UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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COMMISSIONERS

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Dale E. Klein, Chairman
Edward McGaffigan, Jr.
Jeffrey S. Merrifield
Gregory B. Jaczko
Peter B. Lyons

In the Matter of ENTERGY NUCLEAR VERMONT YANKEE, LLC, & ENTERGY NUCLEAR OPERATIONS, INC. (Vermont Yankee Nuclear Power Station)	Docket No. 50-271-LR

CLI-07-16

MEMORANDUM AND ORDER

This adjudication concerns the application of licensees Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc. (collectively "Entergy") to renew their operating license of the Vermont Yankee Nuclear Power Station for 20 additional years.[1] The New England Coalition challenged Entergy's application on numerous grounds. One of the Coalition's arguments is that Entergy's Environmental Report[2] (which is a part of the application) inadequately addressed the impacts of increased thermal discharges into the Connecticut River during the license renewal period.[3] In a split decision last fall (LBP-06-20),

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[1] ADAMS Accession No. ML060300085. (ADAMS is the acronym for the NRC's Agencywide Documents Access and Management System -- a computerized storage and retrieval system for NRC documents, publicly accessible through the NRC's web page at http://www.nrc.gov.) Entergy seeks an extension of the facility's operating license until March 21, 2032.

[2] ADAMS Accession No. ML060300086.

[3] "Petition for Leave to Intervene, Request for Hearing, and Contentions" (May 26, 2006) ("Petition to Intervene").

the Licensing Board admitted for litigation this argument, which the Coalition designates "Contention 1."[4] Entergy sought interlocutory review of this ruling.[5] In our own split decision dated January 11, 2007, we denied Entergy's petition but nevertheless took *sua sponte* review of the Board's admission of Contention 1. We also directed Entergy, the Coalition and the NRC Staff to file briefs on the admissibility issue.[6] In those briefs, Entergy and the Staff urge us to reverse the Board's ruling, while the Coalition asks us to affirm it. We believe that the Staff and Entergy have the better of the argument, and we therefore reverse LBP-06-20 insofar as it admitted Contention 1 for litigation.

BACKGROUND

I. The Vermont Yankee Plant and its Water Discharge System

The Vermont Yankee plant is located on the Connecticut River in Vermont. All of the plant's thermal output that does not actually produce electricity is removed through a "once through" circulating water system. Upon leaving the circulating water system, this water is either discharged into the atmosphere (through mechanical draft cooling towers) or into the Connecticut River. The State of Vermont determines the temperature at which the plant is

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[4] 64 NRC 131 (2006), *reconsid'n denied*, unpublished decision (Oct. 30, 2006), ADAMS Accession No. ML063030484.

The Board split 2-1 on the admissibility of Contention 1. Judges Karlin and Elleman joined in the majority decision admitting the contention (64 NRC at 175-82). Judge Wardwell filed a dissenting opinion (*id.* at 211-18). The Board was unanimous on all other contention-admissibility rulings, and those rulings are not before us today.

[5] "Entergy's Petition for Interlocutory Review of LBP-06-20 Admitting New England Coalition's Contention 1" (Oct. 10, 2006) ("Petition for Review").

[6] *Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), CLI-07-1, 65 NRC 1 (2007). Commissioners Lyons and Jaczko dissented (65 NRC at __-__), and Commissioners Merrifield and McGaffigan concurred (65 NRC at __-__).

permitted to discharge water into the river.[7]

II. Statutory and Regulatory Context for Contention 1

In its Petition to Intervene, the Coalition asks us to take a "hard look," as required under the National Environmental Policy Act ("NEPA"),[8] at the potential environmental impacts of the license renewal.[9] One of those potential impacts, according to the Coalition, is the thermal effect of a 1° F increase in temperature on the biota (in this case, the fish and shellfish) of the Connecticut River during the proposed twenty-year license extension period. The only specific kind of thermal effect the Coalition raises is "heat shock."[10] Judge Wardwell, the dissenting Judge on the Board, defines the term this way: "Heat shock occurs when aquatic biota that have been acclimated to cooler water are exposed to sudden temperature increases when artificial heating commences."[11] In addressing this "heat shock" issue, we must consider not only NEPA but also the provisions of the Federal Water Pollution Control Act of 1972 (commonly known as the "Clean Water Act").[12]

"Heat shock" falls within the scope of the Clean Water Act in the following way. Section

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[7] *Entergy Nuclear/Vermont Yankee Thermal Discharge Permit Amendment* (State of Vt. Envtl. Court, Docket No. 89-4-06 Vtec, Jan. 9, 2007) (Appeal of Connecticut River Watershed Council, et al.) ("2007 Vermont Order"),
available at http://www.vermontjudiciary.org/tcdecisions/06-089c.Entergy.mots.pdf, *appended to* "Appellee New England Coalition's Brief" at 3 (Jan. 29, 2007) ("Coalition Initial Brief") as Exhibit 3. *See also* "Fact Sheet" at 2 (March 30, 2006) ("March 30th Fact Sheet"), *appended to* Agency of Natural Resources, "Amended Discharge Permit" (March 30, 2006) ("March 30th Permit"), *in turn attached to* Entergy's Answer to New England Coalition's Petition for Leave to Intervene, Request for Hearing and Contentions" (June 22, 2006) ("Entergy's June 22nd Answer").

[8] 42 U.S.C. §§ 4321 *et seq.*; *Kleppe v. Sierra Club*, 427 U.S. 390, 410 n.21 (1976); *Natural Resources Defense Council v. Morton*, 458 F.2d 827, 838 (1972).

[9] Petition to Intervene at 12.

[10] *See*, *e.g.*, Coalition Initial Brief at 3.

[11] LBP-06-20, 64 NRC at 212 n.5.

