unit would be equipped with a selective catalytic reduction device that would substantially reduce NO<sub>x</sub> emissions. *See* Permit Application at 2-6, 3-3. Second, the Units would be limited to five startups per day. *See id.* at 2-6. Third, two existing steam-generating units at the facility would be permanently shut down offsetting, in part, the increase in NO<sub>x</sub> emissions from the addition of the ten new Units. *See id.* at 2-5, 4-9. In combination, these terms of operation would limit the net increase in NO<sub>x</sub> emissions from the expansion of the Irvington facility to an amount that is below the “significant” level of 40 tons per year.<sup>5</sup> Permit at 4.

We describe below: (i) the terms of the proposed combined PSD and Class I permit (“Proposed Permit”) noticed for public comment with a focus on the compliance monitoring

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<sup>3</sup> The Class I permit was required to allow construction and operation of the original facility under the Arizona Administrative Code, *see* Ariz. Admin. Code § R18-2-302, which implements Arizona’s operating permits program, authorized by EPA under Title V of the Clean Air Act, 42 U.S.C. §§ 7661-7661f. *See* Clean Air Act Full Approval of the Arizona Operating Permits Program, 66 Fed. Reg. 63,175 (Dec. 5, 2001) (final rule fully approving Arizona’s operating permits program).

<sup>4</sup> In the Administrative Record, the limitation on NO<sub>x</sub> emissions is described interchangeably as a “cap” and a “limit.” *See, e.g.*, Permit at Part B § II.A.1. For clarity and consistency, the Board will use the term “cap” to refer to the limitation on NO<sub>x</sub> emissions.

<sup>5</sup> The to-be-eliminated steam units emit approximately 140 tons per year of NO<sub>x</sub>. Thus, the replacement of these units with the ten new Units (limited to a combined total of 170 tons per year of NO<sub>x</sub>) would result in a net legally-allowed increase of NO<sub>x</sub> of approximately 30 tons per year. *See* Pima Cty. Dep’t of Env’tl. Quality, *Responses to Public Comments* 7 (Aug. 8, 2018) (A.R. 22) (“RTC”). Further, Pima County estimated that the ten Units would emit 152.8 tons per year of NO<sub>x</sub> – i.e., less than the 170 tons per year cap – based on the manufacturer’s specifications on NO<sub>x</sub> emissions from the Units with selective catalytic reduction devices and assuming five startups per day, the maximum allowed under the Permit. Pima Cty. Dep’t of Env’tl. Quality, *Technical Support Document* attach. B at 2 tbl.B-2 (Aug. 2018) (A.R. 24).

requirements pertaining to the NO<sub>x</sub> emissions cap, *see* Part IV.B; and (ii) Sierra Club’s comments on the Proposed Permit and Pima County’s response to those comments, *see* Part IV.C.

*B. The Proposed Permit’s Requirements Concerning the NO<sub>x</sub> Emissions Cap*

In February 2018, Pima County issued the Proposed Permit for public comment. The Proposed Permit included the conditions necessary to restrict NO<sub>x</sub> emissions below the level triggering PSD requirements – requiring use of selective catalytic reduction devices on each new Unit, limiting startups of the new Units to five per day, retiring two existing steam-generating units, and a 170 tons per year NO<sub>x</sub> emissions cap – and imposed requirements to verify compliance with the NO<sub>x</sub> emissions cap. Pima Cty. Dep’t of Env’tl. Quality, *Proposed Prevention of Significant Deterioration Air Quality Permit, Permit No. 1052*, at 4 & Part B § V.E (Feb. 9, 2018) (A.R. 12.1) (“Proposed Permit”).

As to the verification of compliance, the Proposed Permit specified that “[c]ompliance with the NO<sub>x</sub> emission [cap] shall be demonstrated by performance tests as detailed in Condition II.D, monitoring as detailed in Condition II.B, and recordkeeping as detailed in Condition II.C.” *Id.* at Part B § II.A.1.b. The performance tests, monitoring, and recordkeeping required for compliance are described further below.

First, the Proposed Permit called for performance tests – also referred to as “stack tests” – for each of the new Units to be conducted “using the methods and procedures in 40 C.F.R. § 60.4244 and Table 2 of 40 C.F.R. part 60, subpart JJJJ.” Proposed Permit at Part B § II.D.2.a. For NO<sub>x</sub> emissions, these stack tests measure “the concentration of NO<sub>x</sub> in the engine exhaust” during operation of the facility at periods other than at startup (i.e., non-startup operating periods). 40 C.F.R. § 60.4244(b), (d). Because the selective catalytic reduction devices must be operated “at all times while fuel is flowing to the [Unit], excluding periods of startup,” stack tests reflect the impact the selective catalytic reduction devices have on NO<sub>x</sub> emissions. *See* Proposed Permit at Part B § II.A.c.

