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

In re: Cape Wind Associates, LLC	)	OCS Appeal No. 11-01
Permit No. OCS-R1-01	)	

RESPONSE TO PETITION FOR REVIEW

This dispute concerns an Outer Continental Shelf air permit issued by Region 1 of the U.S. Environmental Protection Agency (the Region) to Cape Wind Associates, LLC (Cape Wind) for air emissions from vessels used to construct, maintain, and repair a proposed wind turbine project off the coast of Massachusetts. Petitioners Alliance to Protect Nantucket Sound and Wampanoag Tribe of Gay Head (Aquinnah) argue that (1) the permit record does not adequately support the Region's conclusion that the permitted emissions will not cause violations of the recently-issued 1-hour National Ambient Air Quality Standards for nitrogen dioxide and sulfur dioxide, and (2) a general conformity determination conducted by a different federal agency for a different aspect of the Cape Wind project has been overtaken by alleged changes that postdate permit issuance. The Board should deny review of all issues raised.

Petitioners' challenge to the Region's air quality analysis is founded on a false premise regarding the content of the administrative record, and misunderstanding of well-established legal precepts concerning administrative records. They base their challenge to the Region's air quality determinations on the incorrect premise that the documents in question were omitted from the administrative record. Rather than accept the Region's invitation to ask for copies of any materials in the record, however, Petitioners wrongly assumed that the materials in question

were not in the administrative record at all. Moreover, since they failed to use the 33-day appeal period to request and examine the documents in question, their substantive arguments consist of vague "for example" questions. The Board should not afford Petitioners a second bite at the apple by allowing them to supplement their petition.

Petitioners' argument concerning the general conformity determination prepared by another federal agency, the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE), fails to recognize that BOEMRE's general conformity determination is not reviewable in this forum. In addition, even if there were some legal nexus between BOEMRE's general conformity determination and the Region's air permit, the Region's permit is not subject to general conformity requirements and the Petition fails to show any such nexus suggesting that the Region's permit was issued in clear error. Finally, Petitioners' underlying factual claim (a claimed change in vessel staging location) is contradicted by the record.

TABLE OF CONTENTS

TABLE OF ABBREVIATIONS

Abbreviation	Full phrase
APNS	Alliance to Protect Nantucket Sound
AR	Administrative Record
BOEMRE	Bureau of Ocean Energy Management, Regulation, and Enforcement
CAA	Clean Air Act
CMR	Code of Massachusetts Regulations
COA	Corresponding Onshore Area
Doc. No.	Document (filing) number in Board appeal docket
Ex.	Exhibit
ESP	Electrical Service Platform
NAAQS	National Ambient Air Quality Standards
NANSR	Nonattainment New Source Review
NEPA	National Environmental Policy Act
NSR	New Source Review
NO_2	Nitrogen dioxide
NOx	Nitrogen oxides
OCD	Offshore and Coastal Dispersion
OCS	Outer Continental Shelf
Pet.	Petition for Review
SO_2	Sulfur dioxide
tpy	Tons per year
WTGH	Wampanoag Tribe of Gay Head (Aquinnah)

TABLE OF EXHIBITS

Ex. #	AR #	Document
1	63	Fact Sheet
2	33	Final General Conformity Determination
3	62	Draft Permit
4	61	Public Notice
5	59	Attachment I, Memorandum from Brian Hennessey (June 3, 2010)
6	112	Response to Comments
7	86	APNS Comment
8	66	Nantucket Transcript
9	78	Martha's Vineyard Transcript
10	85	West Yarmouth Transcript
11	99	ESS 11-4-2010 email
12	100	November 4 Modeling Report (Nov. 4, 2010)
13	125	ESS 11-22-2010 email
14	172	ESS 11-30-2010 email
15	173	ESS 12-3-2010 email
16	106	December 3 Modeling Report (Dec. 3, 2010)
17	107	ESS 12-7-2010 email
18	109	One-Hour Modeling Memorandum (Dec. 21, 2010)
19	134	Final Permit
20	124	Final Permit Cover Letter
21	127	Extract FY1985 Model CH on STP adjust
22	105	Appeal information for Final Permit
23	135	OCD User's Guide
24	144	cbgrid.out
25	140	cbgrid2.out
26	142	cbgrid3.out
27	138	cableconcs.xls
28	118	Report No. 5.3.1-3
29	97	Letter from Stephen Perkins to Dennis Duffy (Oct. 29, 2010)
30	102	Letter from Dennis Duffy to Stephen Perkins (Nov. 17, 2010)
31	128	Cape Wind Receptor Locations.xls
32	20	Permit Application
33	158	onsite.txt
34	104	Cape Wind OCD Modeling – Tables & Figures
35	143	cbgrid.dat
36	139	cbgrid2.dat
37	141	cbgrid3.dat
38	167	trgrid.ana
39	168	trgrid.dat

40	169	trgrid.out
41	126	Applicability of Appendix W Modeling Guidance for the 1-hour NO_2 NAAQS (June 28, 2010)
42	17	Letter from Robert Varney to APNS (May 28, 2008)
43	21	Letter from APNS to Robert Varney (Jan. 5, 2009)
JN1	--	Region 1 New Source Review web page
JN2	--	McDonnell-Newsad Email

THRESHOLD PROCEDURAL REQUIREMENTS

Petitioners participated in the public comment period on the permit and therefore have standing to petition for review of the permit decision. As this response demonstrates, Petitioners failed to raise reasonably ascertainable issues and/or submit reasonably available arguments by the close of the public comment period, and therefore failed to preserve them. *See* 40 C.F.R. §§ 124.13, 124.19(a).

STATEMENT OF THE CASE

I. Statutory and Regulatory Background

A. Outer Continental Shelf Air Permitting

Section 328 of the Clean Air Act (CAA) requires EPA to "establish requirements to control air pollution from Outer Continental Shelf sources located offshore of the States along the Pacific, Arctic and Atlantic Coasts . . . to attain and maintain Federal and State ambient air quality standards." 42 U.S.C. § 7627(a)(1). For Outer Continental Shelf (OCS) sources "located within 25 miles of the seaward boundary of such States, such requirements shall be the same as would be applicable if the source were located in the corresponding onshore area, and shall include, but not be limited to, State and local requirements for emission controls, emission limitations, offsets, permitting, monitoring, testing, and reporting." *Id.*[1]

To implement these requirements, EPA has promulgated the Outer Continental Shelf Air Regulations at 40 C.F.R. Part 55, which establish "the air pollution control requirements for OCS sources and the procedures for implementation and enforcement of the requirements." 40 C.F.R. § 55.1. These regulations further define the term "OCS source," and clarify the treatment of vessels, by explaining that, on the one hand, vessels are only OCS sources when they are:

[1] The term "OCS source" is defined as:

> any equipment, activity, or facility which—
>
> (i) emits or has the potential to emit any air pollutant,
> (ii) is regulated or authorized under the Outer Continental Shelf Lands Act, and
> (iii) is located on the Outer Continental Shelf or in or on waters above the Outer Continental Shelf.
>
> Such activities include, but are not limited to, platform and drill ship exploration, construction, development, production, processing, and transportation. For purposes of this subsection, emissions from any vessel servicing or associated with an OCS source, including emissions while at the OCS source or en route to or from the OCS source within 25 miles of the OCS source, shall be considered direct emissions from the OCS source.

Id. § 7627(a)(4)(C).

> (1) Permanently or temporarily attached to the seabed and erected thereon and used for the purpose of exploring, developing or producing resources therefrom, within the meaning of section 4(a)(1) of [the Outer Continental Shelf Lands Act] (43 U.S.C. §1331 et seq.); or
>
> (2) Physically attached to an OCS facility, in which case only the stationary sources aspects of the vessels will be regulated.

40 C.F.R. § 55.2. On the other hand, the regulations' definition of "potential emissions" specifies that "emissions from vessels servicing or associated with an OCS source shall be considered direct emissions from such a source while at the source, and while enroute [*sic*] to or from the source when within 25 miles of the source, and shall be included in the 'potential to emit' for an OCS source." *Id.*

Part 55 also contains procedures by which EPA identifies the "corresponding onshore area" (COA) for a particular OCS source and the requirements of that COA that may be applicable to OCS sources. *See* 40 C.F.R. §§ 55.4 (requiring OCS source proponent to submit notice of intent), 55.5 (describing process for determining COA), 55.12 (describing "consistency update" process by which EPA reviews air pollution control requirements of a given onshore area and incorporates applicable requirements by reference into 40 C.F.R. § 55.14 and Part 55 Appendix A). A proposed OCS source located within 25 miles of a state's seaward boundary must obtain a preconstruction air permit that incorporates both federal requirements and the COA requirements incorporated into the federal regulations. *See id.* §§ 55.6 (b), 55.13, 55.14.

B. Relevant Massachusetts Regulations Incorporated into 40 C.F.R. Part 55

On September 17, 2008, EPA promulgated an OCS consistency update that amended 40 C.F.R. Part 55 to incorporate the provisions that pertain to OCS sources for which Massachusetts is the COA. *See* Outer Continental Shelf Air Regulations Consistency Update for

Massachusetts, 73 Fed. Reg. 53,718 (Sept. 17, 2008) (codified at 40 C.F.R. §§ 55.14(d)(11), (e)(11), and 40 C.F.R. pt. 55 App. A).

The principal Massachusetts permitting regulations applicable to stationary sources are the Massachusetts Air Pollution Control regulations at 310 Code of Massachusetts Regulations (C.M.R.) 7.00. Relevant here are (1) the Massachusetts Plan Approval regulation at 310 C.M.R. 7.02 (Plan Approval and Emission Limitations), and (2) the Massachusetts Nonattainment New Source Review (NANSR) regulation at 310 C.M.R. 7.00 Appendix A (Emission Offsets and Nonattainment Review).

The plan approval regulation is a general permitting regulation that applies to all new sources of air pollutants with potential emissions greater than one ton per year (tpy). It requires the permitting agency (ordinarily the Massachusetts Department of Environmental Protection, but in this case the Region) to ensure that "[t]he emissions from a facility do not result in air quality exceeding either the Massachusetts or National Ambient Air Quality Standards." 310 C.M.R. 7.02(3)(j)(1).[2] The plan approval regulation does not, however, require the permitting agency to conduct air dispersion modeling for every single National Ambient Air Quality Standard (NAAQS), which would be impractical for a permitting program that applies to minor sources ($\geq$ 1 tpy) as well as major sources. Rather, the plan approval regulation provides that "[a]dditional information shall be furnished *upon request by the [permitting authority]* including, but not limited to, air dispersion modeling." 310 C.M.R. 7.02(5)(c)(6) (emphasis added). In other words, the permitting authority must ensure that air quality standards are not violated, but need not conduct a dispersion modeling analysis for every NAAQS with every permit.

[2] With respect to NO_2 and SO_2, the Massachusetts air quality standards are no more stringent than the NAAQS. *See* 310 C.M.R. 6.00. Consequently, this response's discussion of air quality standards focuses on the NAAQS.

Nonattainment NSR applies to new major sources (or major modifications to major sources) of pollutants in areas that are designated nonattainment for the applicable NAAQS. Since eastern Massachusetts is designated nonattainment for the ozone NAAQS, Massachusetts implements the federal NANSR requirements through 310 C.M.R. 7.00 Appendix A. *See* Ex. 1, AR 63 (Fact Sheet) at 14.[3] These rules apply, *inter alia*, to new stationary sources with potential emissions of 50 tpy or more of nitrogen oxides (NOx). *See* 310 C.M.R. 7.00 App. A § 2 (definition of "Major Stationary Source").

As a result of EPA's 2008 OCS consistency update, OCS sources for which Massachusetts is the COA may be subject, if their emissions meet the applicable thresholds, to the Massachusetts plan approval and NANSR regulations. *See* 40 C.F.R. §§ 55.13(d)(11), (e)(11); 40 C.F.R. pt. 55 App. A.

C. Administrative Record Requirements for EPA-Issued Permits

EPA regional offices process OCS permit applications according to the Procedures for Decisionmaking at 40 C.F.R. Part 124. *See* 40 C.F.R. § 55.6(a)(3). Under Part 124, EPA first develops a draft permit, with an associated fact sheet (or, in some cases, a statement of basis) and accompanying administrative record. *See id.* §§ 124.6-124.9. EPA then submits the draft permit for public comment, with an opportunity for public hearing. *See id.* §§ 124.10-124.12. Members of the public may provide written or (if a hearing is held) oral comments on the draft permit. *See id.* §§ 124.11-13.

EPA then reviews and considers the comments received. *See id.* § 124.11. Based on the comments received, EPA determines whether to revise (or in rare cases deny) the permit, and issues a final permit decision, with an accompanying response to comments. *See id.*

[3] In this response, the first reference to an exhibit cites the exhibit number, administrative record number, and short title. Subsequent references cite the exhibit number and short title.

§§ 124.15(a), 124.17. The response to comments must "[s]pecify which provisions, if any, of the draft permit have been changed in the final permit decision, and the reasons for the change," and "[b]riefly describe and respond to all significant comments on the draft permit." *Id.* §§ 124.17(a)(1)-(2).

In responding to comments, the regional office is not limited to responding based on materials that were in the administrative record when the draft permit was issued. Rather, "[i]f new points are raised … during the public comment period, EPA may document its response to those matters by adding new materials to the administrative record." *Id.* § 124.17(a)(3). However, if any arguments submitted during the comment period "appear to raise substantial new questions concerning a permit," the regional office also has discretion to prepare a new draft permit, prepare a revised fact sheet (or statement of basis) and reopen the comment period, or "[r]eopen or extend the comment period . . . to give interested persons an opportunity to comment on the information or arguments submitted." *Id.* §§ 124.14(b)(1)-(3).

D. General Conformity

Under Section 176 of the CAA, no federal agency may "license or permit, or approve, any activity which does not conform to an [approved state] implementation plan after it has been approved or promulgated" under Section 110 of the CAA. 42 U.S.C. § 7506(c)(1). In general terms, an activity "conform[s] to an implementation plan" if it does not (1) cause or contribute to any new violation of any NAAQS, (2) increase the frequency or severity of any existing violation of any NAAQS, or (3) delay timely attainment of any NAAQS or any required interim milestone. *Id.* §§ 7506(c)(1)(A)-(B)(iii).

EPA has promulgated 40 C.F.R. Part 93 (Determining Conformity of Federal Actions to State or Federal Implementation Plans) to implement Section 176, and the "general conformity"

provisions are found at Part 93 Subpart B.[4] In determining whether general conformity applies to a particular federal action or portion of an action, agencies begin with the applicability criteria and exemptions of 40 C.F. R. § 93.153. An action or portion of an action is subject to general conformity if (1) its emissions exceed the applicability thresholds in § 93.153(b), and (2) it is not otherwise exempt under § 93.153. *See id.* §§ 93.153(b)-(f). Relevant here, "a conformity determination is not required for . . . [t]he portion of an action that includes major or minor new or modified stationary sources that require a permit under the new source review (NSR) program (Section 110(a)(2)(c) and Section 173 of the [CAA])." *Id.* § 93.153(d)(1).

II. Factual Background

A. Overview of the Cape Wind Project

Cape Wind has proposed to install and operate 130 wind turbines and other supporting equipment in a grid pattern on or near the Horseshoe Shoal in Nantucket Sound, approximately 3.5 miles off the Massachusetts coast. The project is outside Massachusetts state waters but well within 25 miles of the state's seaward boundary. Ex. 1 (Fact Sheet) at 6.

The project includes the construction and operation of 130 wind turbines, an electrical service platform (ESP), inner-array cables, and two transmission cables. Each of the 130 wind turbines will independently generate electricity. The ESP will serve as the common interconnection point for all of the wind turbines. Solid submarine inner-array cables will interconnect each of the wind turbines to the ESP. The proposed submarine transmission cable system will run approximately 12.5 miles from the ESP to the landfall location in Yarmouth (Cape Cod), Massachusetts. *Id.*

[4] The term "general conformity" is used to distinguish so-called "general federal actions," which are subject to CAA § 176(c)(1) and Part 93 Subpart B, from transportation-related planning and actions, which are subject to additional provisions of Section 176 and to Part 93 Subpart A.

B. Construction-Related Vessel Air Emissions

The principal air emissions for the Cape Wind project derive from two types of diesel engines on vessels used for the initial construction process. *See id.* at 5, 13, 15, 18-20. First, various stationary internal combustion engines are used to power construction equipment, such as cranes, hydraulic rams, and the "jacking systems" used to attach a jack-up rig to the seafloor.[5] *See id.* at 18-19. Second, marine propulsion engines are used to move construction and support vessels to and from individual construction sites. *See id.* at 22-24.

During the initial construction process, these engines' emissions include substantial NOx emissions, as well as much lower emissions of sulfur dioxide (SO_2) and various other pollutants. For purposes of calculating potential construction phase emissions, Cape Wind added the stationary construction emissions to the transit emissions within a 25-mile radius. These total construction emissions are projected to exceed the Massachusetts major source NANSR threshold of 50 tpy for NOx, and the lower Massachusetts plan approval threshold of 1 tpy for SO_2 and several other pollutants. *See id.* at 24 (Table 2). They will not exceed Prevention of Significant Deterioration thresholds under Part C of Title I of the CAA. *See id.* at 24 (Table 2), 26 (Table 3).

Once construction is complete and the wind project begins operations, these construction vessels will likely only be required for occasional repair activities. Consequently, air emissions from construction vessels are expected to be much lower during the operational phase. Based on Cape Wind's emissions estimates, the operations-phase emissions of NOx and several other pollutants will exceed the Massachusetts plan approval threshold of 1 tpy, but no pollutant's emissions will exceed major source thresholds. *See* Ex. 1 (Fact Sheet) at 25-26.

[5] A jack-up rig is a floating vessel or barge that is equipped with long support legs and a lifting system that enables it to attach to the seafloor and elevate the vessel above the sea surface, essentially converting the vessel into a fixed platform. *See* Ex. 1 (Fact Sheet) at 19 n.6.

III. Procedural History

A. Other Federal Reviews

Since Cape Wind proposed the project in November 2001, the overall project has undergone several forms of federal review under the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321 *et seq.*, and various other statutes. In these reviews, BOEMRE (formerly the Minerals Management Service)[6] assumed the lead federal regulatory role, but other federal agencies (including the Region) acted as cooperating agencies in assessing the project. *See* Ex. 1 (Fact Sheet) at 10-11.

Relevant here, pursuant to CAA § 176, BOEMRE undertook a general conformity analysis to ensure that its proposed authorization of the Cape Wind project would meet the requirements of CAA § 176 and 40 C.F.R. Part 93. BOEMRE issued its final general conformity determination in December 2009. *See* Ex. 2, AR 33 (Final General Conformity Determination); *see also* Ex. 1 (Fact Sheet) at 10. BOEMRE's conformity determination focused on air emissions in Rhode Island and Massachusetts other than those addressed by this OCS air permit, i.e., emissions on shore, in state waters, and in federal waters outside of the 25 mile radius addressed by this permit. *See* Ex. 2 (Final General Conformity Determination) at 3-4.

B. Permit Application

On December 17, 2008, Cape Wind applied for an OCS air permit. *See* Ex. 32, AR 20 (Permit Application). The Permit Application (which Cape Wind subsequently revised six times between December 2008 and June 2010) described Cape Wind's emissions sources and proposed to divide the project into two phases, corresponding roughly to construction and operations. For the first phase, the Permit Application proposed to apply the Massachusetts NANSR

[6] The Minerals Management Service was reorganized after issuance of the Draft Permit, and the current name of the relevant agency is BOEMRE. For consistency and simplicity, this response uses the term BOEMRE throughout, even though this term is anachronistic when referring to the agency before the reorganization.

requirements for NOx, including control technology achieving the Lowest Achievable Emission Rate, a total NOx emissions cap, and a requirement to obtain emissions offsets. For the second phase, the Permit Application proposed to apply the Massachusetts plan approval requirements for NOx, principally application of Best Available Control Technology. For SO_2 and the other pollutants at issue, the Permit Application proposed to apply the Massachusetts plan approval requirements in both phases.

C. The 1-Hour NO_2 and SO_2 Standards

In July 2009 (about six months after Cape Wind submitted its permit application), EPA proposed to revise the nitrogen dioxide (NO_2) NAAQS by imposing a new 1-hour standard. *See* Primary National Ambient Air Quality Standard for Nitrogen Dioxide, 74 Fed. Reg. 34,404 (proposed July 15, 2009). Six months later, EPA proposed to revise the SO_2 NAAQS by imposing a new 1-hour standard as well. *See* Primary National Ambient Air Quality Standard for Sulfur Dioxide, 74 Fed. Reg. 64,810 (proposed Dec. 8, 2009).