[12] 33 U.S.C. §§ 1251 *et seq.*

402(b) of that statute authorizes the Environmental Protection Agency to approve state programs for the issuance of National Pollutant Discharge Elimination System" ["NPDES"] permits.[13] EPA has approved Vermont's NPDES program.[14] The permits Vermont issues under this program impose "effluent limitations and other requirements on facilities that discharge pollutants into the waters of the United States."[15] For purposes of NPDES permits, "effluent" is defined as "[l]iquid waste that is discharged into a river, lake, or other body of water."[16] Congress intended the word "effluent" to include heat.[17] Hence, "heat shock" falls within the parameters of the NPDES provisions of the Clean Water Act's Section 402(b).

Pursuant to Section 316(a) of that same Act, NPDES permits may (and the instant Vermont permit does) address thermal discharges into bodies of water.[18] Section 511(c)(2) of the Act precludes us from either second-guessing the conclusions in NPDES permits or

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[13] 33 U.S.C. § 1342(b).

[14] *See* 2007 Vermont Order at 12.

[15] LBP-06-20, 64 NRC at 175 n.54.

[16] *Black's Law Dictionary* (Bryan A. Gardner, ed., 2001). *See also* Clean Water Act § 502(11), 33 U.S.C. § 1362(11) (the definition of "effluent limitation" refers to "chemical, physical, biological, and other constituents which are discharged from point sources into navigable waters, the waters of the contiguous zone, or the ocean").

[17] 33 U.S.C. § 1326. *See also Society for the Protection of NH Forests v. Site Evaluation Comm.*, 115 N.H. 163, 171, 337 A.2d 778, 785 (1975) (""To discharge heated water . . . into the Atlantic Ocean from the Seabrook facility, the Public Service Company needed . . . a[n NPDES] permit from the water supply and pollution control commission," citing, *inter alia*, 33 U.S.C. §§ 1326, 1342); *Public Service Co. of N.H.* (Seabrook Station, Units 1 and 2), CLI-78-1, 7 NRC 1, 24-25 (1978); *Tennessee Valley Authority* (Yellow Creak Nuclear Plant, Units 1 and 2), ALAB-515, 8 NRC 702, 704 (1978); *Public Service Co. of N.H.* (Seabrook Station, Units 1 and 2), ALAB-366, 5 NRC 39, 48, *aff'd*, CLI-77-8, 5 NRC 503, 508 (1977), *aff'd*, *New England Coalition on Nuclear Pollution v. NRC*, 582 F.2d 87 (1st Cir.), *cert. denied*, 439 U.S. 1046 (1978).

[18] 33 U.S.C. § 1326(a), *incorporated by reference into* Clean Water Act, Section 301, 33 U.S.C. § 1311(a), *in turn incorporated by reference into* Clean Water Act, Section 402(b), 33 U.S.C. § 1342(b)(1)(A).

imposing our own effluent limitations – thermal or otherwise.[19] Indeed, the Clean Water Act's legislative history indicates that Congress, when enacting Section 511(c)(2), *specifically* intended to deprive the NRC's predecessor agency (the Atomic Energy Commission) of such authority.[20]

Finally, one of our regulations on license renewal implements the statutory provisions cited above by providing, in relevant part, that

> If the applicant's plant utilizes [a] once-through cooling . . . system[], the applicant shall provide a copy of . . . [a Clean Water Act Section] . . . 316a variance . . . or equivalent State permit[] and supporting documentation. If the applicant can not provide these documents, it shall assess the impact of the proposed action on fish and shellfish resources resulting from heat shock . . . .[21]

Our regulations also classify the effects of heat shock on the protection and propagation of fish and shellfish as a so-called "Category 2" environmental issue. This means that the NRC cannot treat heat shock generically but must instead address it on a case-by-case basis.[22]

III. Vermont Yankee's State Permit under the Clean Water Act

Entergy currently holds NPDES Permit 3-1199, issued by the State of Vermont's Agency of Natural Resources ("the Agency") pursuant to Section 316(a) of the Clean Water Act. This

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[19] 33 U.S.C. § 1371(c)(2). *See also Yellow Creek*, ALAB-515, 8 NRC at 712 (quoting Sen. Edmund Muskie as stating that "the effect of . . . [Section 511(c)(2)] would be to require Federal licensing agencies to 'accept as dispositive' EPA's determinations respecting the discharge of pollutants").

[20] *Yellow Creek*, ALAB-515, 8 NRC at 712 n.47, quoting S. Rep. No. 92-1236, 92nd Cong.., 2nd Sess. (1972) (Conference Report on S. 2770), Legislative History at 198. *See generally Seabrook*, CLI-78-1, 7 NRC at 26 (citing Sen. Howard Baker's remarks regarding Section 511(c)(2)).

[21] 10 C.F.R. § 51.53(c)(3)(ii)(B).

[22] *See* 10 C.F.R. Part 51, Subpart A, Appendix B. In 1996, the Commission concluded that, for license renewal, certain environmental issues were amenable to generic consideration and therefore did not require case-specific analysis. 10 C.F.R. § 51.53(c)(3)(i); NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants" (May 1996). We refer to those as "Category 1" issues. We classify all the rest as "Category 2" issues.

permit was issued in July 2001 and was due to expire on March 31, 2006. Among other things, the permit specifies the thermal (temperature) limitations for Vermont Yankee's effluent discharge into the Connecticut River. These limitations differ depending upon the time of year. Under Entergy's currently effective permit, one limitation applies for the "winter season" of October 15 through the following May 15 of each year, and another for the "summer season" of May 16 through October 14.[23]

On February 20, 2003, Entergy asked the Agency both to renew the permit and to amend it to increase the thermal limitations by 1° for the summer season. On March 30, 2006, the Agency granted Entergy's amendment request in part.[24] The Agency assessed the impacts of the higher effluent limits and concluded that the proposed 1° temperature increase would not compromise the protection and propagation of fish and shellfish from June 16 through October 14.[25] The Agency, however, postponed its decision on whether to allow the temperature increase for the period May 16 through June 15.