In addition to the regulatory procedures for stack tests, the Proposed Permit specified that the tests “shall be performed at 25, 40, 70, and 100 percent of peak load” or at the minimum and peak load levels based on the prior twelve months of operation. *Id.* at Part B § II.D.2.b. As to the frequency of testing, each Unit must be tested “within 60 days after achieving the maximum production rate, but not later than 180 days after initial startup.” *Id.* at Part B § II.D.1. Thereafter, each Unit must be subjected to a stack test “no less frequently than once in each period of two consecutive calendar years,” but at least five of the Units must be tested each calendar year. *Id.* This means that each Unit will be tested at least once every two years.

Second, the Proposed Permit imposed several monitoring and recordkeeping requirements to verify continuing compliance with the NO<sub>x</sub> emissions cap. These monitoring and recordkeeping requirements established a procedure for calculating monthly and yearly NO<sub>x</sub> emissions and a

program for ensuring that the selective catalytic reduction devices are operated properly at all times. *See id.* at Part B § II.C.

The Proposed Permit required the calculation of NO<sub>x</sub> emissions on a monthly and yearly basis for non-startup and startup operating periods. For non-startup operating periods, the Proposed Permit required that monthly NO<sub>x</sub> emissions be calculated by combining information on NO<sub>x</sub> emission rates measured in required stack tests with monitoring data on the operation of the Units. Specifically, the Proposed Permit required that Tucson Electric calculate a NO<sub>x</sub> “emission factor” from the most recent stack test expressed in terms of pounds of NO<sub>x</sub> emitted per the heat input measured in British thermal units (“BTUs”) of natural gas used to power the Unit. *Id.* at Part B § II.D.2.c. Additionally, the Proposed Permit required Tucson Electric to monitor and record the hours of operation of each Unit and natural gas consumption in BTUs during operation. *Id.* at Part B § II.B.1. The Proposed Permit then directed that Tucson Electric calculate monthly NO<sub>x</sub> emissions during non-startup operating periods on a Unit-by-Unit basis by multiplying each Unit’s emission factor by the BTUs of heat input used by the Unit over the month during these operating periods. *Id.* at Part B § II.C.9.

For startup operating periods, the Proposed Permit required that monthly NO<sub>x</sub> emissions be calculated by multiplying the number of startups per Unit in a month by the manufacturer-supplied NO<sub>x</sub> rate of emissions for startup (“startup emission rate”) of the Unit. *Id.* at Part B § II.C.9. To implement this requirement, the Proposed Permit specified that Tucson Electric monitor the number of startups for all Units and record the number and duration of all startups. *Id.* at Part B § II.B.2, II.C.1. Emission calculations for startup operating periods are then combined with emission calculations for non-startup operating periods to calculate total monthly emissions and a twelve-month (i.e., yearly) rolling average of NO<sub>x</sub> emissions. *Id.* at Part B § II.C.9.

Lastly, the Proposed Permit imposed additional requirements as to the selective catalytic reduction devices to assure proper functioning of these devices. These monitoring and recordkeeping requirements included the following: (i) the devices must be maintained and operated in a manner consistent with good air pollution control practice for minimizing NO<sub>x</sub> emissions; (ii) the catalyst in the devices must be cleaned and replaced according to the manufacturer’s recommendations; (iii) two key operating parameters of the devices – ammonia injection rate and temperature – must be monitored and recorded at least once every fifteen minutes; (iv) if ammonia injection to a device fails and cannot be restored in ten minutes, the Unit must be shut down; (v) records must be kept of any instance in which ammonia injection fails for more than two minutes; and (vi) the selective catalytic reduction devices must have a continuous NO<sub>x</sub> process monitor (which measures NO<sub>x</sub> concentration and adjusts ammonia injection levels to achieve desired NO<sub>x</sub> reduction). Proposed Permit at Part B § II.A.1.c, II.B.3, II.C.4; *see* Hug Eng’g, *Operating Manual: Control Unit SNQ 1* (v03.00 Mar. 6, 2013) (A.R. 12).

C. *Sierra Club's Comments on the Proposed Permit and Pima County's Response*

Sierra Club submitted comments on the Proposed Permit arguing, among other things, that the NO<sub>x</sub> emissions cap is not “practically enforceable,”<sup>6</sup> and thus the cap cannot be considered a limitation on the facility’s potential to emit NO<sub>x</sub>. Sierra Club, *Intent to Approve: Proposed Revision to the existing Air Quality Permit No. 1052 to Tucson Electric Power (TEP) Irvington/H. Wilson Sundt Generating Station (IGS) 8-9 & attach. at 20* (Mar. 29, 2018) (A.R. 21.2) (“Sierra Club Comments”). Sierra Club contended that absent a practically enforceable limitation on the facility’s potential to emit NO<sub>x</sub>, Pima County erred in concluding that PSD requirements are not applicable to NO<sub>x</sub> emissions. In its comments and in an expert report attached to its comments, Sierra Club advanced three arguments as to why the NO<sub>x</sub> emissions cap is not practically enforceable.