EPA finalized the 1-hour NO_2 and SO_2 standards in February 2010 (with an effective date of April 12, 2010) and June 2010 (with an effective date of August 23, 2010) respectively. *See* Primary National Ambient Air Quality Standards for Nitrogen Dioxide, 75 Fed. Reg. 6,474, 6,529 (Feb. 9, 2010) (codified at 40 C.F.R. Pts. 50 and 58); Primary National Ambient Air Quality Standard for Sulfur Dioxide, 75 Fed. Reg. 35,520, 35,520 (June 22, 2010) (codified at Pts. 50, 53, and 58).

D. Draft Permit

On June 11, 2010, the Region submitted for public notice a draft OCS air permit, with an accompanying fact sheet, proposing to authorize and regulate Cape Wind's OCS vessel air emissions. *See* Ex. 3, AR 62 (Draft Permit); Ex. 4, AR 61 (Public Notice); Ex. 1 (Fact Sheet). The Draft Permit, like the Permit Application, divided the project into two phases, construction

and operations. In the first phase, the Draft Permit applied the Massachusetts NANSR requirements for NOx, including control technology achieving the Lowest Achievable Emission Rate, a total NOx emissions cap, and a requirement to obtain emissions offsets. In the second phase, the Draft Permit imposed an annual "synthetic minor source" limit on NOx emissions, and imposed the Massachusetts plan approval requirements for NOx, principally application of Best Available Control Technology. For SO_2 and the other pollutants at issue, the Draft Permit imposed the Massachusetts plan approval requirements in both phases.[7]

The Fact Sheet also included an analysis of the source's impact on ambient air quality with respect to the annual NO_2 NAAQS, annual SO_2 NAAQS, and several other standards. As noted above, Cape Wind's projected emissions are well below Prevention of Significant Deterioration thresholds, *see* Ex. 1 (Fact Sheet) at 24 (Table 2), 26 (Table 3), and the modeling requirements of 40 C.F.R. § 52.21 do not apply. However, the Massachusetts plan approval regulation requires the Region to ensure that emissions do not exceed the NAAQS, and requires the applicant to submit air dispersion modeling if the Region so requests. *See* 310 C.M.R. 7.02(3)(j)(1), 7.02(5)(c)(6).

The Draft Permit's source impact analysis was contained principally in a separate memorandum known as "Attachment I," which was summarized and cited in the Fact Sheet. *See* Ex. 5, AR 59 (Attachment I, Memorandum from Brian Hennessey to Brendan McCahill (June 3, 2010)); Ex. 1 (Fact Sheet) at 50-51. In Attachment I, the Region's modeling expert (Brian Hennessey) reviewed modeling information that Cape Wind[8] submitted to BOEMRE in support

[7] Cape Wind only triggers the Massachusetts plan approval requirements for SO_2 in the first year of the construction phase. The project's SO_2 emissions are not projected to exceed the 1 tpy threshold in subsequent years of the first phase, nor at all during the second phase. *See* Ex. 1 (Fact Sheet) at 24 (Table 2), 26 (Table 3). However, the Region imposed the same control technology requirements on SO_2 emissions throughout both phases. *See id.* at 47 n.29.
[8] The air dispersion modeling was actually performed and submitted by Cape Wind's consultant, ESS Group, Inc. For simplicity, this response refers to Cape Wind as having provided the information.

of BOEMRE's general conformity and NEPA analyses. Mr. Hennessey's review noted that Cape Wind's modeling was conservative (i.e., likely overestimated impacts) in several respects, and concluded that the project emissions will not result in air quality exceeding ambient air quality standards for annual NO_2, annual SO_2, or the other standards reviewed. *See* Ex. 5 (Attachment I) at 3-4; Ex. 1 (Fact Sheet) at 50-51.

The Region did not at that point request a modeling analysis of the project's potential impacts under the recently-issued 1-hour NO_2 standard.[9] As noted above, the Massachusetts plan approval regulation accords the permitting authority some discretion in determining which air dispersion modeling to require. *See* 310 C.M.R. 7.02(5)(c)(6). In Attachment I, Mr. Hennessey explained that the Region had discussed whether to require additional air quality dispersion modeling with Cape Wind and BOEMRE several times, and the Region had ultimately decided to rely on the modeling that Cape Wind had already submitted to the Region to support BOEMRE's general conformity analysis. *See* Ex. 5 (Attachment I) at 2. Attachment I noted that annual NO_2 emissions resulted in a projected impact that was below the Significant Impact Level, *see* Ex. 5 (Attachment I) at 4, i.e., *de minimis*. Attachment I furthermore noted that the total modeled concentration of annual NO_2 was just one-tenth of the NO_2 NAAQS. *See id.* Based on these facts, and absent any reason to suspect that the project might cause a violation of the 1-hour NO_2 standard, the Region determined that it would not be necessary to require further modeling. *See* Ex. 5 (Attachment I) at 3 ("Based on the above review of [Cape Wind]'s modeling efforts to date and as shown in the table below, the project emissions will not result in air quality exceeding ambient air quality standards for NO2, . . . , SO2, [or other pollutants]. No further modeling should be required."); Ex. 1 (Fact Sheet) at 50-51 (citing Attachment I) ("EPA

[9] The 1-hour SO_2 standard was not finalized until June 22, 2010, after the Draft Permit had already been proposed. *See supra* at 9.

has examined whether emissions from the project would result in air quality exceeding ambient air quality standards for NO2, . . . , SO2, [or other pollutants]. . . . EPA is satisfied that the project emissions will not result in air quality exceeding ambient air quality standards for NO2, . . . , SO2, [or other pollutants], and is not requiring further modeling.").

E. Public Comment Process

As set forth in the Public Notice, the Region conducted a public comment period from June 11, 2010 to July 16, 2010 (35 days). The Region also conducted three public hearings, on July 13, 14, and 15, in Nantucket, Martha's Vineyard, and West Yarmouth (Cape Cod), Massachusetts. *See* Ex. 4 (Public Notice) at 3-4.

The Region received written comments from 22 commenters, including Petitioner Alliance to Protect Nantucket Sound (APNS). *See* Ex. 6, AR 112 (Response to Comments) at 5; Ex. 7, AR 86 (APNS Comment). The Region also received oral comments from twenty-seven commenters at the public hearings. Petitioner APNS commented at all three hearings. *See* Ex. 8, AR 66 (Nantucket Transcript); Ex. 9, AR 78 (Martha's Vineyard Transcript); Ex. 10, AR 85 (West Yarmouth Transcript). Relevant here, Petitioner APNS commented that the Region had not evaluated whether the project's air emissions would comply with recently-promulgated 1-hour NAAQS for NO_2 and SO_2. *See* Ex. 7 (APNS Comment) at 3.[10]

Petitioner Wampanoag Tribe of Gay Head (Aquinnah) (WTGH) commented at the Martha's Vineyard hearing. *See* Ex. 9 (Martha's Vineyard Transcript) at 22-24; *see also* Ex. 6 (Response to Comments) at 5-6. Additionally, the Region consulted with Petitioner WTGH, as a federally-recognized Indian tribe, starting before the comment period began and continuing after it ended. *See* Ex. 1 (Fact Sheet) at 54 (summarizing communication with tribes before issuance

[10] Petitioner APNS also raised this comment orally at each of the three public hearings. For simplicity, the Region refers only to the version presented in the written comment.

of draft permit); Ex. 6 (Response to Comments) at 43-44 (Response F1) (summarizing communication with Petitioner WTGH between issuance of draft and final permits).

F. Response to Comments and Final Permit

The Region prepared a Response to Comments addressing the comments raised during the public comment period. *See generally* Ex. 6 (Response to Comments). The Response to Comments individually addressed each of Petitioners' comments. Relevant here, the Response to Comments specifically responded to the comment from Petitioner APNS regarding 1-hour NO_2 and SO_2 modeling by developing the information that the comment had requested. *See* Ex. 6 (Response to Comments) at 16 (Response B1). The Region asked Cape Wind to conduct further modeling to demonstrate compliance with the new 1-hour NO_2 and SO_2 standards. *See id.* Initially, Cape Wind submitted a modeling analysis focusing on 1-hour NO_2 and SO_2 emissions from OCS sources. *See* Ex. 12, AR 100 (November 4 Modeling Report). The Region then directed Cape Wind to conduct additional modeling analyses for vessels in transit and the vessels associated with cable-laying activities during the project's construction. *See* Ex. 16, AR 106 (December 3 Modeling Report). According to Cape Wind's modeling, the 1-hour NO_2 and SO_2 standards will not be exceeded. *See generally* Ex. 12 (November 4 Modeling Report); Ex. 16 (December 3 Modeling Report).

The Region's modeling expert (Mr. Hennessey) reviewed the modeling and concluded that, overall, the modeling adequately demonstrated that Cape Wind's emissions will not cause violations of the 1-hour NO_2 or SO_2 standards. He explained the basis for this conclusion in a detailed memorandum. *See* Ex. 18, AR 109 (One-Hour Modeling Memorandum). The One-Hour Modeling Memorandum noted that EPA's standard guidelines for dispersion modeling at 40 C.F.R. Part 51 Appendix W (Guideline on Air Quality Models) were designed for stationary point sources, not the types of sources involved in this project (spatially dispersed, moving

sources engaged in temporary construction activities), and also questioned certain technical elements of the modeling. *See id.* at 2. However, despite these points, Mr. Hennessey concluded, on balance, that Cape Wind's modeling approach was reasonable. *See id.* ("Notwithstanding the remarks below conservative aspects of the modeling remain . . . . [Cape Wind's] results should be accepted."). The Region summarized Mr. Hennessey's conclusions in the Response to Comments itself. *See* Ex. 6 (Response to Comments) at 16 (Response B1).

On Friday, January 7, 2011, the Region's Regional Administrator signed a final permit decision. *See* Ex. 19, AR 134 (Final Permit, or Permit). The Final Permit was substantially identical to the Draft Permit, differing only as to several relatively minor permit provisions not at issue here. *See* Ex. 6 (Response to Comments) at 3-4. The Region posted the Final Permit and Response to Comments on its web page that day. The Region individually contacted Petitioner WTGH that same day (and Petitioner APNS the following Monday morning) to inform them directly that the Final Permit had been signed and was available.

The Region mailed its final permit decision on January 10, 2011. Pursuant to 40 C.F.R. §§ 124.19(a) and 124.20(d), the Region specified in the cover letter accompanying the Final Permit that petitions for review would be due 33 days after the Final Permit decision was mailed. *See* Ex. 20, AR 124 (Final Permit Cover Letter).[11] That cover letter also stated:

> Enclosed is EPA's final OCS air permit for the Cape Wind Offshore Renewable Wind Energy Project located on Horseshoe Shoals in Nantucket Sound. EPA issued the final permit pursuant to Section 328 of the Clean Air Act and 40 Code of Federal Regulations (CFR) Part 55. Also enclosed is a copy of EPA's response to the comments received on the draft permit and information regarding appeals and stays of the OCS permit. In addition, you may obtain electronic copies of the final OCS air permit, fact sheet, application and other supporting documents on

[11] Ex. 20 is a copy of the cover letter to the permittee. The Region generated identical final permit cover letters for all recipients via mail merge but did not retain copies of the individual signed final cover letter for each commenter. *Compare* Ex. 20 *with* Doc. No. 1.08, Pet. App. H (Cover Letter From Region 1 to Audra Parker re Service by Mail).

> EPA's web site at http://www.epa.gov/NE/communities/nsemissions.html.
>
> . . .
>
> Should you have any questions concerning the permit, please call Brendan McCahill at (617) 918-1652.

Ex. 20 (Final Permit Cover Letter) at 1.

G. Petition for Review

On February 9, 2011, Petitioners timely filed their petition for review of the Final Permit.

STANDARD OF REVIEW

This petition for review was brought pursuant to 40 C.F.R. § 124.19(a), which authorizes an appeal of certain federally-issued permit decisions to the Board. Although the Board has broad authority to review permit decisions, EPA intended that "this power of review should be only sparingly exercised." *See* National Pollutant Discharge Elimination System; Revision of Regulations, 44 Fed. Reg. 32,854, 32,887 (June 7, 1979). EPA policy calls for "most permits [to] be finally adjudicated at the Regional level." *Id.*

The Board generally will not grant review unless the petitioner establishes that a permit condition is based on a clearly erroneous finding of fact or conclusion of law, or involves an exercise of discretion or an important policy consideration that the Board determines warrants review. 40 C.F.R. §§ 124.19(a)(1)-(2); *In re Carlota Copper Co.*, 11 E.A.D. 692, 708 (EAB 2004), *rev'd on other grounds sub nom. Friends of Pinto Creek v. EPA*, 504 F.3d 1007 (9th Cir. 2007). The burden of demonstrating that review is warranted rests with the petitioner. 40 C.F.R. § 124.19(a); *see In re Rohm & Haas Co.*, 9 E.A.D. 499, 504 (EAB 2000). A petitioner must argue with specificity why the Board should grant review. *In re Puerto Rico Elec. Power Auth.*, 6 E.A.D. 253, 255 (EAB 1995). To meet the threshold of specificity required under 40 C.F.R. § 124.19(a), a petition must (1) state the objections to the permit that are being raised for review, and (2) explain why the Region's previous response to those objections is clearly erroneous or otherwise warrants review. *See Michigan Dep't of Envtl. Quality v. EPA*, 318 F.3d 705, 708-09 (6th Cir. 2003); *Puerto Rico Elec. Power Auth.*, 6 E.A.D. at 255. Thus, the mere repetition of objections made during the comment period or the "mere allegation of error" without specific supporting information are insufficient to warrant review. *In re Phelps Dodge Corp. Verde Valley Ranch Dev.*, 10 E.A.D. 460, 496, 520 (EAB 2002); *In re Knauf Fiber Glass, GmbH*, 9 E.A.D. 1, 5 (EAB 2000). Vague, imprecise, or speculative arguments do not satisfy the

requirements for review. *See In re City of Attleboro, MA Wastewater Treatment Plant*, NPDES Appeal Nos. 08-08, 08-09, slip op. at 61 (EAB Sept. 15, 2009) ("[T]he burden of showing that review is warranted falls on the petitioner, and the Board will not entertain vague or unsubstantiated claims. Mere allegations of error are not sufficient to support review of a permit condition.") (internal citation omitted); *In re Three Mountain Power, LLC*, 10 E.A.D. 39, 58 (EAB 2001) ("The Board will not overturn a permit provision based on speculative arguments.").

Clear error or abuse of discretion is not established simply because a petitioner presents a difference of opinion or alternative theory regarding a technical matter. *In re Town of Ashland Wastewater Treatment Facility*, 9 E.A.D. 661, 667 (EAB 2001). Instead, when a petitioner challenges the Region's technical judgment, "[p]etitioners must provide compelling arguments as to why the Region's technical judgments or its previous explanations of those judgments are clearly erroneous or worthy of discretionary review." *Id.* at 668; *In re Shell Offshore, Inc., Kulluk Drilling Unit & Frontier Discoverer Drilling Unit* ("*Shell I*"), 13 E.A.D. 357, 397 (EAB 2007) ("When a petitioner seeks review based on issues that are fundamentally technical in nature, the Board assigns a particularly heavy burden to the petitioner."); *In re Ash Grove Cement Co.*, 7 E.A.D. 387, 404 (EAB 1997). Moreover, where the science in an area is uncertain, a contrary opinion urged by a petitioner will neither establish that a rational, adequately explained judgment by the Region is clearly in error, nor overcome the Board's traditional deference to regional technical determinations. *In re Dominion Energy Brayton Point, LLC*, 12 E.A.D. 490, 511 n.30 (EAB 2006) ("*Dominion I*"). In such cases, deference to the Region's decision is generally appropriate if "the record demonstrates that the Region duly considered the issues raised in the comments and if the approach ultimately selected by the Region is rational in light of all of the information in the record." *In re NE Hub Partners, L.P.*, 7

E.A.D. 561, 568 (EAB 1998), *rev. denied sub nom. Penn Fuel Gas, Inc. v. EPA*, 185 F.3d 862 (3d Cir. 1999). If conflicting views of the Region and a petitioner indicate "bona fide differences of expert opinion or judgment on a technical issue, the Board typically will defer to the Region." *Id.* at 567-68. This deference to the region's technical judgment advances the policy imperative of "ensur[ing] that the locus of responsibility for important technical decisionmaking rests primarily with the permitting authority, which has the relevant specialized expertise and experience." *In re Peabody W. Coal Co.*, 12 E.A.D. 22, 33 (EAB 2005).

SUMMARY OF ARGUMENT

The Petition's challenge to the Region's air quality modeling analysis does not raise any issues warranting Board review. First, Petitioners argue that the Permit is fatally flawed because the Region's web page did not contain hyperlinks to certain modeling-related files. Petitioners apparently desired access to several files, but, after being unable to download them from the Internet, declined to telephone or e-mail the Region to ask for those files; rather, they wrongly assumed that the files were not part of the administrative record. This argument fails because the administrative record as defined by 40 C.F.R. Part 124 is not limited to the files that the Region discretionarily posted to its web page. Petitioners' argument that the files in question were not part of the administrative record flows directly from this misunderstanding.

Second, Petitioners argue that the public comment period should have been reopened to allow an additional round of comment on aspects of the air quality modeling analysis that the Region added to the administrative record in its response to Petitioners' own comments. However, the Region's decision to develop the additional material and include it in the final permit administrative record, rather than reopen the comment period, was well within the Region's discretion.

Third, Petitioners' vague and speculative questions about the modeling analysis do not provide sufficient specificity to be preserved, nor identify any clear error. Finally, while Petitioners' challenge to the air quality modeling analysis might well have been less speculative if Petitioners had in fact requested copies of the documents in question, they missed their opportunity and, to preserve finality and certainty in the permitting process, should not be allowed a second bite at the apple.

The Petition's argument regarding BOEMRE's general conformity determination also does not raise any issues warranting Board review. Petitioners argue that Cape Wind is planning

to change the staging location for its vessels, which may require BOEMRE to revise its general conformity determination, and therefore the Board should remand the Region's Permit. This argument fails for several reasons. First, any hypothetical errors in BOEMRE's general conformity determination itself are beyond the Board's jurisdiction because the Board lacks jurisdiction to review the general conformity determination, either directly (i.e., as if BOEMRE's general conformity determination could be appealed to EPA's Environmental Appeals Board) or indirectly (i.e., in the context of the Region's air permit). Second, the Permit itself is exempt from general conformity as a matter of law. Finally, the assertion that Cape Wind has changed its staging location relies on post-decisional materials and is directly contradicted by the record.

ARGUMENT

I. The Region's Air Quality Analysis Under the One-Hour Nitrogen Dioxide and Sulfur Dioxide Standards is Supported by the Record.

The flaws at the heart of the Petition's challenge to the Region's air quality analysis under the 1-hour NO_2 and SO_2 standards stem from Petitioners' failure to ask the Region for copies of certain materials in the administrative record before filing their Petition. Because Petitioners were unable to find these materials on the Region's web site, they incorrectly assumed that the materials had been improperly excluded from the administrative record. To the contrary, these materials are part of the administrative record by operation of law, and have been (and continue to be) available upon request by any person. The Petition is based on a misunderstanding of what "administrative record" means, both under 40 C.F.R. Part 124 in general and for this permit in particular.

Moreover, because Petitioners never asked for those materials, the Petition contains very little specific argument directed at the air quality modeling analysis. Instead, it consists of (1) a generalized argument that the comment period should have been reopened because new material was developed in the response to comments, and (2) a set of open-ended questions about the air quality modeling analysis that Petitioners could have discovered were amply answered by the record if they had asked for the materials in question. Thus, the Petition identifies no clear error or abuse of discretion warranting Board review.

Finally, while this response does in fact attach the materials in question as exhibits, the Petition's lack of specificity is based on Petitioners' own failure to seek publicly available materials, and Petitioners should not be afforded a second bite at the apple by granting review and allowing them to raise new arguments after they have reviewed the materials that they could have reviewed in January.

II. Petitioners' Claim That Modeling Files are Missing from the Administrative Record is Incorrect and, Even if True, Would Not Warrant Review.

The crux of Petitioners' argument is that certain modeling files are missing from the administrative record. This is not true: the files in question are now, and have been since their receipt or creation, part of the permit's administrative record. The Region has always considered these documents to be part of the administrative record, has been prepared since the day of final permit issuance to supply them on request, has listed them in the certified index, and has attached them as exhibits hereto. The Region's pragmatic approach to providing key documents, but not the entire administrative record, on its web page was both rational and legally correct, and Petitioners have not identified any clear error or abuse of discretion warranting Board review.

