BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF	)	PETITION NO. VIII-2022-2
	)	
PACIFICORP ENERGY	)	ORDER RESPONDING TO
HUNTER POWER PLANT	)	PETITION REQUESTING
EMERY COUNTY, UTAH	)	OBJECTION TO THE ISSUANCE OF
	)	TITLE V OPERATING PERMIT
PERMIT NO. 1500101004	)	
	)	
ISSUED BY THE UTAH DEPARTMENT OF	)	
ENVIRONMENTAL QUALITY,	)	
DIVISION OF AIR QUALITY	)	

ORDER DENYING A PETITION FOR OBJECTION TO PERMIT

I. INTRODUCTION

The U.S. Environmental Protection Agency (EPA) received a petition dated January 14, 2022 (the Petition) from Sierra Club (the Petitioner), pursuant to section 505(b)(2) of the Clean Air Act (CAA or Act), 42 United States Code (U.S.C.) § 7661d(b)(2). The Petition requests that the EPA Administrator object to the operating permit No. 1500101004 (the Permit) issued by the Utah Department of Environmental Quality, Division of Air Quality (UDAQ) to PacifiCorp Energy for the Hunter Power Plant (PacifiCorp-Hunter or the facility) in Castle Dale, Emery County, Utah. The operating permit was issued pursuant to title V of the CAA, 42 U.S.C. §§ 7661–7661f, and Utah Administrative Code (UAC)[1] R307-415. *See also* 40 Code of Federal Regulations (C.F.R.) part 70 (title V implementing regulations). This type of operating permit is also referred to as a title V permit or part 70 permit.

Based on a review of the Petition and other relevant materials (including the Permit, the permit record, and relevant statutory and regulatory authorities), EPA denies the Petition requesting that the EPA Administrator object to the Permit for the reasons explained in Section IV of this Order.

II. STATUTORY AND REGULATORY FRAMEWORK

A. Title V Permits

Section 502(d)(1) of the CAA, 42 U.S.C. § 766la(d)(1), requires each state to develop and submit to EPA an operating permit program to meet the requirements of title V of the CAA and EPA's implementing regulations at 40 C.F.R. part 70. The state of Utah submitted a title V program governing the issuance of operating permits on April 14, 1994. EPA granted full approval of

[1] The Petition refers to the relevant provisions of the UAC as the Utah Air Conservation Regulations or Utah Air Conservation Rules (UACR). Both the UAC and UACR section numbers and content are identical.

Utah's title V operating permit program in 1995. 60 Fed. Reg. 30192 (June 8, 1995). This program, which became effective on July 10, 1995, is currently codified in UAC R307-415.

All major stationary sources of air pollution and certain other sources are required to apply for and operate in accordance with title V operating permits that include emission limitations and other conditions as necessary to assure compliance with applicable requirements of the CAA, including the requirements of the applicable implementation plan. 42 U.S.C. §§ 7661a(a), 7661b, 7661c(a). The title V operating permit program generally does not impose new substantive air quality control requirements, but does require permits to contain adequate monitoring, recordkeeping, reporting, and other requirements to assure compliance with applicable requirements. 57 Fed. Reg. 32250, 32251 (July 21, 1992); *see* 42 U.S.C. § 7661c(c). One purpose of the title V program is to "enable the source, States, EPA, and the public to understand better the requirements to which the source is subject, and whether the source is meeting those requirements." 57 Fed. Reg. at 32251. Thus, the title V operating permit program is a vehicle for compiling the air quality control requirements as they apply to the source's emission units and for providing adequate monitoring, recordkeeping, and reporting to assure compliance with such requirements.

B. Review of Issues in a Petition

State and local permitting authorities issue title V permits pursuant to their EPA-approved title V programs. Under CAA § 505(a) and the relevant implementing regulations found at 40 C.F.R. § 70.8(a), states are required to submit each proposed title V operating permit to EPA for review. 42 U.S.C. § 7661d(a). Upon receipt of a proposed permit, EPA has 45 days to object to final issuance of the proposed permit if EPA determines that the proposed permit is not in compliance with applicable requirements under the Act. 42 U.S.C. § 7661d(b)(1); *see also* 40 C.F.R. § 70.8(c). If EPA does not object to a permit on its own initiative, any person may, within 60 days of the expiration of EPA's 45-day review period, petition the Administrator to object to the permit. 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(d).

Each petition must identify the proposed permit on which the petition is based and identify the petition claims. 40 C.F.R. § 70.12(a). Any issue raised in the petition as grounds for an objection must be based on a claim that the permit, permit record, or permit process is not in compliance with applicable requirements or requirements under part 70. 40 C.F.R. § 70.12(a)(2). Any arguments or claims the petitioner wishes EPA to consider in support of each issue raised must generally be contained within the body of the petition.[2] *Id.*

The petition shall be based only on objections to the permit that were raised with reasonable specificity during the public comment period provided by the permitting authority (unless the petitioner demonstrates in the petition to the Administrator that it was impracticable to raise such objections within such period or unless the grounds for such objection arose after such period). 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(d); *see also* 40 C.F.R. § 70.12(a)(2)(v).

[2] If reference is made to an attached document, the body of the petition must provide a specific citation to the referenced information, along with a description of how that information supports the claim. In determining whether to object, the Administrator will not consider arguments, assertions, claims, or other information incorporated into the petition by reference. *Id.*

In response to such a petition, the Act requires the Administrator to issue an objection if a petitioner demonstrates that a permit is not in compliance with the requirements of the Act. 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(c)(1).[3] Under section 505(b)(2) of the Act, the burden is on the petitioner to make the required demonstration to EPA.[4] The petitioner's demonstration burden is a critical component of CAA § 505(b)(2). As courts have recognized, CAA § 505(b)(2) contains both a "discretionary component," under which the Administrator determines whether a petition demonstrates that a permit is not in compliance with the requirements of the Act, and a nondiscretionary duty on the Administrator's part to object where such a demonstration is made. *Sierra Club v. Johnson*, 541 F.3d at 1265–66 ("[I]t is undeniable [that CAA § 505(b)(2)] also contains a discretionary component: it requires the Administrator to make a judgment of whether a petition demonstrates a permit does not comply with clean air requirements."); *NYPIRG*, 321 F.3d at 333. Courts have also made clear that the Administrator is only obligated to grant a petition to object under CAA § 505(b)(2) if the Administrator determines that the petitioner has demonstrated that the permit is not in compliance with requirements of the Act. *Citizens Against Ruining the Environment*, 535 F.3d at 677 (stating that § 505(b)(2) "clearly obligates the Administrator to (1) determine whether the petition demonstrates noncompliance and (2) object *if* such a demonstration is made" (emphasis added)).[5] When courts have reviewed EPA's interpretation of the ambiguous term "demonstrates" and its determination as to whether the demonstration has been made, they have applied a deferential standard of review. *See, e.g.*, *MacClarence*, 596 F.3d at 1130–31.[6] Certain aspects of the petitioner's demonstration burden are discussed in the following paragraph. A more detailed discussion can be found in the preamble to EPA's proposed petitions rule. *See* 81 Fed. Reg. 57822, 57829–31 (August 24, 2016); *see also In the Matter of Consolidated Environmental Management, Inc., Nucor Steel Louisiana*, Order on Petition Nos. VI-2011-06 and VI-2012-07 at 4–7 (June 19, 2013) (*Nucor II Order*).

EPA considers a number of criteria in determining whether a petitioner has demonstrated noncompliance with the Act. *See generally Nucor II Order* at 7. For example, one such criterion is whether a petitioner has provided the relevant analyses and citations to support its claims. For each claim, the petitioner must identify (1) the specific grounds for an objection, citing to a specific permit term or condition where applicable; (2) the applicable requirement as defined in 40 C.F.R. § 70.2, or requirement under part 70, that is not met; and (3) an explanation of how the term or condition in the permit, or relevant portion of the permit record or permit process, is not adequate to comply with the corresponding applicable requirement or requirement under part 70. 40 C.F.R. § 70.12(a)(2)(i)–(iii). If a petitioner does not identify these elements, EPA is left to work out the basis for the petitioner's objection, contrary to Congress's express allocation of the burden of demonstration to the petitioner in CAA § 505(b)(2). *See MacClarence*, 596 F.3d at 1131 ("[T]he Administrator's requirement that [a title V petitioner] support his allegations with

[3] *See also New York Public Interest Research Group, Inc. v. Whitman*, 321 F.3d 316, 333 n.11 (2d Cir. 2003) (*NYPIRG*).
[4] *WildEarth Guardians v. EPA*, 728 F.3d 1075, 1081–82 (10th Cir. 2013); *MacClarence v. EPA*, 596 F.3d 1123, 1130–33 (9th Cir. 2010); *Sierra Club v. EPA*, 557 F.3d 401, 405–07 (6th Cir. 2009); *Sierra Club v. Johnson*, 541 F.3d 1257, 1266–67 (11th Cir. 2008); *Citizens Against Ruining the Environment v. EPA*, 535 F.3d 670, 677–78 (7th Cir. 2008); *cf. NYPIRG*, 321 F.3d at 333 n.11.
[5] *See also Sierra Club v. Johnson*, 541 F.3d at 1265 ("Congress's use of the word 'shall' . . . plainly mandates an objection *whenever* a petitioner demonstrates noncompliance." (emphasis added)).
[6] *See also Sierra Club v. Johnson*, 541 F.3d at 1265–66; *Citizens Against Ruining the Environment*, 535 F.3d at 678.

legal reasoning, evidence, and references is reasonable and persuasive.").[7] Relatedly, EPA has pointed out in numerous previous orders that general assertions or allegations did not meet the demonstration standard. *See, e.g.*, *In the Matter of Luminant Generation Co., Sandow 5 Generating Plant*, Order on Petition Number VI-2011-05 at 9 (January 15, 2013).[8] Also, the failure to address a key element of a particular issue presents further grounds for EPA to determine that a petitioner has not demonstrated a flaw in the permit. *See, e.g., In the Matter of EME Homer City Generation LP and First Energy Generation Corp.*, Order on Petition Nos. III-2012-06, III-2012-07, and III-2013-02 at 48 (July 30, 2014).[9]

Another factor EPA examines is whether the petitioner has addressed the state or local permitting authority's decision and reasoning contained in the permit record. 81 Fed. Reg. at 57832; *see Voigt v. EPA*, No. 21-1970, slip op. at 10–11 (8th Cir. August 31, 2022); *MacClarence*, 596 F.3d at 1132–33.[10] This includes a requirement that petitioners address the permitting authority's final decision and final reasoning (including the state's response to comments) where these documents were available during the timeframe for filing the petition. 40 C.F.R. § 70.12(a)(2)(vi). Specifically, the petition must identify where the permitting authority responded to the public comment and explain how the permitting authority's response is inadequate to address (or does not address) the issue raised in the public comment. *Id*.

The information that EPA considers in determining whether to grant or deny a petition submitted under 40 C.F.R. § 70.8(d) generally includes, but is not limited to, the administrative record for the proposed permit and the petition, including attachments to the petition. 40 C.F.R. § 70.13. The administrative record for a particular proposed permit includes the draft and proposed permits; any permit applications that relate to the draft or proposed permits; the statement required by § 70.7(a)(5) (sometimes referred to as the 'statement of basis'); any comments the permitting authority received during the public participation process on the draft permit; the permitting authority's written responses to comments, including responses to all significant comments raised during the public participation process on the draft permit; and all materials available to the permitting authority that are relevant to the permitting decision and that the permitting authority made available to the public according to § 70.7(h)(2). *Id.* If a final permit

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[7] *See also In the Matter of Murphy Oil USA, Inc.*, Order on Petition No. VI-2011-02 at 12 (September 21, 2011) (denying a title V petition claim where petitioners did not cite any specific applicable requirement that lacked required monitoring); *In the Matter of Portland Generating Station*, Order on Petition at 7 (June 20, 2007) (*Portland Generating Station Order*).