First, Sierra Club contended that the Proposed Permit’s compliance monitoring for NO<sub>x</sub> was inadequate because it relied on stack tests that could be performed as infrequently as every two years. *Id.* at 2, 9. Sierra Club argued that “using stack tests once every two years to determine whether the [Units] are in compliance with the permit is woefully inadequate.” *Id.* The expert report attached to Sierra Club’s comments asserted that stack tests “may not be representative for emissions during routine operations” because stack tests do not provide data on whether pollution control devices at a facility are functioning at an effective level at times other than when the stack test is performed. *Id.* attach. at 21-22 & n.59 (citing to EPA comment letters on state permits that raise this concern as a reason to require additional compliance monitoring to supplement annual stack tests). The solution, according to the expert report, would be to require Continuous Emissions Monitors. *Id.* attach. at 23. The report argued that without Continuous Emissions Monitors, “community members will not be able to protect themselves against harmful emissions and local, state, and federal regulatory agencies cannot detect and cure violations of permit conditions.” *Id.*

Second, Sierra Club argued that the NO<sub>x</sub> emissions cap is not practically enforceable because the Permit does not contain an “unambiguous methodology for calculating NO<sub>x</sub> emissions from the emission [stack] test.” *Id.* attach. at 25; *see also id.* at 2, 9. Sierra Club requested that the Proposed Permit “be revised to include an equation that lays out the emission calculation in detail.” *Id.* attach. at 25.

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<sup>6</sup> Sierra Club uses the term “practicably enforceable” as well as “practically enforceable” in its Petition. *See, e.g.*, Petition for Review of Prevention of Significant Deterioration Permit 1, 6 (Sept. 7, 2018) (“Pet.”). But as we see no difference between the two (and Sierra Club does not assert that there is), the Board will use the term “practically enforceable” for clarity and consistency.

Third, Sierra Club asserted that there was no record support for a manufacturer-supplied NO<sub>x</sub> emission rate during startup, which was to be used to calculate emissions during startup operating periods. *Id.* at 2, 9 & attach. at 25. Although the Proposed Permit referred to the NO<sub>x</sub> startup emission rate as “guaranteed,” Sierra Club noted that there was no manufacturer guarantee provided for a startup NO<sub>x</sub> emission rate included in an attachment to the draft Technical Support Document. *Id.* attach. at 25.

In August 2018, Pima County issued the Permit and its response to the public comments (“Response to Comments”) received on the Proposed Permit, including its response to each of Sierra Club’s comments on whether the NO<sub>x</sub> emissions cap is practically enforceable.

As to Sierra Club’s comment about the adequacy of stack tests for determining continuing compliance with the NO<sub>x</sub> emissions cap, Pima County acknowledged that “EPA has indicated \* \* \* that annual [stack] tests alone are insufficient to assure compliance with emission limits.” Pima Cty. Dep’t of Env’tl. Quality, *Responses to Public Comments* 10 (Aug. 8, 2018) (A.R. 22) (“RTC”). However, Pima County explained that the Permit does not rely solely on the results of stack tests to determine compliance. *Id.* Pima County detailed how monthly and yearly NO<sub>x</sub> emissions would be calculated using conservative non-startup emission factors and a similarly conservative startup emission rate and how monitoring of the selective catalytic reduction devices would assure that these control devices function properly at all times. *Id.* at 10-13.

In response to the request for an unambiguous methodology in calculating NO<sub>x</sub> emissions, Pima County revised the Permit to include “a more detailed compliance determination methodology, expressed in the form of an equation.” *Id.* at 13. Pima County noted that “[t]his methodology clearly indicates the emission factors and monitored data that will be used when calculating total NO<sub>x</sub> emissions from the engines.” *Id.*; compare Proposed Permit at Part B § II.C.9 with Permit at Part B § II.C.9.

Finally, to address the concern with the manufacturer-supplied startup emission rates, Pima County clarified that it had meant to reference the manufacturer-specified, not manufacturer-guaranteed, startup emission rates, and it amended the Permit accordingly. RTC at 12; see Permit at Part B § II.C.9. Further, Pima County admitted it had not included the latest manufacturer data in the administrative record and explained that it had corrected this error by obtaining a waiver of the manufacturer’s confidentiality claim concerning this information and included the information on its website. RTC at 4, 12.

This appeal followed.

## V. ANALYSIS

In its Petition for Review, Sierra Club renews its challenge to Pima County’s determination that the Permit’s inclusion of a NO<sub>x</sub> emissions cap prevents the addition of the ten new Units to

Tucson Electric's Irvington facility from triggering PSD requirements for NO<sub>x</sub> emissions. The sole issue that Sierra Club raises on appeal is whether the NO<sub>x</sub> emissions cap is practically enforceable.