Entergy, the Coalition and others appealed various portions of the Agency's ruling to the Vermont Environmental Court. That Court stayed the March 30th Amendment,[26] and all appeals

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[23] *See* 2007 Vermont Court Order, slip op. at 2; March 30th Fact Sheet" at 2.

[24] To our knowledge, the Agency has not yet ruled on the renewal request.

[25] *See* 2007 Vermont Court Order, slip op. at 2-4, citing 2006 Permit Amendment, Part I, § 6(c), at 5.

[26] *See Entergy Nuclear/Vermont Yankee Thermal Discharge Permit Amendment* (State of Vt. Envtl. Court, Docket No. 89-4-06 Vtec, Sept. 1, 2006) (Appeal of Connecticut River Watershed Council, *et al.*), slip op. at 4 ("Vermont Stay Order"), *available at* http://www.vermontjudiciary.org/tcdecisions/06-089b.Entergy.sty2.pdf, and *attached to* Entergy's Answer to New England Coalition's Motion to File Supplemental and New Authority (Sept. 8, 2006). The Vermont Stay Order amended an earlier Stay Order of the Environmental Court, dated Aug. 28, 2006.

remain pending before the Court.[27] Although the pre-amendment version of the permit was scheduled to expire March 31, 2006, it remains in effect pursuant to Vermont's "timely renewal" statute.[28] That statute provides that the timely filing of an application to renew a state license tolls the license's expiration until the State's issuance of a final ruling on that application (or, if the State denies the application, until either the last day for seeking judicial review of the ruling or a date fixed by the reviewing court).[29] Because Entergy had filed a timely renewal application in September 2005,[30] its NPDES permit fell within the parameters of the "timely renewal" statute. Consequently, the Court's September 1st Stay Order and the timely renewal statute combine to keep the pre-March 30th version of the permit in effect until either April 1, 2007, or the issuance of a further order by that Court.[31]

IV. NRC License Renewal Proceeding

In January 2006, Entergy filed an application to renew its NRC operating license for the Vermont Yankee facility. This application included the Environmental Report about which the Coalition complains. At the time, Entergy's request to amend its permit was still pending before the Agency. Entergy therefore included in its Environmental Report a description of the requested amendment and an assessment of the proposed license renewal's thermal impact on

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[27] "NRC Staff Brief in Response to CLI-07-01" at 3 & n.7 (Jan. 29, 2007) ("Staff Initial Brief"), and cited authority.

[28] 3 Vt. Stat. Ann. § 814(b).

[29] Staff Initial Brief at 2 & n.3, citing 3 Vt. Stat. Ann. § 814(b).

[30] 2007 Vermont Court Order at 4 n.3.

[31] Vermont Stay Order, slip op. at 4. *See also* 2007 Vermont Court Order, slip op. at 4. The Environmental Court indicated that it would schedule a hearing in March 2007 to determine whether to continue the stay. Vermont Stay Order at 4.

fish and shellfish.[32] It also attached a copy of the then-current (pre-March 30th) version of its NPDES permit, as required by 10 C.F.R. § 51.53(c)(3)(ii)(B).[33]

On March 27, 2006, the Commission published a Notice of Opportunity for Hearing in the *Federal Register*.[34] In response, the Coalition filed a petition with us on May 26, 2006, seeking to intervene and requesting a hearing. The Coalition argued, among other things, that Entergy's Environmental Report has failed to assess the impacts of the increased thermal discharges into the Connecticut River, as allowed by the March 30th amendment, over the entire twenty-year renewal period.[35] It asserted that Entergy's proposal to increase (or "uprate") the plant's original design capacity by 20 percent necessitates a review of the "cumulative environmental impact" from the resulting increase in thermal discharge.[36] The Coalition particularly directed the NRC's attention to the fact that the submitted NPDES Permit predated the approval of Vermont Yankee's uprate and therefore could not have taken it into consideration.[37]

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[32] *See particularly* Environmental Report at pp. 4-16 through 4-19, regarding heat shock.

[33] *See* Environmental Report, Attachment D. Entergy also submitted the Fact Sheet (as amended in 2003) which accompanied the pre-March 30th permit. Although the parties disagree as to whether Entergy in fact attached to its application the appropriate version of the permit and supporting documentation, the question has no bearing on today's decision.

[34] 71 Fed. Reg. 15,220.

[35] Petition to Intervene at 10-14.

[36] *Id.* at 11. *See also* Coalition Initial Brief at 2.

[37] *See* Petition to Intervene at 13 n.2; Coalition Initial Brief at 2. We observe that Entergy's request for a 1° increase in thermal limits was not dependent upon a positive outcome of its uprate request to the Vermont Public Service Board (or, presumably, to us). *See* "Responsiveness Summary for Draft Amended Discharge Permit No. 3-1199" at 16 ("March 30th Responsiveness Summary"), appended to March 30th Permit, attached to Entergy's June 22nd Answer; Entergy's Reply to New England Coalition's Brief on Review of LBP-06-20, at 3 (Feb. 6, 2007) ("Entergy Reply Brief"). (The March 30th Responsiveness Summary, *supra*, is the Agency's response to public comments on its draft permit.)