[8] *See also Portland Generating Station Order* at 7 ("[C]onclusory statements alone are insufficient to establish the applicability of [an applicable requirement]."); *In the Matter of BP Exploration (Alaska) Inc., Gathering Center #1*, Order on Petition Number VII-2004-02 at 8 (April 20, 2007); *In the Matter of Georgia Power Company*, Order on Petitions at 9–13 (January 8, 2007) (*Georgia Power Plants II Order*); *In the Matter of Chevron Products Co., Richmond, Calif. Facility*, Order on Petition No. IX-2004–10 at 12, 24 (March 15, 2005).

[9] *See also In the Matter of Hu Honua Bioenergy*, Order on Petition No. IX-2011-1 at 19–20 (February 7, 2014); *Georgia Power Plants II Order* at 10.

[10] *See also, e.g., Finger Lakes Zero Waste Coalition v. EPA*, 734 Fed. App'x *11, *15 (2d Cir. 2018) (summary order); *In the Matter of Noranda Alumina, LLC*, Order on Petition No. VI-2011-04 at 20–21 (December 14, 2012) (denying a title V petition issue where petitioners did not respond to the state's explanation in response to comments or explain why the state erred or why the permit was deficient); *In the Matter of Kentucky Syngas, LLC*, Order on Petition No. IV-2010-9 at 41 (June 22, 2012) (denying a title V petition issue where petitioners did not acknowledge or reply to the state's response to comments or provide a particularized rationale for why the state erred or the permit was deficient); *Georgia Power Plants II Order* at 9–13 (denying a title V petition issue where petitioners did not address a potential defense that the state had pointed out in the response to comments).

and a statement of basis for the final permit are available during the agency's review of a petition on a proposed permit, those documents may also be considered when determining whether to grant or deny the petition. *Id*.

C. New Source Review

The major New Source Review (NSR) program is comprised of two core types of preconstruction permit requirements for major stationary sources. Part C of title I of the CAA establishes the Prevention of Significant Deterioration (PSD) program, which applies to new major stationary sources and major modifications of existing major stationary sources for pollutants for which an area is designated as attainment or unclassifiable for the national ambient air quality standards (NAAQS) and for other pollutants regulated under the CAA. 42 U.S.C. §§ 7470–7479. Part D of title I of the Act establishes the major nonattainment NSR (NNSR) program, which applies to new major stationary sources and major modifications of existing major stationary sources for those NAAQS pollutants for which an area is designated as nonattainment. 42 U.S.C. §§ 7501–7515. EPA has two largely identical sets of regulations implementing the PSD program. One set, found at 40 C.F.R. § 51.166, contains the requirements that state PSD programs must meet to be approved as part of a state implementation plan (SIP). The other set of regulations, found at 40 C.F.R. § 52.21, contains EPA's federal PSD program, which applies in areas without a SIP-approved PSD program. EPA's regulations specifying requirements for state NNSR programs are contained in 40 C.F.R. § 51.165.

While parts C and D of title I of the Act address the major NSR program for major sources, section 110(a)(2)(C) addresses the permitting program for new and modified minor sources and for minor modifications to major sources. EPA commonly refers to the latter program as the "minor NSR" program. States must also develop minor NSR programs to, along with the major source programs, attain and maintain the NAAQS. The federal requirements for state minor NSR programs are outlined in 40 C.F.R. §§ 51.160 through 51.164. These federal requirements for minor NSR programs are less prescriptive than those for major sources, and, as a result, there is a larger variation of requirements in EPA-approved state minor NSR programs than in major source programs.

In Utah, both major and minor NSR permits issued by UDAQ are termed Approval Orders. An application to obtain an Approval Order is referred to as a Notice of Intent (NOI). EPA approved Utah's PSD program as part of its SIP. *See* 47 Fed. Reg. 6472 (February 12, 1982) (initial approval of Utah PSD program); 40 C.F.R. § 52.2320(c) (listing EPA-approved PSD provisions contained in UAC R307). Utah's PSD provisions are currently contained in UAC R307-101-1, R307-101-2, R307-110-09, R307-401, and R307-405. Utah's EPA-approved minor NSR SIP rules are codified at UAC R307-101-1, R307-101-2, R307-110-3, and R307-401.[11]

Note that the SIP regulations relevant to the Petition are significantly different from the current SIP regulations that UDAQ implements (and the modern EPA regulations upon which the current Utah SIP is based).The Utah SIP regulation applicable during the time period relevant to the Petition is UAC R307-1-1 (1995); this regulation was based on EPA's 1980 PSD

[11] Many of Utah's PSD and minor NSR regulations were initially codified in different numbered sections of the UAC, which were subsequently re-numbered.

regulations.[12] This section of the SIP contains various definitions related to PSD applicability; specific definitions are discussed in EPA's response that follows.

III. BACKGROUND

A. The PacifiCorp-Hunter Facility

PacifiCorp Energy (PacifiCorp) is the majority owner and sole operator of the Hunter power plant, located in Castle Dale, Emery County, Utah. The Hunter plant is comprised of three coal-fired electric utility steam generating units (designated as Units 1, 2, and 3), with a total gross capacity of 1,455 megawatts (MW). Units 1 and 2 are rated at 480 MW each and feature dry-bottom, tangentially fired boilers. Unit 3 is rated at 495 MW and features a dry-bottom, wall-fired boiler. All three units are currently equipped with low nitrogen oxide (NO_x) burners/overfire air for NO_x control, a wet flue gas desulfurization system (or scrubber) with no bypass for sulfur dioxide (SO_2) control, and a baghouse for particulate matter (PM) control. The facility is a major stationary source of air pollution under title V, and is subject to various other CAA requirements, including New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), SIP requirements, and NSR permitting requirements.

EPA conducted an analysis using EPA's EJScreen[13] to assess key demographic and environmental indicators within a five-kilometer radius of the Hunter plant. This analysis showed a total population of approximately 685 residents within a five-kilometer radius of the facility, of which approximately two percent are people of color and 38 percent are low income. In addition, EPA reviewed the EJScreen Environmental Justice Indices, which combine certain demographic indicators with 12 environmental indicators. Five of the 12 Environmental Justice Indices in this five-kilometer area exceed the 70th percentile when compared to the rest of the State of Utah.

B. Permitting History

Prior to receiving a title V permit, the PacifiCorp-Hunter facility has received various NSR permits authorizing construction. As relevant to the Petition, on August 18, 1997, PacifiCorp applied for a preconstruction permit authorizing various physical changes to Units 1, 2, and 3 (the 1997 Notice of Intent or 1997 NOI). Petition Ex. 9. On November 20, 1997, UDAQ issued a minor NSR permit authorizing these changes, followed by a slightly revised minor NSR permit

[12] This Order is based on the 1995 version of the UAC rules as reflected in Petition Ex. 5. The Petitioner points out that UDAQ has not disputed that Petition Ex. 5 reflects the applicable SIP regulations. *See* Petition at 7 n.4.
[13] EJScreen is an environmental justice mapping and screening tool that provides EPA with a nationally consistent dataset and approach for combining environmental and demographic indicators. *See https://www.epa.gov/ejscreen/what-ejscreen*.

issued on December 18, 1997 (the 1997 Approval Order). Petition Ex. 10, 11. UDAQ explained its decision to issue a minor NSR permit (instead of a PSD permit) as follows:

> A number of projects, which may increase the capacity or capacity utilization of the three units, have been planned or completed. The net effect of these projects could be an increase in emissions, hence the newly requested limits to insure an emission decrease. After imposing the new limits, the total emissions from the consolidated source (all three Hunter units) will decrease as follows: PM_{10} -112, NO_x -8551, SO_2 -689, CO -1063, VOC -632 (all numbers are in tons per year).

1997 NOI at 1.

UDAQ subsequently issued an initial title V permit to the PacifiCorp-Hunter facility in 1998. Following various title V permit actions, including several permit amendments and modifications and a renewal permit action in 2005 that was not completed, UDAQ released a draft renewal title V permit on September 15, 2015. After a public comment period that closed on November 13, 2015, UDAQ submitted a proposed title V permit, including a memorandum containing UDAQ's Response to Public Comments, to EPA on January 11, 2016. EPA's 45-day review period concluded on February 25, 2016. EPA did not object to the proposed permit. UDAQ finalized the 2016 title V Permit (No. 1500101002) on March 3, 2016. On April 11, 2016, the Petitioner filed a title V petition challenging the 2016 Permit (the 2016 Petition).

EPA denied the 2016 Petition. *In the Matter of PacifiCorp Energy, Hunter Power Plant*, Order on Petition No. VIII-2016-4 (October 16, 2017) (*PacifiCorp-Hunter I Order*). The Petitioner sought judicial review of a portion of the *PacifiCorp-Hunter I Order*—specifically, EPA's response to Claim A of the 2016 Petition. EPA's response to Claim A interpreted the CAA and EPA's title V regulations as not requiring a permitting authority (including EPA) to examine the merits of certain title I (NSR) permitting decisions in the title V permitting context under specific circumstances. Accordingly, EPA declined to examine the merits of the Petitioner's claim that a PSD permit (instead of a minor NSR permit) was required for certain changes that occurred at Hunter between 1997 and 1999, and claim that the Hunter title V permit therefore lacked applicable PSD permitting requirements. On July 2, 2020, the United States Court of Appeals for the Tenth Circuit issued a decision vacating and remanding EPA's *PacifiCorp-Hunter I Order*. *Sierra Club v. EPA*, 964 F.3d 882 (10th Cir. 2020). The court held that the plain language of EPA's title V regulations at 40 C.F.R. § 70.2 requires compliance with all requirements of a state's implementation plan, and Utah's SIP broadly requires compliance with major NSR requirements, including PSD requirements. *Id.* at 885–86, 891–96. On October 16, 2020, the Tenth Circuit denied petitions for rehearing of the July 2, 2020 opinion, filed by the state of Utah (on behalf of UDAQ) and by PacifiCorp. On October 27, 2020, the Tenth Circuit decision became final and effective when the court issued its mandate.

On April 17, 2020, during litigation concerning the 2016 Permit, PacifiCorp timely filed with UDAQ an application to renew its title V permit for the Hunter Power Plant. On June 3, 2020, UDAQ published notice of this permit renewal, subject to a public comment period that ran until July 3, 2020. Utah received no public comments. On July 7, 2020, Utah transmitted a proposed title V permit to EPA for review. EPA's 45-day review period concluded on August 21, 2020,

during which time EPA did not object to the proposed permit. UDAQ finalized the 2020 Permit (No. 1500101004) on September 4, 2020. On October 20, 2020, the Petitioner filed a petition challenging the 2020 Permit (the 2020 Petition).