EPA's procedural regulations at 40 C.F.R. Part 124 define the administrative record for a final permit when EPA is the permitting authority. The administrative record for a final permit begins with the administrative record for the draft permit. 40 C.F.R. § 124.18(b). It also includes all comments and materials received during the public comment period and at any public hearing, the response to those comments, and the final permit itself. *Id.* §§ 124.18(b)(1)-(4), (7). Most relevant here, the administrative record may contain materials that EPA obtained or developed as part of the process of responding to comments:

> For EPA-issued permits, any documents cited in the response to comments shall be included in the administrative record for the final permit decision as defined in §124.18. If new points are raised or new material supplied during the public comment period, EPA may document its response to those matters by adding new materials to the administrative record.

Id. § 124.17(b); *see also id.* §§ 124.18(b)(4) (stating that administrative record includes "[t]he response to comments required by § 124.17 and any new material placed in the record under that section"), 124.18(b)(6) (stating that administrative record includes "[o]ther documents contained

in the supporting file for the permit"). As explained in detail below, the Region met, and continues to meet, all of these requirements.

A. The Region was not required to post every document in the administrative record, or any documents at all, on its web page.

Petitioners' argument misconstrues the concept of an "administrative record" under 40 C.F.R. § 124.18, and how that legal concept does (or does not) correspond to specific physical or electronic repositories. The "administrative record," as defined by 40 C.F.R. § 124.18, describes a set of documents that constitute the appropriate basis for the Regional Administrator's final permit decision, *see* 40 C.F.R. § 124.18(a), and for the Board's review of that decision. If a document meets the criteria of 40 C.F.R. § 124.18, then it is part of the administrative record, whether or not the Region has posted it on a web page. Section 124.18 does not specify any particular method of recordkeeping, with one exception:

> Material readily available at the issuing Regional Office, or published materials which are generally available and which are included in the administrative record under the standards of this section or of § 124.17 ("Response to comments"), need not be physically included in the same file as the rest of the record as long as it is specifically referred to in the statement of basis or fact sheet or in the response to comments.

Id. § 124.18(e). Thus, materials that are part of the administrative record, and specifically referred to within the response to comments, "need not be physically included in the same file as the rest of the record" if they are "readily available at the issuing Regional Office." Notably, there is no requirement in 40 C.F.R. Part 124 that any documents from the administrative record be posted to a web site, nor that, if a Region posts *any* documents to a web site, then it must post *the entire administrative record* to that web site.

At the crux of Petitioners' argument appears to be a set of interlocked, but mistaken, beliefs: that the Region's web page represents a complete electronic docket of every document in

the administrative record, *see, e.g.*, Pet. at 12 (stating that the documents in question "do not, however, appear in the docket for the permit"); that the Region is legally required to make available a complete electronic docket of every document in the administrative record as of the date of final permit issuance; and that, if a document is absent from this "docket," then it is *ipso facto* not part of the administrative record as defined by 40 C.F.R. § 124.18. However, all three beliefs are incorrect.

The Region has no legal obligation to provide an electronic copy of any part, let alone the entirety, of the administrative record. *See Dominion I*, 12 E.A.D. at 529-30 (rejecting objection that an electronic index of the record was not available for several weeks after issuance of the final permit, because "there is no requirement that an electronic index be prepared" in the first place). More recently, in *In re Russell City Energy Center*, PSD Appeal Nos. 10-01 through 10-05, 10-12, 10-13 (EAB Nov. 18, 2010), the petitioner objected that the permitting authority had provided an incomplete electronic record, rather than a continually updated electronic docket as another EPA regional office or this Board may provide. *Id.*, slip op. at 129. The Board rejected this argument:

> [O]ne of [petitioner's] primary concerns appears to be that the administrative record is not available electronically. While this may be preferable, the regulations do not require it. The regulations only require that the administrative record be available for review. *See* 40 C.F.R. § 124.10(d)(vi) (requiring that the permit issuer specify "the times at which the record will be open for public inspection").

Id. at 130 (some internal citations omitted). Similarly, there is no requirement that the Region provide a comprehensive and final list of all the items in the administrative record when it issues the final permit.[12] *See Dominion I*, 12 E.A.D. at 528-30; *In re Mayaguez Reg'l Sewage*

[12] To be sure, the administrative record must be complete as soon as the final permit is issued. *See id.* § 124.18(c). However, the Region is not required to provide a certified index of all documents in the administrative record until a

Treatment Plant, 4 E.A.D. 772, 776 n.7 (EAB 1993). Since the Region has no obligation to include any documents whatsoever on its web page—or even to *have* a web page—the Region's decision not to post the documents in question on its web page does not warrant Board review.

Moreover, even the "physical file" that the Region *is* required to maintain need not include everything that is legally part of the administrative record. *See* 40 C.F.R. § 124.18(e) (noting that "[m]aterial readily available at the issuing Regional Office, or published materials which are generally available . . . need not be physically included in the same file as the rest of the record as long as it is specifically referred to in the statement of basis or fact sheet or in the response to comments"); *id.* § 124.9(c) (same for draft permit administrative record); *Dominion I*, 12 E.A.D. at 530-31 (rejecting petitioner's argument that the record was fatally flawed because it was missing certain documents, citing § 124.18(e), and noting that "the appropriate method for challenging missing documents . . . [is] a motion to supplement the record").

Even if a region were to deliberately or inadvertently omit certain items from its production of the administrative record, this would not by itself render the record incomplete, nor the resulting permit decision flawed. In *In re J&L Specialty Products Corp.*, 5 E.A.D. 31, 80 (EAB 1994), the petitioner requested a copy of the administrative record for the draft permit, and the region sent the petitioner a package of materials that inadvertently omitted several documents. The petitioner later challenged the final permit, arguing that these oversights made the permit fatally defective. The Board rejected the challenge:

> The Region's oversight or error in responding to J&L's request for a copy of the administrative record, alone, does not necessarily mean that the administrative record was incomplete, or that the Region failed to review everything in the administrative record prior to drafting the permit. We note that § 124.9(c) [parallel to § 124.18(e)] does not

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petition is filed and the Board so requests. *See Environmental Appeals Board Practice Manual* (Sept. 2010) at 36; Doc. No. 2 (Letter to Carl Dierker, Regional Counsel, Requesting Response to the Petition for Review (Feb. 10, 2011)) at 2. This requirement does not stem from the regulations, but rather Board practice. *See Ash Grove*, 7 E.A.D. at 427 n.33.

> require everything that is part of the administrative record to be physically included in the administrative record. There has been no showing that this exception does not apply to any or all of the documents J&L claims are missing from the administrative record. Further, J&L does not allege that anything other than an oversight is involved here; for example, J&L does not allege that upon receiving what it claims is an incomplete administrative record it notified the Region of the error, and the Region refused to make the missing documents available. . . . The NPDES regulations contemplate making the administrative record available and open for public inspection, not mailing it in its entirety to interested persons.

Id. at 80-81; *see also In re Zion Energy, LLC*, 9 E.A.D. 701, 704, 709 n.6 (EAB 2001) (rejecting petitioner's objection that "a complete copy of the draft permit was not made available at the Waukegan Public Library or on the internet" because, "while certain information may have been absent (at least temporarily) from the Waukegan Public Library," petitioner was, despite this flaw, able to actually obtain access to the draft permit).

In *Mayaguez*, the petitioner argued that because a certain document was not listed in the certified index to the administrative record submitted along with the Region's response to the petition for review, the document was not part of the administrative record. 4 E.A.D. at 776 n.7. The Board disagreed:

> The Report was cited [in] . . . the Region's response to comments . . . and therefore became part of the administrative record. *See* 40 C.F.R. § 124.17(b) ("any documents cited in the response to comments shall be included in the administrative record for the final permit decision * * *."). *See also* 40 C.F.R. § 124.18(e) (material readily available at the issuing Regional office need not be physically included in the same file as the rest of the record as long as it is referred to in the response to comments). Although, as the Region acknowledges, it would have been clearer if the Region had listed the Tetra Tech Report in the certified index . . ., [petitioner] was aware of the report and, in fact, requested and received a copy of it approximately six weeks before requesting an evidentiary hearing.

Id. (some elisions added). In other words, in *Mayaguez* the Board held that the report at issue automatically became part of the administrative record by operation of law under 40 C.F.R.

§ 124.17(b), simply because the region cited it in the response to comments, *even though the region did not list the document in the certified index on appeal*.

Similarly, in *Ash Grove*, the Board held that a region's review memorandum, which was neither listed in the certified index, *nor even specifically cited in the response to comments*, was nevertheless part of the administrative record under 40 C.F.R. § 124.17(b), because the response to comments alluded generally to the region's "review." 7 E.A.D. at 427. The Board reiterated that "[w]hile all items referenced in a response to comments document certainly *should* appear on the certified index, an omitted item is nonetheless a part of the administrative record and may be considered by the Board on appeal." *Id.* (emphasis in original). Moreover, the Board noted that the certified index is not even a regulatory requirement:

> Preparation of a certified index is not a requirement of the regulations governing the permit appeal process. *See* 40 C.F.R. § 124.19. The Board generally requests that a Region prepare and submit a certified index with its response to a petition for review as a matter of convenience for the Board. The Board views the certified index as evidence of the contents of the administrative record, but the index is not a substitute for 40 C.F.R. § 124.18. Section 124.18 specifies the items that make up the administrative record. The listed items include "[t]he response to comments required by § 124.17 and any new material placed in the record under that section." 40 C.F.R. § 124.18(b)(4).

Id. at 427 n.33.

Taken together, these cases— *Dominion I*, *Russell City Energy Center*, *Mayaguez*, *Zion Energy*, *J&L Specialty Products*, and *Ash Grove*—establish several principles. First, the Region is not required to provide any part of the administrative record, nor even the certified index, in electronic form. *See Russell City Energy Ctr.*, slip op. at 130; *Dominion I*, 12 E.A.D. at 530. Rather, the Region is required only to make the record available for inspection at a stated time and place. *See Russell City Energy Ctr.*, slip op. at 130. Second, inadvertent omission of a document from a copy of the administrative record (sent by mail or placed in a physical location)

does not mean that document is excluded from the administrative record, nor that the permitting process is fatally flawed as a result, even if the omission occurs as late as the Region's certified index on appeal. *See Dominion I*, 12 E.A.D. at 530-31; *Ash Grove*, 7 E.A.D. at 427; *Mayaguez*, 4 E.A.D. at 776 n.7; *Zion Energy*, 9 E.A.D. at 709 n.6. Rather, if a petitioner believes that the permitting authority has intentionally or unintentionally omitted a document from the administrative record, the petitioner's appropriate remedy is to move to supplement the record. *See Dominion I*, 12 E.A.D. at 530 ("With respect to Petitioner's claim that the record may be incomplete and documents may be missing, Petitioner has already utilized the appropriate method for challenging missing documents: it filed a motion to supplement the record."); *J&L Specialty Prods.*, 5 E.A.D. at 80.

B. The modeling attachments cited in the One-Hour Modeling Memorandum are already part of the administrative record and available on request.

The modeling files cited in the One-Hour Modeling Memorandum are part of the administrative record, and have been (and continue to be) available on request. As explained below, the Region has, throughout the permitting process, made clear that the entire administrative record is available to any person on request, but Petitioners never requested these documents (or any others).

Although the modeling files in question were added to the administrative record after the close of the comment period, the full administrative record history from the issuance of the Draft Permit forward is instructive. In Section XVIII of the Fact Sheet, EPA included a section entitled "Source Impact Analysis" that read, in its entirety:

> EPA has examined whether emissions from the project would result in air quality exceeding ambient air quality standards for NO2, . . . , SO2, [or other pollutants]. In particular, EPA reviewed modeling information that Cape Wind submitted to [BOEMRE] as part of [BOEMRE]'s general conformity and NEPA analyses. Based on that review, EPA is satisfied that the project emissions

> will not result in air quality exceeding ambient air quality standards for NO2, . . . , SO2, [or other pollutants], and is not requiring further modeling. Please refer to Attachment I, memo from Brian Hennessey to Brendan McCahill dated June 3, 2010.

Ex. 1 (Fact Sheet) at 50-51. Attachment I, in turn, is a scanned copy of a six-page memorandum from Brian Hennessey (the Region's air quality modeling expert) summarizing and reviewing Cape Wind's air quality modeling performed to that point. Attachment I included non-hyperlinked references to three data files, including files labeled "Cape Wind monvals.txt," "Cape Wind pltmon.cgm," and "Cape Wind pltmon.txt." Attachment I also included non-hyperlinked references to several letters received from Cape Wind and/or BOEMRE.

In accordance with 40 C.F.R. § 124.8(b)(7), the Fact Sheet specified that "[a]dditional information concerning the draft permit may be obtained between the hours of 9:00 a.m. and 5:00 p.m., Monday through Friday, excluding holidays," and provided the contact information for Brendan McCahill (the permit writer). *See* Ex. 1 (Fact Sheet) at 55. The Fact Sheet also contained a section at the end entitled "Permit Records" which stated:

> The following is a list of the main documents in the administrative record for this permit. To review the permit file, contact Brendan McCahill as described in Section XVII. *The list is provided for the reader's convenience, and is not intended to be exhaustive.* EPA may add additional documents to the record before issuing a final permit decision.

Id. (emphasis added). The Fact Sheet listed these "main documents," including "Attachment I, Memo from Brian Hennessey, EPA, to Brendan McCahill, EPA, June 3, 2010," but not including, *inter alia*, the three data files cited within Attachment I. *See id.* at 56. Similarly, the Public Notice stated:

> All data submitted by the applicant is available as part of the administrative record. The administrative record, including copies of the draft OCS permit, original and supplemental OCS permit applications, fact sheet, and other supporting documents may be viewed between 9:00 a.m. and 4:00 p.m., Monday through Friday,

> at the EPA – Region 1 office at 5 Post Office Square, Suite 100, Boston, MA 02109-3912 or may be obtained on-line at EPA New England's website at http://www.epa.gov/NE/communities/nsemissions.html.
>
> For more information, contact Brendan McCahill at (617) 918-1652 or by e-mail at McCahill.Brendan@EPA.GOV.

Ex. 4 (Public Notice) at 4.

Like the Fact Sheet, the Public Notice exhorted the reader to contact Mr. McCahill for more information or to view the administrative record. The Fact Sheet, which is much lengthier than the four-page Public Notice, specifically explained that it was listing "the main documents in the administrative record for this permit," but that this list was "for the reader's convenience, and [was] not intended to be exhaustive." Ex. 1 (Fact Sheet) at 55. Thus, even if the Public Notice's brief phrase "may be obtained on-line" was interpreted as suggesting that the *entire* record was intended to be available on-line, and furthermore that this on-line availability was intended to be exhaustive (such that documents not found on-line were therefore not part of the record), the Fact Sheet's more detailed explanation would dispel any such confusion.

Any person who was interested in modeling files (or any other documents) that were cited in the Fact Sheet would have reasonably realized that not all of the documents that were cited in Section XVIII of the Fact Sheet were posted on the Region's web page. *See* Ex. JN1 (Region 1 New Source Review web page).[13] The Region's web page lists all air permits issued by the Region since 2005, and a few key documents for each permit. As the web page explains, "[t]he Permit Application, Draft Permit and Public Hearing Notice are available for review by clicking on the appropriate link." *Id.* at 1. When the Region issued the draft permit and public

[13] The Region's web page is not a part of the administrative record for the Permit, but, since the Petition relies heavily on the contents of that web page for its argument, the Region requests that the Board take judicial notice of it. The web page, which is also available directly at http://www.epa.gov/NE/communities/nsemissions.html, has not changed in relevant respect since issuance of the final permit decision.

notice for the Cape Wind permit, the Region posted key documents (including the permit application, the draft permit, the fact sheet, the public notice, and Attachment I) to this web page, but did not post every single document in its permit file. To the contrary, the Fact Sheet's list of "main documents" enumerated several documents that were not posted to EPA's web page during the comment period, and are not posted there now—indeed, the *very first document listed* in Section XVIII of the Fact Sheet ("Outer Continental Shelf Air Regulations Notice of Intent, December 7, 2007") is not posted on the Region's web page. *Compare* Ex. 1 (Fact Sheet) at 56 (listing this document) *with* Ex. JN1 (Region 1 New Source Review web page) (not listing this document). Thus, the Fact Sheet and the Region's web page would not reasonably give rise to the misimpression that the Region intended its web page to be a comprehensive electronic "docket" as suggested by Petitioners. *Compare* Pet. at 12 (stating that the documents in question "do not . . . appear in the docket for the permit") *with* Ex. JN1 (Region 1 New Source Review web page) (not using the words "docket" or "administrative record" anywhere).[14]

As for modeling files, Attachment I cited (and contained non-hyperlinked references to) several technical modeling files, including "Cape Wind monvals.txt," "Cape Wind pltmon.cgm," and "Cape Wind pltmon.txt." The Region did not post the aforementioned files to its web page during the comment period (and they are not there now). Nevertheless, under 40 C.F.R. §§ 124.9(4) and/or (5), those files were part of the administrative record for the draft permit, and were available to anyone on request. In fact, neither Petitioners nor anyone else asked for copies of "Cape Wind monvals.txt," "Cape Wind pltmon.cgm," or "Cape Wind pltmon.txt" during the comment period. While Petitioners did submit comments regarding air dispersion modeling,

[14] The heading for the table column in which the One-Hour Modeling Memorandum is linked is "Draft Permit & Supporting Documentation." *See* Ex. JN1 (Region 1 New Source Review web page). While this placement or wording may be inartful as a matter of web page design, it certainly does not imply a comprehensive "docket" containing every single document in the administrative record.

their comments neither involved the type of technical details that are contained in air dispersion modeling files of that nature, nor objected to the format of the Region's ambient air quality analysis. *See* Ex. 7 (APNS Comment) at 3-4.

This background sets the context for the issues raised in the Petition regarding the availability of modeling files. Petitioners requested, during the public comment process, that EPA conduct air modeling analysis to verify that the 1-hour NO_2 and SO_2 standards would not be exceeded. *See* Ex. 7 (APNS Comment) at 3; Ex. 6 (Response to Comments) at 16 (Comment B1). The Region accepted the comment and, after explaining the legal framework, responded:

> EPA asked Cape Wind to conduct further modeling to demonstrate compliance with the new 1-hour NOx and SO2 standards. On November 4, 2010, Cape Wind submitted additional modeling results in response to EPA's request (which Cape Wind supplemented via e-mail in November and December 2010, in response to further EPA requests). Cape Wind's modeling demonstration and supplemental responses, are included in the administrative record and incorporated by reference into this comment. EPA has reviewed Cape Wind's analysis and agrees that Cape Wind's construction emissions will not cause or contribute to an exceedance of the revised 1-hour NOx or SO2 standards. *See* Memorandum from Brian Hennessey, EPA, to Ida McDonnell, EPA, dated December 21, 2010.

Ex. 6 (Response to Comments) at 16 (Response B1). The referenced memorandum from Brian Hennessey, entitled "Cape Wind 1-Hour SO_2 and NO_2 Modeling" (hereafter, "One-Hour Modeling Memorandum") was similar in both nature and format to its analogous predecessor, Attachment I. Like Attachment I, the One-Hour Modeling Memorandum included several non-hyperlinked references to seven additional files (collectively, the "Modeling Attachments").

The first such file ("Extract FY1985 Model CH on STP adjust.pdf") is a two-page excerpt from a 1985 EPA modeling clearinghouse report. *See* Ex. 21, AR 127 (Extract FY1985 Model CH on STP adjust). The second file ("Draft Final Cape Wind 6-4-2010.doc") is simply Attachment I rendered in Microsoft Word format. The next five files, listed under the heading

"ESS modeling furnished to Region 1 for Cape Wind," are "ESS 11-4-2010.doc," "ESS 11-22-2010.doc," "ESS 11-30-2010.doc," "ESS 12-3-2010.doc," and "ESS 12-7-2010.doc." These were e-mail messages (some with attachments) that had been converted to Microsoft Word format. *See* Ex. 11, AR 99 (ESS 11-4-2010); Ex. 13, AR 125 (ESS 11-22-2010); Ex. 14, AR 172 (ESS 11-30-2010); Ex. 15, AR 173 (ESS 12-3-2010); Ex. 17, AR 107 (ESS 12-7-2010).