Entergy responded that the state permit constituted a Section 316(a) determination, that Section 316(a) required no further analysis, that Section 511(c) of the Clean Water Act precluded the Commission from reviewing Vermont's effluent limitation or imposing a different limitation, and that the Coalition had therefore failed to raise a material issue of law or fact.[38]

The NRC Staff, in its response, pointed out that Entergy had not yet filed its then-current (*i.e.*, March 30th) permit as part of its Environmental Report. Based on this omission, the Staff asserted that Contention 1 should be admitted, but only insofar as it complained of the Environmental Report's failure to include the required assessment of the environmental impact of the 1° temperature increase during the 20-year renewal period.[39] Entergy later filed with the NRC's Office of the Secretary the March 30th version of its NPDES permit.[40] Entergy also submitted the Agency's supporting documentation (the March 30th Fact Sheet and the March 30th Responsiveness Summary) containing the Agency's assessment of aquatic impacts of the permitted thermal effluent.[41]

V. The Licensing Board Decision LBP-06-20

In a majority decision, the Licensing Board admitted Contention 1 (and others not before us today). Judge Wardwell filed a dissenting opinion regarding the admission of Contention 1.

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[38] Entergy's June 22nd Answer at 11-18.

[39] Staff Initial Brief at 4.

[40] *See* "Entergy's Brief on Review of LBP-06-20" at 6 (Jan. 29, 2007) ("Entergy Initial Brief"); Staff Initial Brief at 5; LBP-06-20, 64 NRC at 211 (Wardwell, J., dissenting).

The permit was, in fact, submitted twice -- on June 22 and July 27, 2006. See note 68, *infra*. The Board, responding to a Coalition motion, stuck the July 27, 2006 submittal on grounds that it was irrelevant, immaterial and procedurally improper (being in the form of a "for your information" letter with attachments). Transcript of Hearing for Oral Argument at 61 (Aug. 1-2, 2006) ("Tr."), available at ADAMS Accession No. ML062210038; unpublished Order (Striking Entergy's Letter to the Board and Attached Materials), dated Aug. 11, 2006, available at ADAMS Accession No. ML062230276.

[41] *See* Entergy Initial Brief at 5 & n.5.

The majority admitted Contention 1 on the ground that it raised a material issue concerning the adequacy of the Environmental Report – specifically that the Environmental Report "contains an insufficient analysis of the thermal impacts in the Connecticut River and merely refers to an NPDES permit, which is under appeal, [is] of allegedly uncertain status, and does not cover the twenty years covered by the proposed license renewal."[42] The majority rejected Entergy's argument that Section 511(c)(2) of the Clean Water Act barred the contention outright.[43] Instead, the majority concluded that the Commission was barred merely "from reviewing or imposing effluent limitations, water quality certification requirements, or other [Clean Water Act] requirements,"[44] and that the Commission still had a duty under NEPA to examine the environmental impacts of the proposed license renewal, including those to water quality.[45]

Then, turning to the specifics of Contention 1, the majority acknowledged that the NPDES permit did address the increased thermal impact of the facility and that the permit would, if valid and effective, satisfy the first prong of 10 C.F.R. § 51.53(c)(3)(ii)(B).[46] But the majority concluded that the NPDES permit's "meaning and status" (*i.e.*, validity) were unclear -- given its mere five-year duration, the uncertainty inherent in the pendency of its appeal, and the fact that the Vermont Environmental Court had stayed its effectiveness.[47] In the majority's view,

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[42] 64 NRC at 178, citing Coalition's Petition to Intervene at 11.

[43] *Id.* at 179.

[44] *Id.* at 180.

[45] *Id.* at 180-81.

[46] "If the applicant's plant utilizes [a] once-through cooling . . . system[], the applicant shall provide a copy of . . . [a Clean Water Act Section] . . . 316a variance . . . or equivalent State permit[] and supporting documentation."

[47] 64 NRC at 181, citing an earlier version of the Vermont Stay Order.

this lack of clarity raised a factual question appropriate for litigation.

The majority further reasoned that, conversely, if the permit did *not* satisfy the first prong of section 51.53(c)(3)(ii)(B), then the Entergy application must, under the regulation's second prong, adequately assess the thermal impact on fish and shellfish.[48] And this, the majority concluded, was likewise a factual issue appropriate for litigation.[49] Either way, according to the majority, the issue whether the NPDES permit satisfies the requirements of section 51.53(c)(3)(ii)(B) must be admitted for adjudication.[50]

And finally, the majority concluded that Contention 1 encompasses the factual/legal question whether "Entergy satisf[ies] the requirements of section 51.53(c)(3)(ii)(B) and Part 51 in general, and [whether the] NRC satisf[ies] its NEPA duties, by simply [Entergy] attaching a copy of an NPDES permit that will expire before the NRC license renewal even takes effect."[51]

The dissent, by contrast, concluded that Entergy had satisfied the requirements of section 51.53(c)(3)(ii)(B). The dissent reasoned that all the required environmental analysis for Category 2 issues was contained in the NPDES.[52] Also, the dissent disagreed with the majority regarding the significance of the permit's status. The dissent reasoned that, if the Vermont Environmental Court overturned the amended permit on appeal, the contention would be rendered moot.[53] The dissent further pointed out that the permit's five-year term allowed for

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[48] *Id.*. The second prong reads: "If the applicant can not provide [a Section 316(a) permit and supporting documentation], it shall assess the impact of the proposed action on fish and shellfish resources resulting from heat shock . . . ."

[49] *Id.*

[50] *Id.*

[51] *Id.* at 182.

[52] *Id.* at 213-14.

