

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

In the Matter of a Renewal and Modification of a
State Pollutant Discharge Elimination System (“SPDES”)
Permit Pursuant to Environmental Conservation Law (“ECL”)
Article 17 and Title 6 of the Official Compilation of
Codes, Rules and Regulations of the State of New York
 (“6 NYCRR”) Parts 704 and 750 by

Entergy Nuclear Indian Point 2, LLC and
Entergy Nuclear Indian Point 3, LLC,

Permittees.

DEC Appl. No.: 3-5522-00011/00004
SPDES No. NY-0004472

In the Matter of the Joint Application of

Entergy Nuclear Indian Point 2, LLC,
Entergy Nuclear Indian Point 3, LLC, and
Entergy Nuclear Operations, Inc.

for a Water Quality Certificate Pursuant to
Section 401 of the Clean Water Act and Section 608.9
of Title 6 of the Official Compilation of Codes, Rules
and Regulations of the State of New York.

DEC Appl. Nos.:
3-5522-00011/00030 (IP2)
3-5522-00105/00031 (IP3)

ISSUES RULING – PERMANENT FORCED OUTAGES
February 3, 2015

BACKGROUND AND PROCEDURAL HISTORY

Entergy Nuclear Indian Point 2, LLC and Entergy Indian Point 3, LLC (collectively, “Entergy” or “Applicant”) applied for renewal of a State Pollutant Discharge Elimination System (“SPDES”) permit for the Indian Point nuclear powered steam electric generating stations 2 and 3 (the Indian Point Energy Center (“IPEC” or “the Stations”)). IPEC is located on the east side of the Hudson River in the Village of Buchanan, Westchester County, New York. Staff of the New York State Department of Environmental Conservation (“Department” or “DEC”) has proposed various modifications to the SPDES permit for IPEC, including new conditions to implement measures to minimize impacts to aquatic organisms from the Stations’ cooling water

intake systems (“CWISs”). In an interim decision dated August 13, 2008 (the “Interim Decision”), the Deputy Commissioner advanced various issues to adjudication in the SPDES permit proceeding. *See Matter of Entergy Indian Point 2, LLC*, Interim Decision of the Assistant Commissioner, 2008 N.Y. Env. LEXIS 52 (August 13, 2008). Among other things, the Interim Decision directed the parties to proceed to hearing on the issue of the best technology available (“BTA”)¹ for IPEC to minimize entrainment and impingement of aquatic organisms.

On April 6, 2009, Department Staff received a joint application for a federal Clean Water Act (“CWA”) Section 401 Water Quality Certificate (“WQC”) on behalf of Entergy Nuclear Operations, Inc., Entergy Indian Point Unit 2, LLC, and Entergy Indian Point Unit 3, LLC.² Entergy submitted the joint application for a Section 401 WQC to the Department as part of Entergy’s April 30, 2007 federal license 20-year renewal request to the Nuclear Regulatory Commission (“NRC”) for Indian Point Unit 2 and Indian Point Unit 3. Section 401 conditions federal licensing of an activity which might cause a “discharge” into navigable waters on certification from the State in which the discharge might originate that the proposed activity would not violate federal or State water-protection laws. 33 United States Code (“U.S.C.”) Section 1341(a). In order to grant a WQC, the Department must determine whether IPEC’s continued operation meets State water quality standards pursuant to CWA Section 401 and Section 608.9 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (“6 NYCRR”).

By letter dated April 2, 2010, Department Staff denied the application, and Applicant made a timely request for a hearing in a submission dated April 29, 2010. A public comment hearing was held on July 20, 2010, and the issues conference took place the following day, on July 21, 2010. In an issues ruling dated December 13, 2010 (“WQC Issues Ruling”), the administrative law judges (“ALJs”) advanced additional issues to adjudication relating to the joint Section 401 WQC application. *See Matter of Entergy Nuclear Indian Point, LLC*, Ruling on Proposed Issues for Adjudication and Party Status, 2010 N.Y. Env. LEXIS 86 (December 13, 2010). The ALJs determined that the hearing on the SPDES and Section 401 WQC issues would proceed simultaneously, in order to develop a joint record.