Specifically, Sierra Club argues (as it did in its comments) that biennial stack tests – used to develop each Unit's emission factor for calculating non-startup operating period emissions – are too infrequent to verify compliance with the NO<sub>x</sub> emissions cap. Petition for Review of Prevention of Significant Deterioration Permit 5, 7 (Sept. 7, 2018) (“Pet.”). Sierra Club further contends that reliance on biennial stack testing is not cured by the Permit's compliance monitoring requirements for the selective catalytic reduction devices or by Pima County's assertion that the emission factors for non-startup operating periods are required to be calculated in a conservative fashion. *Id.* at 12, 16 n.37. In a related vein, Sierra Club also asserts that Pima County's response to its comments was inadequate because Pima County did not “show that the permit relies on sufficient monitoring data to assure accurate and continuous monthly compliance with the NO<sub>x</sub> cap.” *Id.* at 12.

Mirroring its response to Sierra Club's comments, Pima County defends the practical enforceability of the NO<sub>x</sub> emissions cap in its Response to the Petition by emphasizing the interconnected relationship of the entire suite of the Permit's compliance monitoring requirements. Pima County's Response to Sierra Club's Petition for Review 15, 17-19 (Oct. 1, 2018) (“Pima County Resp.”); *see also* Response of Permittee Tucson Electric Power to Petition for Review 10-15 (Sept. 28, 2018) (“Tucson Electric Resp.”).<sup>7</sup> Pima County does not claim that biennial stack testing is sufficient to make the NO<sub>x</sub> emissions cap practically enforceable. Pima County Resp. at 16. Nor do we read Pima County's Response to Comments or its Response to the Petition as contending that biennial stack testing combined with monthly and yearly emission calculations based on that testing would *alone* provide adequate compliance monitoring requirements for the expansion of the Irvington facility. *Id.* Rather, Pima County argues that the NO<sub>x</sub> emissions cap is practically enforceable based on how the biennial stack testing and the monthly and yearly

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<sup>7</sup> Additionally, Tucson Electric contends that the Petition should be summarily dismissed because the question of whether a permit's compliance monitoring requirements are sufficient to ensure the practical enforceability of an emissions cap is not a “novel issue,” as the Board and the Administrator have upheld substantially similar challenges to the practical enforceability of an emissions cap in *In re Shell Offshore, Inc.*, 15 E.A.D. 536, 546-67 (EAB 2012), and *In re Pope & Talbot, Inc., Lumber Mill*, Pet. No. VIII-2006-04, 2007 EPA CAA Title V LEXIS 3, at \*12-13 (Adm'r Mar. 22, 2007). Tucson Electric Resp. at 7. We reject this argument. The Board's two main decisions involving a similar issue, *Shell Offshore* and *Peabody*, 12 E.A.D. at 34-47, as well as the Administrator's decision in *Pope & Talbot*, turned on a fact-based analysis of the permit in question, the nature of the facility, and the claims of the petitioner. They do not stand for the proposition that any permit using emission factors and monitoring of control devices to verify compliance with an emissions cap can be summarily affirmed as sufficient to ensure the practical enforceability of that cap.

emission calculations requirements are complemented by: (i) the requirements pertaining to the use, operation, and monitoring of the selective catalytic reduction devices; and (ii) the Permit's conservative methodology for calculating emission factors. *Id.* at 15-19; *see also* Tucson Electric Resp. at 11-15.

Given the Permit's compliance monitoring requirements and Pima County's justification for the practical enforceability of the NO<sub>x</sub> emissions cap, the issues before us are narrower than stated by Sierra Club. Sierra Club's objections to the adequacy of the biennial stack tests and stack test-derived emission factors are not responsive to the actual compliance monitoring requirements in this Permit – which include more than stack tests and stack-test derived emission factors – and Pima County's explanation of how compliance with the Permit's NO<sub>x</sub> emissions cap will be verified.<sup>8</sup> Thus, we need not determine whether biennial stack tests and use of emission factors based on those biennial stack tests to project monthly and yearly emissions – standing alone – would be sufficient to verify compliance with the NO<sub>x</sub> emissions cap. What remains at issue, however, are Sierra Club's challenges to: (i) Pima County's reliance on two aspects of the Permit's compliance monitoring requirements – monitoring of the selective catalytic reduction devices and the conservative methodology for calculating emission factors for non-startup operating periods – to ensure the NO<sub>x</sub> emissions cap is practically enforceable; and (ii) the adequacy of Pima County's response to Sierra Club's comments on the practical enforceability of the NO<sub>x</sub> emissions cap. We address these contentions in turn below.