On January 13, 2021, EPA issued a second order responding to both the 2016 Petition (on remand from the Tenth Circuit) as well as the 2020 Petition. *In the Matter of PacifiCorp Energy, Hunter Power Plant*, Order on Petition Nos. VIII-2016-4 & VIII-2020-10 (January 13, 2021) (*PacifiCorp-Hunter II Order*).[14] The *PacifiCorp-Hunter II Order* denied both petitions under CAA § 505(b)(2), but nonetheless directed UDAQ to reopen the 2020 Permit for cause under CAA § 505(e).

As EPA explained:

> In issuing the 2016 Permit to PacifiCorp, UDAQ expressly declined to consider Sierra Club's 2015 public comments asserting that the Hunter title V permit should include additional PSD-related applicable requirements associated with the facility's 1997–1999 modifications. UDAQ followed the same course in issuing the 2020 Permit, which similarly contains no PSD-related applicable requirements associated with those projects, nor any record explaining UDAQ's decision that such requirements were not applicable. In its 2017 *PacifiCorp-Hunter Order*, the EPA agreed with and supported UDAQ's decision to not evaluate the merits of these PSD-related issues in the title V permitting context. The EPA reasoned that Utah's issuance of a minor NSR permit to PacifiCorp established the NSR-related "applicable requirements" relevant to those 1997–1999 projects, such that further review of NSR-related "applicable requirements" was not warranted in the title V context. *PacifiCorp-Hunter Order* at 8–21. However, the Tenth Circuit rejected the EPA's reasoning as inconsistent with the EPA's regulations. *Sierra Club*, 964 F.3d at 897. According to the Tenth Circuit, the EPA's regulations require that title V permits ensure compliance with all "applicable requirements," which the court interpreted to include all requirements in the Utah SIP, including those related to major NSR. *Id*. at 885–86, 890–91. The EPA interprets the Tenth Circuit's decision to mean that permitting authorities within the Tenth Circuit's jurisdiction must consider—and address public comments relating to—whether there are major NSR requirements, as opposed to solely minor NSR requirements, that are the "applicable requirements" in the course of issuing title V permits.
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> In light of the Tenth Circuit's decision, the EPA finds that UDAQ erred in declining to consider Sierra Club's PSD-related comments to be relevant to the PacifiCorp-Hunter title V permit, and more generally in declining to evaluate whether PSD-related applicable requirements should be included in the 2016 and 2020 Permits.

[14] The 2016 Petition contained five separate claims: Claims A, B, C, D, and E. EPA's 2017 *PacifiCorp-Hunter I Order* denied all five claims. The Petitioner's challenge to that Order, and the Tenth Circuit's subsequent decision, only concerned Claim A (the Petitioner waived its right to challenge Claims B through E). Therefore, EPA's *PacifiCorp-Hunter II Order* only addressed Claim A from the 2016 Petition, superseding the *PacifiCorp-Hunter I Order* with respect to that claim. The 2021 *PacifiCorp-Hunter II Order* also indicated that, to the extent that the Tenth Circuit's decision also invalidated portions of EPA's response to Claim E of the 2016 Petition, the *PacifiCorp-Hunter II Order* also responded to that portion of Claim E. *PacifiCorp Hunter II Order* at 7 n.11.

> Because the record supporting the 2020 Permit—like that of the 2016 Permit—contains no justification for UDAQ's decision to omit PSD-related applicable requirements for the 1997–1999 projects, the EPA cannot determine whether the 2020 Permit ensures compliance with all applicable requirements. Therefore, the EPA finds that cause exists to reopen the 2020 Permit. 40 C.F.R. §§ 70.7(g), 70.7(f)(1)(iii)–(iv).

PacifiCorp-Hunter II Order at 15 (footnotes and some citations omitted). EPA then directed UDAQ as follows:

> The EPA directs UDAQ to reopen the 2020 Permit to evaluate whether the 1997–1999 projects at the PacifiCorp-Hunter facility should have triggered PSD under the EPA-approved SIP rules applicable at that time, and, consequently, to determine whether any PSD-related "applicable requirements" must be included in the facility title V permit. In so doing, UDAQ must consider and address the arguments presented in Sierra Club's 2015 comments (summarized above with respect to the 2016 and 2020 Petitions). If UDAQ determines that the projects at issue did not trigger PSD, it must reopen and revise the permit record associated with the 2020 Permit to document the basis for its decision, in consideration of Sierra Club's 2015 public comments.

Id. at 16.

In response, UDAQ initiated a proceeding to reopen the 2020 Permit and permit record. On May 12, 2021, UDAQ released a draft permit for public review and comment (the Draft Permit). The Draft Permit itself was unchanged from the 2020 Permit, but it included an Appendix (the Draft Permit Appendix) containing UDAQ's response to the *PacifiCorp-Hunter II Order*. Specifically, the Draft Permit Appendix contains a supplemental justification by UDAQ affirming its original determination that the 1997–1999 changes were not subject to PSD, including a response to the Petitioner's public comments submitted in 2015. The public comment period on the Draft Permit ended June 11, 2021, during which time the Petitioner submitted additional comments addressing UDAQ's supplemental (2021) justification for its original (1997) PSD non-applicability decision. On October 1, 2021, UDAQ transmitted a proposed permit (the 2021 Proposed Permit), along with its response to the most recent public comments (the RTC), to EPA for the Agency's 45-day review. EPA did not object during this period. On November 19, 2021, UDAQ finalized the Permit.[15] On January 14, 2022, the Petitioner filed the Petition. This Order responds to the January 14, 2022 Petition.

C. Timeliness of Petition

Pursuant to the CAA, if EPA does not object to a proposed permit during its 45-day review period, any person may petition the Administrator within 60 days after the expiration of the 45-day review period to object. 42 U.S.C § 7661d(b)(2). EPA's 45-day review period for the 2021 Proposed Permit expired on November 15, 2021. Thus, any petition seeking EPA's objection to

[15] The 2021 final permit also includes an Appendix, mirroring the Draft Permit Appendix.

the 2021 Proposed Permit was due on or before January 14, 2022. The Petition was dated and received January 14, 2022, and, therefore, EPA finds that the Petitioner timely filed the Petition.

IV. DETERMINATION ON CLAIM RAISED BY THE PETITIONER

The Petitioner Claims that "Because the Hunter Permit Fails to Include PSD Requirements that Became Applicable when PacifiCorp Constructed Major Modifications Between 1997 and 1999, EPA Must Object."

Petitioner's Claim: The 96-page Petition contains a single overarching claim: "The 2021 Hunter title V permit is deficient because it fails to include the applicable requirements of the PSD permitting regulations in the Utah SIP for the 1997–1999 Hunter Projects." Petition at 93.[16]

The Petitioner asserts that UDAQ's 1997 PSD non-applicability decision (as affirmed in the present title V permit action) resulted in flaws in the current title V permit. First, the Petitioner claims that the Permit lacks PSD-related "applicable requirements" of the Utah SIP for the 1997–1999 changes. *Id*. at 1, 4–6, 45. Specifically, the Petitioner argues the Permit lacks emission limits that reflect the "best available control technology" (BACT) for NO_x, SO_2, and PM at Hunter Units 1, 2, and 3. *Id*. at 6, 45, 93–94. The Petitioner offers its perspective of what BACT would require and asserts that current Permit limits do not meet this standard. *Id*. at 94–96. Additionally, the Petitioner suggests that the Permit may lack additional emission limits necessary to demonstrate that the 1997–1999 changes would not cause or contribute to a violation of any NAAQS or PSD increment or adversely impact air quality values of any Class I area. *Id*. at 6, 45–46, 94. Second, the Petitioner alleges that because PacifiCorp violated the applicable PSD requirements, the Permit must include a compliance schedule. *Id*. at 5–6.

In support of this claim, the Petition includes various arguments, which can generally be characterized as (i) arguments as to why the Petitioner believes PSD was triggered by the 1997–1999 changes (Arguments 1 and 2), (ii) arguments as to why the Petitioner believes UDAQ erred in concluding otherwise (Arguments 3 through 6), and (iii) other arguments that do not directly concern UDAQ's PSD applicability determination.[17]

Background

The Petition includes extensive background discussion about the PacifiCorp-Hunter plant's operation as well as the changes to the facility that were constructed between 1997–1999. *See id*. at 15–27, 84–93. In sum, the Petitioner indicates that the 1997–1999 changes at issue involved modifications to the Hunter plant's turbines, superheaters, safety valves, and other components related to the boilers. *Id*. at 13–14.

[16] This claim is similar to that raised in the 2020 Petition as well as Claim A of the 2016 Petition.

[17] The individual arguments presented in the Petition are organized under various headings and sub-headings, often interspersed with background material or other discussion not directly relevant to the core arguments. For ease of reference, this Order presents the Petitioner's arguments using a different order and numbering system (Arguments 1–6) than that contained in the Petition.

The Petitioner states that PacifiCorp acknowledged in its 1997 NSR permit application (1997 NOI) that the planned 1997–1999 changes collectively would have resulted in an emission increase. *Id*. at 28–29. The Petitioner notes that PacifiCorp requested—and UDAQ imposed—emission limits on NO_x, SO_2, and PM[18] that were designed to ensure that the changes would not be considered a major modification that triggered PSD. *Id*. at 31, 32. Ultimately, due to various alleged flaws in how emissions increases were calculated (discussed further in the following sections), the Petitioner asserts that these "limits were insufficient to prevent PSD applicability." *Id*. at 31.

In order to determine the applicability of PSD to the 1997–1999 changes, the Petitioner claims that the SIP regulations applicable in 1997–1999[19] required a comparison of pre- and post-project actual emissions to determine whether a modification resulted in a significant net emissions increase. *Id*. at 9 (citing UAC R307-1-1 (1995) (definitions of "major modification," "net emissions increase," and "actual emissions")). The Petitioner observes that the then-applicable SIP regulations defined "actual emissions" as follows:

> 1. In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the source actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal source operations. The Executive Secretary shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the source's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.
> 2. The Executive Secretary may presume that source-specific allowable emissions for the source are equivalent to the actual emissions of the source.
> 3. For any source which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the source on that date.

Id. at 9–10 (quoting UAC R307-1-1 (1995) (definition of "actual emissions")).

The Petitioner then reproduces discussion from a draft EPA training manual in which EPA stated the following:

> For an existing unit, actual emissions just prior to either a physical or operational change are based on the lower of the actual or allowable emissions levels. . . . In certain limited circumstances, where sufficient representative operating data do not exist to determine historic actual emissions and the reviewing agency has reason to believe that the source is operating at or near its allowable emissions level, the reviewing authority may presume that source-specific allowable emissions [or a

[18] For Hunter Units 1 and 2, the limits were: 0.05 lb/MMBtu PM, 0.21 lb/MMBtu SO_2, and 0.45 lb/MMBtu NO_x. For Hunter Unit 3, the limits were: 0.02 lb/MMBtu PM, 0.10 lb/MMBtu SO_2, and 0.46 lb/MMBtu NO_x. Petition Ex. 10 (1997 NOI) at 3–4.

[19] The Petitioner bases its analysis on a 1995 copy of the Utah SIP regulations. The Petitioner observes that the relevant Utah SIP regulations at the time are identical to or consistent with the 1980 federal PSD regulations. *Id.* at 7, 10. The Petitioner's citations to federal regulations are generally omitted from this claim summary, as they were not directly applicable to the 1997–1999 changes.

> fraction thereof] are equivalent to (and therefore are used in place of) actual emissions at the unit. For determining the difference in emissions from the change at the unit, emissions after the change are the potential to emit from the units.