Accordingly, hearings were held to consider Entergy’s preferred BTA (cylindrical wedge wire screens); Department Staff proposed BTA (closed cycle cooling); radiological issues; and the issue of best usages as advanced to adjudication in the issues ruling on the Section 401 WQC application. The hearings on these topics began on October 17, 2011, and to date, forty-six hearing days have taken place.

¹ Operators of facilities in New York State with cooling water intake structures that are subject to SPDES permits are required to comply with Section 316(b) of the federal Clean Water Act (“CWA”), and Section 704.5 of 6 NYCRR. Codified at Section 1326(b) of Title 33 of the United States Code, CWA § 316(b) provides that “[a]ny standard established pursuant to [33 United States Code (“U.S.C.”) § 1311, “Effluent limitations”] or [33 U.S.C. § 1316, “National standards of performance”] and applicable to a point source shall require that the location, design, construction and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact.” Section 704.5 of 6 NYCRR is similar, and states that “[t]he location, design, construction and capacity of cooling water intake structures, in connection with point source thermal discharges, shall reflect the best technology available for minimizing adverse environmental impact.” “BTA determinations by the Department have been conducted on a site-specific, case-by-case basis.” Interim Decision, at 9.

² Entergy Nuclear Indian Point 2, LLC and Entergy Indian Point 3, LLC are the owners of Indian Point Units 2 and 3, respectively. Entergy Nuclear Operations, Inc. is the operator of Units 2 and 3.

The background and procedural history with respect to the renewal and modification of the SPDES permit are set forth in greater detail in the February 3, 2006 ruling on proposed issues for adjudication and petitions for party status (“SPDES Issues Ruling”), 2006 N.Y. Env. LEXIS 3; the Interim Decision, 2008 N.Y. Env. LEXIS 52 (August 13, 2008); and the November 28, 2012 ruling of the Regional Director (“Fourth Step Ruling”), 2012 N.Y. Env. LEXIS 80. The background and procedural history with respect to the Section 401 WQC proceeding are set forth in greater detail in the WQC Issues Ruling, 2010 N.Y. Env. LEXIS 86 (December 13, 2010).

PROCEEDINGS

By letter dated September 12, 2013, Department Staff advised the ALJs and the parties that it planned to advance an additional BTA alternative. Specifically, Department Staff stated that “Staff intends to present additional evidence on permanent periods of outages for fish protection as an additional BTA alternative for the Indian Point facilities in this proceeding.”

On October 4, 2013, Entergy filed a motion to strike, arguing that the proposal to adjudicate forced outages was untimely, contradicted Department Staff’s rejection of forced outages as BTA in the 2003 draft SPDES permit, and failed to provide draft SPDES permit conditions or a fact sheet for public review and comment. Furthermore, Entergy pointed out that Department Staff’s April 2, 2010 denial of Entergy’s application for a water quality certification stated that closed-cycle cooling was the only available and technically feasible technology that would satisfy the regulatory requirements relating to cooling water intake structures, set forth in Section 704.5 of 6 NYCRR.

In a ruling dated October 18, 2013 (“Outages Ruling”), the ALJ denied Entergy’s motion, stating that the issue of permanent forced outages would be adjudicated (2013 N.Y. Env. LEXIS 62). The Outages Ruling required Department Staff to provide an offer of proof, and that offer of proof was timely submitted on November 12, 2013. Department Staff subsequently provided a May 9, 2014 SPDES permit fact sheet (“Outages Fact Sheet,” Issues Conference Exhibit (hereinafter “IC Exh.”) 16) with respect to the proposed BTA alternative.

The Outages Fact Sheet outlined six potential outage scenarios for the 20-year NRC license renewal period, as follows:

- (1) 42 days of outages between May 10 and August 10 at each unit (total of 84 days);
- (2) 62 days of outages between May 10 and August 10 at each unit (total of 162 days);
- (3) 92 days of outages between May 10 and August 10 at each unit (total of 184 days);
- (4) closed-cycle cooling installed at Unit 2, and 42 days of outages between May 10 and August 10 at Unit 3;
- (5) closed-cycle cooling installed at Unit 2, and 62 days of outages between May 10 and August 10 at Unit 3; and
- (6) closed-cycle cooling installed at Unit 2, and 92 days of outages between May 10 and August 10 at Unit 3.