[53] *Id.* at 215-16.

ongoing reassessment of the effects of the one-degree temperature increase.[54] Finally, based on Section 511(c)(2) of the Clean Water Act, the dissent concluded that the Commission is required to take at face value the evaluation of the Agency and is forbidden from engaging in independent analysis.[55]

VI. Entergy's Petition for Interlocutory Review of LBP-06-20

On October 10, 2006, Entergy filed a timely petition for review of LBP-06-20. Entergy directs our attention to four issues: "(1) whether the NRC must independently assess aquatic impacts; (2) whether [section 51.53(c)(3)(ii)(B)] is applicable given the possibility that the NPDES permit amendment may be set aside on judicial review; (3) whether [that same section] and NEPA may be satisfied by an NPDES permit that is only issued for 5-year terms and therefore does not cover the same period as license renewal; and (4) whether there are thermal impacts other than heat shock that must be assessed."[56] On January 11, 2007, we denied Entergy's petition but nonetheless took *sua sponte* review of the Board's admission of Contention 1.[57]

DISCUSSION

I. Status of the Section 316(a) Permit

We first consider the significance of the three elements of the Section 316(a) permit's status, on which the majority decision relies – the permit's five-year duration, its stayed effectiveness, and the pendency of its appeal.[58]

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[54] *Id.*

[55] *Id.* at 217.

[56] Petition for Review at 10-11.

[57] CLI-07-1, 65 NRC __.

[58] 64 NRC at 181. Although Entergy did not raise the "stayed effectiveness" issue in its (continued...)

We do not share the majority's concern (based on a Coalition argument) that the Commission cannot legitimately rely on a state permit which expires only five years into the twenty-year renewal period. The Coalition's argument to this effect constitutes a *de facto* collateral attack on the scope of section 51.53(c)(3)(ii)(B)'s requirement and thereby contravenes our rule prohibiting such attacks on our regulations unless the NRC grants a waiver of the prohibition.[59] Section 51.53(c)(3)(ii)(B) requires merely that an applicant submit the EPA Section 316(a) variance or the equivalent state document. The regulation does not limit this requirement to those situations where the state permit expires within a period greater than five years. Nor could it, because Section 402(b)(1)(B) of the Clean Water Act expressly *prohibits* any state from issuing an NPDES permit for a period longer than five years.[60]

Next, we conclude that the Vermont Environmental Court's stay is irrelevant to the issue now before us. All the stay accomplishes is to reinstate, temporarily, the pre-March 30th version of the permit – an action that does not adversely affect the Coalition's interests (in fact, it favors them). The stay does *not*, as the Coalition would have us believe, render the March 31st permit "wholly superseded," "without any effect," and "a nullity."[61] It merely places that permit in limbo

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[58](...continued)
Petition for Review, it nonetheless falls within our *sua sponte* review as part of the Board's ruling on Contention 1.

[59] 10 C.F.R. § 2.335(a). *See*, *e.g.*, *AmerGen Energy Co., LLC* (License Renewal for Oyster Creek Nuclear Generating Station), CLI-07-8, 65 NRC ___, ___, slip op. at 11 (Feb. 26, 2007). The Coalition sought no such waiver.

[60] 33 U.S.C. § 1342(b)(1)(B). State agencies may re-examine a permit and its conditions at any time, if they conclude that its terms are no longer valid. Final Rule, "Environmental Review for Renewal of Nuclear Power Plant Operating Licenses," 61 Fed. Reg. 28,467, 28,475 (June 5, 1996). *See also* March 30th Responsiveness Summary at 15 ("The Agency will continue to adjust the terms of the Applicant's permit as necessary, to address any new data regarding impacts to shad"), 16 ("the Agency . . . will be reviewing and adjusting Entergy's permit monitoring requirements as necessary during the permit renewal period(s)").

[61] Coalition Initial Brief at 29. *See also id.* at 2 (describing the Environmental Court's
(continued...)

pending the conclusion of the Court's deliberations on the merits of Entergy's thermal increase amendment application. The Coalition thus confuses a stayed permit with a vacated one.

And finally, under Commission precedent, the pendency of the appeal to the Vermont Environmental Court and any resulting "uncertainty" as to the permit's status are not relevant here. In *Seabrook*, we accepted as conclusive the EPA's determinations on aquatic impact, despite the fact that the EPA decision was under judicial review at the time.[62] Moreover, we see no "uncertainty" at all if the Vermont Environmental Court either revokes the permit or does not include the 1° increase when it renews the permit. Under either of those circumstances, the effluent levels would revert to their previous (pre-March 30th) values, rendering the Coalition's contention moot.[63]

If, on the other hand, the Court upholds the permit, then Contention 1 would be relevant *only if*, as a matter of law, any doubt exists as to whether Entergy submitted a Section 316(a) permit and thereby satisfied the regulatory requirements of section 51.53(c)(3)(ii)(B). For the reasons discussed below, we conclude that no such doubt exists.

II. Compliance with the Requirements of 10 C.F.R. § 51.53(c)(3)(ii)(B)

We turn now to the real nub of this appeal – the question whether Entergy met the requirements of 10 C.F.R. § 51.53(c)(3)(ii)(B). A licensee may satisfy those requirements in

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[61](...continued)
ruling as a finding that the permit was "defective"), 11 (same: "faulty"), 16 (same: "factually inadequate"), 23 (describing the Agency's permitting action as "hav[ing] no effect under Vermont law"); New England Coalition's Reply Brief at 1 (Feb. 5, 2007) ("Coalition Reply Brief") (stating that the Environmental Court "annulled" the Agency's action), 2 (describing the amendment as "a legal nullity" and having been found to be "substantively defective").

[62] *Seabrook*, CLI-78-1, 6 NRC at 27 n.41. *See also Public Service Co. of NH* (Seabrook Station, Units 1 and 2), CLI-78-17, 8 NRC 179, 181 (1978); *Seabrook*, CLI-77-8, 5 NRC at 521 n.20.