As noted, several of the Modeling Attachments themselves referenced further attachments. A few of those attachments provide information readily accessible to persons who are not modeling experts. *See* Ex. 12 (November 4 Modeling Report) (referenced in Ex. 11 as "Cape Wind Modeling Report – 110410 Final.pdf"); Ex. 16 (December 3 Modeling Report) (referenced in Ex. 15 as "Cape Wind Modeling Report – 120310 Final.pdf"); Ex. 27, AR 138 (cableconcs.xls) (referenced in Ex. 14);[15] Ex. 34, AR 104 (Cape Wind OCD Modeling – Tables & Figures) (referenced in Ex. 13). The rest are raw data files consisting almost entirely of lists of numbers.[16]

When the Region issued the Final Permit, the accompanying cover letter stated:

> Enclosed is EPA's final OCS air permit for the Cape Wind Offshore Renewable Wind Energy Project located on Horseshoe Shoals in Nantucket Sound. . . . Also enclosed is a copy of EPA's response to the comments received on the draft permit and information regarding appeals and stays of the OCS permit. In addition, you may obtain electronic copies of the final OCS air permit, fact sheet, application and other supporting documents on

[15] Pursuant to the Board's electronic filing procedures, the Region has converted certain files from their native format to the PDF format to file them as exhibits. *See* Environmental Appeals Board, "Electronic Submission," *at* http://yosemite.epa.gov/oa/EAB_Web_Docket.nsf/General+Information/Electronic+Submission (last visited Mar. 14, 2011) ("All documents filed electronically must be submitted in portable document format (PDF)."). The original files are available upon request in their native formats.

[16] See Ex. 24, AR 144 (cbgrid.out) (referenced in Ex. 14), Ex. 25, AR 140 (cbgrid2.out) (referenced in Ex. 14); Ex. 26, AR 142 (cbgrid3.out) (referenced in Ex. 14); Ex. 35, AR 143 (cbgrid.dat) (referenced in Ex. 14); Ex. 36, AR 139 (cbgrid2.dat) (referenced in Ex. 14); Ex. 37, AR 141 (cbgrid3.dat) (referenced in Ex. 14); Ex. 38, AR 167 (trgrid.ana) (referenced in Ex. 14); Ex. 39, AR 168 (trgrid.dat) (referenced in Ex. 14); Ex. 40, AR 169 (trgrid.out) (referenced in Ex. 14); Ex. 31, AR 128 (Cape Wind Receptor Locations.xls) (referenced, with an icon but no name, in Ex. 17). This response does not cite Exhibits 35-40, and the Region provides them to the Board only in the interest of completeness.

> EPA's web site at http://www.epa.gov/NE/communities/nsemissions.html.
>
> . . .
>
> Should you have any questions concerning the permit, please call Brendan McCahill at (617) 918-1652.

Ex. 20 (Final Permit Cover Letter) at 1.

Again, the Region posted key documents to its web page, including the Final Permit, Response to Comments, One-Hour Modeling Memorandum, and others, but *not* every single document in the administrative record. Indeed, the Response to Comments refers to several documents, *including in responses to comments submitted by Petitioners*, which were not posted on the Region's web page. *See* Ex. 6 (Response to Comments) at 37 (Response D1) (responding to comment by Petitioner APNS, and citing "Letter from Stephen Perkins, EPA, to Thomas Chapman, FWS (Oct. 25, 2010); E-mail from Ida McDonnell, EPA, to Julie Crocker, NOAA (Nov. 2, 2010)," neither of which the Region posted to its web page); *id.* at 44 (Response F1) (responding to comment by Petitioner WTGH, and citing "Memorandum from Stephen Perkins, EPA, to File, dated December 20, 2010," which Region did not post to its web page). In other words, Petitioners could have easily determined, simply by reading the Region's responses to *their own comments*, that not all documents cited in the Response to Comments were available on the Region's web page. Nevertheless, Petitioners did not ask for copies of the Modeling Attachments, nor, indeed, any other items in the administrative record.[17]

The Region did not affirmatively mislead Petitioners into believing that the Region's web page contained the entire administrative record. Petitioners cite the Final Permit Cover Letter, which stated: "In addition, you may obtain electronic copies of the final OCS air permit, fact

[17] In January 2011, Petitioner APNS did submit an extremely broad Freedom of Information Act request that reaches well beyond the administrative record in this case. However, the production deadline for that request was not until after their Petition was due to be filed (and, as of the date of this response, is still not due). In any event, Petitioners could have obtained copies of documents in the record simply by asking.

sheet, application, *and other supporting documents* on EPA's web site at http://www.epa.gov/NE/communities/nsemissions.html." Ex. 20 (Final Permit Cover Letter) (emphasis added).

But "and other supporting documents" is not the same as "and every other document in the administrative record for the permit." To the contrary, the Region had good reason not to list every single modeling file on its web page. As the Board has elsewhere recognized, air dispersion modeling is an extremely technical endeavor, and even to understand it, let alone critique it meaningfully, requires an uncommon level of specific expertise. *See Shell I*, 13 E.A.D. at 397 (noting that air dispersion modeling requires "'specialized expertise and experience'") (quoting *Peabody W. Coal Co.*, 12 E.A.D. at 33). Moreover, the modeling endeavor typically generates a large number of documents, including raw data output files (consisting of lists of numbers), and correspondence (typically e-mail) regarding details of the inputs to, and operations of, specialized computer programs. In many cases, these modeling-related documents, though properly part of the administrative record, are not of widespread interest to the general public even for controversial permits.

The Region's web page lists every permit the Region has issued since it began direct air permitting in 2005. *See* Ex. JN1 (Region 1 New Source Review web page). In the Region's earliest air permits, the Region listed very few documents for each permit: typically just the permit application, fact sheet or statement of basis, public notice, and final permit. *See id.* at 5. Over time, in the interest of transparency and of reducing the need to respond to requests for the most commonly requested documents, the Region has provided more and more documents via its web page. *Compare id.* at 3 (listing numerous documents for Brayton Point air permit, the Region's most recent air permit before this permit) *with id.* at 5 (listing only minimal documents for University of Massachusetts air permit, the Region's first directly issued air permit).

However, in no case has the Region listed the entire administrative record (which can contain hundreds of documents), nor the type of technical modeling files specifically under discussion here. Listing such documents would make the web page unmanageably long and complex, and in the Region's experience—including the experience of the draft permit for Cape Wind, wherein no party requested access to the modeling files in the draft permit's administrative record—these are not of widespread interest to the general public, even potential project opponents. None of this amounts to reviewable error under 40 C.F.R. § 124.19.

For these reasons, the Region typically (as here) exercises its discretion to list on its web site the documents it expects will be of greatest general interest, and provides any other documents on request. A contrary rule, requiring the Region to either list the entire administrative record on its web site or list nothing at all, would serve as a disincentive to listing anything at all, and would not serve the interests of petitioners here or in any other matter.

The contrasts between previous Board cases addressing these issues and the facts of the present proceeding are striking. In *Mayaguez* and *Ash Grove*, the Board found that documents were part of the administrative record even though they did not appear in the certified index. *See Ash Grove*, 7 E.A.D. at 427; *Mayaguez*, 4 E.A.D. at 776 n.7. Here, the Modeling Attachments *are* listed in the certified index. In *Ash Grove*, the Board emphasized that the certified index (which is not required by 40 C.F.R. § 124.19, but only by the Board's orders) "is not a substitute for 40 C.F.R. § 124.18." 7 E.A.D. at 427 n.33. Here, the issue is not the certified index, which at least is required by the Board's orders, but merely the Region's web page, which the Region is not required to maintain at all. *See Russell City Energy Ctr.*, slip op. at 129-30 ("[O]ne of [petitioner's] primary concerns appears to be that the administrative record is not available electronically. While this may be preferable, the regulations do not require it."). In *Ash Grove*,

the Board found that a document was properly included in the administrative record under 40 C.F.R. § 124.18 even though the response to comments contained only a vague allusion to the document, rather than any detail that could have armed a prospective petitioner to know what to request. *See* 7 E.A.D. at 427. Here, the One-Hour Modeling Memorandum identifies the exact computer file names of the Modeling Attachments.

Finally, even assuming *arguendo* that the Final Permit Cover Letter's statement that "you may obtain electronic copies of the final OCS air permit, fact sheet, application and other supporting documents on EPA's web site" could reasonably be interpreted as creating some confusion as to whether this statement was both complete (i.e., all documents in the administrative record are on EPA's web site) and exhaustive (i.e., any document not on EPA's web site is therefore not part of the administrative record), Petitioners did not take basic steps to request the documents in question. Just two sentences later, the Final Permit Cover Letter stated: "Should you have any questions concerning the permit, please call Brendan McCahill at (617) 918-1652." Ex. 20 (Final Permit Cover Letter) at 1. Petitioners did not call Mr. McCahill.[18]

It is worth contrasting the approach of Petitioners with the steps taken by petitioners in other cases. In *J&L Specialty Products*, the petitioner specifically requested a copy of the administrative record after issuance of the draft permit. 5 E.A.D. at 79. In *Dominion I*, the petitioner requested an electronic record index after issuance of the final permit. 12 E.A.D. at 529. In *Mayaguez*, before filing its appeal, the petitioner requested a copy of a study that the region had cited in the response to comments. 4 E.A.D. at 776 n.7. In *Russell City Energy Center*, the petitioner—dismayed that the permitting authority's web page did not contain a comprehensive electronic docket—requested to view the administrative record, and came in to

[18] Again, while Petitioner APNS did submit an extremely broad Freedom of Information Act request, *see supra* note 17, the files in question were available simply on request, as noted in the Region's communications cited above.

inspect it in person. *See Russell City Energy Ctr.*, slip op. at 128-130. Here, by contrast, after noticing that certain specifically named computer files were not on EPA's web page, Petitioners did not ask the Region for copies of those files.[19]

In sum, the Region fully agrees that the Modeling Attachments are properly part of the administrative record under § 124.18, has been prepared since the day of final permit issuance to supply them upon request, has listed them in the certified index, and has attached them as exhibits to this response. The Region's pragmatic approach to providing key documents, but not the entire administrative record, on its web site was both rational and legally correct, and Petitioners have not identified any clear error or abuse of discretion warranting Board review.

III. The Region's Decision to Respond to Petitioners' Comment by Providing the Requested Air Quality Modeling Analysis in the Response to Comments, Without Reopening a New Comment Period, Was Not an Abuse of Discretion.

Petitioners argue that the Region should have reopened the public comment period so that Petitioners could comment on the air quality modeling analysis for the 1-hour NO_2 and SO_2 standards. It is true that the Region responded to Petitioners' comment by supplying the analysis

[19] As it happens, another party did ask for certain of the Modeling Attachments, which the Region promptly supplied. On January 19, 2011, one David Newsad e-mailed Ida McDonnell at the Region, stating:

> I would like to obtain copies of the files embedded/attached to the two following dispersion modeling memos currently posted on the NSR application page:
>
> http://www.epa.gov/region1/communities/pdf/CapeWind/2010June3ModelingMemo.pdf
> http://www.epa.gov/region1/communities/pdf/CapeWind/CapeWindModelingReview.pdf

See Ex. JN2 (McDonnell-Newsad Email) at 1. The second listed file ("CapeWindModelingReview.pdf") is in fact the One-Hour Modeling Memorandum. Ms. McDonnell responded that same day and, after some technical difficulties related to file size, succeeded in e-mailing the requested files to Mr. Newsad. *See generally id.* at 1-8. Obviously, these e-mail exchanges, which post-date the issuance of the Final Permit, are not part of the administrative record. *See* 40 C.F.R. § 124.18(c) ("The record shall be complete on the date the final permit is issued.") The Region does *not* seek to supplement the administrative record with these e-mail messages, which played no role in the Region's final permit decision. However, the Region requests that the Board take judicial notice of them for the limited purpose of demonstrating that, when an interested person has requested the exact files that Petitioners seek, the Region has promptly supplied them. *Cf. T & M Distribs., Inc. v. United States*, 185 F.3d 1279, 1285 (Fed. Cir. 1999) (citing the hoary maxim that "government officials are presumed to act in good faith, and it requires 'well-nigh irrefragable proof' to induce the court to abandon the presumption of good faith dealing") (internal quotation marks and omitted).

that Petitioners sought, without reopening the public comment period. However, the Region had discretion to do just that, and did not abuse this discretion.

A. A regional office may respond to public comments and data submissions without reopening the public comment period.

If new issues are raised during the public comment period, a regional office has two principal options. First, and most commonly, "[i]f new points are raised or new material supplied during the public comment period, EPA may document its response to those matters by adding new materials to the administrative record." 40 C.F.R. § 124.17(b). In responding to comments, a Region may generate new information and analysis, add new materials to the administrative record, revise analyses, and even change permit conditions. *See id.* §§ 124.17(b), 124.18(b)(4); *In re Caribe Gen. Elec. Prods., Inc.*, 8 E.A.D. 696, 705 n.19 (EAB 2000), *appeal dismissed per stip.*, No. 00-1580 (1st Cir. 2001); *In re Amoco Oil Co.*, 4 E.A.D. 954, 980 (EAB 1993); *In re Old Dominion Elec. Coop.*, 3 E.A.D. 779, 797 (Adm'r 1992). New materials added to the record may include information provided by the permit applicant. *See, e.g., In re Am. Soda, LLP*, 9 E.A.D. 280, 298-99 (EAB 2000) (groundwater quality report); *NE Hub Partners*, 7 E.A.D. at 586-88 (technical materials regarding underground well imaging device); *In re Metcalf Energy Ctr.*, PSD Appeal Nos. 01-07 & 01-08, slip op. at 28 (EAB Aug. 10, 2001) (unpublished order denying review) (supplemental control technology analysis).

Alternatively, the region "may" reopen the public comment period "[i]f any data[,] information or arguments submitted during the public comment period . . . appear to raise substantial new questions concerning a permit." 40 C.F.R. §§ 124.14(b). This standard has three principal elements. First, the questions raised by the new information must be "new," i.e., not involve issues already evident in the permit proceeding. Second, the questions must be "substantial," i.e., have a material effect on the permit result. Finally, even if a question is new

and substantial, the Region "may" reopen the public comment period, and, as explained below, the regulations and EAB precedent afford the Region reasonable discretion in deciding whether to reopen the comment period.

The Board reviews the Region's decision whether to reopen the comment period under a deferential abuse of discretion standard. *See In re Dist. of Columbia Water & Sewer Auth.*, 13 E.A.D. 714, 759-60 (EAB 2008) ("*DC WASA*") ("[T]he reopening of the comment period is discretionary, and the Board often defers to the permit issuer's discretion in deciding not to reopen a comment period . . . ."); *In re Envtl. Disposal Sys., Inc.*, UIC Appeal No. 07-03, slip op. at 42-43 (EAB July 18, 2008) ("It is well settled that the decision to reopen the public comment period is largely discretionary upon the Regional Administrator's finding that the new questions are substantial. . . . Consequently, the Board reviews a decision not to reopen the comment period under an abuse of discretion standard.") (internal quotation marks and citations omitted); *In re Dominion Energy Brayton Point, LLC*, 13 E.A.D. 407, 416 (EAB 2007) ("*Dominion II*") ("[T]he critical elements . . . are that new questions *must* be 'substantial' and that the Regional Administrator '*may*' take action. Thus, we review a region's decision not to reopen the comment period under an abuse of discretion standard and afford the region substantial deference.") (quoting *NE Hub Partners*, 7 E.A.D. at 585) (emphasis added; internal citations and quotation marks omitted); *In re Prairie State Generating Co.*, 13 E.A.D. 1, 48 (EAB 2006) ("[W]hether the public should be provided an opportunity to comment on new information received after the close of the public comment period is a matter generally left to the permit issuer's discretion when the information raises 'substantial new questions concerning the permit' and reopening the public comment period could expedite the decisionmaking process.").

This grant of discretion to the Region is consistent with the general administrative law principle that an agency is not required to indulge in a never-ending cycle of comments upon comments. *See Cmty. Nutrition Inst. v. Block*, 749 F.2d 50, 58 (D.C. Cir. 1984) ("Rulemaking proceedings would never end if an agency's response to comments must always be made the subject of additional comments."). With respect to data in particular, "[i]t is perfectly predictable that new data will come in during the comment period . . . . The agency should be encouraged to use such information in its final calculations without thereby risking the requirement of a new comment period." *BASF Wyandotte Corp. v. Costle*, 598 F.2d 637, 644-45 (1st Cir. 1979). A contrary rule would create a disincentive for agencies to respond to comments by improving analyses or appropriately changing permit conditions, *see, e.g., Old Dominion*, 3 E.A.D. at 797, and confront agencies with a Hobson's choice between inferior quality decisions and a never ending public comment process, *see, e.g., Rybachek v. EPA*, 904 F.2d 1276, 1286 (9th Cir. 1990); *BASF Wyandotte*, 598 F.2d at 644-47.

For this reason, EPA has emphasized the discretionary nature of this decision since these regulations were first proposed in 1978. *See* National Pollutant Discharge Elimination System: Revision of Existing Regulations, 43 Fed. Reg. 37,078, 37,117 (proposed Aug. 21, 1978) ("If any information or arguments submitted during the public comment period . . . appears to raise substantial new questions concerning a permit, the [permit issuer] *may, if he/she concludes that [it] is necessary for an informed decision* . . . reopen the comment period . . . .") (emphasis added) (codified as revised at 40 C.F.R. § 124.45 (1979), as amended at 40 C.F.R. § 124.14); *see also* Consolidated Permit Regulations, 45 Fed. Reg. 33,290, 33,412 (May 19, 1980) ("[I]t may often be impossible for the Agency to respond without making use of new material. . . . [I]f all new material in a response to comments required reproposal, the agency would be put to the

unacceptable choice of either providing an inadequate response or embarking on the same kind of endless cycle of reproposals which the courts have already rejected.").

In exercising this discretion, regions may be guided by several considerations, including:

> whether permit conditions have been changed, whether new information or new permit conditions were developed in response to comments received during prior proceedings for the permit, whether the record adequately explains the agency's reasoning so that a dissatisfied party can develop a permit appeal, and the significance of adding delay to the particular permit proceedings.

Dominion II, 13 E.A.D. at 416 n.10.

Ultimately, the final permit decision must be a "logical outgrowth" of the draft permit. *See DC WASA* at 13 E.A.D. at 759-60; *NE Hub Partners*, 7 E.A.D. at 587, 587 n.14; *Old Dominion*, 3 E.A.D. at 797-98. To determine whether a final permit is a "logical outgrowth" of a draft permit:

> The essential inquiry focuses on whether interested parties reasonably could have anticipated the final rulemaking from the draft permit. In determining this, one of the most salient questions is whether a new round of notice and comment would provide the first opportunity for interested parties to offer comments that could persuade the agency to modify its rule.

DC WASA, 13 E.A.D. at 759 (quoting *NRDC v. EPA*, 279 F.3d 1180, 1186 (9th Cir. 2002)).

To determine whether the changes that appear in the final permit raise "substantial new questions" or fail to meet the "logical outgrowth" standard, the Board "consider[s] the evolution of the permit condition at issue, and the Region's corresponding explanatory statements." *DC WASA*, 13 E.A.D. at 760. Reopening public comment is necessary only if the new data provides "entirely new information 'critical' to the [agency's] determination." *Cmty. Nutrition Inst.*, 749 F.2d at 58. "Even substantial changes in the original plan may be made so long as they are 'in character with the original scheme' and 'a logical outgrowth' of the notice and comment already given." *BASF Wyandotte*, 598 F.2d at 642 (citation omitted); *Air Transp. Ass'n of Am. v. FAA*,

169 F.3d 1, 7 (D.C. Cir. 1999) ("The question is typically whether the agency's final rule so departs from its proposed rule as to constitute more surprise than notice.").

Finally, if the region chooses to address the new information by adding new information to the record and describing its rationale in the response to comments, "the appellate review process affords [petitioner] the opportunity to question the validity of the material in the administrative record upon which the Agency relies in issuing a permit." *Dominion I,* 12 E.A.D. at 695-96 (quoting *Caribe Gen. Elec. Prods.,* 8 E.A.D. at 705 n.19); *Attleboro,* slip op. at 86 (the petitioner "had the opportunity, after permit issuance and before the deadline for filing the petition, to review and comment on the documents and information mentioned in the [Response to Comments document], as evidenced by its appeal [to the Board]"); *NE Hub Partners,* 7 E.A.D. at 587 n.14; *Ash Grove,* 7 E.A.D. at 431.

B. The Region did not abuse its discretion in declining to reopen the comment period so that petitioners could comment on the analysis that they requested.

Petitioners argue that the Region was required to reopen public comment so that Petitioners could comment on the Region's air quality modeling analysis, which responded to Petitioners' request that the Region evaluate compliance with the 1-hour NO_2 and SO_2 standards. This raises no issue warranting review because the Region's 1-hour NO_2 and SO_2 air quality modeling analysis (1) was precisely the analysis that Petitioners had requested, (2) raised no "substantial new questions," (3) is amply explained in the record and readily amenable to Board review, (4) resulted in no changes whatsoever to the permit, and (5) does not provide a reason for adding additional delay to this permit proceeding.