Id. at 10–11 (quoting NSR Workshop Manual, A.41 (Draft, October 1990)).

The Petitioner further asserts that post-project actual emissions are generally based on potential emissions. *Id*. at 11–12 (citing multiple authorities). Thus, the Petitioner concludes that UDAQ was required to compare a baseline of pre-project actual emissions to post-project potential emissions (the "actual-to-potential" test). *Id*. at 7, 9–13, 33.

Petitioner's Argument that PSD was Applicable

Argument 1: Actual Increases: The Petitioner claims that the 1997–1999 changes actually resulted in a significant net emissions increase of NO_x and SO_2, triggering PSD. *Id*. at 40, 45, 56. More specifically, the Petitioner asserts that Hunter Units 1, 2, and 3 each had a significant increase in actual emissions of NO_x and SO_2 for at least one of the five years after the 1997–1999 changes were completed. *Id*. at 42–43. The Petition also discusses two individual years in which plantwide emissions increased for NO_x (2000) and SO_2 (2002). *Id*. The Petitioner asserts that the 1997–1999 changes were "related to" and "resulted in" these emissions increases. *Id*. at 43 (citing Petition Ex. 23). The Petitioner concludes that such increases provide a basis for enforcing major NSR requirements. *Id*. at 43 (citing 42 U.S.C. § 7411(a)(4)).

Argument 2: Projected Increases: The Petitioner also asserts the 1997–1999 changes to Hunter Units 1, 2, and 3 should have been projected to result in a significant net emissions increase, subject to PSD. *Id*. at 28. The Petitioner presents its view of how emission increases should have been calculated from the 1997–1999 changes. The Petitioner asserts that pre-project baseline emissions should have reflected two year-average actual emissions of each Hunter unit for the two years immediately prior to the 1997 NOI. *Id*. at 33. The Petitioner supplies its own calculations of such baseline actual emissions, based on PacifiCorp's emission inventory reports from 1995 and 1996. *See id*. at 35. The Petitioner also supplies its calculations of post-project potential emissions. *See id*. Based on these numbers, the Petitioner concludes that the emission increases from these projects exceeded the relevant thresholds for significant increases of NO_x, SO_2, and PM. *Id*. at 35. Moreover, the Petitioner asserts that these projects resulted in a significant net emissions increase for the same pollutants, considering other creditable and contemporaneous emission increases and decreases at the facility. *See id*. at 35–39.[20] Thus, the Petitioner concludes that the 1997–1999 changes should have been considered a major modification that triggered PSD. *Id*. at 40, 45.

Challenges to UDAQ's PSD Non-Applicability Decision

In addition to providing its own views and calculations regarding PSD applicability, the Petitioner addresses UDAQ's decision to treat the 1997–1999 changes as a minor modification

[20] The Petitioner argues that there were emission increases, but no creditable emission decreases, during the relevant time period. *Id*. at 36, 37, 39.

that did not trigger PSD.[21] The Petitioner contends that UDAQ "failed to provide a sufficient legal or technical basis for finding that the 1997–1999 projects at the Hunter Power Plant were properly exempted from PSD permitting requirements." *Id*. at 47. The Petitioner challenges UDAQ's calculations of pre-project baseline emissions as well as post-project emissions.

Argument 3: Use of Allowable Emissions to Represent Pre-Project Actual Emissions: The Petitioner asserts that it was legally and technically incorrect for UDAQ to use pre-project *allowable* emissions to represent pre-project *actual* emissions. *Id*. at 33, 47. That is, the Petitioner faults UDAQ's decision to determine emissions increases by comparing baseline pre-project allowable emissions to post-project potential emissions.[22]

The Petitioner argues that UDAQ should not have used allowable emissions as a proxy for baseline actual emissions for the 1997–1999 changes because there was reliable evidence that baseline actual emissions were significantly lower than allowable emissions. *Id*. at 69. The Petitioner quotes the following EPA guidance on calculating pre-project baseline emissions from the preamble to EPA's 1980 NSR regulations: "The presumption that federally enforceable source-specific requirements correctly reflect actual operating conditions should be rejected by EPA or a state, if reliable evidence is available which shows that actual emissions differ from the level established in the SIP or the permit." *Id*. at 65 (quoting 45 Fed. Reg. 52676, 52718 (August 7, 1980)). The Petitioner also cites an earlier version of EPA's NSR training manual, PSD Workshop Manual, I-A-14 (October 1980) and the page (A.41) of the 1990 Draft NSR Workshop Manual quoted above. The Petitioner provides a table with emission calculations indicating that actual emissions of NO_x, SO_2, and PM from 1995–1996 were far lower than the allowable emissions baseline relied upon by UDAQ. *Id*. The Petitioner explains that it calculated "actual" emissions using information from PacifiCorp's 1995 and 1996 emission inventory submittals. *See id*. at 66–68. The Petitioner asserts that these data are reliable and argues that the "EPA should not give any weight to UDAQ's undocumented and unfounded claims that the 1995 and 1996 PacifiCorp actual emission inventories for 1995 and 1996 were based on unreliable data." *Id*. at 69.[23] Accordingly, because reliable actual emissions data existed during the baseline period, the Petitioner asserts that UDAQ erroneously relied on allowable emissions as a substitute for actual emissions. *Id*.

Argument 4: Calculation of Allowable Emissions: The Petitioner argues that, even if allowable emissions could be used to calculate pre-project emissions, the SIP regulation only allows UDAQ to presume that "source-specific allowable emissions" are equivalent to actual emissions. *Id*. at 57. More specifically, quoting EPA preamble statements accompanying the 1980 PSD rules, the Petitioner argues that only limits that "specify operating conditions for an individual source, such as PSD permits, state NSR permits . . . and SIP emissions limitations established for individual sources" can be considered source-specific emission limits. *Id*. at 58, 60 (quoting 45 Fed. Reg. at 52718). Similarly, quoting another 1980 statement from EPA, the

[21] The Petition includes a summary of UDAQ's 2021 supplemental justification for its PSD non-applicability decision (from the Draft Permit Appendix), the Petitioner's public comments, and UDAQ's RTC. *See id*. at 47–49.
[22] As a general matter, the Petitioner remarks that this resulted in a "potential-to-potential" NSR applicability test, which EPA considered in subsequent rulemakings but never adopted into its regulations. *Id*. at 57.
[23] The Petitioner also observes that PacifiCorp stated in a 2021 email to UDAQ that the "1995 and 1996 emissions data should suffice to establish the requested baseline." *Id*. at 64 (citing Petition Ex. 22).

Petitioner asserts that source-specific limits must be determined on a "site-specific, case-by-case basis." *Id*. at 58, 61 (quoting PSD Workshop Manual, I-A-13 to -14 (October 1980)).

The Petitioner asserts that there were no source-specific allowable emissions limits for NO_x and PM from Units 1 and 2 because the NO_x and PM limits upon which UDAQ relied were identical to limits from an NSPS that apply to a broad category of sources and which were not specifically established for PacifiCorp-Hunter. *Id*. at 48, 60–61.[24] The Petitioner reasons that NSPS limits cannot be considered "source-specific" limits. *Id*. at 60. Thus, the Petitioner disagrees with UDAQ's position that, despite being equivalent to the NSPS-based limits, these permit limits nonetheless established source-specific allowable emissions for PacifiCorp-Hunter. *Id* at 60.[25]

The Petitioner also claims the allowable emissions used as baseline emissions for NO_x from Hunter Unit 2 were incorrectly based on the wrong emission limit. The Petitioner observes that UDAQ calculated baseline NO_x emissions using a 0.70 lb/MMBtu NO_x limit, and contends that UDAQ should have instead used a 0.49 lb/MMBtu NO_x limit contained in a previously-issued 1987 Approval Order. *Id*. at 62 (citing Petition Ex. 16). The Petitioner acknowledges but does not further address UDAQ's explanation that, "By the time the 1997 Approval Order was issued, PacifiCorp had installed a [continuous emissions monitor] and appropriately requested that the [0.49 lb/MMBtu] limit be changed back to the default NSPS level of 0.70 lb/MMBtu." *Id*. at 63 (quoting Draft Permit Appendix at 14).

Argument 5: Post-project Potential Emissions: In addition to its concerns about pre-project baseline emission calculations, the Petitioner claims that UDAQ incorrectly calculated post-project potential emissions. Specifically, the Petitioner addresses UDAQ's use of a 95 percent capacity factor (*i.e.*, operating at 95 percent of maximum capacity) to calculate post-project potential to emit. *Id*. at 75. The Petitioner asserts that "this contradicts the plain language of the definition of potential to emit," which refers to "the maximum capacity of a source to emit a pollutant under its physical and operational design." *Id*. at 75 (quoting UAC R307-1-1 (1995). The Petitioner acknowledges UDAQ's explanation that 95 percent capacity reflects the "realistic" potential to emit after the 1997–1999 changes. *Id*. at 76–77. However, because there was no enforceable limitation on capacity, the Petitioner states that there was no legal justification to use the 95 percent capacity factor. *Id*. at 77; *see id*. at 75–76. The Petitioner subsequently presents its own calculation of post-project potential emissions, based on the units running at 100 percent capacity continuously for 24 hours a day, 365 days a year. *See id*. at 76, 78. According to the Petitioner, the decision to use a 95 percent capacity factor resulted in underestimating source-wide emissions increases of NO_x by 1,419 tons per year, SO_2 by 539 tons per year, and PM by 354 tons per year. *Id*. at 78.

[24] The Petitioner remarks that the NSPS limits were established for all fossil fuel-fired steam generating units of more than 73 megawatts heat input rate, constructed after 1971, and that the limits are not dependent on the type of coal burned, the boiler type, or the pollution control equipment installed on an individual unit. *Id.* at 60–61. The Petitioner further discusses variability in actual NO_x emission rates depending on boiler type and pollution controls. *Id.* at 61.

[25] The Petitioner acknowledges UDAQ's position that these limits were established under UAC R307-1-3.1.8, as required by the then-applicable definition of "allowable emissions." *Id.* at 60. Elsewhere, the Petitioner suggests that the only type of limits that could be used to satisfy the definition of "allowable emissions" are BACT limits established pursuant to UAC R307-1-3.1.8.A. *Id.* at 69.

Argument 6: Consideration of Emissions Decreases: The Petitioner also asserts that UDAQ should not have considered emissions decreases when determining whether the 1997–1999 changes resulted in a net emissions increase. The Petitioner observes that PacifiCorp's 1997 NOI indicated that the 1997–1999 changes included the installation of various controls that reduced NO_x emissions from the boilers at Hunter Units 1, 2, and 3. *Id*. at 50. Specifically, the Petitioner references "overfire air ports for added NO_x control" and a "NO_x control project including burner and/or windbox changes." *Id*. The Petitioner asserts that, under the rules applicable at the time, emission decreases should not be considered in determining whether there was a significant emissions increase from the 1997–1999 changes (often described as "step 1" of the NSR applicability analysis[26]). *Id*. at 52–53.[27] For support, the Petitioner cites various EPA statements from 1989 and 1990 indicating that only emissions increases—not emissions decreases—should be considered at this stage of the PSD applicability analysis. *Id*. at 54. The Petitioner also addresses subsequent EPA regulations and guidance that addressed this issue, claiming generally that these subsequent developments are not relevant to the rules that applied to the 1997–1999 changes. *See id*. at 55–56. The Petitioner contends that if the aforementioned emissions reductions had not been included in the PSD applicability analysis (and even using an allowable emissions baseline), the 1997–1999 changes would have resulted in a net emissions increase, as well as a significant net emissions increase. *Id*. at 53.