[63] *See* LBP-06-20, 64 NRC at 215 (Wardwell, J., dissenting); Entergy Initial Brief at 18-19.

either of two ways: to evaluate, in its Environmental Report, the impacts on aquatic resources from entrainment, impingement and heat shock,[64] or to provide a copy of the current Section 316(a) permit (issued by either the EPA or the state where the plant is located).[65] Entergy claims to have done both. The Coalition asserts that Entergy has done neither.[66] The Coalition's argument is based on two basic premises.

The first is that the amended permit and its supporting documents are not before the Commission in this adjudication: "Entergy did not attempt to incorporate the March 30, 2006 [Agency] action into the ER until July 28, 2006, and the [Board] struck that information from this proceeding's record."[67] The Coalition's argument that the Board struck these documents from the record is beside the point. Although the Board did strike Entergy's July 28th letter along with its attachments (including the permit and supporting documents),[68] Entergy had already filed these same documents in this adjudication a month earlier -- as attachments to its June 22nd Answer to the Coalition's Petition to Intervene. Thus, the Board's decision to strike the July 28th

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[64] Of these three Category 2 issues, only heat shock is before us today. Entergy addressed heat shock at section 4.4 of its Environmental Report, pp. 4-16 through 4-19. ADAMS Accession No. ML060300086. Entergy also submitted a revision to its Environmental Report on July 27, 2006, to re-address heat shock in light of the March 30th Permit and its supporting documentation. ADAMS Accession No. ML062130080.

[65] 10 C.F.R. § 51.53(c)(3)(ii)(B).

[66] Coalition Initial Brief at 5, 7-9, 27-28

[67] *Id.* at 13. See also *id.* at 2, 9-10.

[68] On July 28, 2006, Entergy sent to the Board, for its information, the March 30th Permit and its supporting documentation, which Entergy had included as part of an amendment to its license renewal application. *See* Vermont Yankee Nuclear Power Station License Renewal Application, Amendment 6, Appendix E, Attachment D, Revision 1 (submitted July 27, 2006), ADAMS Accession No. ML062130080, at 10-65. Entergy also submitted an amended Environmental Report. *See id.*, Amendment 6, Appendix E, Section 4.4, Revision 1, ADAMS Accession No. ML062130080, at 3-7. Entergy had previously submitted each of these documents to the NRC Staff for its review outside the context of this adjudication.

letter and its accompanying documents had no practical effect on this adjudication.[69]

The Coalition's second premise is that the March 30th version of the permit does not qualify as a valid Section 316(a) determination.[70] According to the Coalition, an NPDES permit merely "requires compliance with water quality standards," while a Section 316(a) determination is "a variance allowing deviation from [those] standards."[71] As discussed below, Congress has severely limited our scope of inquiry into Section 316(a) determinations. All we may do is examine whether the EPA or the state agency considered its permit to be a Section 316(a) determination. If the answer is "yes," our inquiry ends. And so it does here.

The March 30th Fact Sheet which the Agency appended to the current NPDES permit leaves no doubt in our minds that the Agency considered its permit to be a Section 316(a) determination:

> [referring to] the Agency's partial *approval* of the Applicant's 2003 § 316(a) demonstration request.
>
> the Agency . . . has made a *determination* that the proposed increase in thermal effluent limits will maintain a level of quality that fully supports all designated uses.
>
> the Agency . . . has made a *finding* that the Applicant's request meets the requirements for thermal discharges pursuant to § 316(a).
>
> [t]he Agency has *concluded* that there will be no significant impact from the proposed discharge on the aquatic biota.[72]

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[69] Nor did the Board's action adversely affect the "acceptability for docketing" of this same amendment to Entergy's license renewal application, which Entergy had submitted to the NRC Staff. This is because the Board lacks authority to prohibit the NRC Staff from docketing the amendment. *See generally Dominion Nuclear Connecticut* (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551, 570 (2005) (observing that Licensing Boards lack the authority to supervise the NRC Staff in the performance of its non-adjudicatory duties).

[70] Coalition Initial Brief at 5.

[71] *Id.* at 5 n.2.

[72] March 30th Fact Sheet at 4, 5, 5, and 7, respectively. *See also* March 30th

(continued...)

The Coalition, seeking to avoid the controlling nature of the Agency's language, directs our attention to the Fact Sheet's two references to the NPDES permit being merely a "draft" or a "tentative decision."[73] We are unconvinced. These two descriptions are at odds with numerous statements in both the March 30th Fact Sheet and the March 30th Responsiveness Summary indicating the definitive nature of the Agency's Section 316(a) determination. The two cited descriptions perhaps reflect the Agency's drafting of the Fact Sheet prior to its permit hearing.[74] Or perhaps they allude merely to the remaining unresolved issue of a proposed increase in the maximum allowed temperature for the period May 16 through June 15. In any event, the permitting documents, read as a whole, make clear that the Agency considers its

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[72](...continued)
Responsiveness Summary, also attached by the Agency to the March 30th Permit (emphases added):

> The Agency has *determined* that the 316(a) Demonstration and the material that the applicant has produced in support of the amendment request meet the applicable standards. [*id.* at 5]
>
> the Agency . . . has *determined* that . . . the temperature change will not cause thermal shock [*id.* at 8]
>
> The extensive biological monitoring in the Connecticut River and the Demonstration Study *demonstrate* that the existing and proposed discharge will assure the protection and propagation of a balanced indigenous biological community which supports the finding that the proposed discharge will not result in thermal shock. [*id.* at 8]
>
> The agency has made a *determination* that the permittee *has demonstrated to the satisfaction of the Agency* that the previously permitted thermal effluent limitations during the period of June 16 through October 14 are more stringent than necessary to assure the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife in and on the body of water into which the discharge is to be made. [*id.* at 14]

Moreover, the EPA reviewed the draft permit and lodged no objections as to its issuance. Responsiveness Summary at 12.