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<sup>8</sup> At times, several of Sierra Club's statements in its Petition and its comments appear to question the adequacy of the regulatorily-established requirements for conducting performance (stack) tests in subpart JJJJ, 40 C.F.R. § 60.4244, to determine the compliance of internal combustion engines with NO<sub>x</sub> emission limitations. *See* Pet. at 11 (arguing that stack tests provide inadequate emissions compliance data due to the shortness of the tests and because they are conducted under ideal, prearranged conditions); Sierra Club Comments attach. at 21-22 & n.59 (same). To the extent Sierra Club intends this Petition to be a challenge to the requirements for tests in subpart JJJJ, 40 C.F.R. § 60.4244, that question is not properly before the Board because challenges to Clean Air Act regulations must be brought in the U.S. Court of Appeals, District of Columbia Circuit, within 60 days of promulgation. 42 U.S.C. § 7607(b). Moreover, the Board does not review EPA regulations as part of permit appeals. *See In re FutureGen Indus. All., Inc.*, 16 E.A.D. 717, 724 (EAB 2015) (the Board "is not the appropriate forum" for raising dissatisfaction with an EPA regulation); *In re Tondu Energy Co.*, 9 E.A.D. 710, 715-16 (EAB 2001) ("As we have repeatedly stated, permit appeals are not appropriate fora for challenging Agency regulations.").

A. *Sierra Club's Challenges to the Permit's Compliance Monitoring Requirements*

1. *Sierra Club Fails to Show Clear Error in Pima County's Reliance on Monitoring of the Selective Catalytic Reduction Devices to Ensure the NO<sub>x</sub> Emissions Cap is Practically Enforceable*

As discussed, the Permit's compliance monitoring requirements have two main components in addition to stack tests. The first component involves calculating monthly and yearly NO<sub>x</sub> emissions for each Unit during non-startup and startup operating periods. NO<sub>x</sub> emissions for non-startup periods are based on NO<sub>x</sub> emission factors derived from stack tests conducted every two years and for startup periods are based on manufacturer data. The second component is monitoring of the selective catalytic reduction devices.

In its Petition, Sierra Club contends that the monitoring requirements for the selective catalytic reduction devices do not cure the problem with the Permit's reliance on stack tests and stack test-derived emission factors because the monitoring does not produce data to be "included in the formula to establish the NO<sub>x</sub> emission factor." Pet. at 12. To the extent Sierra Club is challenging Pima County's conclusion that the monitoring requirements for the selective catalytic reduction devices are, in combination with the Permit's other monitoring requirements, adequate to ensure the NO<sub>x</sub> emissions cap is practically enforceable, this argument is raised for the first time in Sierra Club's Petition. As a result, it has not been preserved for Board review. The regulations governing Board review of permit appeals, require that the party seeking review establish "that each issue being raised in the petition was raised during the public comment period (including any public hearing)," or demonstrate that the issue was not "reasonably ascertainable" at that time. 40 C.F.R. § 124.13, 19(a)(4)(ii); *see, e.g., In re Seneca Res. Corp.*, 16 E.A.D. 411, 415 (EAD 2014). As the Board has previously explained, "[t]he effective, efficient and predictable administration of the permitting process demands that the permit issuer be given the opportunity to address potential problems with draft permits before they become final." *In re Encogen Cogeneration Facility*, 8 E.A.D. 244, 250 (EAB 1999). This is a particularly important requirement as to technical issues such as the adequacy of the compliance monitoring requirements presented here because "the locus of responsibility for important technical decisionmaking rests primarily with the permitting authority, which has the relevant specialized expertise and experience." *Peabody*, 12 E.A.D. at 33.

Although Sierra Club did challenge the practical enforceability of the NO<sub>x</sub> emissions cap in its comments, Sierra Club did not include as part of that challenge any critique of the role that the monitoring requirements for the selective catalytic reduction devices play. In fact, Sierra Club's comments never even mentioned the Permit's monitoring requirements for the selective catalytic reduction devices.

The section in Sierra Club's comments addressing practical enforceability of the NO<sub>x</sub> emissions cap contains four paragraphs: (1) two paragraphs describing in general terms the legal

requirement for practically enforceable emission limits; (2) one paragraph arguing that the Permit contained nothing more than a “[b]lanket” emission limitation, which was not practically enforceable; and (3) a final paragraph raising the frequency of stack tests and two other unrelated concerns with practical enforceability of the NO<sub>x</sub> emissions cap. Sierra Club Comments at 8-9. The two other concerns were described in that final paragraph as follows:

[Sierra Club’s] expert comments detail at length the enforceability issues with the proposed permit. Specifically, using stack tests once every two years to determine whether the [Units] are in compliance with the permit is woefully inadequate. *The permit does not contain an unambiguous methodology for demonstrating compliance with the annual NO<sub>x</sub> emission cap, and there is no support for the applicant’s “vendor-guaranteed” NO<sub>x</sub> rate that is used to demonstrate compliance.*

*Id.* at 9 (emphasis added) (footnote omitted). While Sierra Club’s expert report, which was attached to its comments, expanded on the concerns raised with stack tests, the methodology issue as to emission factors, and the manufacturer data on NO<sub>x</sub> emissions during startup, that report did not raise concerns with or otherwise discuss the Permit’s monitoring requirements for the selective catalytic reduction devices. *See Id.* attach. at 20-25.