1. The analysis that the Region supplied was precisely the analysis that Petitioners themselves requested.

Petitioners specifically commented that the Region should model 1-hour NO_2 and SO_2 emissions. *See* Ex. 7 (APNS Comment) at 3; Ex. 6 (Response to Comments) at 16 (Comment

B1). At the time they made this comment, it was entirely foreseeable that the Region would respond by providing exactly that analysis. As a result, Petitioners are in a poor position to complain on appeal that, after they themselves asked the Region to conduct a modeling analysis, the Region responded by conducting the requested analysis. *See Caribe Gen. Elec. Prods.*, 8 E.A.D. at 705 n.19 (rejecting challenge to region's inclusion of new material in response to comments, and explaining that "[petitioner] cannot reasonably protest that it has been prejudiced or surprised by the arrival of this information in the later stages of this proceeding. As plainly contemplated by the applicable regulations, the Region has merely included in the administrative record information in response to points that [petitioner] itself raised during its comments on the draft permit . . . .").

Petitioners' argument amounts to a *per se* rule that once a commenter has requested an additional analysis and the regional office conducts that analysis, it must also reopen the comment period so that the commenter can review the response to the original comment. Such a rule is contrary to 40 C.F.R. §§ 124.14(a) and 124.17(b), and would undermine the general principle that an agency need not engage in a never-ending cycle of comments on comments. *See Cmty. Nutrition Inst.*, 749 F.2d at 58 ("Rulemaking proceedings would never end if an agency's response to comments must always be made the subject of additional comments.").

2. Petitioners have not shown that the Region erred by determining that no "substantial new question" had been raised.

The threshold requirements for reopening the comment period under 40 C.F.R. § 124.14(b) are that the information raise questions that are both "new" and "substantial."

At the start, it is important to distinguish between the question of whether the *comment* raised substantial new questions, or whether the *air dispersion modeling analysis* raised substantial new questions. Petitioners focus on the latter. *See* Pet. at 9 ("[P]ost-comment period

submissions by Cape Wind raised substantial new questions about whether construction emissions would exceed the new one-hour NOx standard."), 22 ("[Cape Wind's] Post-Comment Period Submissions Raise Substantial New Questions"). Notably, this is *not* a case where "data[,] information, or arguments submitted during the public comment period" indicated (other than by speculation) that the permit would *not* ensure protection of the NAAQS. Rather, Petitioner APNS's comment simply asked the question.[20] Therefore, the Region focuses, as does the Petition, on whether the Region's answer (i.e., the air dispersion modeling analysis) raised substantial new questions.

First, when the questions at issue are framed in context, they are not entirely "new." Although specific questions pertaining to 1-hour NO_2 and SO_2 modeling were not discussed in the draft permit administrative record, the question of whether the project's construction emissions would comply with all applicable NAAQS, and whether any further modeling should be conducted, was discussed in the Fact Sheet and Attachment I and was already before the public. *See* Ex. 1 (Fact Sheet) at 50-51; Ex. 5 (Attachment I) at 3. Moreover, the very fact that Petitioners submitted detailed comments on 1-hour NO_2 and SO_2 modeling during the public comment period indicates that Petitioners have had an opportunity to address these issues. *Cf. Metcalf Energy Ctr.*, slip op. at 29-30 ("Despite the absence of [certain] information from the [permit issuer's] initial . . . analysis, a number of commenters nonetheless submitted comments addressing these very issues during the public comment period on the draft PSD permit. In light of these comments . . . we cannot find that the public has not had any opportunity to address the relative merits of these two technologies.") (internal citations omitted).

[20] To be clear, there is nothing inappropriate about a comment that simply asks a question. The point here is only that asking the question, without providing specific information or argument why Cape Wind's emissions would *not* protect the NAAQS, did not *itself* raise a substantial new question.

Second, even assuming *arguendo* that the air dispersion modeling analysis presents "new" questions, the Region was within its discretion in concluding that such questions are not "substantial." *See Envtl. Disposal Sys.*, slip op. at 42-43 ("It is well settled that 'the decision to reopen the public comment period is largely discretionary' upon the Regional Administrator's finding that the new questions are 'substantial.'") (quoting *Dominion I*, 12 E.A.D. at 695). Crucially, the information supplied by the air dispersion modeling analysis was not critical to the Region's final permit decision, because the Region was not required to conduct a 1-hour NO_2 or SO_2 dispersion modeling analysis in the first place.

The Massachusetts plan approval regulation requires the permitting agency to "ensure that [t]he emissions from a facility do not result in air quality exceeding either the Massachusetts or National Ambient Air Quality Standards." 310 C.M.R. 7.02(3)(j)(1); Ex. 6 (Response to Comments) at 16 (Response B1). That regulation does *not*, however, require the permitting agency to conduct air dispersion modeling for every single NAAQS. Rather, it provides only that "upon request by the [permitting authority]" the applicant must supply air dispersion modeling. 310 C.M.R. 7.02(5)(c)(6); Ex. 6 (Response to Comments) at 16 (Response B1).

In other words, the Region has discretion to determine, on a case-by-case basis, whether air dispersion modeling is required, and for which pollutants.[21] For example, the Region did not require Cape Wind to conduct air dispersion modeling for the lead NAAQS, since Massachusetts is easily attaining the lead NAAQS and Cape Wind's emissions of lead are either trivial or zero. No commenter challenged the Fact Sheet's lack of ambient air quality analysis for lead. With respect to 1-hour NO_2, the Region declined to require 1-hour modeling at the Draft Permit stage because, based on Cape Wind's previous NO_2 modeling analysis, there was no evidence to

[21] Cape Wind's projected emissions are well below Prevention of Significant Deterioration thresholds. *See* Ex. 1 (Fact Sheet) at 24 (Table 2), 26 (Table 3). Therefore, PSD modeling requirements do not apply.

suggest that a violation of the 1-hour NO_2 standard would be likely.[22] Consequently, the Region determined that it would not be necessary to require further modeling. *See* Ex. 1 (Fact Sheet) at 50-51 ("EPA has examined whether emissions from the project would result in air quality exceeding ambient air quality standards for NO2, . . . , SO2, [or other pollutants]. In particular, EPA reviewed modeling information that Cape Wind submitted to [BOEMRE] . . . . Based on that review, EPA is satisfied that the project emissions will not result in air quality exceeding ambient air quality standards for NO2, . . . , SO2, [or other pollutants], and is not requiring further modeling."); Ex. 5 (Attachment I) at 3 ("Based on the above review of [Cape Wind]'s modeling efforts to date and as shown in the table below, the project emissions will not result in air quality exceeding ambient air quality standards for NO2, . . . , SO2, [or other pollutants]. No further modeling should be required.").

Of course, in response to Petitioners' comment, the Region *did* eventually ask Cape Wind to conduct a 1-hour NO_2 and SO_2 dispersion modeling analysis, which the Region in turn reviewed, and which confirmed that the 1-hour standards will not be violated. But the point here is that the dispersion modeling analysis was not required in the first place, and therefore was not critical to the Region's final decision.

Furthermore, the dispersion modeling analysis itself did not raise any "substantial" new questions. The analysis showed, with a substantial margin of safety, that Cape Wind's emissions impacts will not cause violations of the 1-hour NO_2 or SO_2 NAAQS. The Petition argues that the analysis raised "substantial" new questions because it concerns "compliance with new primary national air quality standards designed to protect human health." Pet. at 22. But if this alone were sufficient to make a question "substantial," then nearly any comment at all addressing NAAQS compliance would arguably raise "substantial" new questions. Rather, the Region was

[22] As of the date of draft permit issuance, the SO_2 standard had not yet been finalized. *See supra* at 9.

entitled to evaluate substantiality based on the analysis itself. In this case, the modeling analysis did not give the Region reason to determine that substantial new questions were raised. Overwater dispersion modeling for mobile sources is a technically complex subspecies of dispersion modeling, for which traditional stationary source, onshore modeling approaches are not always ideally suited. However, Cape Wind developed a modeling approach that Mr. Hennessey reviewed and found to be reasonable. "Reasonable," in this cutting-edge context, does not mean "beyond all possible critique." Rather, it means that, given the limited state of the art, Cape Wind used generally accepted methods and assumptions, in some but not all cases more conservative than necessary, resulting in an overall result that, in Mr. Hennessey's experienced judgment, reflects a valid assessment of the impacts of Cape Wind's vessel emissions on the 1-hour NO_2 and SO_2 standards.

3. The record adequately contains the factual information on which the Region relied and adequately explains the Region's reasoning.

The record is more than sufficient for a potential petitioner to review the basis for the Region's decision. *See Dominion II*, 13 E.A.D. at 416 n.10 (listing, as a consideration in a region's decision whether to reopen a comment period, "whether the record adequately explains the agency's reasoning so that a dissatisfied party can develop a permit appeal"); *In re Indeck-Elwood, LLC*, 13 E.A.D. 126, 147 (EAB 2006); *In re City of Newburyport Wastewater Treatment Facility*, NPDES Appeal No. 04-06, slip op. at 14-15 (EAB, Dec. 8, 2005) (unpublished order denying review in part and remanding in part) (the fact that "the record does not contain sufficient support for the change, and . . . the insufficiency of the record relating to the . . . change has frustrated the public's opportunity to meaningfully comment" is an important factor in deciding whether to reopen the comment period). Here, notwithstanding Petitioners' failure to request documents from the administrative record before filing their Petition, the record

includes every single modeling file and report submission developed or submitted by Cape Wind to the Region, as well as the One-Hour Modeling Memorandum itself. *See generally* Ex. 21 (Extract FY1985 Model CH on STP adjust.pdf); Ex. 24 (cbgrid.out); Ex. 25 (cbgrid2.out); Ex. 26 (cbgrid3.out); Ex. 27 (cableconcs.xls). The record is more than sufficient for a diligent interested party to review the basis for the Region's decision, and Petitioners had an adequate opportunity to challenge the Region's Response B1 and the One-Hour Modeling Memorandum in their petition for review. *See Attleboro*, slip op. at 86; *Dominion I*, 12 E.A.D. at 695-96.

Similarly, there is no merit to Petitioners' claim that the Region failed to respond adequately to their comment. The Region responded by directing Cape Wind to conduct additional modeling; reviewing that modeling; and summarizing the results of that modeling (along with a small number of comments noting that an alternate approach could have been taken) in a four-page, single-spaced memorandum; and, contrary to Petitioners' assertions, making available all of the underlying modeling submissions, including raw data.[23] The cases Petitioner cites are readily distinguishable. In *In re General Motors, Inc.*, 10 E.A.D. 360 (EAB 2002), the permitting agency eliminated two control technology options from consideration on the basis that they "would require a significant engineering effort." *Id.* at 378. The Board noted that the permitting agency "ma[de] no attempt to quantify those costs," and observed that "a failure to provide a certain level of detail and analysis to substantiate a claim that a particular control technology is technically or economically unachievable is fatal to a [Best Available Control Technology] analysis." *Id.* at 378-79. Here, the entire analysis (from raw data files, to the applicant's reports, to the Region's summary memorandum) is available in the record. In *In*

[23] *See generally* Exs. 11 (ESS 11-4-2010), 12 (November 4 Modeling Report), 13 (ESS 11-22-2010), 14 (ESS 11-30-2010), 15 (ESS 12-3-2010), 16 (December 3 Modeling Report), 17 (ESS 12-7-2010), 18 (One-Hour Modeling Memorandum), 24 (cbgrid.out), 25 (cbgrid2.out), 26 (cbgrid3.out), 27 (cableconcs.xls), 31 (Cape Wind Receptor Locations.xls), 33 (onsite.txt), 34 (Cape Wind OCD Modeling – Tables & Figures), 35 (cbgrid.dat), 36 (cbgrid2.dat), 37 (cbgrid3.dat), 38 (trgrid.ana), 39 (trgrid.dat), 40 (trgrid.out).

re City of Marlborough, Massachusetts Easterly Wastewater Treatment Plant, 12 E.A.D. 235 (EAB 2005), the administrative record did not show whether an effluent limit would ensure protection of water quality standards. *See id.* at 250 ("[T]he record does not indicate whether the Permit's . . . phosphorus limitation, by itself, will meet the state's water quality standards."). Here, the Region has provided not just the underlying air dispersion modeling analysis from the applicant, but also a four-page memorandum from the Region's modeling expert that concludes "[Cape Wind's] results should be accepted." Ex. 18 (One-Hour Modeling Memorandum) at 2; *see also* Ex. 18 (Response to Comments) at 16 (Response B1) ("EPA has reviewed Cape Wind's analysis and agrees that Cape Wind's construction emissions will not cause or contribute to an exceedance of the revised 1-hour NOx or SO2 standards.").

Petitioners also object that "a permittee's submission . . . 'cannot substitute' for a complete analysis 'that is fully documented, made available for public review, and ultimately adopted' by the permitting agency." Pet. at 27 (quoting *In re Knauf Fiber Glass, GmbH*, PSD Appeal Nos. 98-3 through 98-20, slip op. at 6 (EAB Feb. 4, 1999) (unpublished order on motions for reconsideration). In the *Knauf Fiber Glass* order that Petitioners cite, the Board had remanded a permit to the permitting agency to reevaluate, *inter alia*, best available control technology. *See id.*, slip op. at 3-4. In its motion for reconsideration, the permittee provided additional information that was not in the permitting agency's written control technology determination and had not previously been presented to the Board. *See id.* at 5. The Board's order on reconsideration stated that "[t]he *discussion in Knauf's motion for reconsideration* cannot substitute for a complete [technology] analysis that is fully documented, made available for public review, and ultimately adopted by [the permitting agency]." *Id.* at 6-7 (emphasis added). Here, by contrast, the data from the permittee appears not in a motion for

reconsideration, but rather in the final permit administrative record. It has been fully documented, *see supra* note 23, made available for public review (not through a reopened comment period, but through the petition process), *see supra* at 43, and ultimately adopted by the Region, *see* Ex. 18 (One-Hour Modeling Memorandum); Ex. 6 (Response to Comments) at 16 (Response B1). Moreover, the fact that the permitee's modeler performing the modeling runs, and the Region's modeling expert reviewed and approved the modeling, is consistent with both the regulations and normal air permitting practice. *See* 310 C.M.R. 7.02(5)(c)(6) (listing what an applicant for a plan approval must provide, and including, when requested by the permitting agency, air dispersion modeling); *Indeck-Elwood*, 13 E.A.D. at 132 ("In conducting air quality analyses, applicants for [air] permits ordinarily employ air quality models to predict the impacts on ambient air of pollutants . . . ."). Thus, the Region's approach of requiring Cape Wind to perform the modeling, reviewing that modeling, and documented its approval in a four-page memorandum as well as the Response to Comments, was an appropriate manner in which to respond to Petitioners' comment.[24]

4. The Final Permit is identical to the Draft Permit with respect to the matter on which Petitioners seek to reopen comment.

The Final Permit is not merely a "logical outgrowth" of the Draft Permit—it is *identical* in relevant respect to the Draft Permit. Under the Board's notice and comment precedent, reopening the comment period is not necessary if the final permit is a "logical outgrowth" of the draft permit. *See DC WASA*, 13 E.A.D. at 759-60 (the final permit decision must be a "logical outgrowth" of the draft permit); *Dominion II*, 13 E.A.D. at 416 n.10 (listing, as a consideration in

[24] Nor does the fact that the modeling was supplied by Cape Wind raise substantial new questions. "Information does not necessarily give rise to a substantial new question simply because the information is supplied by a permittee." *Envt'l Disposal Sys.*, slip op. at 42-43; *NE Hub Partners*, 7 E.A.D. at 586 ("[T]he standard for reopening the public comment period turns on whether a substantial new question has arisen and not the genesis of information that may be added to the record.").

a region's decision whether to reopen a comment period, "whether permit conditions have been changed"); *Old Dominion*, 3 E.A.D. at 797-98 (where revised permit is "a logical outgrowth of the notice and comment process and all commenters have had a fair and reasonable opportunity to present their views on the permit," reopening comment period is unwarranted).

In reviewing regions' decisions not to reopen a comment period, the Board has often focused on the extent to which a final permit differs from the draft permit as a major factor. *See, e.g.*, *Newburyport*, slip op. at 14-15 (citing, as an important factor in deciding whether to remand to reopen the comment period, the fact that "the change is significant"); *Indeck-Elwood*, 13 E.A.D. at 146-47 ("While the Board often defers to the permit issuer's discretion in these matters, the Board nonetheless will look at the change in the draft permit and, *based on the significance of the change*, will determine whether reopening the public comment period is warranted in a given circumstance.") (emphasis added); *Amoco*, 4 E.A.D. at 981 ("Given *the significance of the addition* and the potential costs of compliance to the permittee, we conclude that reopening the record to provide for comment is appropriate.") (emphasis added); *In re GSX Servs. of S.C., Inc.*, 4 E.A.D. 451, 467 (EAB 1992) ("Given *the significance of the addition* of these [new permit conditions] . . . we find that reopening the record to provide for comment is appropriate.") (emphasis added); *cf. Old Dominion*, 3 E.A.D. at 797 ("While there may be times when a revised permit *differs so greatly* from the draft version that additional public comment is required (the discretionary wording of 40 CFR §124.14(b) notwithstanding), this is not one of those instances.") (emphasis added).

The Board may also consider the extent to which a change made after the close of the public comment period was adverse to the interests or comments of the particular petitioner. *See, e.g., In re Chehalis Generating Facility*, PSD Appeal No. 01-06, slip op. at 35 (EAB Aug.

20, 2001) (unpublished order denying review) (rejecting petitioner's argument that new emission limits that appeared for the first time in the final permit should have been subjected to renewed public comment, noting that the additional limits "resulted from comments received by [petitioner] and others during the public comment period"); *Old Dominion*, 3 E.A.D. at 797 ("Petitioners are not worse off with the revision than without it.").

Here, not only was there no "significant" change to the Final Permit—the 1-hour NO_2 and SO_2 modeling analysis resulted in *no changes at all* to the Final Permit. The only difference between the Region's determination that the Draft Permit complied with all NAAQS and its determination that the Final Permit complied with all NAAQS is that, at Petitioners' request, EPA conducted precisely the analysis that Petitioners sought. An agency need not reopen public comment simply because it has used new data that "'expands on and confirms' information contained in the proposed rulemaking and addresses 'alleged deficiencies' in the pre-existing data." *Solite Corp. v. EPA*, 952 F.2d 473, 484 (D.C. Cir. 1991) (quoting *Cmty. Nutrition Inst.*, 749 F.2d at 57-58); *Int'l Fabricare Inst. v. EPA*, 972 F.2d 384, 399 (D.C. Cir. 1992) ("[T]he EPA did no more than provide support for the same decision it had proposed to take.").

Moreover, the fact that the analysis in question was requested by Petitioners themselves distinguishes this permit from the cases upon which the Petition relies. In *Amoco*, the Board granted the permittee's request for a remand to reopen the comment period after the region added new permit provisions to the final permit at the request of a third party, without an opportunity for comment on those provisions. *See* 4 E.A.D. at 980-81. Similarly, in *GSX Services*, the Board granted the permittee's request for a remand to reopen the comment period after the region added new permit provisions to the final permit on its own initiative, without an opportunity for comment on those provisions. *See* 4 E.A.D. at 466-67. Here, by contrast, no relevant permit

provisions were changed, and the analysis was conducted and added to the record at the request of Petitioners themselves.

5. The significance of adding delay to the permit proceedings counsels against reopening the comment period.

Finally, the Board may consider the significance of adding delay to the permit proceedings. *See Dominion II,* 13 E.A.D. at 416 n.10. Several reasons counsel against adding delay here.

First, this is a new source preconstruction permit, and until the final permit becomes effective, the permittee cannot begin construction. Indeed, the Board's own practice manual recognizes that delays of even 15 days can be relevant for new source permits. *See Environmental Appeals Board Practice Manual* (Sept. 2010) at 48 & n.53 (noting that, ordinarily, regional offices are given 45 days to respond to petitions for review, but for new source permits, the Board requests a response within 30 days). Second, this permit proceeding has been underway (including extensive communication with Petitioners) for almost three years.[25] Third, and as set forth in more detail below, Petitioners have not identified any specific objections that would justify an additional comment period. In a similar case, the Board noted:

> Petitioners have not identified on appeal any information that they would submit into the record, if it were reopened, to establish grounds for changing the Permit's terms. Instead, Petitioners simply imply that reopening the record might produce some speculative body of evidence. This is simply not a sufficient basis

[25] The Region and Petitioners have been in communication regarding the Region's review of Cape Wind project in general, and air quality issues in particular, since as early as 2008—almost a year before Cape Wind even submitted a permit application. Starting in May 2008, Petitioner APNS's President and Chief Executive Officer exchanged correspondence with the Region's Regional Administrator regarding the OCS air permitting requirements that would apply to Cape Wind. *See* Ex. 42, AR 17 (Letter from Robert Varney to APNS (May 28, 2008)); Ex. 43, AR 21 (Letter from APNS to Robert Varney (Jan. 5, 2009)). Similarly, in April 2009, the Region reached out to three Indian tribes, including Petitioner WTGH, regarding Cape Wind's air permit application. *See* Ex. 1 (Fact Sheet) at 54. During April-May 2010, the Region conducted further outreach to the tribes, and even provided an unofficial draft of the permit and fact sheet. *See id*. After the close of the comment period, the Region continued to consult with Petitioner WTGH through December 2010. *See* Ex. 6 (Response to Comments) at 43-44 (Response F1).