The Outages Fact Sheet stated that

[i]n the event that a closed-cycle cooling alternative is found by the decision-maker to not be “available” at IPEC, after DEC’s four-step BTA analysis and SEQRA³ review for closed-cycle cooling is complete, protective outages provide a readily feasible alternative to the Department’s preferred option of closed-cycle cooling to reduce, and in some instances minimize, the adverse environmental impact that has been determined as a matter of law to be caused by IPEC’s CWIS.

IC Exh. 16, p. 2 (citation omitted).

The October 18, 2013 Outages Ruling stated that a hearing to receive public comments on the issue of permanent forced outages, as well as an issues conference, would be scheduled. The public comment hearing and issues conference were the subject of a May 21, 2014 notice in the Department’s *Environmental Notice Bulletin*. Notice of the hearings was also published in late May and early June in the Poughkeepsie *Journal*, the Middletown *Times Herald Record*, the Kingston *Daily Freeman*, the *Journal News*, and the New York *Daily News*.

Two public comment hearings took place on Tuesday, July 22, 2014 at the Colonial Terrace, Cortlandt Manor, New York. At the 2:00 p.m. session, approximately 100 persons were in attendance, and 38 persons provided oral comments. Approximately 100 persons attended the 7:00 session, and 35 persons spoke. In addition, written comments were received during the public comment period set forth in the May 21, 2014 notice, and at both public comment hearing sessions.

The issues conference was convened at 10:00 a.m. on Wednesday, July 23, 2014. Although no petitions for full party or *amicus* status were received in response to the notice,⁴ the African American Environmentalist Association (“AAEA”) filed a petition dated July 11, 2014, seeking full party status in the Section 401 WQC proceeding. The AAEA had already been granted full party status in the SPDES proceeding (Interim Decision, at 46). At the issues conference, the ALJ granted the AAEA’s petition for full party status in the Section 401 WQC proceeding (Issues Conference Transcript (hereinafter “IC Tr. at ___”) at 6).

³ State Environmental Quality Review Act, Environmental Conservation Law Article 8; Part 617 of 6 NYCRR.

⁴ As provided in the notice, entities that were already full or *amicus* parties to the SPDES and WQC proceedings were automatically parties for purposes of the issue of permanent forced outages. Accordingly, the County of Westchester; the Town of Cortlandt; Richard Brodsky; Riverkeeper, Inc., Natural Resources Defense Council, Inc. and Scenic Hudson, Inc. (collectively, “Riverkeeper”); the African American Environmentalist Association; the City of New York; and the Independent Power Producers of New York, Inc. were not required to file petitions for party status in order to participate in this phase of the proceeding. By letter dated June 26, 2014, Central Hudson Gas & Electric Corporation, which had been granted *amicus* party status in the Section 401 WQC matter, notified the parties and the ALJs that it was withdrawing from participating in that proceeding.

DISCUSSION

Entergy filed comments in a submission dated July 11, 2014 (IC Exh. 17). In addition, Entergy submitted the July 21, 2014 affirmation of Kevin P. Martin, Esq. (the “Martin Affirmation”) (IC Exh. 19) in support of Entergy’s issues conference arguments in response to Riverkeeper’s July 11, 2014 comments (IC Exh. 18).

In its comments, Entergy raised four matters it characterized as threshold legal issues, as follows:

- (1) Annual outages, such as those proposed by Department Staff, are not a “technology” within the meaning of Section 704.5 of 6 NYCRR, judicial precedent, and the Department’s precedent and policy;
- (2) Department Staff’s outage proposal is preempted by the Atomic Energy Act, rendering adjudication of this issue *ultra vires* and otherwise illegal;
- (3) Department Staff’s proposal to consider permanent forced outages at this stage of the proceeding was untimely, for reasons discussed in greater detail below, and Department Staff should be estopped from advancing this proposal; and
- (4) In the event this issue were to proceed to adjudication, Department Staff should be directed to select one proposal, rather than the six proposals set forth in the fact sheet, to be advanced at the hearing.