Sierra Club cannot claim that Pima County did not provide notice of the role that monitoring of the selective catalytic reduction devices plays in verifying compliance with the NO<sub>x</sub> emissions cap. On its face, the Proposed Permit expressly stated that its requirements for monitoring of selective catalytic reduction devices are an element bearing on verifying compliance with the NO<sub>x</sub> emissions cap. Condition II.A.1.b of the Proposed Permit provided that “[c]ompliance with the NO<sub>x</sub> emission limit shall be demonstrated by performance [i.e. stack] tests as detailed in Condition II.D, monitoring as detailed in Condition II.B, and recordkeeping as detailed in Conditions II.C.” Proposed Permit at Part B § II.A.1.b. And Conditions II.B and II.C on monitoring and recordkeeping, as well as Condition II.A addressing emission limitations, contain multiple requirements pertaining to monitoring of the selective catalytic reduction devices in addition to requirements as to stack tests and calculation of monthly and yearly emissions. *See id.* at Part B § II.A.1 (setting the 170 tons per year NO<sub>x</sub> emission limit, requiring installation of selective catalytic reduction devices with continuous NO<sub>x</sub> process monitors, and imposing operating requirements on such devices); *id.* at Part B § II.B (requiring monitoring of fuel consumption and startups of the new Units and monitoring of operating parameters – ammonia injection rate and temperature – for selective catalytic reduction devices); *id.* at Part B § II.C (requiring records be kept of the monitoring of fuel consumption, of startups of the engines, and of the operating parameters of the selective catalytic reduction devices; and specifying that monthly and yearly NO<sub>x</sub> emissions must be calculated). Thus, the Permit’s reliance on monitoring of the selective catalytic reduction devices as a key part of determining compliance with the NO<sub>x</sub> emissions cap was reasonably ascertainable at the time of the comment period. Any challenge to the way in which the monitoring of the selective catalytic reduction devices functioned in verifying

compliance with the NO<sub>x</sub> emissions cap should have been presented to the permit issuer in the first instance.

In any event, even if Sierra Club's challenge to Pima County's reliance on the monitoring of the selective catalytic reduction devices to verify compliance with the NO<sub>x</sub> emissions cap was preserved for Board review, Sierra Club's specific challenge (the monitoring results are not "included in the formula to establish the 'NO<sub>x</sub> emission factor'") reflects a misunderstanding of how the Permit works. *See* Pet. at 12. In response to Sierra Club's general argument about the lack of practical enforceability of the NO<sub>x</sub> emissions cap through reliance on biennial stack tests, Pima County explained that it was not relying solely on stack tests to verify compliance. In addition to the required stack tests, Pima County pointed to the Permit's requirements to calculate monthly and yearly NO<sub>x</sub> emissions and the monitoring of the selective catalytic reduction devices. RTC at 10-13. As to the latter, Pima County explained that monitoring of the selective catalytic reduction devices would assure that the devices were functioning properly "at all times." *Id.* at 10. Pima County's intent was not to obtain data from this monitoring to adjust the emission factors. Instead, the data are required to make sure the selective catalytic reduction devices are working properly at all times. Thus, Sierra Club's argument in its Petition is not responsive to the role of monitoring of the selective catalytic reduction devices as described by Pima County.

2. *Sierra Club Fails to Show Clear Error in Pima County's Determination that the Non-Startup Emission Factors Are Conservative*

In a footnote to its Petition, Sierra Club also takes issue with Pima County's assertion that the methodology for calculating emission factors for non-startup operating periods is conservative. Pet. at 16 n.37. Under Board case law, a determination such as this one by Pima County "requires the sort of quintessential technical expertise the permit issuer possesses." *In re Shell Offshore, Inc.*, 15 E.A.D. 536, 558 (EAB 2012) (upholding a permit issuer's choice of emission factors in a challenge to the practical enforceability of an emissions cap limiting a facility's potential to emit). Sierra Club has not met the "particularly heavy burden" it bears on this technical question. *See Peabody*, 12 E.A.D. at 41.

Sierra Club disputes that calculating non-startup emission factors from the highest emission rate produced during required stack tests will, as Pima County claims, result in an emission factor that "over-calculat[es]" NO<sub>x</sub> emissions. Pet. at 16, n.37. Sierra Club maintains that there is no support in the record for this conclusion and no specific calculation of the quantitative extent of the over-calculation. We find no merit in Sierra Club's argument.<sup>9</sup>

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<sup>9</sup> Sierra Club's argument here also appears for the first time in its Petition. However, neither the Proposed Permit nor draft Technical Support Document explained that the conservative nature of the methodology for calculating non-startup emission factors was a consideration bearing on the practical

First, although Pima County does state at one point that the Permit's methodology for calculating emission factors based on stack tests will overstate actual emissions, the record as a whole suggests that Pima County did not design the procedure for establishing emission factors to overstate emissions by a specific quantitative amount but rather to guard against understating emissions. For example, Pima County introduced its emission factor methodology by explaining that "certain elements [of the methodology] \* \* \* will inherently produce a conservative calculation of emissions (i.e., a tendency to over-calculate, rather than under-calculate, engine NO<sub>x</sub> emissions)." RTC at 13. Nor does the record show that Pima County relied upon a specific quantitative degree of over-calculation in the emission factors to justify the practical enforceability of the NO<sub>x</sub> emissions cap.