> for introducing further delay in issuing the Permit at this late stage in the administrative decisionmaking process.

Prairie State, 13 E.A.D. at 50.

For these reasons, the Board should reject Petitioners' argument that the Region abused its discretion in deciding not to reopen the comment period.

C. Petitioners have not provided any specific arguments, let alone identified any clear error or abuse of discretion, regarding the air quality modeling analysis.

The Petition does not provide any specific arguments challenging the Region's air quality modeling analysis. Rather, it identifies six "areas of inquiry that petitioners would want to pursue when . . . the Region [] make[s] available the relevant documents for review and comment." Pet. at 23-25. As explained below, these poorly-developed "areas of inquiry" do not warrant review because they do not rise to the level of specificity required in a petition under 40 C.F.R. § 124.19, do not identify any clear error or abuse of discretion, and are in fact meritless.

These modeling-related issues are assuredly "technical in nature," and deciding them involves "'specialized expertise and experience.'" *Shell I,* 13 E.A.D. at 398 (quoting *Peabody W. Coal Co.*, 12 E.A.D. at 33); *see also* 40 C.F.R. pt. 51 App. W §§ 1.0.c ("As modeling efforts become more complex, it is increasingly important that they be directed by highly competent individuals with a broad range of experience and knowledge in air quality meteorology. Further, they should be coordinated closely with specialists in emissions characteristics, air monitoring and data processing. The judgment of experienced meteorologists and analysts is essential."), 2.1.c ("Models are highly specialized tools. Competent and experienced personnel are an essential prerequisite to the successful application of simulation models. The need for specialists is critical when the more sophisticated models are used or the area being investigated has complicated meteorological or topographic features."). For challenges to regional

determinations in technical modeling issues, the Board generally "assigns a particularly heavy burden to the petitioner." *Shell I*, 13 E.A.D. at 397; *Prairie State*, 13 E.A.D. at 100 (the Board "generally accord[s] broad deference to permitting authorities with respect to issues, such as this [modeling issue], requiring the exercise of technical judgment and expertise"), *aff'd sub nom. Sierra Club v. EPA*, 499 F.3d 653, 656, 658 (7th Cir. 2007); *Carlota Copper*, 11 E.A.D. at 708 (same); *accord BCCA Appeal Group v. EPA*, 355 F.3d 817, 824, 830 n.12, 834 (5th Cir. 2003) (court must be "most deferential" to EPA's review of air quality modeling involving "complex computer models"). Moreover, as with any other aspect of a permit decision, challenges to modeling analyses must rest on more than mere speculation. *See Three Mountain Power*, 10 E.A.D. at 58 ("The Board will not overturn a permit provision based on speculative arguments."); *In re Texas Indus., Inc.*, 2 E.A.D. 277, 279 (Adm'r 1986) ("Less speculation and more empirical evidence is needed by petitioner to justify review of the permit.").

Before delving into the detailed technical issues, it is appropriate to set context. As noted above, air dispersion modeling is a complex technical endeavor. But what is even more noteworthy is that each modeling exercise involves literally hundreds of distinct technical assumptions. At the outset, the modeler must select a background concentration location, a grid of receptors, and hopefully-representative meteorological data, but often the complexity does not stop there; rather, it *begins* there. For example, the Offshore and Coastal Dispersion (OCD) computer model, which Cape Wind used here, uses approximately one hundred thousand distinct input parameters.[26] *See generally* Ex. 23, AR 135 (OCD User's Guide).

When a regional office's modeling expert reviews a permit applicant's modeling, s/he reviews the entire modeling analysis as well as the individual parameters. A given modeling run

[26] These include six overwater meteorological inputs hourly for at least one year, a comparable number of inputs overland for coastline concentrations, ten input parameters for each emission point, and a network of receptor locations.

will typically use a combination of both conservative (pessimistic) and nonconservative (optimistic) assumptions, and in some cases it may be inappropriate to use excessively or exclusively conservative assumptions if they will wildly overstate emissions impacts. Moreover, modeling involves judgment, and expert modelers may reasonably disagree on the appropriate values for particular parameters in a particular case. For example, given 100 input parameters and the values given them by the applicant's modeler, the region's modeling expert might conclude that 90 are conservative, but 10 are nonconservative.

The question before the region's modeling expert is *not* whether each of the 100 input parameters was optimally selected, resulting in a 100% accurate prediction of ambient air concentrations at each receptor. Rather, the question is whether, on balance, the overall approach is sufficiently reasonable to support a conclusion that the source's impact will not cause a violation of ambient air quality standards. If the nonconservative (optimistic) assumptions are sufficiently consequential to call into question the modeling output's overall reliability, then the permitting authority may require the applicant's modeler to re-run the model with different assumptions. If, on the other hand, the nonconservative assumptions are of little consequence, and the permitting authority's modeling expert is satisfied that, *overall*, the model reliably demonstrates that the source will not cause a violation of ambient air quality standards, then typically the permitting authority will accept the modeling, despite individual minor flaws. In Region 1, the general practice is for the Region's modeling expert to supply a memorandum to the file summarizing the applicant's modeling, noting which elements of the modeling were conservative and which were not, and explaining the basis for the conclusion that, overall, the modeling was reasonable.

That was done here. The Region's modeling expert, Brian Hennessey, reviewed the modeling submitted by Cape Wind's modeler. Mr. Hennessey noted several elements of the modeling that were, in his professional judgment, suboptimal. However, he also noted that the modeling contained conservative elements. On balance, he concluded that the modeling was reasonable and supported the finding that the 1-hour standards would not be violated:

> Notwithstanding the remarks below conservative aspects of the modeling remain - e.g., use of the ARM screening technique which will overestimate NO2 impacts, or representation of dispersed or moving temporary - sporadic - emission sources as point sources. Given the poor fit of Appendix W to modeling Cape Wind's construction, [Cape Wind's] results should be accepted.

See Ex. 18 (One-Hour Modeling Memorandum) at 2.

Petitioners have seized upon Mr. Hennessey's notation of nonconservative elements, as if the Region were concealing essential flaws in the applicant's modeling that, once exposed by Petitioners, could cause the entire modeling analysis to collapse like a house of cards.[27] To the contrary, Mr. Hennessey was aware of each issue cited by Petitioners in their Petition—indeed, the Petition essentially just repeats Mr. Hennessey's own statements. He concluded that, despite any arguably suboptimal choices made by the applicant's modeler ("[n]otwithstanding the remarks below . . ."), the overall results still support the ultimate finding, which is that Cape Wind's emissions will not cause a violation of the 1-hour NO_2 and SO_2 NAAQS.

It is also important to note that the 1-hour NO_2 and SO_2 standards are *not* framed as "never to exceed" values, for which any exceedance violates the standard. Rather, for NO_2, "[t]he 1-hour primary standard is met when the three-year average of the annual 98th percentile

[27] Petitioners also complain about the brevity of Mr. Hennessey's notes, and state that "[a]s their length would indicate, the Region's comments are conclusory and fail to demonstrate the validity of Cape Wind's conclusions." Pet. at 26. This misconstrues the nature of the One-Hour Modeling Memorandum. The bulk of the four-page, single-spaced memorandum is Mr. Hennessey's summary of the modeling conducted by Cape Wind in support of its permit application. The relatively few italicized comments reflect the small number of instances where Mr. Hennessey noted that Cape Wind's methodology was worthy of remark. The fact that there are so few of these italicized comments indicates that most of Cape Wind's modeling methodology was unobjectionable.

of the daily maximum 1-hour average concentration is less than or equal to 100 ppb." 40 C.F.R. § 50.11(f). Similarly, for SO_2, "[t]he 1-hour primary standard is met at an ambient air quality monitoring site when the three-year average of the annual (99th percentile) of the daily maximum 1-hour average concentrations is less than or equal to 75 ppb." *Id.* § 50.17(b).

Since each standard's definition involves a daily maximum, an annual percentile, and a three-year average, calculating each standard's design value at a given location involves three steps. Using NO_2 as an example, the three steps to calculate "three-year average of the annual 98th percentile of the daily maximum 1-hour average concentration" are: First, for each day, the "daily maximum 1-hour average concentration," i.e., the highest hourly concentration at any time during that day, is identified. It does not matter whether concentrations were high for 1 hour, 10 hours, or 24 hours; only the single highest hourly concentration is selected for that day. This process is repeated for each of the 365 days in a given calendar year. Next, of the 365 values thus identified, "the annual 98th percentile" is identified. Since 98% of 365 is just under 358, the 98th percentile value is simply the eighth-highest of the 365 values. *See, e.g.*, Ex. 6 (Response to Comments) at 16 n.4 (Response B1). Thus, an entire year's worth of hourly NO_2 data at a particular concentration is condensed to the eighth-highest daily maximum. It does not matter how high the hourly concentrations were for the top seven days; they are discarded, as per the definition of the NAAQS. Finally, a "three-year average" is used, meaning that even if the eighth-highest value exceeds 100 ppb, the NAAQS may still be met if the eighth-highest value for the two other years is low enough that the average does not exceed 100 ppb.[28]

[28] To be sure, there is a distinction between the manner in which the NAAQS is defined in 40 C.F.R. Part 50, and the concentration statistic that a model uses to determine a design value for assessing NAAQS compliance. The model's design value is based on the NAAQS definition, but also depends on other elements such as the length of the model run and the nature of the model itself (e.g., screening or refined). However, the key point is that a single modeled hourly NO_2 concentration above 100 ppb does not mean that the NAAQS has been violated.

Against that background, the Region responds in detail below to each of the points raised by Petitioners.

1. Petitioners' questions regarding predicted cable laying emissions and 1-hour NO_2 impacts do not provide sufficient specificity, identify clear error or abuse of discretion, or otherwise warrant review.

The One-Hour Modeling Memorandum, summarizing Cape Wind's modeling efforts, noted that the background 1-hour NO_2 levels were 47 parts per billion (ppb), and that the modeled impact of the overwater cable laying was "<53" ppb. *See* Ex. 18 (One-Hour Modeling Memorandum) at 1 (table). Consequently, the One-Hour Modeling Memorandum concluded, the total 1-hour NO_2 impact was "<100" ppb.

Petitioners assert that they "would like to understand what the actual predicted concentrations were, and examine the margins of error around this extremely close prediction of attainment." Pet. at 24. This statement does not even assert that the Region erred *at all*, let alone provide a specific argument that demonstrates a clearly erroneous conclusion. Rather, it simply notes that Petitioners "would like to understand" more. For this reason alone, the argument does not warrant review. Moreover, as explained below, information in the administrative record answers Petitioners' questions and shows that the cable-laying emissions will not lead to an exceedance of the 1-hour NO_2 design value.

The actual model results for the cable-laying operation appear in the data output files "cbgrid.out," "cbgrid2.out," and "cbgrid3.out," but have been consolidated into a more accessible analysis in the spreadsheet "cableconcs.xls." *See* Ex. 24, AR 144 (cbgrid.out); Ex. 25, AR 140 (cbgrid2.out); Ex. 26, AR 142 (cbgrid3.out); Ex. 27 (cableconcs.xls). Cape Wind used an appropriate (and conservative) methodology to develop these results.

First, Cape Wind conservatively selected the ambient air quality monitor that would be used to determine the 1-hour NO_2 background concentrations. Cape Wind selected data

collected in Haverhill, Massachusetts from 2007-2009. *See* Ex. 16 (December 3 Modeling Report) at 6; Ex. 12 (November 4 Modeling Report) at 3. This is conservative because it is likely that actual background concentrations within or near the project area are significantly lower than the background values from Haverhill. Background NO_2 levels are higher at the Haverhill monitor (which is far from the project site, near the Massachusetts-New Hampshire border) than at a much closer NO_2 monitor in Truro, Massachusetts (on Cape Cod). *See* Ex. 18 (One-Hour Modeling Memorandum) at 2. Moreover, *any* onshore monitor likely overestimates the actual background concentrations offshore. *See* Ex. 12 (November 4 Modeling Report) at 2 ("Onshore monitoring locations located in urban or suburban settings in Massachusetts or Rhode Island[] must . . . be used in the dispersion modeling. However, common sense dictates that the ambient air quality 6 to 13 miles offshore in the middle of Nantucket Sound would be significantly better than ambient air quality in an urban or suburban setting.").

Next, Cape Wind conservatively determined a background level from the Haverhill data by selecting the *daily maximum* 1-hour concentrations, even though the design value for the 1-hour NO_2 NAAQS is the 3-year average of the 98th percentile of the daily maximum concentrations. *See* Ex. 12 (November 4 Modeling Report) at 4. In other words, while the 1-hour standard's design value at Haverhill is defined by averaging the 98th percentile over a three year period, Cape Wind assumed that the background concentration was the highest value recorded in Haverhill, without excluding the top 2% or averaging over multiple years. This approach was both conservative and in accordance with then-current EPA modeling guidance.[29]

[29] *See* Ex. 41, AR 126 (Applicability of Appendix W Modeling Guidance for the 1-hour NO_2 NAAQS (June 28, 2010)). After the Petition was filed, EPA released a new guidance on modeling under the 1-hour NO_2 standard. *See* "Additional Clarification Regarding Applicability of Appendix W Modeling Guidance for the 1-hour NO2 NAAQS" (Mar. 1, 2011), *available at* http://www.epa.gov/ttn/scram/Additional_Clarifications_AppendixW_Hourly-NO2-NAAQS_FINAL_03-01-2011.pdf. Obviously, this guidance played no role in the Region's review of Cape Wind's modeling analysis, and is not part of the administrative record. Moreover, the Region does *not* ask the Board to take judicial notice of it. The Region does, however, represent that its modeling expert has reviewed the guidance and

Using this approach, Cape Wind calculated an assumed background of 88 μg/m³. *See id.* As noted in the One-Hour Modeling Memorandum, 1 ppb NO_2 equals 1.884 μg/m³ NO_2, *see* Ex. 18 at 2, and therefore a concentration measured in μg/m3 can be converted to ppb by dividing by 1.884. Therefore, Cape Wind assumed background NO_2 is 47 ppb (88 / 1.884 = 46.7).

Next, to assess Cape Wind's cable-laying impact, Cape Wind modeled its projected cable-laying emissions at approximately 1,320 receptor locations at various distances from the cable-laying activities. *See* Ex. 27 (cableconcs.xls) at 1-30 (tables labeled "1km," "2km," and "2.5km"). The projected impacts generally decrease with distance. *See id.*

Cape Wind noted that, since the assumed background was 88 μg/m^3 (47 ppb) and the standard is 188 μg/m^3 (100 ppb), projected impacts of up to 100 μg/m^3 (53 ppb) would not result in exceedances of the standard. *See id.* at 31 (calculation of "Allowable Modeled to meet NAAQS"). Of course, in many cases, the projected impacts exceed 100 μg/m^3. *See, e.g., id.* at 1 (estimating maximum 1-hour NO_2 impact at receptor CB0221 of 843.39 μg/m^3).

However, as noted above, individual hourly exceedances of 100 ppb do not necessarily constitute NAAQS violations. Since cable-laying is a transient mobile operation, Cape Wind used the fact that the 1-hour NO_2 standard relies on the eighth-highest daily maximum to demonstrate compliance. First, Cape Wind examined the relationship between the distance from cable-laying activities and modeled concentrations. This revealed that, at distances of 1904 meters (1.9 kilometers) and more, the projected impact does not exceed 100 μg/m^3, but that at

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that, if the modeling had conformed to this new guidance, it would not have changed the ultimate conclusions. Therefore, nothing in the guidance leads the Region to request a voluntary remand or to believe that it would be an appropriate exercise of the Board's discretion to remand the permit for reevaluation under the guidance. Indeed, the new modeling guidance is *less* conservative than the approach Cape Wind took, and thus modeling conducted pursuant to the new modeling guidance would probably show reduced air impacts from Cape Wind as compared to the modeling in the administrative record upon which the Region relied for its final permit decision. Specifically, Cape Wind modeled using the highest 1-hour monitored NO_2 background value, *see supra* at 61, whereas the new guidance allows using the 3-year average 98th percentile highest value. Again, the point here is only that (1) the new guidance formed no part of the Region's decision, and (2) the Region's post-decisional review of the new guidance provides no basis to call into question the modeling that *did* underlie the Region's final permit decision.

distances closer than 1904 meters, the projected impact might exceed 100 μg/m^3. *See id.* at 31 ("Maximum distance to Allowable Modeled"). In essence, Cape Wind determined that a 1904-meter radius around cable-laying activities would represent the potential high-concentration area.

Since the cable-laying vessels will not be stationary sources, but rather will be *moving* (at 300 feet per hour) as they emit NO_2, this high-concentration radius will move along with them. As a cable-laying vessel moves, the high-concentration radius encompasses new locations (receptors) in the direction of travel, and a similar number of receptors exit the radius to the rear. Thus, *no* receptor will be exposed to the cable-laying vessels' emissions for long periods of time.

Put simply, the area experiencing high NO_2 in the morning is not the same as the area experiencing high NO_2 in the evening, which is not the same as the area experiencing high NO_2 the following day. Put precisely, Cape Wind calculated that no receptor or area will be in the high-concentration radius (and therefore exposed to NO_2 concentrations that exceed 100 ppb) for more than a total of 3.4 days. *See* Ex. 6 (Response to Comments) at 16 n.4 (Response B1); Ex. 18 (One-Hour Modeling Memorandum) at 4; Ex. 16 (December 3 Modeling Report) at 6-7; Ex. 27 (cableconcs.xls) at 31 ("Total duration of activity within high conc. Area").

Since the 1-hour NO_2 standard's design value relies on the *eighth-highest* daily maximum value, total modeled concentrations can exceed 100 ppb on up to seven days without violating the NAAQS. *See* Ex. 6 (Response to Comments) at 16 n.4 (Response B1); Ex. 18 (One-Hour Modeling Memorandum) at 4; Ex. 16 (December 3 Modeling Report) at 6-7. Thus, a permit applicant may demonstrate compliance by showing that its impacts will not cause total modeled concentrations to exceed 100 ppb at any location on more than seven days. That is precisely what Cape Wind did. *See* Ex. 6 (Response to Comments) at 16 n.4 (Response B1); Ex. 18 (One-

Hour Modeling Memorandum) at 4; Ex. 16 (December 3 Modeling Report) at 6-7; Ex. 27 (cableconcs.xls) at 31.

Petitioners' question regarding actual predicted concentrations misses the mark. Cape Wind did not demonstrate compliance by showing that its absolute worst-case impact would be less than 53 ppb. To the contrary, as explained in the Response to Comments and the One-Hour Modeling Memorandum, *see* Ex. 6 at 16 n.4; Ex. 18 at 4, Cape Wind demonstrated compliance by focusing on the eighth-highest value and the transient nature of its emissions. According to Cape Wind's modeling, its cable-laying impact will in fact exceed 53 ppb, and the total concentration will exceed 100 ppb, *at various different locations on various different days*. But at *no* location will Cape Wind's cable-laying impact exceed 53 ppb (nor will the total concentration exceed 100 ppb) for *eight* days, or even close to eight days. *See* Ex. 6 (Response to Comments) at 16 n.4 (Response B1); Ex. 18 (One-Hour Modeling Memorandum) at 4; Ex. 16 (December 3 Modeling Report) at 6-7. Since the 1-hour NO_2 NAAQS is only violated if there is an exceedance at a particular location for eight days or more, there will be no NAAQS violation.

The nature of this demonstration was explained in both the Response to Comments and the One-Hour Modeling Memorandum, and the underlying raw data was available in the administrative record. Most importantly, the record amply demonstrates that the cable-laying will not lead to a violation of the 1-hour NO_2 NAAQS.

2. Petitioners' questions regarding the length of time the cable-laying vessels will be in any location do not provide sufficient specificity, identify clear error or abuse of discretion, or otherwise warrant review.