Other Arguments

In addition to its assertion that the 1997–1999 changes resulted in a significant net emissions increase (triggering PSD) and its contentions that UDAQ was wrong to conclude otherwise, the Petitioner presents various other arguments related to the 1997–1999 changes.

The Petitioner asserts that the 1997–1999 changes did not qualify as "routine maintenance, repair, and replacements," *id*. at 8–9, 44–45, which would have exempted the changes from being considered a major modification regardless of any resulting emissions increase. The Petitioner acknowledges that PacifiCorp did not claim this exemption, nor did UDAQ rely on it to determine that the 1997–1999 changes were not a major modification. *Id*. at 44.

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[26] As the Petitioner observes, under both EPA's historical and modern rules, the NSR applicability process for modifications has generally involved a two-step process. *Id.* at 35–36. Under the Utah SIP rules applicable in 1997 (and the 1980 EPA rules on which the Utah SIP was based), the first step applied by EPA and other permitting authorities has involved evaluating whether there was "any increase in actual emissions from a particular physical change or change in method of operation at a source," and the second step involved evaluating "any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable." UAC R307-1-1 (1995) (definition of "net emissions increase"). EPA codified this two-step process in a 2002 revision to its regulations. 67 Fed. Reg. 80186, 80190 (Dec. 31, 2002). Under EPA's current regulations, the term "significant emissions increase" represents the first step and "significant *net* emissions increase" represents the second step. *E.g.*, 40 C.F.R. § 52.21(b)(2)(i) (emphasis added). Both the Petitioner and Utah sometimes use these modern phrases to describe the corresponding steps that were applied in practice under the prior Utah SIP rules.

[27] The Petitioner also references the emission limitations that PacifiCorp requested to prevent emission increases from triggering PSD, suggesting that these limits also reflected an emission reduction associated with the 1997–1999 changes. *Id*. at 50, 51. The Petitioner argues that emission decreases from these limits, as well as the NO_x control projects, were not "creditable" and therefore not eligible to be considered when determining whether the 1997–1999 changes resulted in a "step 2" significant net emissions increase. *Id*. at 50–52. The Petitioner acknowledges that UDAQ's PSD non-applicability decision never reached the "step 2" significant net emissions increase issue because the state determined that there was no "step 1" significant emissions increase. *Id*. at 52.

The Petitioner also addresses UDAQ's suggestion that it could have applied a different applicability calculation—an "actual to future actual" test—in 1997. *Id*. at 69 (citing Draft Permit Appendix at 15–17). The Petitioner acknowledges that UDAQ later clarified that it did not, in fact, use or rely on that alternative applicability test. *Id*. at 69–70. Nonetheless, the Petitioner explains why it believes this test was not available, *id*. at 70–72, followed by an analysis of how, if available, this test would have resulted in a significant emissions increase, *id*. at 72–75.

Additionally, the Petition contains extensive discussion about the relationship between the changes to turbines and boilers. *See id*. at 78–93; *see also id*. at 14. The Petitioner addresses a number of specific changes to the boilers that the Petitioner claims were related to various changes to turbines. *See id*. at 84, 87, 89–93. The Petitioner also suggests that some of these changes to the boilers were responsible for emission increases. *See id*. at 79–80, 82, 86, 89–90. This discussion is presented as support for the Petitioner's conclusion that, if these changes triggered PSD, the boilers should be subject to BACT requirements. *See id*. at 78, 80–82, 83, 87, 93.[28]

EPA's Response: For the following reasons, EPA denies the Petitioner's request for an objection.

As an initial matter, EPA acknowledges that the Tenth Circuit's *Sierra Club* ruling governs here. EPA has previously stated: "EPA interprets the Tenth Circuit's decision to mean that permitting authorities within the Tenth Circuit's jurisdiction must consider . . . whether there are major NSR requirements, as opposed to solely minor NSR requirements, that are the 'applicable requirements' in the course of issuing title V permits." *PacifiCorp-Hunter II Order* at 15. Accordingly, EPA's Order addresses whether the Petitioner has demonstrated that UDAQ's conclusion that PSD requirements were not applicable to the 1997–1999 changes to the PacifiCorp-Hunter plant was contrary law or lacked a reasoned basis.[29] More specifically, EPA

[28] For example, the Petitioner concludes two subsections by stating: "Thus, UDAQ's arguments that BACT would not be required at the Units 1 and 2 boilers because only the turbines allowed for the projected increases in heat input at the boilers are not supported in the Hunter Title V permit record," and "Accordingly, UDAQ's arguments that BACT would not be required at the Unit 3 boiler because only the turbine changes allowed for the projected increases in heat input at the boiler are not supported in the Hunter Title V permit record and are unjustified." *Id*. at 87, 93.

[29] Although EPA acknowledges that *Sierra Club* governs here, as stated in the *PacifiCorp-Hunter II Order* (at 15 n.26), EPA continues to believe that the interpretation of the CAA upheld by the Fifth Circuit's decision in *Environmental Integrity Project v. EPA*, 969 F.3d 529 (5th Cir. 2020), is correct. EPA thus intends, where supported by the facts of individual permits, to continue to apply the reasoning of *In re Big River Steel, LLC*, Order on Petition No. VI-2013-10 (October 31, 2017), when issuing and reviewing title V permits and reviewing petitions on permits for sources in states outside of the Tenth Circuit. That is, where EPA has approved a state's title I permitting program, duly issued preconstruction permits establish the NSR-related "applicable requirements" for the purposes of title V. As with "applicable requirements" established through other CAA authorities, the terms and conditions of those permits should be incorporated into a source's title V permit without a further round of substantive review as part of the title V process. *See, e.g.*, *In the Matter of Valero Refining-Texas, L.P., Valero Houston Refinery*, Order on Petition No. VI-2021-8 at 6, 65–66 (June 30, 2022).

evaluates the Petitioner's PSD applicability claim under the following framework, applied by EPA prior to the *PacifiCorp-Hunter I Order*:

> Where a petitioner's request that the Administrator object to the issuance of a title V permit is based in whole, or in part, on a permitting authority's alleged failure to comply with the requirements of its approved PSD program (as with other allegations of inconsistency with the Act), the burden is on the petitioner to demonstrate to the Administrator that the permitting decision was not in compliance with the requirements of the Act, including the requirements of the SIP. As the EPA has explained in describing its authority to oversee the implementation of the PSD program in states with approved programs, such requirements include that the permitting authority: (1) follow the required procedures in the SIP; (2) make PSD determinations on reasonable grounds properly supported on the record; and (3) describe the determinations in enforceable terms. As the permitting authority for [the state's] SIP-approved PSD program, [the state agency] has substantial discretion in issuing PSD permits. Given this discretion, in reviewing a PSD permitting decision in the title V petition context, the EPA generally will not substitute its own judgment for that of [the state]. Rather, consistent with the decision in *Alaska Dep't of Envt'l Conservation v. EPA*, 540 U.S. 461 (2004), in reviewing a petition to object to a title V permit raising concerns regarding a state's PSD permitting decision, the EPA generally will look to see whether the petitioner has shown that the state did not comply with its SIP-approved regulations governing PSD permitting, or whether the state's exercise of discretion under such regulations was unreasonable or arbitrary.

In the Matter of Appleton Coated, LLC, Order on Petition Nos. V-2013-12 & V-2013-15 at 5 (October 14, 2016) (*Appleton Order*) (citations omitted).[30]

Here, the Petitioner alleges that the title V permit is flawed because it lacks PSD-related requirements associated with the 1997–1999 changes. To prevail, the Petitioner must demonstrate that these requirements were "applicable requirements;" in other words, that PSD was applicable to the 1997–1999 changes. Where, like here, the relevant regulations do not clearly prescribe a single method for determining PSD applicability, such that a permitting

[30] EPA has applied similar principles in numerous other title V petition orders that predated *PacifiCorp-Hunter I*, dating back to 1999. *E.g.*, *In the Matter of Roosevelt Regional Landfill*, Order on Petition at 9 (May 4, 1999) ("In determining BACT under a minor NSR program, as in implementing other aspects of SIP preconstruction review programs, a State exercises considerable discretion. Thus, EPA lacks authority to take corrective action merely because the Agency disagrees with a State's lawful exercise of discretion in making BACT-related determinations. State discretion is bounded, however, by the fundamental requirements of administrative law that agency decisions not be arbitrary or capricious, be beyond statutory authority, or fail to comply with applicable procedures."). Applying this framework, EPA has also drawn an analogy between this approach and the standard used by the EPA Environmental Appeals Board in reviewing EPA-issued PSD permits, described as a "clearly erroneous" standard. *See, e.g.*, *In the matter of East Kentucky Power Cooperative, Inc., Hugh L. Spurlock Generating Station*, Order on Petition at 4–5 (August 30, 2007) (citing *In re Prairie State Generating Company*, 13 E.A.D. 1 (EAB, August 24, 2006); *In re Kawaihae Cogeneration*, 7 E.A.D. 107 (EAB, April 28, 1997)).

authority must exercise some discretion in applying its regulations,[31] EPA's task in evaluating the Petition is not to weigh competing arguments to determine which aligns most closely with EPA's own views. Instead, EPA's task is to determine whether the Petitioner demonstrated that UDAQ lacked a permissible or reasoned basis under its EPA-approved SIP regulations to conclude that PSD did not apply to the 1997–1999 changes. As explained in the following subsections, because the Petitioner has not carried this burden, EPA denies the Petition.

Petitioner's Argument that PSD was Applicable

Argument 1: Actual Increases: The Petitioner argues that the 1997–1999 changes triggered PSD because these changes actually resulted in significant net emissions increases of NO_x and SO_2. For support, the Petitioner compares actual emissions data reported by PacifiCorp before and after those changes. *See* Petition at 40–43. As an initial matter, neither the applicable Utah SIP regulations nor EPA's regulations at the time contained a PSD applicability trigger or procedure that was based on post-project actual emissions observed after the issuance of a preconstruction permit.[32] Even assuming *arguendo* that an actual (but not projected) emissions increase could serve as the basis for triggering PSD under the Utah SIP rules applicable at the time, the Petitioner has not demonstrated that the 1997–1999 changes in fact *caused* any such emissions increase.

UDAQ argues in the Draft Permit Appendix:

> It should be noted that the actual emissions data [presented by the Petitioner] do not take causality into account. Even if significant increases in actual emissions had occurred, that by itself would not be indicative of a major modification unless it could be shown that the project was the cause of those emissions increases. In addition to using facility data for its emission calculations, Sierra Club did not demonstrate causality, and UDAQ also rejects Sierra Club's "emission increase" arguments on that basis.

Draft Permit Appendix at 11. In response to additional information provided with UDAQ's subsequent RTC, the Petitioner commissioned a report, included as Petition Ex. 23, which purportedly explains that certain physical changes "*resulted in* the NO_x and SO_2 emissions increases that actually occurred" at the PacifiCorp-Hunter plant. Petition at 43 (emphasis added). However, the cited report does not demonstrate this causal link; nor does it even claim to. Instead, the report concludes that "the 1997–1999 projects *could cause* emissions increases" and that "actual emissions increases did occur following the projects" Petition Ex. 23 at 17, 24 (emphasis added); *see id*. at 25. But that is not the same thing as demonstrating that the 1997–

[31] As previously stated, *supra* note 12 and accompanying text, the SIP rules relevant to the 1997–1999 changes were based on EPA's 1980 PSD rules, and these rules are significantly different than UDAQ's and EPA's current rules governing PSD applicability. In EPA's proposal to reform its 1980 PSD rules into their modern form, the Agency's stated goal was "to eliminate as much of the program complexity . . . as possible without sacrificing the current level of environmental protection and benefits derived from the program" established in the 1980 rules. 61 Fed. Reg. 38250, 38252 (July 23, 1996).