Second, the Permit's description of the methodology for establishing an emission factor for non-startup operating periods provides sufficient record support for Pima County's description of emission factors as conservative (i.e., likely to overstate emissions). The emission factor methodology requires Tucson Electric to identify the maximum NO<sub>x</sub> emissions that will be emitted across the full range of load levels during non-startup operating periods. To do this, the Permit requires Tucson Electric to conduct each stack test across the full range of non-startup operating load levels. Permit at Part B § II.D.2.b. The methodology then requires that the emission factor be calculated using the maximum emission rate found in that test as the presumed emission rate whenever the engine is operating in non-startup conditions, irrespective of the load level at which it is operating. *Id.* at Part B § II.D.2.c. Given that the methodology requires that the highest measured emission rate from stack tests be used in the calculation of emission factors, it was reasonable for Pima County to conclude that this approach is a conservative one. Sierra Club's "bare assertion" to the contrary is not adequate to support the opposite conclusion. *See Shell Offshore*, 15 E.A.D. at 561 n.28 (the Board refuses to rely on a petitioner's "bare assertion" that stack tests supporting emission factors were too infrequent).<sup>10</sup>

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enforceability of the NO<sub>x</sub> emissions cap. That explanation appears for the first time in the Response to Comments, RTC at 13, and thus Sierra Club's challenge to that rationale may be raised on appeal. *See In re Pio Pico Energy Ctr.*, 16 E.A.D.56, 102 (EAB 2013) (allowing consideration of an issue not raised in a public comment "where the permit issuer's reasoning on an issue was not clearly ascertainable from the record at the draft permit stage").

<sup>10</sup> Additionally, Sierra Club ignores that the methodology for calculating emissions during startup operating periods is also designed to conservatively calculate emissions. NO<sub>x</sub> emissions differ significantly between "cold" or "warm" startups with cold startups generating approximately three times the NO<sub>x</sub> emissions as warm startups. Letter from Conrad Spencer, Tucson Elec. Power, to Rupesh Patel, Pima Cty. Dep't of Env'tl. Prot. 6 (Sept. 21, 2017) (A.R. 6) (finding that a cold startup emits 10.3 pounds of NO<sub>x</sub> compared to a warm startup that emits 3.5 pounds). Nonetheless, the methodology for calculating emissions during startup requires Tucson Electric to assume that all startups are cold startups. Permit at Part B II.C.9.

For all the above reasons, Sierra Club fails to substantiate its claim that the record does not support Pima County's determination that the emission factor methodology is likely to overstate, not understate, actual emissions.

### 3. *Conclusion*

Sierra Club failed to preserve for Board review its ability to challenge Pima County's reliance on monitoring of the selective catalytic reduction devices as a component of the Permit's compliance monitoring program. Sierra Club further did not substantiate its challenge to either the adequacy of that monitoring or the conservative emission factor methodology. Accordingly, the Board concludes that Sierra Club has not carried its burden to show that Pima County clearly erred in its determination that the Permit's NO<sub>x</sub> emissions cap is practically enforceable.

#### B. *Sierra Club Fails to Show Pima County Clearly Erred in Responding to Sierra Club's Comments*

Sierra Club asserts that Pima County's "responses to Sierra Club's comments were inadequate." Pet. at 12. In support of that contention, Sierra Club argues that Pima County did not "otherwise show that the permit relies on sufficient monitoring data to assure accurate and continuous monthly compliance with the NO<sub>x</sub> cap," and "did nothing to address the fact that the NO<sub>x</sub> cap remains practically unenforceable." *Id.*

The adequacy of a permit issuer's response to comments must be evaluated in the context of the content, specificity, and precision of the submitted comments. The Board has held that "parties submitting comments on draft permits must present their concerns with sufficient precision and specificity to apprise the permitting authorities of the significant issues so that the permit issuer can make timely and appropriate adjustments to its permit determination, or, if no adjustments are made, can explain why none are necessary in its response to comments." *In re Pio Pico Energy Ctr.*, 16 E.A.D. 56, 85 (EAB 2013). Where a comment lacks specificity and precision, the permit issuer's obligation to respond is similarly tempered. It is well settled that "permit issuers need not guess the meaning behind imprecise comments and are under no obligation to speculate about possible concerns that were not articulated in the comments." *In re Scituate Wastewater Treatment Plant*, 12 E.A.D. 708, 723 (EAB 2006) (quotations and citations omitted).