[73] *See* March 30th Fact Sheet at 4, 5.

[74] *See* Entergy Reply Brief at 8 & n.15.

determination valid and final.

Given the Agency's statements, we are required by law to reject both the Coalition's argument and the majority's ruling. As we explain below, Section 511(c)(2) of the Clean Water Act does not give us the option of looking behind the agency's permit to make an independent determination as to whether it qualifies as a *bona fide* Section 316(a) determination. That Section expressly prohibits us from "review[ing] any effluent limitation or other requirement established pursuant to" the Clean Water Act.[75] And to state the obvious, the Agency's Section 316(a) permit establishes limitations on effluent water temperature and therefore falls within this statutory provision.

We and our Appeal Board[76] have repeatedly interpreted Section 511(c)(2) as requiring us to take a Section 316(a) determination at face value and as prohibiting us from undertaking any independent analysis of the thermal impact that the Agency has already assessed.[77] For instance, the Appeal Board in 1979 addressed this general issue at some length in *H.B.*

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[75] *See also* "Final Rule, Environmental Review for Renewal of Nuclear power Plant Operating Licenses," 61 Fed. Reg. 28,467, 28,474 (June 5, 1996) ("pursuant to Section 511(c) of the Federal Water Pollution Control Act of 1972, the Commission cannot question or reexamine the effluent limitations or other requirements in permits issued by the relevant permitting authorities"); "Proposed Rule, "Environmental Review for Renewal of Operating Licenses", 56 Fed. Reg. 47,016, 47,019 (Sept. 17, 1991): ("If an applicant to renew a license has appropriate . . . State permits, further NRC review of these potential impacts is not warranted").

[76] Although the Atomic Safety and Licensing Appeal Board was disbanded in 1991, its decisions still carry precedential value. *See Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-99-24, 50 NRC 219, 222 n.3 (1999).

[77] Section 51.53(c)(3)(ii)(B) rests on the presumption that we need not -- indeed *cannot* -- review and judge environmental permits issued under the Clean Water Act by the EPA or an authorized state agency. Given this statutory limitation, it is questionable whether we have the authority to consider even the environmental impacts of such permits. *See generally Department of Transportation v. Public Citizen*, 541 U.S. 752, 754 (2004) (Because the Federal Motor Carrier Safety Administration "has no ability to prevent such cross-border operations, it lacks the power to act on whatever information might be contained in an EIS and could not act on whatever input the public could provide").

Robinson, and reached the same conclusion we do today. In that proceeding, the Appeal Board was reviewing a decision in which a Licensing Board had reluctantly deferred to a water quality decision of the EPA under the same statutory provisions at issue here -- Clean Water Act Sections 316(a) and 511(c)(2). In a factual scenario quite similar to the one before us today, an intervenor in *H.B. Robinson* had argued that the Robinson nuclear plant, with its once-through cooling system, would increase the temperature of nearby Lake Robinson and would thereby affect adversely the aquatic environment of that lake.[78]

The Licensing Board conducted an in-depth examination of the plant's thermal discharge and tentatively concluded that the intervenor was right. However, consistent with the Clean Water Act, the Licensing Board delayed issuing its partial initial decision addressing the merits of the intervenor's contention until the EPA had issued its own decision in a parallel case. The EPA ultimately concluded that "there was no need for additional cooling in order to meet [Section 316(a)'s] statutory objective of 'assur[ing] the protection and propagation' of the Lake Robinson ecology."[79] (The EPA was playing the same role regarding the Robinson facility as the Agency plays here regarding the Vermont Yankee plant.) The Licensing Board subsequently issued a decision announcing that, although it disagreed with EPA on the thermal impact issue, it was nevertheless required by law to consider the EPA's decision as binding.[80]

Upholding the Licensing Board's decision, the Appeal Board held that the "NRC may not undercut EPA by undertaking its own analyses and reaching its own conclusions on water

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[78] *Carolina Power and Light Co.* (H.B. Robinson, Unit 2), ALAB-569, 10 NRC 557, 558 (1979).

[79] *Id.* at 559.

[80] *Id.*

quality issues already decided by EPA."[81] The Appeal Board explained that Congress, in enacting the Clean Water Act, had removed the broad responsibility of multiple federal agencies for water quality standards and had placed that responsibility solely in the hands of the EPA[82] (the issue of state NPDES permits not being before the Appeal Board). From this, it concluded that the NRC was required "to take EPA's considered decisions at face value."[83] The Appeal Board also observed that NRC abstinence from setting water quality standards was fully consistent with Congressional general intent that the Clean Water Act "was to be implemented in a way that would avoid 'needless duplication and unnecessary delays at all levels of government.'"[84]

The relationship between our responsibilities and those of the permitting agencies (*i.e.*, EPA and the state agencies) has not changed since the Appeal Board issued its *H.B. Robinson* decision. As we stated in *Seabrook* (another case involving both Section 511(c)(2) and a once-through cooling system), the permitting agency "determines what cooling system a nuclear

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[81] *Id.* at 561, quoting *Yellow Creek*, ALAB-515, 8 NRC at 715, and also citing *Philadelphia Electric Co.* (Peach Bottom Atomic Power Statio, Unit 3), ALAB-532, 9 NRC 279 (1979). *See also New England Coalition on Nuclear Pollution v. NRC*, 582 F.2d at 98 (the NRC "obeyed its FWPCA duties by deciding to accept as dispositive EPA determinations concerning one aspect of the overall environmental impact"); *Consolidated Edison Co of NY* (Indian Point, Unit No. 2), CLI-81-7, 13 NRC 448, 449-50 (1981); *Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Units 2 and 3), LBP-04-15, 60 NRC 81, 93 n.55, *aff'd*, CLI-04-36, 60 NRC 631, 638-39 (2004).