Each of these issues is discussed below.

Entergy’s Legal Issue No. 1

Entergy asserted first that annual outages were not a “technology” for Indian Point’s cooling water intake structure, within the meaning of Section 704.5 of 6 NYCRR, and therefore could not be used to satisfy the BTA requirement. Section 704.5 provides that “[t]he location, design, construction and capacity of cooling water intake structures, in connection with point source thermal discharges, shall reflect the best technology available for minimizing adverse environmental impact.” A “cooling water intake structure” is defined as “the total physical structure and any associated constructed waterways used to withdraw cooling water from waters of the State. The cooling water intake structure extends from the point at which water is withdrawn from the waters of the State up to, and including, the intake pumps.” 6 NYCRR Section 700.1(a)(12).

Entergy argued that nothing in Section 704.5, or the legislative history of Section 316(b) of the Clean Water Act, its federal equivalent, supported “the notion that turning off a nuclear power plant – with all that doing so entails with respect to the nuclear reactor and fuel and spent-fuel management – is a ‘technology’ pertaining to the ‘location, design, construction and capacity of cooling water intake structures,’ as defined to end at ‘the intake pumps.’” IC Exh. 17, p. 7. Entergy cited to the Second Circuit’s decisions in *Riverkeeper I* and *Riverkeeper II*, and asserted that the measures at issue in those cases (restoration of aquatic habitats and fish restocking), which the court determined were not intake structure technologies, were analogous to the outages proposed by Department Staff in this proceeding. (See *Riverkeeper, Inc. v. EPA*,

475 F.3d 83, 109 (2nd Cir. 2007) (“*Riverkeeper II*”), rev’d and remanded, 556 U.S. 208 (2009) (*certiorari* review limited to whether EPA could compare cost and benefits); *Riverkeeper, Inc. v. EPA*, 358 F.3d 174 (2nd Cir. 2004) (“*Riverkeeper I*”). Entergy emphasized the Court’s determination in *Riverkeeper II* that

[r]estoration measures are not part of the location, design, construction or capacity of cooling water intake structures, *Riverkeeper I*, 358 F.3d at 189, and a rule permitting compliance with the statute through restoration measures allows facilities to avoid adopting any cooling water intake structure technology at all, in contravention of the Act’s clear language as well as its technology-forcing principle.

475 F.3d at 110 (internal citations omitted). Entergy went on to contend that “[i]f Congress had intended to allow plenary authority over facility operations in order to reduce adverse impacts from intakes of cooling water, it could and would have phrased Section 316(b) more generally,” rather than limiting the statute to location, design, construction and capacity of a cooling water intake structure. IC Exh. 17, p. 7. According to Entergy, shutting off a nuclear power plant is not a technology. Entergy asserted that under Department Staff’s permanent forced outages proposal, the location, design, construction and capacity of IPEC’s cooling water intake structures would remain exactly the same.

In addition, Entergy cited to the Interim Decision, which states that the availability of a technology is to be “analyzed in the context of its suitability for the particular application, including its ability to be installed and operated at the site.” Interim Decision, at 10 (citations omitted). Entergy maintained that “[t]o mandate an operational measure that ensures that the facility does not operate at all – let alone operate efficiently – is expressly beyond the scope of and contradicts the clear purpose of the Interim Decision.” IC Exh. 17, p. 8.