Petitioners question the calculation of the cable vessels' travel time. The One-Hour Modeling Memorandum explained:

> "Cable installation" is a transient (300 feet per hour) operation and conducted in two passes. Modeling considered three Cartesian grids centered on the operation: one with 100 m. resolution to 1

> km, another with 200 m. spacing from 200 m. to 2.0 km, and the third with 250 m resolution from 250 m. to 2.5 km. [Cape Wind] examined all the cases in which 1-hour impacts combined with background NO2 could exceed the level of the standard - 100 ppb - and found the furthest such receptor would be 1900 meters from the cable laying activity. From this and the activity's 300 foot per hour movement [Cape Wind estimated] 3.4 days would be the most any receptor could exceed the level of the standard:
>
> 2 X 3800 m / (300 ft/hr X 0.3048 m/ft) = 41.6 hr. or 1.7 days –
>
> And the second pass doubles this.
>
> A violation of the standard would require eight separate days with concentrations above 100 ppb NO2 at the same receptor.

Ex. 18 (One-Hour Modeling Memorandum) at 4. The Region highlighted this issue in the main body of the Response to Comments:

> As explained in Mr. Hennessey's memorandum, cable installation could result in individual hourly periods in which NOx impacts combined with background NO2 could exceed the numeric level of the standard as far as 1900 meters from the cable laying activity. From this and the activity's 300 ft/hr movement, the standard could be exceeded at any location for up to 3.4 days. However, the NO2 1-hour standard's design value is specified in terms of "the annual 98th percentile of the daily maximum 1-hour average concentration." 40 C.F.R. § 50.11(f). Since 2% of 365 is approximately seven days, the NAAQS is not exceeded unless the 1-hour NO2 level exceeds the primary standard level for eight days or more at the same location. This is not projected to occur.

Ex. 6 (Response to Comments) at 16 n.4 (Response B1).

The Petition states that "Petitioners would like to explore the basis for the key assumption that the 1-hour NOx NAAQS will not be exceeded because the movement of the cable-laying vessel means it will never be in one place long enough to exceed 100 ppm [on] eight days." Pet. at 24. The Petition does not, however, assert that the Region erred *at all*, let alone provide a specific argument that demonstrates a clearly erroneous conclusion. Rather, it simply notes that Petitioners "would like to explore" more. For this reason alone, the argument does not warrant

review. Moreover, as explained below, information in the administrative record answers Petitioners' questions and supports the Region's conclusion that, although individual hourly NO_2 values may exceed 100 ppb, cable-laying emissions will not cause an exceedance of the 1-hour NO_2 NAAQS design value.

On December 3, 2010, Cape Wind submitted a letter to EPA explaining this precise issue. *See* Ex. 16 (December 3 Modeling Report). Cape Wind explained:

> Modeling was also conducted to determine the maximum distance at which an impact concentration greater than the 1-hour NO2 NAAQS standard concentration could occur as a result of the emissions from the cable laying sources. Three separate rectangular grids were centered on the combined cable laying source, using the emission rates and exhaust parameters detailed above, to determine the maximum impact concentrations over the full year of meteorological data as follows:
>
> - 100-meter spacing out to 1 kilometer
> - 200-meter spacing out to 2 kilometers
> - 250-meter spacing out to 2.5 kilometers
>
> A separate modeling run was conducted for each of these three receptor grids. The results of the analysis determined that the maximum distance at which an impact concentration which could potentially exceed the 1-hour NO2 standard concentration, utilizing the default ARM factor of 0.75 to convert modeled NOX impacts to NO2 impacts, and in combination with background concentrations, could occur was approximately 1.9 kilometers from the source. So for any given receptor along the route, impact concentrations above the standard concentration could occur from the cable laying combined source when the source is approaching the receptor within 1.9 km, and when the source is moving away from the receptor out to a distance of 1.9 km. The total travel distance in which the source could impact any receptor during a single pass at a level which could exceed the standard concentration is 3.8 km.
>
> The cable laying equipment will travel at an approximate speed of 300 feet per hour. At this rate, the cable laying source will travel through the 3.8 km distance in approximately 41.6 hours, or 1.7 days. This represents the longest duration that any receptor could be exposed to concentrations which could exceed the standard

> concentration during each pass. Because cable laying will involve two passes, the total exposure time for each receptor was determined to be 3.4 days.
>
> The 1-hour NO2 NAAQS is based on the eighth highest daily maximum 1-hour concentration over a full year. The standard allows a source to produce impacts that exceed the standard concentration at least once per day for up to seven days per year. This analysis has determined that the longest period that any receptor along the cable laying route could potentially be exposed to impact concentrations above the standard is less than seven days per year, thus complying with the standard.

See id. at 5-6. The Region reviewed this and agreed with its reasoning. *See* Ex. 18 (One-Hour Modeling Memorandum) at 4.

The Petition does not specify what additional information Petitioners seek. The details of the receptor locations and the numerical output of the three separate modeling runs discussed in Cape Wind's letter are provided in the files "Cape Wind Receptor Locations.xls," "cbgrid.out," "cbgrid2.out," "cbgrid3.out," and "cableconcs.xls." *See* Ex. 31, AR 128 (Cape Wind Receptor Locations.xls); Ex. 24 (cbgrid.out); Ex. 25 (cbgrid2.out); Ex. 26 (cbgrid3.out); Ex. 27 (cableconcs.xls). These files are, as noted above, part of the administrative record, which was available upon request. The rationale for selecting the 1904 meter impact distance, and the cable-laying vessels' speed of 300 feet/hour, are explained in Cape Wind's December 3, 2010 modeling report, which was available in the administrative record upon request. *See generally* Ex. 16. The rest is arithmetic, and the Region repeated that arithmetic both in the One-Hour Modeling Memorandum and in Response B1, as noted above.

Moreover, the calculation involves a substantial margin of safety. Cape Wind concluded that its cable-laying emissions might cause individual 1-hour NO_2 exceedances at any given location for up to 3.4 days. As noted in the One-Hour Modeling Memorandum and in Response B1, for the 1-hour NO_2 NAAQS to be violated, the concentration of 100 ppb would need to be

exceeded at a given location on eight separate days. *See* Ex. 18 (One-Hour Modeling Memorandum) at 4; Ex. 6 (Response to Comments) at 16 n.4 (Response B1); Ex. 16 (December 3 Modeling Report) at 6. Thus, the number of days of exposure to any given receptor from high cable-laying NOx emissions could literally be *doubled* and it would still fall below eight days.

In short, the Region's calculations were reasonable and involved an ample margin of safety in assessing the cable-laying activities' 1-hour NO_2 NAAQS compliance.

3. Petitioners' vague questions regarding selection of background concentration locations do not provide sufficient specificity, identify clear error or abuse of discretion, or otherwise warrant review.

Cape Wind's initial air modeling analysis used ambient monitoring data from Haverhill, Massachusetts for 1-hour NO_2 background concentrations, and Boston Harbor (Massachusetts) for 1-hour SO_2 background concentrations. *See* Ex. 12 (November 4 Modeling Report) at 3-4. The One-Hour Modeling Memorandum explained:

> Closer monitors have recorded background air quality data than at the Haverhill and Boston locations but length of record, data capture, and nature of local emission sources also matter to the selection of background air quality data. In this case, for example, the closer SO2 monitor in Fall River was not selected because the Brayton Point [G]enerating Station has a large local impact which would be unrepresentative of most of the Cape. On the other hand NO2 data from the closer Fox Bottom monitor in Truro was passed over for the Haverhill site with its shorter but more recent record, better data capture, and clearly higher concentrations.

Ex. 18 (One-Hour Modeling Memorandum) at 2. The Petition says that these choices "need[] to be explained," and wonders "[t]o what extent will the Brayton Point and Cape Wind emissions interact?" Pet. at 24. This statement does not even assert that the Region erred *at all*, let alone provide a specific argument that demonstrates a clearly erroneous conclusion. Rather, it simply notes that Petitioners "would like to explore" more. For this reason alone, the argument does not warrant review. Moreover, as explained below, information in the administrative record answers

Petitioners' questions and supports the Region's conclusion that the Haverhill and Boston locations were appropriate for reflecting background air quality data near the Cape Wind site.

At the outset, it is important to emphasize that the selection of an air quality monitor to be representative of background conditions is both a highly technical matter within the Region's particular competence, and at the same time a matter of some discretion, because different factors (e.g., distance from project site, data quality, and nature of local emissions sources) must be weighed in the expert judgment of the modeler. *See Shell I*, 13 E.A.D. at 400 ("[W]hile it is important that air quality data be representative, the choice of appropriate data sets for the air quality analysis is largely left to the discretion of a permitting authority, absent some indication of non-representativeness."). Furthermore, Cape Wind's selection of background sites was not rigged to always find the lower-background-concentration site. It is true, as the Petition notes, that, with respect to background SO_2, EPA approved Cape Wind's selection of the more distant Boston Harbor monitor because the closer monitor (Fall River) had higher SO_2 concentrations due to a local source (Brayton Point Station). On the other hand, as the One-Hour Modeling Memorandum *also* noted, with respect to NO_2, EPA approved Cape Wind's selection of Haverhill (in northern Massachusetts, near the New Hampshire border) rather than the much closer Truro monitor (on Cape Cod), even though Haverhill has *higher* NO_2 concentrations than Truro, because the Haverhill data is more recent and of superior technical quality. *See supra* at 61; Ex. 18 (One-Hour Modeling Memorandum) at 2. Thus, this is *not* a case where a permit issuer has rubber-stamped an applicant's conveniently uniform selection of the lowest-concentration monitor for each pollutant.[30]

[30] The Petition states that "[t]he choice of monitors used to estimate the background 1-hour concentrations of SO2 and NOx needs to be explained," but questions only the selection of the background monitor for SO_2, not the background monitor for NO_2. *See* Pet. at 24. The Region does not understand the Petition to suggest that the Region should have used the lower-concentration Truro monitor for NO_2 rather than the higher-concentration

In this case, Petitioners' question is easily answered. Cape Wind used the OCD model. *See* Ex. 16 (December 3 Modeling Report) at 2-3. This model "is recommended for estimating air quality impact from offshore sources on onshore, flat terrain areas" but "is not recommended for use in air quality impact assessments for onshore sources." 40 C.F.R. pt. 51 App. W § 6.2.4.b. Cape Wind did not attempt to model *Brayton Point*'s emissions (which would use a different computer model), nor would any other source in Cape Wind's position typically be expected to do so. Moreover, Brayton Point Generating Station is located in Somerset, Massachusetts, approximately two miles from the Fall River monitor, but approximately fifty miles from the area of Cape Cod (Hyannis, Massachusetts) for which the modeling effort was attempting to estimate SO_2 background impacts. However much Brayton Point's SO_2 emissions may contribute to ambient SO_2 concentrations near Hyannis, that concentration is much less than in Fall River, since the distance is an order of magnitude greater.

Furthermore, in addition to the conservative aspects of the modeling itself, the SO_2 modeling resulted in an ample margin of safety. The SO_2 modeling predicted that Cape Wind's activities would add at most 3.7 $\mu g/m^3$ (1.4 ppb) of SO_2, and added this to the much higher background level of 61 $\mu g/m^3$ (23 ppb) to obtain a total concentration of 65 $\mu g/m^3$ (25 ppb). *See* Ex. 16 (December 3 Modeling Report) at 7; Ex. 18 (One-Hour Modeling Memorandum) at 1. This is one-third of the 1-hour SO_2 standard of 75 ppb. *See* 40 C.F.R. § 50.17(b). Since almost all of the total modeled concentration derives from background, rather than Cape Wind's additional impact, the actual SO_2 concentration in Hyannis could be more than *triple* that of Haverhill (i.e., 69 ppb) and, when added to Cape Wind's modeled impact of at most 1.4 ppb, the

Haverhill monitor, but if Petitioners so suggest, then their challenges to the NO_2 modeling are even less persuasive, since a lower Truro-derived background value would further decrease the modeled total concentration.

standard would still be attained.[31] Given this wide margin of safety, and the extremely technical and at the same time discretionary nature of the background-location determination, Petitioners' vague questions do not show any error at all, let alone clear error or abuse of discretion.

4. Petitioners' argument regarding mixing height is procedurally forfeited and demonstrates no clear error warranting review.

Petitioners argue that Cape Wind's assumed overwater mixing height of 500 meters is questionable and warrants review. As explained below, Petitioners have failed to preserve this issue for appeal, and have failed to argue the point with sufficient specificity. Moreover, the issue is moot because, on further inspection, the Region has determined that Cape Wind did, in fact, use a lower mixing height.

First, Petitioners have forfeited this issue. Unlike many other aspects of the 1-hour NO_2 and SO_2 modeling analysis, which arguably could not have been raised during the public comment period, this issue was before the public and could have been raised during the comment period. In 2008, Cape Wind performed modeling analyses for BOEMRE's NEPA and general conformity determinations. *See generally* Ex. 28, AR 118 (Report No. 5.3.1-3). That modeling assumed a default overwater mixing height of 500 meters. *See id.* at 4. The Region relied on Cape Wind's 2008 modeling for the ambient air quality analysis supporting the draft permit, and specifically cited Report No. 5.3.1-3. *See* Ex. 5 (Attachment I) at 2-3. But neither Petitioners nor any other party commented that the 500 meter overwater mixing height was inappropriate. Therefore, the issue of a 500 meter mixing height was available for comment, and objections to that mixing height were reasonably ascertainable during the comment period, but Petitioners failed to raise this issue to EPA. For this reason alone, review should be denied for this issue.

[31] Indeed, even higher levels might not violate the standard. The 1-hour SO_2 NAAQS "is met . . . when the three-year average of the annual (99th percentile) of the daily maximum 1-hour average concentrations is less than or equal to 75 ppb." 40 C.F.R. § 50.17(b). Thus, multiple exceedances of 75 ppb over a three-year period would be necessary to cause a NAAQS violation.

Second, Petitioners' vague arguments fail to identify a clear error or abuse of discretion. In the One-Hour Modeling Memorandum, the Region stated: "ESS postulated a 500 m. overwater mixing height as was used for 2008 modeling for [BOEMRE]." Ex. 18 (One-Hour Modeling Memorandum) at 2. The memorandum then noted:

> Much lower mixing heights are not unusual overwater and can produce higher air pollutant concentrations. At Ventura and Pismo Beach on the Pacific where the OCD model was validated overwater mixing heights lower than 100 m. occurred about half the time, but at Cameron, site of another validation, such low mixing heights were much less frequent. However, Cameron is on the Gulf which has much higher average water temperatures than would be expected in Nantucket Sound. The waters off California, on the other hand, are quite cold.

Id. at 2-3. In other words, the One-Hour Modeling Memorandum explained that, for cold waters, overwater mixing heights could be well below 500 meters, and noted this as an element in which the modeling was insufficiently conservative. But at the same time, the modeling contained many elements which were more than adequately conservative. *See* Ex. 12 (November 4 Modeling Report) at 1-2, 4; Ex. 16 (December 3 Modeling Report) at 6; Ex. 18 (One-Hour Modeling Memorandum) at 2. Thus, Mr. Hennessey concluded, in his professional judgment, that the conservative aspects of the modeling outweigh the insufficiently conservative aspects so as to produce a reasonable estimate of projected air impacts. *See* Ex. 18 (One-Hour Modeling Memorandum) at 2. Put another way, this is not an instance where a region's modeling expert failed to realize that 500 meters is a high mixing height, and therefore the entire analysis is questionable. Rather, Mr. Hennessey noted that 500 meters is a high mixing height, and transparently explained the issue, before reaching his ultimate conclusion that, even given this high assumed mixing height, Cape Wind's modeling analysis adequately demonstrated that the 1-hour standards would not be violated. Petitioners have not even attempted to argue that the

difference between a 500 meter mixing height and a lower mixing height, even in combination with other assumptions that they question, outweighs the conservative aspects of the modeling.

Third, after a further review of the record, it is clear that Cape Wind's 2010 modeling for the 1-hour NO_2 and SO_2 standards actually assumed a mixing height of 200 meters, not 500 meters. *See* Ex. 33, AR 158 (onsite.txt) (column 6, representing mixing height, set to 200). Thus, the Region's conclusion that the 1-hour standards will not be violated stands on even *more* solid ground than as stated in the One-Hour Modeling Memorandum.[32]

5. Petitioners' vague arguments regarding plume rise, stack tip downwash, assumed elevation, and vessel transit emission assumptions do not provide sufficient specificity, identify clear error or abuse of discretion, or otherwise warrant review.

Petitioners allege that "[c]ertain assumptions" about vessel emissions, of which they describe two, reduce the predicted concentrations of air pollutants and therefore raise significant questions. Pet. at 25. As Petitioners argue:

> According to the Region 1 memorandum, the model used was set to "ignore transient plume rise and stack tip downwash." The model also did not conform to a User's Guide recommendation to set the emission release point at water level for vessels. Both these assumptions reduce the predicted concentrations of pollutants.
>
> * * *
>
> [A]fter a three-paragraph description of Cape Wind's individual modeling analyses, the Region's comments for this section consist of:

[32] The fact that the One-Hour Modeling Memorandum was incorrect in this respect does not itself justify review. While that memorandum's incorrect statement regarding the mixing height understandably led Petitioners astray, the administrative record clearly shows that the actual modeling used the 200 meter mixing height. It would, of course, be a different circumstance if the Region had incorrectly assumed that the applicant had used a low mixing height, whereas in fact the applicant had used a higher mixing height. Here, the Region was incorrectly *pessimistic* about the modeling, and still concluded that the standards would not be violated. While the Region regrets the misstatement, no purpose would be served by subjecting this issue to further public comment or review by this Board, since it is now clear that Cape Wind used the lower mixing height, which only improves the accuracy of the modeling as compared to what the Region had misunderstood the modeling height to be.

> *To reach a conclusion with this approach one must assume there will be no interaction among adjacent 500 m. vessel spacings and also that an hour's average total pollutant discharge will have the same air quality impact whether spread over the entire hour or confined to a few minutes. The nonguideline Inpuff model might be used to test the first assumption but probably not the second. . . .*
>
> This comment leaves unanswered even basic questions like: Was the Inpuff model used? This analysis is indecipherable without a complete record.

Id. (quoting Ex. 18 (One-Hour Modeling Memorandum) at 3). Review should be denied because Petitioners have failed to raise these arguments with sufficient specificity, and failed to identify any clear error or abuse of discretion.

First, Petitioners have failed to raise any arguments with sufficient specificity. Indeed, Petitioners' arguments regarding plume rise, stack tip downwash, assumed elevation, and vessel transit emission assumptions simply repeat observations that the Region itself made in the One-Hour Modeling Memorandum:

> It should be noted that OCD input files set the model calculations to ignore transient plume rise and stack tip downwash. Also note in the table above (and the modeling files) ground level elevation has been set to the 'building'- - vessel in this case? - -height. Page 3-4 of the OCD User's Guide states that ground level elevation should be set at the building height for stilted structures like platforms such as the ESP but not for vessels or others in contact with the water.

Ex. 18 (One-Hour Modeling Memorandum) at 3. It is well-established that "[i]t is not sufficient simply to repeat objections made during the comment period; instead, a petitioner 'must demonstrate why the permit issuer's response to those objections is clearly erroneous or otherwise warrants review.'" *Shell I*, 13 E.A.D. at 399 (quoting *In re Steel Dynamics, Inc.*, 9 E.A.D. 740,744 (EAB 2001)); *Indeck-Elwood*, 13 E.A.D. at 190. *A fortiori*, where the Region transparently and clearly identifies a technical issue, and the Petition does nothing more than

repeat the *Region's own discussion* of that technical issue to the Board, the Petition has failed to even mount an argument.

The discussion in the One-Hour Modeling Memorandum shows the Region's honest appraisal that the modeling methodology incorporated certain elements that were not conservative, namely, the issues of ignoring transient plume rise and stack tip downwash, selection of the elevation parameter, and certain assumptions regarding vessel transit. Nevertheless, in light of all of the other elements of the model, including many conservative assumptions, Mr. Hennessey concluded that the analysis sufficed to show that the 1-hour NO_2 and SO_2 standards would not be violated. The Petition has added nothing by its vague statement that "[c]ertain assumptions about the vessels, critical to the predicted concentrations of air pollutants, raise significant questions." *See* Pet. at 25. The Region has already considered these issues, and the Petition provides no arguments why the Region's analysis was incorrect.

Indeed, the Petition fails to identify any error at all, let alone clear error or an abuse of discretion. While it may be true that the aforementioned assumptions *reduce* the predicted concentrations of air pollutants, other assumptions *increase* the predicted concentrations of air pollutants, in such a manner that, in the Region's modeling expert's professional judgment, the conservative elements outweigh the nonconservative elements.

Finally, as explained in detail below, the administrative record amply demonstrates that these issues are either minor or nonexistent.