[32] Note that subsequent revisions to EPA's regulations specify that, "Regardless of any such preconstruction projections, a major modification results if the project causes a significant emissions increase and a significant net emissions increase." *E.g.*, 40 C.F.R. § 51.166(a)(7)(iv)(*b*).

1999 changes *did cause* emission increases over the PSD applicability thresholds, which is the Petitioner's burden here (to the extent that observed post-project actual emissions could actually serve as an applicability trigger under the relevant SIP rules). 42 U.S.C. § 7661d(b)(2); *see, e.g.*, *Appleton Order* at 5.

Additionally, the emissions data and calculations supplied by the Petitioner[33] undermine a causality finding. For NO_x, the Petitioner's data indicate that plantwide NO_x emissions increased by 914 tons in one of five years following the 1997–1999 changes, but emissions *decreased* by an average of 1,179 tons in each of the remaining four years, with considerable variability in annual emissions on a unit-by-unit and year-by-year basis. Similarly, for SO_2, the Petitioner's data indicate that plantwide SO_2 emissions increased by 882 tons in one of five years following the 1997–1999 changes, but emissions *decreased* by an average of 526 tons in each of the remaining four years, again with considerable variability in annual emissions on a unit-by-unit and year-by-year basis. Based on the variability of this data and the overall downward trends in emissions, EPA cannot conclude from the Petitioners' data that the 1997–1999 changes (as opposed to other factors, like varying demand for power) caused an actual increase in emissions.[34] Thus, the Petitioner's arguments concerning actual emissions increases do not demonstrate that the State's determination that PSD did not apply to the 1997–1999 changes was contrary to the SIP or lacked a reasoned basis.

Argument 2: Projected Increases: The Petitioner also contends that the 1997–1999 changes should have been subject to PSD as a major modification for NO_x, SO_2, and PM, based on the Petitioner's pre- and post-project emissions calculations (*i.e.*, projections). *See* Petition at 33–40. Not surprisingly, the Petitioner's calculations are significantly different than those relied upon by UDAQ. However, under the review framework described above, EPA's task in evaluating the Petition is not to weigh competing arguments or calculations. However plausible the Petitioner's calculations might be,[35] they do not themselves demonstrate a basis for objection. Accepting the Petitioner's calculations would only show that UDAQ *could* have concluded that PSD applied to the 1997–1999 changes, not that UDAQ lacked a permissible or reasoned basis to reach the opposite conclusion.[36]

Challenges to UDAQ's PSD Non-Applicability Decision

In addition to presenting its own calculations regarding PSD applicability, the Petitioner also attempts to rebut UDAQ's rationale and conclusion that PSD was not applicable to the 1997–

[33] EPA observes that UDAQ contests the accuracy of the Petitioner's emissions data. *See* Draft Permit Appendix at 11; RTC at 10. EPA reserves judgement on this matter, as even the Petitioner's data do not demonstrate that PSD was triggered.

[34] Even if the Petitioner had demonstrated causality, it is also not clear that the single-year emissions increases identified by the Petitioner would be relevant to determining whether the 1997–1999 changes triggered PSD. The Petitioner has not cited any authority to support the calculation procedure it used—*i.e.*, comparing two-year average pre-project emissions to the highest single-year emissions of the five years after the project. As indicated previously, neither the relevant UDAQ SIP nor EPA's regulations at the time prescribed such a calculation procedure for using post-project actual emissions as a basis for PSD applicability.

[35] EPA takes no position on the merits of the Petitioner's calculations and observes that UDAQ contests their accuracy. *See* Draft Permit Appendix at 10–13; RTC at 9.

[36] As UDAQ stated, the Petitioner "has submitted its own PSD analysis, but it is irrelevant to the determination of whether UDAQ erred in its analysis of the projects." RTC at 9.

1999 changes. However, for the reasons discussed in the following paragraphs, the Petitioner has failed to demonstrate that UDAQ's 1997 PSD non-applicability determination, affirmed and supplemented in the present permitting action, "did not comply with its SIP-approved regulations governing PSD permitting, or [that] the state's exercise of discretion under such regulations was unreasonable or arbitrary." *E.g.*, *Appleton Order* at 5.

Argument 3: Use of Allowable Emissions to Represent Pre-Project Actual Emissions: The Petitioner challenges UDAQ's use of allowable emissions to represent baseline actual emissions. *See* Petition at 63–69. For purposes of calculating pre-project baseline actual emissions, the relevant Utah SIP rules provide, in relevant part: "The Executive Secretary *may presume* that source-specific allowable emissions for the source are equivalent to the actual emissions of the source." UAC R307-1-1 (1995) (definition of "actual emissions") (emphasis added). This provision is based on an essentially identical provision in EPA's 1980 PSD regulations. *E.g.*, 40 C.F.R. § 51.24(b)(21)(iii) (1981) (recodified at § 51.166(b)(21)(iii)).

UDAQ relied on UAC R307-1-1 in issuing the 1997 Approval Order (*i.e.*, minor NSR permit) authorizing the 1997–1999 changes. UDAQ justifies this decision by focusing on the discretion afforded by the plain text of the regulations, arguing that "Utah's then-existing NSR rule [] explicitly allowed the [UDAQ] Executive Secretary to presume that the source's actual emissions are equivalent to its source-specific allowable emissions" and that "the rule establishes no explicit limits on this discretion and sets forth no explicit criteria." Draft Permit Appendix at 8; *see id*. at 6–7; RTC at 5–6. UDAQ also relies on a decision from the U.S. Court of Appeals for the D.C. Circuit, which UDAQ asserts "validates the ability to use 'allowable emissions' for the NSR baseline at the time the 1997 Hunter Approval Order was issued as a matter of 'state discretion.'" Draft Permit Appendix at 8.[37]

At the outset, EPA agrees that the plain text of the SIP *did* provide UDAQ with discretion to presume that allowable emissions were equivalent to actual emissions, and the SIP did not expressly define the situations in which the state could exercise its discretion and apply this presumption. This does not mean that UDAQ's discretion was unlimited; as with other administrative decisions, it would have been improper for UDAQ to exercise this discretion in an unreasonable or arbitrary manner. *See, e.g.*, *Appleton Order* at 5. However, it is important to recognize (as EPA did in the preamble to the 1980 EPA rule upon which UDAQ's rules is based) that the regulatory text gives a permitting authority discretion to apply a *presumption*—that is, a presumptively reasonable starting point that may be relied upon unless and until it is rebutted. As EPA explained when promulgating the 1980 PSD rules:

> EPA believes that, in calculating actual emissions, emissions allowed under federally enforceable source-specific requirements *should be presumed* to represent actual emission levels. . . . EPA believes *it is generally appropriate to presume* the source will operate and emit at the allowed levels. . . . EPA believes *it is reasonable to presume* those limitations closely reflect actual source operation. . . . EPA, a

[37] Specifically, UDAQ quotes the following discussion: "Under the 1980 rule, sources determined past actual emissions by averaging their annual emissions during the two years immediately prior to the change, though they could use either different, more representative periods or source-specific allowable emissions levels, if they could convince the permitting authorities." *New York v. EPA*, 413 F.3d 3, 16 (D.C. Cir. 2005).

> state, or source remains free to *rebut the presumption* by demonstrating that the source-specific requirement is not representative of actual emissions.

45 Fed. Reg. at 52718 (emphasis added).

Here, the Petitioner does not argue that UDAQ's decision to apply the allowable emissions presumption ran afoul of the SIP, and the Petitioner offers no rebuttal to UDAQ's arguments concerning the plain text of the regulations and UDAQ's discretion to apply this presumption. The Petitioner also does not show that the regulation contains criteria limiting when the presumption may be applied or identifying information that would rebut the presumption. Instead, the Petitioner argues that UDAQ's application of the presumption in this case was "unreasonable" and "not technically justified *under EPA policy*." Petition at 69, 63 (emphasis added).

As the Petitioner observes, EPA has offered its views on how to apply the allowable emission presumption (as reflected in EPA rules) in a 1980 preamble to the regulations, a 1980 guidance document, and a 1990 guidance document. These were statements of policy, addressing how EPA would exercise its discretion by describing situations in which EPA would (or would not) apply the allowable emissions presumption under EPA's rules. Such policy statements were not binding on UDAQ and did not directly govern UDAQ's decisions to implement its own SIP-approved rules (notwithstanding that those rules mirror EPA's). In addition, EPA's views on how to apply the presumption evolved from 1980 to 1990.[38] In its 1980 PSD rule preamble, EPA stated this presumption "should be rejected . . . if reliable evidence is available which shows that actual emissions differ from the level established in the SIP or the permit," or where "the source-specific requirement is not representative of actual emissions." 45 Fed. Reg. at 52718. Similarly, in another 1980 guidance document, EPA suggested that "the allowable emission rate should not be used" where "[a]llowable emission rates . . . exceed actual emissions (and in some cases, by a large margin)." PSD Workshop Manual, I-A-14 (October 1980). In a draft 1990 guidance document, EPA expanded its caution and narrowed its recommended approach to the following:

> In certain limited circumstances, where sufficient representative operating data do not exist to determine historic actual emissions and the reviewing agency has reason to believe that the source is operating at or near its allowable emissions level, the reviewing agency may presume that source-specific allowable emissions . . . are equivalent to (and therefore are used in place of) actual emissions at the unit.

NSR Workshop Manual, A.41 (Draft, October 1990).

These statements by EPA did not establish the only circumstances in which a state could apply this presumption or in which the presumption could be rebutted. Thus, while UDAQ was required to evaluate whether it was appropriate to apply the presumption, the caution EPA communicated in these policy statements did not establish binding limitations on UDAQ's exercise of its discretion.[39]

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[38] *Compare* 45 Fed. Reg. at 52718 *with* NSR Workshop Manual, A.41 (Draft, October 1990).

[39] And again, as UDAQ observed, its SIP "rule establishes no explicit limits on this discretion and sets forth no explicit criteria." Draft Permit Appendix at 8.

Regarding UDAQ's basis for applying the allowable emissions presumption, in UDAQ's words:

> UDAQ lawfully chose to use the allowable emissions presumption for pre-project baseline emissions. As the permitting authority, UDAQ had full discretion to do this instead of trying to ascertain actual emissions that could not be reliably established.

RTC at 5. As the last clause of this quotation reflects, UDAQ's judgment after a review in 2021 was that reliable actual emissions data could not be established in 1997 during the pre-project period. UDAQ's RTC stated as follows:

> Pre-project actual emissions from the three units could not reliably be established. This has previously been shown in both the Appendix and Sierra Club's own information submission, which essentially concedes that a large majority of the emissions data for the pre-project period does not exist.
>
> ***
>
> Sierra Club bases this claim on its own calculations, using its own methodology or using information from various databases, depending on the emission year. All these databases contain errors, and Sierra Club did not use any reliable sets of actual emissions data for the three boilers. Therefore, the data that Sierra Club relies on in its comments to demonstrate that there were emission increases post-project at the Hunter units is not accurate or reliable. The lack of reliable data is the reason why UDAQ lawfully accepted the allowable limits established in the then-current approval orders as pre-project actual emissions.