[82] ALAB-569, 10 NRC at 561, quoting *Yellow Creek*, ALAB-515, 8 NRC at 712. *See also Public Service Co. of N.H.* (Seabrook Station, Units 1 and 2), ALAB-422, 6 NRC 33, 70 (1977) ("For purposes of its NEPA evaluation, the NRC must accept the cooling system approved by EPA"), *aff'd*, CLI-78-1, *supra*; *Seabrook*, ALAB-366, 5 NRC at 49.

[83] ALAB-569, 10 NRC at 562.

[84] *Id.* at 561 n.14, quoting Clean Water Act Section 101(f), 33 U.S.C. § 1251(f). *See also Seabrook*, CLI-78-1, 7 NRC at 24; *Peach Bottom*, ALAB-532, 9 NRC at 283, and cited authority; *Yellow Creek*, ALAB-515, 8 NRC at 709-10 (quoting Sen. Baker, the sponsor of the forerunner to Section 511(c)(2), regarding that Section's purpose of avoiding duplication). Regarding avoiding delays in the form of relitigation of the same issues, *see Seabrook*, CLI-78-1, 7 NRC at 26-27.

power facility may use[,] and NRC factors the impacts resulting from use of that system into the NEPA cost-benefit analysis."[85] And our instruction in *Seabrook* to Licensing and Appeal Boards is likewise equally applicable today: "In future cases where EPA [or, as here, a state permitting agency] has made the necessary factual findings for approval of a specific once-through cooling system for a facility after full administrative proceedings, we expect our adjudicatory boards to do as we have done today," *i.e.*, defer to the agency that issued the Section 316(a) permit.[86]

The majority's position, therefore, runs contrary to the clear language of Section 511(c)(2), the legislative history underlying that Section (see note 20, *supra*), and longstanding Commission case law.[87]

III. Cumulative Impacts from a Rise in Water Temperature

The Coalition raises the issue of the cumulative impacts from the thermal increase on the aquatic life in the river.[88] The majority expressly declined to reach this issue, leaving the question for another day.[89] However, because the dissent did address it and because we wish to reach complete closure on the entire thermal impact issue,[90] we briefly address the "cumulative impacts" issue.

The Coalition's pleadings on this matter are ambiguous. It is apparently asserting that a

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[85] *Seabrook*, CLI-78-1, 7 NRC at 26.

[86] *Id.* at 28 n.42.

[87] We are troubled by the Board Chairman's statement that the "Appeal Board . . . got it wrong" in *Seabrook*. Tr. 271 (presumably referring to ALAB-366 and/or ALAB-422).

[88] Petition for Review at 11; Coalition Initial Brief at 2-3.

[89] 64 NRC at 181-82. The dissent, however, did address the matter. *Id.* at 214-15.

[90] As noted above, this issue was couched in terms more general than "heat shock." *See* Petition for Review at 10-14 (referring to "thermal impact" and "thermal discharge").

1° F increase in water temperature would present us either with at least one Category-2 environmental issue in addition to heat shock or with at least one Category-1 issue.[91]

If our first impression is correct, then the argument is fatally undermined by the Coalition's failure to specify such an additional Category-2 issue. If our second interpretation is correct, then the Coalition loses sight of the fact that *only* Category-2 environmental issues must be addressed in an Environmental Report[92] and may therefore be litigated at an adjudicatory hearing.[93] The Category-2 environmental issues listed in our regulations include only one thermal effect -- heat shock.[94] All remaining thermal-related issues fall within Category 1. As such, they need not be addressed in an Environmental Report and are thus impermissible topics for adjudication.[95]

Either way, there are no additional thermal impacts which we could combine with heat shock in order to conduct a cumulative impact analysis of thermal effects.[96]

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[91] In some pleadings, the Coalition refers to "the cumulative Category 2 impacts of . . . increased thermal discharge" and thereby suggests the possibility of more than one Category 2 environmental impact. Coalition Initial Brief at 24. *See also* id. at 3 ("at least one Category 2 impact"), 21 ("the cumulative impacts of thermal discharge"), 24 ("cumulative impacts"), 26 n.8 ("Further development of the facts before the [Board] may reveal other Category 2 impacts"); Coalition Reply Brief at 4 ("'impacts' of heat shock . . . include its direct, indirect and cumulative impacts"). The Coalition's argument could, however, also be read to mean that the "at least one Category 2 impact" (*id.* at 3) combines with other unspecified non-Category 2 (*i.e.*, Category 1) impacts to create "the cumulative environmental impact of the increased thermal discharge" (Coalition Initial Brief at 2).

[92] 10 C.F.R. 51.53(c)(3)(ii).

[93] *Entergy Nuclear Vermont Yankee* (Vermont Yankee Nuclear Power Station), CLI-07-3, 65 NRC ___, ___, slip op. at 7 (Jan. 22, 2007); *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 19 (2001).

[94] 10 C.F.R. Part 51, Subpart A, App. B, Table B-1.

[95] *Id.*

[96] We also agree with Judge Wardwell that the State of Vermont's five-year review period for its permits provides an opportunity to reexamine any cumulative impacts of these

(continued...)

CONCLUSION

We *reverse* the Board majority's decision to admit the Coalition's Contention 1 for litigation.

IT IS SO ORDERED.

For the Commission

/RA/

____
Annette L. Vietti-Cook
Secretary of the Commission

Dated at Rockville, Maryland,
this _11th_ day of April, 2007.

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[96](...continued)
effluents and to modify the parameters as needed to protect the aquatic life in the river.