Plume rise. As the One-Hour Modeling Memorandum noted, Cape Wind's OCD modeling excluded plume rise.[33] EPA's general air quality modeling guidelines state that "[g]radual plume rise is generally recommended where its use is appropriate: (1) In AERMOD; (2) in complex terrain screening procedures to determine close-in impacts and (3) when

[33] Plume rise means the height to which a plume of air pollutants rises.

calculating the effects of building wakes." 40 C.F.R. pt. 51 App. W, § 7.2.5.b. None of these situations apply here. Rather, for estimating air quality impact from offshore sources, Appendix W recommends use of the OCD model, *see id.* § 6.2.4.b, and the OCD User's Guide specifically advises *against* including gradual plume rise:

> Unless specified in the OCD model, gradual rise is not considered, and final rise is assumed to occur very close to the source. This assumption is usually valid for determining the impact of offshore sources on onshore receptors, since the sources are often located several kilometers offshore. . . . Following the recommendations of the EPA, *users are advised not to select the gradual plume rise option* since it has been found to occasionally produce large overpredictions close to the stack.

Ex. 23 (OCD User's Guide) at 2-13 to 2-14 (emphasis added).[34] Thus, while selecting this option might have resulted in higher projected impacts, Cape Wind's approach was not unreasonable and was consistent with the OCD User's Guide.

Stack tip downwash. As the One-Hour Modeling Memorandum noted, Cape Wind's OCD modeling excluded stack tip downwash.[35] Consequently, the Region's modeling expert noted the fact that the model excluded stack tip downwash, which was arguably not the ideal choice. Appendix W explains that "[s]tack tip downwash generally occurs with poorly constructed stacks and *when the ratio of the stack exit velocity to wind speed is small*." 40 C.F.R. pt. 51 App. W § 7.2.5.c (emphasis added). At the same time, however, the Region's modeling expert did not find a basis to suggest, nor do Petitioners provide any, that the difference that stack tip downwash could make in the modeling analysis would be large or otherwise consequential. The record contains no evidence, and Petitioners do not provide any, suggesting that Cape Wind's emission points involve a low stack velocity to wind speed ratio, e.g., due to

[34] The OCD User's Guide was developed for BOEMRE. *See* Ex. 23 (OCD User's Guide) (cover). EPA has recommended it as a reference in applying the OCD model. *See* 40 C.F.R. pt. 51 App. W, App. A § A.6.
[35] Stack tip downwash refers to a downward air current (eddy) that can form on the leeward side of a stack when the stack exit velocity is low relative to wind speed.

overly wide stacks. Therefore, as with other elements of the modeling analysis, Mr. Hennessey noted the nonconservative element of the modeling, but ultimately concluded, in his professional judgment, that the conservative aspects of the modeling outweigh the insufficiently conservative aspects so as to produce a reasonable estimate of projected air impacts.

Selection of ground level elevation. As the One-Hour Modeling Memorandum noted, Cape Wind's OCD modeling set the "ground" level elevation variable to "building" height. The OCD User's Guide recommends against this:

> The source "ground" level elevation should be the height above water level, which is not necessarily at mean sea level elevation for inland bodies of water. This elevation should be the height of a platform above the water for structures on "stilts." For ships or other overwater structures in contact with the water, this elevation should be zero. Stack-top and building height are then referenced relative to this base elevation for the source.

Ex. 23 (OCD User's Guide) at 3-4. Cape Wind's OCD modeling, however, characterized its construction activities as having a single 10 meter high stack with ground level elevation equal to structure height. *See* Ex. 18 (One-Hour Modeling Memorandum) at 3. Cape Wind used a single activity-specific building height (as well as other variables, such as emission rate) for each activity, i.e., each wind turbine, the ESP, the vessel traffic and cable laying. *See id*. Thus, the modeling effort used a consistent template to address a varied range of activities, making the modeling effort manageable, but arguably at the expense of ideal characterization of vessel ground level elevation.

This type of tradeoff is typical of the myriad of choices faced by permit applicants when conducting modeling, and of the issues evaluated by permitting authorities' modeling experts when reviewing such modeling. The Region's modeling expert noted that the ground level elevation was arguably suboptimal for vessels, but once again concluded, in his professional judgment, that the conservative aspects of the modeling outweigh the insufficiently conservative

aspects so as to produce a reasonable estimate of projected air impacts. Petitioners have not shown that Mr. Hennessey's judgment in this case was incorrect.

Vessel transit emission assumptions. As the One-Hour Modeling Memorandum noted, Cape Wind estimated emissions from vessels in transit by assuming, *inter alia*, that in every two-minute period, the vessels travel about 500 meters and emit one-thirtieth of their total hourly emissions within that 500 meter zone. *See* Ex. 18 (One-Hour Modeling Memorandum) at 3. This approach was described in some detail in Cape Wind's December 3 Modeling Report. *See* Ex. 16 (December 3 Modeling Report) at 4-5.

Mr. Hennessey noted that this approach implicitly assumed that (1) emissions from nearby vessels would not interact, and (2) an hour's worth of emissions would have the same air quality impact whether spread over an entire hour or confined to a few minutes. *See* Ex. 18 (One-Hour Modeling Memorandum) at 3. Mr. Hennessey did not conclude that these assumptions were unreasonable; rather, he simply noted that they were implicit in Cape Wind's approach. He also noted that there exists a computer model known as "Inpuff," which is *not* listed as a "preferred" model in EPA's Guideline on Air Quality Models at 40 C.F.R. Part 51 Appendix W, but which might be of some utility in testing the first assumption. *See id.*

Petitioners' questions are readily answered by consulting the administrative record. First, Petitioners ask, "Was the Inpuff model used?" As the record clearly states, "The air dispersion modeling analysis was conducted using the Offshore and Coastal Dispersion (OCD) Model (Version 5)." *See* Ex. 16 (December 3 Modeling Report) at 2-3. Petitioners also claim that "[t]his analysis is indecipherable without a complete record." Pet. at 26. With the December 3 Modeling Report (and, if desired, raw data files) in hand, however, Petitioners or anyone else could readily evaluate the modeling methodology. *See* Ex. 16 (December 3 Modeling Report) at

4-5. Since Petitioners did not request to review Cape Wind's detailed modeling submissions, they are in a poor position to object that Mr. Hennessey's summary or notes are too concise.

D. Petitioners' failure to request a copy of the administrative record before filing their petition should not entitle them to a second chance.

Ordinarily, petitioners are required to raise all reasonably ascertainable issues during the public comment period, and may not raise new arguments in a petition for review. *See* 40 C.F.R. § 124.13; *Phelps Dodge*, 10 E.A.D. at 519-20 (explaining that "persons seeking review of a permit must demonstrate that any issues or arguments raised on appeal were previously raised during the public comment period on the draft permit, or were not reasonably ascertainable at that time"). It is well established, however, that regional offices may add additional materials or analyses in a response to comments, and obviously petitioners cannot be expected to have already commented on materials that did not appear until the response to comments. The Board has resolved this tension by holding that petitioners may raise new arguments in a petition for review on material that first appeared in the administrative record after the close of the comment period. *See Dominion II*, 13 E.A.D. at 418 ("[T]he appellate review process can serve as a petitioner's first opportunity to question the validity of material added to the administrative record in response to public comment . . . . "); *Ash Grove*, 7 E.A.D. at 431 (opportunity to review items added to final permit administrative record occurs after final decision by Region and before deadline for filing petition for review with the Board). Since the Region added the 1-hour NO_2 and SO_2 modeling analyses to the record after the close of the comment period, the Region does not dispute that Petitioners had the right to raise new arguments against these analyses in their petition for review.

However, Petitioners missed that opportunity. The Petition does not raise new issues with any degree of specificity, but rather conjures hazy, ill-developed "areas of inquiry."

Consequently, even allowing for the fact that Petitioners were entitled to raise new arguments challenging these modeling analyses in their petition for review, the Petition does not in fact contain specific arguments against the modeling analyses.

Similarly, even if the Region's Public Notice (for the Draft Permit) and/or Final Permit Cover Letter (for the Final Permit) inadvertently misled Petitioners into believing that the Region had intended to post every item in the administrative record to its web page, a considered examination of the materials on the web page should have led Petitioners to conclude otherwise. The One-Hour Modeling Memorandum, which *was* posted on the Region's web page, provided a specific citation (by specific computer filename) to precisely the documents that Petitioners could have examined (i.e., the Modeling Attachments) to learn the answers to the questions that they ask in their Petition.

Petitioners should not receive a second chance. The purpose of the rule allowing petitioners to raise, in a petition for review, new objections to material that was added after the close of the comment period, is to allow petitioners *one* bite at the apple. If the Board were to conclude that the Petition's indistinct and inchoate "areas of inquiry" sufficed to warrant review and thereby allow Petitioners to further develop these arguments post-petition, it would grant Petitioners here two bites at the apple, and render meaningless the requirement that petitions for review state their objections with specificity. Since the Petition offers no serious challenges to the modeling analysis, allowing Petitioners more time would be unlikely to result their showing clear error. Particularly in a petition for review of a preconstruction permit for a new source, where the filing of a petition stays the effective date of the permit and therefore prevents construction, petitioners must demonstrate *in the petition itself* that there are clear errors of law

or fact, abuse of discretion, or important policy considerations warranting review. Petitioners failed to do that here, and they should not be allowed to do so later in the process.

IV. Petitioners' Arguments Regarding BOEMRE's General Conformity Analysis Do Not Warrant Board Review.

As discussed above, BOEMRE conducted a general conformity analysis for the Cape Wind project to fulfill the requirements of CAA § 176. *See supra* at 8. BOEMRE's general conformity analysis was based on Cape Wind's project plan of staging its construction vessels from Quonset Point, Rhode Island. *See* Ex. 2 (Final General Conformity Determination) at 1, 4, 6-9. Petitioners' claims rest on the assertion that Cape Wind is planning, or has decided, to stage its construction vessels from New Bedford, Massachusetts, rather than Quonset Point. Petitioners argue that the Permit should be remanded because BOEMRE may need to revise its general conformity determination.

Even assuming *arguendo* that Cape Wind changes its staging location, Petitioners have not shown that this would undermine the validity of any conditions of the Permit, or otherwise warrant review. The Board lacks jurisdiction to review BOEMRE's decisions, the Permit itself is exempt from the general conformity requirements of CAA § 176, and claims that a permitted project violates a statutory provision outside the Board's jurisdiction, alone, do not warrant Board review under Part 124. Finally, Petitioners' claim that Cape Wind is changing its staging location is contradicted by the record upon which the Region based its final permit decision.

A. The Board lacks jurisdiction to review BOEMRE's general conformity determination.

This Board has jurisdiction to review permits issued by EPA regional offices or delegated state or local permitting agencies, but does not have jurisdiction to review decisions reached by another federal agencies, including BOEMRE. It is true that general conformity derives from the

Clean Air Act, a statute which is, in large part, administered by EPA. However, CAA § 176 applies to every federal agency, not just EPA.[36] *See* 40 C.F.R. § 93.154.

The Board has no special role in reviewing sister federal agencies' general conformity determinations, and no jurisdiction to do so. Except at the Administrator's specific request, the Board's jurisdiction is limited to "authority expressly delegated to it in [title 40 of the Code of Federal Regulations]." 40 C.F.R. § 1.25(e)(2). Relevant to this appeal, "any person who filed comments on [the] draft permit or participated in the public hearing may petition the Environmental Appeals Board to review any *condition of the permit decision*." *Id.* § 124.19(a) (emphasis added). BOEMRE's general conformity determination is not part of any condition of the Permit, and the Board does not have authority to review every decision made by every federal agency regarding the Cape Wind project. Petitioners seem to miss this point, arguing:

> [C]hanged circumstances have made obsolete the emission numbers assumed in [BOEMRE's] conformity determination.
>
> In light of this change, at least the following critical findings of fact and conclusions of law *in the [BOEMRE] conformity determination* appear to be "clearly erroneous." 40 C.F.R. § 124.19(a)(1): . . . .

Pet. at 32 (emphasis and substitutions added). But the Board is not empowered to review whether BOEMRE, in its separate review of a different aspect of the overall Cape Wind project under a different statutory provision not subject to review under 40 C.F.R. Part 124, made clear errors of fact or law. Rather, § 124.19(a)(1) pertains to a showing that "*the condition in question is based on* a finding of fact or conclusion of law which is clearly erroneous." Notably, Petitioners cannot identify any condition of the Permit that "is based on" BOEMRE's allegedly

[36] Indeed, when (as is *not* the case here) EPA is arguably itself required to conduct a general conformity analysis, it does so "qua agency of the federal government, not as administrator or enforcer of the CAA." *See Conservation Law Found., Inc. v. Busey*, 79 F.3d 1250, 1262 (1st Cir. 1996).

erroneous general conformity determination, because no such condition exists. Accordingly, the Board should deny review.[37]

B. Even if Cape Wind does revise its project staging location and BOEMRE must revise its general conformity determination, this would not warrant review of the Region's final permit.

Even if Cape Wind does revise its staging location, and even if BOEMRE does find it necessary to revise its general conformity determination, this would not warrant review of the Region's OCS air permit. First, the Permit does not rely on BOEMRE's general conformity determination because the Permit is exempt from general conformity requirements. Second, even assuming *arguendo* that BOEMRE's general conformity determination is now or could soon be in need of revision, the Board's authority to review permits issued by EPA regions does not authorize the Board to review every environmental objection to a permitted project absent a showing that such issues affect conditions in the permits issued by those regions.

1. The Permit does not rely on BOEMRE's general conformity determination because the Permit is exempt from general conformity requirements.

New source review permits, including the OCS air permit issued by the Region, are exempt from general conformity requirements:

> Notwithstanding the other requirements of this subpart, a conformity determination is not required for the following Federal actions (or portion thereof):
>
> (1) The portion of an action that includes major or minor new or modified stationary sources that require a permit under the new source review (NSR) program (Section 110(a)(2)(c) and Section 173 of the Act) or the prevention of significant deterioration program (title I, part C of the Act).

[37] Petitioners are not without remedy if they believe that BOEMRE's general conformity determination is erroneous. General conformity determinations are reviewable in federal district court under the Administrative Procedure Act. *See Conservation Law Found., Inc. v. Busey*, 79 F.3d 1250, 1260-62 (1st Cir. 1996).

40 C.F.R. § 93.153(d)(1). The Permit is both a major nonattainment NSR permit under 310 C.M.R. 7.00 Appendix A, which EPA approved pursuant to the major nonattainment NSR provisions of CAA § 173, and a Massachusetts minor source permit under 310 C.M.R. 7.02, which EPA approved pursuant to the minor NSR provisions of CAA § 110(a)(2)(c). Thus, a general conformity determination is not required for the portion of the overall Cape Wind project that is subject to EPA's air permit.

Put simply, the Permit is exempt from general conformity. Contrary to Petitioner's suggestion, this is *not* a case where the Region has made use of a federal agency's discretion to "choose to adopt the analysis of another Federal agency . . . in order to make its conformity determination." *See* 40 C.F.R. § 93.154. Rather, this is a case where the Region's Permit is not subject to general conformity *at all*. Consequently, even assuming *arguendo* that BOEMRE's general conformity determination requires revision, such issues are irrelevant to the Permit. Indeed, Petitioners have not even suggested a mechanism by which, if BOEMRE were to revise its general conformity determination, this could somehow result in a change to the Permit.[38] Therefore, the Board should deny review.

2. The Board's authority to review permits issued by Regions under 40 C.F.R. Part 124 does not extend to every environmental objection, including general conformity, to a proposed project.

The overall Cape Wind project has been subject to numerous forms of federal review for aspects unrelated to the Permit. *See, e.g.,* Ex. 6 (Response to Comments) at 28 (Response C6) (discussing aerial navigation impact review by Federal Aviation Administration); Ex. 6 (Response to Comments) at 30 (Response C11) (discussing marine navigation impact review by

[38] In this case, the Permit and BOEMRE's general conformity determination occupy complementary and exclusive regulatory spaces: the Permit regulates air emissions within a statutorily prescribed 25-mile radius of the project site, and BOEMRE's general conformity determination regulates air emissions outside of this circle. Thus, a change to BOEMRE's general conformity determination would not affect EPA's Permit. Regarding the extent (if any) to which a hypothetical change in staging location might affect the *Permit's* air quality analyses for the 25-mile radius, *see infra* note 40.

Coast Guard). Even assuming *arguendo* that one of these detailed federal reviews was flawed, the Board can only review the OCS air permit upon a showing that the *Permit* was founded on a clearly erroneous finding of fact or conclusion of law. *See* 40 C.F.R. § 124.19(a). "The Board does not have authority to review every environmental concern associated with this project." *Knauf Fiber Glass*, 8 E.A.D. at 162; *see also id.* at 127 ("The PSD review process is not an open forum for consideration of every environmental aspect of a proposed project, or even every issue that bears on air quality."); *Russell City Energy Ctr.*, slip op. at 117, 132 (same). In this case, Petitioners have not pointed to any specific Permit condition that is (or will be) flawed if BOEMRE's conformity analysis must be revised. Therefore, review should be denied.

C. The record before EPA does not support Petitioners' assertions regarding Cape Wind's project staging location.

Petitioners' claims rest on the assertion that Cape Wind is planning, or has decided, to stage its construction vessels from New Bedford, Massachusetts, rather than Quonset Point. While, as explained above, this issue is of limited or no relevance to the Permit, as explained above, it is worth noting that this assertion is unsupported by the record.

After the close of the comment period, it came to the Region's attention that Cape Wind might be considering changing its staging location.[39] The Permit does not itself regulate the project's staging location. However, because air quality modeling could potentially be affected by vehicle travel paths, and because certain other non-Clean Air Act requirements to which the issuance of the Permit was subject could potentially be affected by a change to the project staging location, the Region wrote to Cape Wind, inquiring whether Cape Wind was planning to change its location. *See* Ex. 29, AR 97 (Letter from Stephen Perkins to Dennis Duffy (Oct. 29,

[39] Earlier, the Region's Fact Sheet had noted that "[BOEMRE's] general conformity analysis was based on Cape Wind using Quonset, Rhode Island as the staging area for the offshore construction activities . . . . If Cape Wind wishes to move its onshore staging area to another port facility, [BOEMRE] may need to conduct a revised general conformity analysis." Ex. 1 (Fact Sheet) at 10.

2010)). Cape Wind responded that it had not revised its project plan, nor requested any changes to its air permit application, and that if it did change its plans, it would notify the regulatory agencies. *See* Ex. 30, AR 102 (Letter from Dennis Duffy to Stephen Perkins (Nov. 17, 2010)) at 1 ("In the event that . . . [Cape Wind] proposes to use [a proposed New Bedford facility] for all or a substantial part of its staging requirements, Cape Wind would alter its project plans and make the appropriate regulatory filings at that time.").[40]

Petitioners cite a press release issued by Cape Wind *after* the Region issued its final permit decision for the proposition that Cape Wind has definitively changed its staging location to New Bedford. *See* Doc. No. 105, Pet. App. E. Obviously, this press release was not before the Region at the time of permit issuance, and it should be stricken from the record. *See* 40 C.F.R. § 124.18(c) (administrative record closes when final permit decision issues); *Dominion I*, 12 E.A.D. at 518-19. More importantly, the undisputed record evidence indicates that Cape Wind's planned project staging location is Quonset Point. The entire factual basis for Petitioners' argument rests on post-decisional material and speculation that contradicts the record upon which the Region was required to base its decision. *Cf. Russell City Energy Ctr.*, slip op. at 116 n.109 ("[The permitting agency] properly issued the Final Permit based on the administrative record as it existed at the time [the agency] issued its final permit decision rather than on speculation regarding future studies, reports, or recommendations."). Consequently, review should be denied.

[40] If, based on updated modeling and other analyses, it appeared that Cape Wind could not comply with the Final Permit as written without a permit modification, then the Region would evaluate whether to propose a permit modification for public comment under 40 C.F.R. § 124.5. If, on the other hand, revised analyses indicated that no changes to the Permit were necessary, then the Region would not need to issue any new permit decision. In either case, the Region would evaluate a proposed project change in the first instance.

CONCLUSION

For the reasons set forth above, the Petition fails to identify any clearly erroneous findings of fact or conclusions of law, abuses of discretion, or important policy considerations warranting Board review. The Region requests that the Board deny review.

Respectfully submitted,

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, REGION 1

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CERTIFICATE OF SERVICE

I, Sally Burt, hereby certify that copies of the Region's aforementioned Response to Petition for Review were sent on the 15th day of March 2011 to the following persons in the manner described below:

Posted to CDX electronic system (w/exhibits) Copy by regular mail (w/exhibits)	Eurika Durr, Clerk of the Board Environmental Appeals Board (MC 1103B) U.S. Environmental Protection Agency Ariel Rios Building 1200 Pennsylvania Avenue, N.W. Washington, D.C. 20460-0001
Copy by e-mail (w/exhibits) Copy by regular mail (w/o exhibits)	Richard E. Ayres Kristin L. Hines Ayres Law Group 1615 L Street, N.W., Suite 650 Washington, DC 20036
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Signed: March 15, 2011 /s/ Sally Burt