RTC at 6, 10; *see also* Draft Permit Appendix at 8.

The Petitioner responds by disputing UDAQ's contention that reliable emissions data did not exist at the time, characterizing this conclusion as "undocumented and unfounded." Petition at 69. The Petitioner also attempts to distinguish or qualify its own prior allegations regarding the lack of reliable emissions data (to which UDAQ alludes). *See id*. at 66–68.

The most appropriate time to present technical information rebutting the reasonableness of UDAQ's presumption that allowable emissions were equivalent to actual emissions was in 1997 (when the changes at issue were authorized by the 1997 Approval Order). As no such rebuttal was developed at the time, EPA is currently faced with a contradictory, fragmentary, and somewhat conjectural permit record on this topic. That is, EPA must consider two competing arguments involving a fact-based exercise of discretion on a highly technical question that is now more than 25 years old. These competing arguments do not present a clear answer as to the availability and reliability of actual emissions data during the baseline period.

To provide a basis for objection, the Petitioner has the burden to demonstrate "that the state did not comply with its SIP-approved regulations governing PSD permitting, or [that] the state's exercise of discretion under such regulations was unreasonable or arbitrary." *E.g.*, *Appleton*

Order at 5. Here, the Petitioner does not demonstrate that UDAQ did not comply with its SIP-approved regulations, which explicitly provided that UDAQ "may presume that source-specific allowable emissions for the source are equivalent to the actual emissions of the source." UAC R307-1-1 (1995). Moreover, the Petitioner has not demonstrated that UDAQ failed to evaluate whether application of the presumption was appropriate or lacked a reasoned basis for applying it. UDAQ identified gaps in the actual emissions data over the relevant time period, and thus judged this data to not be sufficiently reliable to rebut the presumption that allowable emissions were representative of actual emissions. Again, this particular exercise of discretion involves a situation where (1) the SIP rule expressly provided UDAQ with the discretion to apply such a presumption; (2) the language in the relevant SIP rule did not contain specific criteria limiting the circumstances under which the presumption could be applied, and the limitations described in EPA's 1980 and 1990 policies (on which the Petitioner's argument rests) were not binding on UDAQ); (3) the factual dispute raised in the Petition involves a highly technical question concerning the reliability of emissions data that is over 25 years old; and (4) the Petitioner has not demonstrated that UDAQ lacked a reasoned basis for its decision to presume allowable emissions were equivalent to actual emissions. This is a situation in which UDAQ had discretion and thus "EPA generally will not substitute its own judgment for that of [the state]." *E.g.*, *Appleton Order* at 5. Accordingly, the Petitioner's arguments on this issue do not demonstrate a basis for EPA's objection.[40]

Argument 4: Calculation of Allowable Emissions: The Petitioner offers two reasons as to why, even if UDAQ could use allowable emissions to represent pre-project actual emissions, UDAQ's calculations were incorrect. First, the Petitioner asserts that the NO_x and PM limits on Units 1 and 2 on which UDAQ relied did not reflect "source-specific allowable emissions" because they were equivalent to limits in an NSPS that applied to an entire source category. *See* Petition at 57—61.

The relevant SIP rules define "allowable emissions" as follows: "the emission rate of a source calculated using the maximum rated capacity of the source (unless the source is subject to enforceable limits which restrict the operating rate, or hours of operation, or both) and the emission limitation established pursuant to R307-1-3.1.8." UAC R307-1-1 (1995) (definition of "allowable emissions"). The regulation referenced by this definition requires that Approval Orders (*i.e.*, NSR permits) include limits that reflect BACT. UAC R307-1-3.1.8(A) (1995).

UDAQ asserts that the limits used to calculate emissions satisfied these SIP requirements, stating as follows:

> While the state did impose limits equal in stringency to NSPS limits, this is appropriate because these are the source-specific limits that UDAQ established under [UAC] R307-1-3.1.8 to govern plant operations. This meant that the limits reflected source-specific allowable emissions for the units and could be properly used for baseline emissions.

[40] As with other issues addressed in this Order, the fact that EPA does not object based on this issue is not an indication that EPA necessarily agrees with UDAQ's decision or that EPA would have made the same decision if EPA had stood in UDAQ's shoes in 1997.

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> All three units at the Hunter facility were subject to Approval Orders at the time UDAQ made its PSD nonapplicability determination in 1997. Each of these approval orders imposed emission limitations for NO_x, [PM], and SO_2 established pursuant to R307-1-3.1.8. The fact that certain of these emission limitations established in the approval orders were equivalent in stringency to emission limitations established by EPA in NSPS Subpart D neither lessens their effectiveness nor contravenes this requirement.

RTC at 4–5, 7.

The Petitioner does not contest UDAQ's assertion that the limits upon which UDAQ relied were established in source-specific NSR permits (Approval Orders). This is consistent with the EPA guidance cited by the Petitioner, which indicates that source-specific limits can include limits contained in "PSD Permits [and] state NSR permits." 45 Fed. Reg. at 52718. The fact that these NSR permit limits mirrored the NSPS limits does not nullify the fact that they were established in a previous (*i.e.*, pre-1997) source-specific NSR permitting action (and appear to reflect BACT).[41] It is not uncommon for limits in NSR permits, including limits that reflect BACT, to be equivalent to limits contained in an NSPS. In fact, this possibility is recognized in the relevant Utah SIP regulations, which require BACT limits to be at least as stringent as the limits contained in the relevant NSPS (often called the "BACT floor"). UAC R307-1-1 (1995) (definition of "Best Available Control Technology"). Accepting the Petitioner's suggestion that NSR permit limits equivalent to the NSPS cannot be considered in calculating allowable emissions would effectively require NSR permit limits to be *more stringent than* NSPS limits, which neither Utah's nor EPA's NSR regulations require. Thus, the Petitioner has not demonstrated that UDAQ lacked the discretion to use these NO_x and PM limits to establish source-specific allowable emissions.

Second, the Petitioner asserts that baseline allowable emissions of NO_x from Unit 2 were incorrectly calculated because UDAQ relied on a 0.70 lb/MMBtu limit instead of a lower 0.49 lb/MMBtu limit that the Petitioner claims was applicable. *See* Petition at 62–63. UDAQ addressed this issue in the Draft Permit Appendix, stating:

> Another mistaken Sierra Club assumption is its further comment that even if "allowable emissions" could have been used, the State of Utah erred in its analysis by not incorporating a 1987 Approval Order that required a NO_x emissions limit of 0.49 lbs/MMBtu. Sierra Club's comment misunderstands the 1987 Approval Order. At the time of issuance of the 1987 Approval Order, Hunter Unit 2 was issued a NO_x emissions limit of 0.49 lb/MMBtu with a "test if directed" stack test requirement. The 0.49 lb/MMBtu limit was chosen specifically because it was 70% of the NSPS Subpart D limit of 0.70 lb/MMBtu for NO_x, a level at which Hunter Unit 2 would not have been required to install a CEM as per the subpart. By the

[41] *See* Petition Ex. 11, Approval Order at 5–6 (December 18, 1997) (describing BACT analysis and/or applicability as it related to the 1997–1999 projects as well as pre-project requirements); *id*. at 6–7 (describing applicability of R307-1-3.1.8(A)).

> time the 1997 Approval Order was issued, PacifiCorp had installed a CEM and appropriately requested that the limit be changed back to the default NSPS level of 0.70 lb/MMBtu, in keeping with the original NSPS requirement. So, at the time of the 1997 NSR review, the 1987 0.49 lb/MMBtu NO_x limit in the 1987 Approval Order had become a nullity.

Draft Permit Appendix at 11.

Here, too, the Petitioner has not demonstrated that UDAQ's use of the 0.70 lb/MMBtu limit was contrary to the SIP or lacked a reasoned basis.[42] Specifically, the Petitioner has failed to address or rebut UDAQ's explanation for why the state believed it more appropriate to rely on the 0.70 lb/MMBtu NO_x limit in establishing baseline allowable emissions. The Petitioner acknowledges a portion of UDAQ's explanation but offers no rebuttal. *See* Petition at 63. Perhaps most importantly, the Petitioner does not even acknowledge UDAQ's contention that, "at the time of the 1997 NSR review, the 1987 0.49 lb/MMBtu NO_x limit in the 1987 Approval Order had become a nullity." Draft Permit Appendix at 11. In order to demonstrate a basis for EPA's objection, a petitioner must address the state permitting authority's reasoning and explain why the state's decision was unreasonable.[43] Because the Petitioner does not address or rebut UDAQ's justification for relying on the 0.70 lb/MMBtu limit, the Petitioner has failed to demonstrate grounds for EPA's objection concerning UDAQ's calculation of pre-project allowable emissions.

Argument 5: Post-project Potential Emissions: The Petitioner challenges UDAQ's decision to calculate post-project emissions based on a 95 percent capacity factor. *See* Petition at 76–78. In its RTC, UDAQ explains:

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[42] It is also not clear that this issue was raised with reasonable specificity during the public comment period for the present permit action. 42 U.S.C. § 7661d(b)(2). As with other aspects of the Petition, the Petitioner's arguments have shifted over time. In its 2015 comments on the prior version of the Hunter permit, the Petitioner squarely raised this issue. However, that is not relevant for purposes of determining whether the issue was raised with reasonable specificity during the present permit action. *See Hunter II Order* at 14; *In the Matter of Bullseye Glass Co.*, Order on Petition No. X-2020-7 at 5 (August 18, 2020). In the relevant 2021 public comments, the Petitioner effectively abandoned this argument in favor of a different argument: that "neither of the two NO_x limits should be considered as source-specific limits" because they were both based on NSPS requirements (as discussed in the preceding paragraphs). *See* Petition Ex. 2 (2021 Comments) at 15. In other words, the 2021 comments do not specifically argue that the 0.49 lb/MMBtu limit should have been used to establish baseline allowable emissions; instead, they argue that the 0.49 lb/MMBtu limit *should not* have been used. Thus, it is not clear that the Petitioner preserved this issue by raising it "with reasonable specificity" during the comment period on this permit action. 42 U.S.C. § 7661d(b)(2); 40 C.F.R. §§ 70.8(d), 70.12(a)(2)(v). Regardless, for the reasons discussed in the body of this Order, the Petitioner has not demonstrated that this issue warrants EPA's objection.

[43] *See supra* note 10 and accompanying text. Note that 40 C.F.R. § 70.12(a)(2)(vi) specifically requires a petitioner to "explain how the permitting authority's response to the comment is inadequate to address the issue raised in the public comment." Here, UDAQ's explanation for this decision was contained not in its RTC (because public comments did not squarely raise this issue), but instead in the Draft Permit Appendix (reacting to the Petitioner's 2015 comments). In interpreting the petitioner's demonstration burden in CAA § 505(b)(2), EPA has applied the principle now codified in § 70.12(a)(2)(vi) to other aspects of the permit record, including the "statement of basis" accompanying a draft permit (analogous to UDAQ's Appendix). *See* 81 Fed. Reg. 57822, 57832 (August 24, 2016) ("Where a permitting authority has articulated its rationale for the permit terms and conditions concerning an applicable requirement in its record (RTC and statement of basis) and the petitioner did not adequately address that rationale in its petition, the EPA has often denied the petition, at least in part, on that basis.").