Sierra Club's comments on practical enforceability of the NO<sub>x</sub> emissions cap focused on the adequacy of biennial stack testing as a form of compliance monitoring and were very general in nature.<sup>11</sup> In its comments, Sierra Club merely stated that "using stack tests once every two years

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<sup>11</sup> As described in Part IV.B, Sierra Club also argued in its comments that the NO<sub>x</sub> emissions cap was not practically enforceable because the Proposed Permit lacked a clear statement of the methodology for calculating NO<sub>x</sub> emissions from emission factors and because Pima County had not included in the

to determine whether the [Units] are in compliance with the permit is woefully inadequate.” Sierra Club Comments at 9. The expert report attached to Sierra Club’s comments added some detail but not much more. *See id.* attach. at 20-25. The report explained that infrequent stack tests may not be representative of “routine operations” and noted that “EPA itself has stated that annual stack tests are not sufficient to assure compliance with emissions limits.” *Id.* attach. at 21-22. The information cited to support this assertion showed that EPA was concerned that annual stack tests may not be adequate to demonstrate compliance throughout the remainder of the year, particularly where the proper functioning of pollution control technology is necessary for the source to meet applicable requirements. *Id.* attach. at 21 n.59. Instead of stack testing, Sierra Club’s expert report recommended that the Permit require Continuous Emissions Monitors. *Id.* attach. at 23.

Pima County responded to these comments by first acknowledging that annual stack tests “are insufficient to assure compliance with emission limits.” RTC at 10. Pima County then provided a detailed explanation of what other requirements it had included in the Permit to assure sufficient compliance monitoring during all periods of operation. That lengthy explanation touched on the requirements for use of stack test-derived emission factors and manufacturer emission rates to calculate monthly and yearly NO<sub>x</sub> emissions, the conservative nature of these emission factors and emission rates, and the required monitoring of the selective catalytic reduction devices. *Id.* at 10-13. This level of detail was more than an adequate response to Sierra Club’s comment that the Permit’s compliance monitoring was “woefully inadequate” and the expert report explanation that infrequent stack tests may not be representative of routine operations. As the Board has previously held, if “an issue is raised only generically during the public comment period, the permit issuer is not required to provide more than a generic justification for its decision, and the petitioners cannot raise more specific concerns for the first time on appeal.” *Encogen*, 8 E.A.D. at 251 n.12; *see In re Knauf Fiber Glass, GmbH*, 8 E.A.D. 121, 146-47 (EAB 1999) (where commenter submitted comments challenging representativeness of air quality data without supplying reasons, permit issuer’s response that the data is conservative was adequate given the generic nature of the comment).

To the extent Sierra Club now raises concerns about any of the specifics of that response, we have addressed those claims in Part V.A, above. Sierra Club provides no further detail to support its claim of an inadequate response to comments. In fact, a substantial portion of Sierra Club’s Petition is composed of block quotes from Pima County’s explanation in the Response to Comments of its basis for concluding that the NO<sub>x</sub> emissions cap is practically enforceable. *See*

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record the manufacturer data on startup emission rates that are required for calculating emissions during startup operating periods. Sierra Club Comments at 2, 9. In response, Pima County amended the Permit to include an equation for calculating NO<sub>x</sub> emissions and included in the record the manufacturer data on startup emission rates. RTC at 4, 13. Sierra Club has not suggested these comment responses were inadequate.

Pet. at 13-16. But as the Board's regulations make clear, when a permit issuer has addressed a petitioner's comments in the record, the petitioner must do more than insist that the permit issuer's response is incorrect, the petitioner "must \* \* \* explain why the Regional Administrator's response to the comment was clearly erroneous or otherwise warrants review." 40 C.F.R. § 124.19(a)(4)(ii); *see In re Windfall Oil & Gas, Inc.*, 16 E.A.D. 769, 797-98 (EAB 2015) ("Simply disagreeing with the Region and repeating concerns [raised in public comments] in a petition for review \* \* \* does not satisfy the regulatory requirement that petitioners confront the permit issuer's responses and explain why the responses were clearly erroneous."). Accordingly, the Board concludes that Sierra Club has not shown Pima County clearly erred in the manner in which it responded to Sierra Club's comments.

## VI. CONCLUSION

For the reasons stated above, the Board denies Sierra Club's Petition for Review.

So ordered.

**CERTIFICATE OF SERVICE**

I certify that copies of the foregoing **ORDER DENYING REVIEW** in the matter of Tucson Electric Power, PSD Appeal No. 18-02, were sent to the following persons by email:

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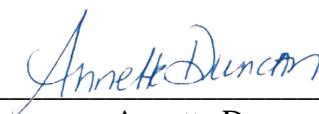
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Dated: December 3, 2018



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