> UDAQ properly applied its technical judgment in 1997 to determine that coal-fired electric generating units operating under their physical and operational design did not have the capacity to operate continuously for 8,760 consecutive hours at 100 percent of the maximum heat input rate, which is achievable on a short-term basis only. Accordingly, the heat input rates UDAQ used to calculate potential-to-emit represented the actual capacity of the source, which cannot realistically be exceeded. As a result, UDAQ did not need to impose any additional independently-enforceable limitations on annual heat input—the limit was already realistically at 95%. UDAQ also did not need to include any such limits in the approval order.

RTC at 9.

The Petitioner suggests that enforceable limitations on unit capacity are necessary and asserts that UDAQ's position to the contrary "contradicts the plain language of the definition of potential to emit." Petition at 75. This argument is unpersuasive. Although the second sentence of the relevant definition provides an option for a facility to restrict its potential to emit using enforceable limitations, UDAQ's decision rests instead on the language of the first sentence of the definition: "'Potential to Emit' means the maximum capacity of a source to emit a pollutant *under its physical and operational design*." UAC R307-1-1 (1995) (emphasis added). The Petitioner does not offer any argument to rebut UDAQ's position that the annual capacity used to calculate PTE represented the Hunter plant's "physical and operational design." Moreover, the Petitioner does not offer any argument to demonstrate that the Petitioner's calculated capacity to emit would better reflect the Hunter plant's "physical and operational design." Thus, the Petitioner has not demonstrated that UDAQ's calculation of post-project potential emissions was contrary to the SIP or lacked a reasoned basis.[44]

Argument 6: Consideration of Emissions Decreases: The Petitioner's arguments regarding certain physical changes that decreased NO_x emissions from the boilers (specifically, installation of overfire air ports and burner and/or windbox changes) have shifted over time. As presented in the Petition, the Petitioner argues that it was inappropriate to include any emission decreases in "step 1" of the NSR applicability analysis (determining whether the 1997–1999 changes resulted in a significant emissions increase). Petition at 52–53.[45]

EPA has addressed and rejected similar challenges in a previous petition order. *See In the Matter of Georgia Power*, Order on Petitions at 23–25 (April 14, 2014) (*Georgia Power Plants III Order*). There, EPA explained that during the first step of the NSR applicability analysis, pre- and post-project emissions are compared "for each emission unit" and indicated that "the

[44] As with other aspects of EPA's response, EPA's finding that the Petitioner failed to demonstrate a basis for EPA's objection should not be read to imply EPA's agreement (or disagreement) with UDAQ's technical conclusions concerning potential to emit. As a general matter, if assumptions used in calculating potential to emit are later shown to be invalid, that could present grounds for enforcement.

[45] The Petitioner's arguments concerning these emission decreases in the context of "step 2" of the NSR applicability analysis (determining whether the 1997–1999 changes, viewed alongside other contemporaneous and creditable increases and decreases in emissions, resulted in a significant net emissions increase) are not relevant here. As UDAQ's RTC explained and the Petitioner acknowledged, UDAQ's PSD non-applicability determination never reached "step 2." RTC at 3–4; Petition at 52.

anticipated effect of [emissions] controls on the unit's post-project emissions can be considered if the controls will be installed and operating during the time period selected for the emissions calculation." *Id*. at 24. EPA rejected similar claims by petitioners alleging that a state incorrectly considered emissions reductions where the "turbine upgrades and the installation of pollution controls . . . are changes to the same emission unit (*i.e.*, the boiler/steam turbine . . .)" and where the source "planned to undertake the turbine upgrades and pollution control installation as part of the same renovation project." *Id*. at 25.

Here, the Petitioner acknowledges that UDAQ apparently analyzed the various 1997–1999 changes as a single aggregated "project," evaluating whether the collective changes as a whole reflected a "major modification" subject to PSD.[46] The Petitioner does not claim that the boiler changes responsible for reductions of NO_x should have been considered part of a different project, separately assessed for NSR applicability from the remainder of the changes. Instead, the Petitioner attempts to separate the NO_x-reducing aspects of the project using a different line of reasoning. The Petitioner essentially argues that for each emissions unit (*i.e.*, each boiler),[47] UDAQ should have only considered individual project elements (*i.e.*, individual aspects of the 1997–1999 project) that, if viewed in isolation, had the result of increasing emissions at that unit, and that UDAQ should have ignored any project elements that decreased emissions at that unit. Doing so would require itemizing and attributing the positive and negative emissions impacts of each individual physical or operational change at each emissions unit that collectively made up the 1997–1999 project. However, the Petitioner has not identified any Utah SIP (or EPA) regulation that would require this approach. Nor has the Petitioner identified any EPA policy that would support this approach. As relevant to the 1980 EPA rules on which the Utah SIP was based, EPA policy at the time made clear that that increases and decreases in emissions under the applicable regulations were determined at the emissions unit level.[48] Individual project elements at a single emissions unit that may, if viewed in isolation, result in an increase or decrease in emissions were to be considered *in aggregate* to determine the overall change in emissions that would result from the project at that emissions unit, whether an increase or decrease.

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[46] *See* Petition at 82 ("PacifiCorp tied these projects together in its August 1997 Notice of Intent by stating, among other things, that while some of the projects by themselves could not cause an increase in emissions, 'as a whole, the upgrades may increase the actual capacity and capacity utilization of the boilers.'"); RTC at 4 ("It is also inaccurate to say that PacifiCorp 'requested' UDAQ to account for emissions decreases. Instead, PacifiCorp stated that certain of the physical projects being included in the 1997 NOI were pollution controls or were meant to control emissions. The total project would then be reviewed to determine if PSD applied. . . . [S]everal proposed permit changes were combined into a single permitting project . . . .").

[47] As relevant to NO_x, the 1997–1999 projects involved changes that affected emissions from each of the three boilers (Unit 1, Unit 2 and Unit 3).

[48] *See, e.g.*, NSR Workshop Manual, A.39 (Draft, October 1990) (describing the calculation of pre- and post-project emissions "for an emissions unit"); *id*. at A.45, Table A-5, (describing the procedures for determining the net emissions change at a source in part as involving an evaluation of "which *emissions units* at the source experienced (or will experience, including any proposed decreases resulting from the proposed project) a creditable increase or decrease in emissions during the contemporaneous period." (emphasis added)); *id*. at A.46 (same); *cf. id*. at A.22 (describing the procedure for calculating emissions of a new source as follows: "The potential to emit of each pollutant . . . is estimated for each individual emissions unit. The individual estimates are then summed by pollutant over all the emissions units at the stationary source."); *see also Georgia Power Plants III Order* at 23–25. Although the *Georgia Power Plants III Order* addressed PSD applicability regulations that differ in some ways from the former Utah SIP rules applicable to the 1997–1999 changes at PacifiCorp-Hunter, those differences do not affect the basic principles relevant to evaluating pre- and post-project emissions associated with a project on a unit- and pollutant-specific basis.

Accordingly, applicants and permitting authorities were simply required to quantify changes in emissions on a unit- and pollutant-specific basis based on pre-project and post-project emissions.

The Petitioner's argument appears to rest on a mistaken suggestion that this issue implicates what is known as "project emissions accounting" (sometimes historically described as "project netting").[49] Project emissions accounting concerns how to account for emission increases and decreases between multiple emissions units involved in a single project when determining whether emissions from the project as a whole would result in a significant emissions increase under the first step of the NSR applicability analysis. In particular, project emissions accounting is relevant where emissions of a regulated NSR pollutant from one emissions unit increase while emissions of that pollutant from a different unit decrease. However, this construct is not relevant to PacifiCorp-Hunter's 1997–1999 changes because UDAQ's PSD analysis did not involve any accounting of NO_x emissions increases and decreases *between multiple emissions units*. As far as NO_x emissions are concerned, the collective physical and operational changes from the 1997–1999 changes were projected to result in a decrease of NO_x emissions *from each emissions unit at issue*: the Unit 1 boiler, Unit 2 boiler, and Unit 3 boiler. No units were predicted to increase NO_x emissions. Thus, even if one were to adjust each of those per-unit emissions decreases to zero (as the Petitioner advocates), this would not change UDAQ's conclusion that, under "step 1," there was no source-wide emissions increase of NO_x.[50] Overall, the Petitioner has not demonstrated that UDAQ's accounting of NO_x emission reductions associated with the 1997–1999 changes was contrary to the SIP or lacked a reasoned basis.

Other Arguments

The Petitioner's remaining arguments are not relevant to determining whether the 1997–1999 changes constituted a major modification subject to PSD requirements.[51] First, the Petitioner's arguments concerning the non-applicability of the "routine maintenance, repair, and replacements" exemption is not relevant because UDAQ did not rely on this exemption to conclude that a PSD permit was not required (a fact the Petitioner acknowledges). *See* RTC at 8, 10; Petition at 44. Second, the Petitioner's arguments contesting the use of the "actual-to-future actual" or "actual-to-projected actual" PSD applicability test are not relevant because UDAQ did not rely on this test (a fact the Petitioner acknowledges). RTC at 3; Petition at 69–70. Third and finally, the Petitioner's extensive discussion about the relationship between various changes to the turbines and boilers does not appear to be relevant because it is presented without any cognizable allegation concerning UDAQ's PSD applicability analysis. Instead, the only defect alleged by the Petitioner relates to which units would be subject to BACT *if* these projects

[49] *See* "Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NNSR): Project Emissions Accounting," 85 Fed. Reg. 74890 (November 24, 2020).

[50] Put another way, because NO_x emissions were projected to decrease from each Hunter unit, UDAQ's conclusion that the 1997–1999 changes would not result in a significant emissions increase of NO_x did not depend on whether emission decreases from a given unit are treated as a negative value (per UDAQ's calculations) or as a zero (per historical EPA policies related to project emissions accounting).

[51] The inclusion of this material within the Petition appears to be based on a back-and-forth between the Petitioner and UDAQ, beginning with the Petitioner's 2015 comments and proceeding through UDAQ's Draft Permit Appendix, the Petitioner's 2021 comments, UDAQ's RTC, and finally the Petition. Throughout these documents, each party has attempted to refute points raised by the other party, even on certain issues that have proven irrelevant to UDAQ's PSD non-applicability decision.

resulted in a major modification and triggered PSD. *See* Petition at 78, 80–82, 83, 87, 93. Because UDAQ did not determine—and the Petitioner has not demonstrated that UDAQ was required to determine—that the 1997–1999 changes were subject to PSD, these arguments are not relevant.

In sum, none of the Petitioner's arguments demonstrate that UDAQ's determination that PSD did not apply to the 1997–1999 changes "did not comply with its SIP-approved regulations governing PSD permitting, or [that] the state's exercise of discretion under such regulations was unreasonable or arbitrary." *E.g.*, Appleton Order at 5. Accordingly, the Petitioner has not demonstrated that the title V permit lacks PSD-related applicable requirements (such as BACT) or that the title V permit must include a compliance schedule requiring PacifiCorp to obtain a PSD permit. Therefore, the Petition is denied.

V. CONCLUSION

For the reasons set forth in this Order and pursuant to CAA § 505(b)(2) and 40 C.F.R. § 70.8(d), I hereby deny the Petition as described in this Order.

Dated: SEP 27 2022

Michael S. Regan
Administrator