In response, Department Staff cited to the Department’s July 10, 2011 policy, *CP-#52/Best Technology Available (BTA) for Cooling Water Intake Structures* (“CP-52”). That policy identifies performance goals for selection of BTA to minimize adverse environmental impact from a cooling water intake system. CP-52 (Hearing Exhibit Entergy 400), p. 1. Wet closed-cycle cooling, or its equivalent, is identified as the performance goal for existing industrial facilities, such as Indian Point, that operate a cooling water intake system in connection with a point source thermal discharge. *Id.*, p. 2. The policy states that facility owners seeking to meet the equivalent performance goal set by the policy “shall propose a suite of technologies and operational measures to the Department for consideration as BTA. Operational measures proposed by the facility owner may include but not be limited to: (1) reductions in cooling water capacity; (2) fish protective outages; and (3) reducing cooling water capacity use.” *Id.*

According to Department Staff, fish protective outages are a limit on capacity or the use of water at a facility, and therefore directly related to the operation of the cooling water intake structure. IC Tr. at 8. Department Staff went on to note that SPDES permits have been issued for other power plants, including Bowline, Huntley, Danskammer, Glenwood, and Port Jefferson, that use operational measures such as outages as a means of complying with BTA.

Entergy countered that CP-52 “has no force of law.” IC Tr. at 32. Entergy observed that CP-52 defined “feasible” in the context of BTA determinations, to mean “capable of being done; able to be installed and function efficiently within the operating constraints of the facility.” CP-52, p. 3. According to Entergy, an outage “is the polar opposite” of functioning. At the issues conference, Entergy contended that “[a]ll you’ve done when you’ve mandated an outage is controlled reactor operations. The capacity of the intake structure remains exactly the same.” IC Tr. at 29.

Riverkeeper made reference to several exhibits offered by Entergy and received into the record during the course of the hearing, and which, according to Riverkeeper, demonstrated that Entergy itself recognized that outages were a “technology.” Specifically, Riverkeeper cited to Hearing Exhibit Entergy 6A (Entergy’s biological assessment, evaluating outages in tables addressing different intake technologies); Hearing Exhibit Entergy 7 (evaluation of economic and environmental impacts associated with conversion to closed-cycle cooling; discussing construction outages at page 14); and Hearing Exhibit Entergy 8 (evaluation of alternative intake technologies; references to timing of outages on page 61 in connection with installation of cylindrical wedge wire screens, and discussion on page 90 of flow reductions, including operational measures (outage timing)). Riverkeeper contended further that the capacity of the cooling water intake system would not remain the same, as Entergy had argued, if outages were put in place restricting water flow. In addition, Riverkeeper maintained that Entergy’s objections to adjudicating permanent forced outages were untimely, and should have been raised in connection with the 2003 draft SPDES permit, which considered two outages.

Ruling: CP-52 provides that a facility owner can seek to meet the equivalent performance goal set by the policy through a suite of technologies and operational measures. Operational measures include reducing cooling water capacity use. As Department Staff notes, outages have been employed at other facilities in the State in order to comply with BTA. Entergy’s arguments that Department precedent precludes consideration of permanent forced outages as a potential means of limiting impingement and entrainment at IPEC are not persuasive, and are insufficient to preclude adjudication of this issue.

The cases that Entergy cites are not dispositive. In *Riverkeeper I*, supra, the court determined that the United States Environmental Protection Agency (“EPA”) exceeded its authority by promulgating a regulation that would allow compliance with Section 316(b) of the Clean Water Act though marine life and habitat restoration measures such as restocking fish killed by a cooling water intake system, or improving the habitat in the vicinity of the intake. The court reasoned that such measures “however beneficial to the environment, have nothing to do with the location, the design, the construction, or the capacity of cooling water intake structures, because they are unrelated to the structures themselves.” 358 F.3d 189. The court noted that “[r]estoration measures correct for the adverse environmental impacts of impingement and entrainment; they do not minimize those impacts in the first place.” Id. In the case of Indian Point, however, permanent forced outages could minimize the impacts associated with entrainment and impingement at the cooling water intake structure.

Entergy also cited to *Surfrider Foundation v. California Regional Water Quality Control Board*, 211 Cal. App. 4th 557 (4th Dist. 2012). In that decision, the court stated that the case law analyzing Section 316(b) of the Clean Water Act was inapplicable to the facts in that proceeding, because of crucial differences in the statutory language between Section 316(b) and the California statute at issue. The court went on to distinguish the holdings in *Riverkeeper I* and *Riverkeeper II*, pointing out that the Clean Water Act “is quite different in that it makes no mention of mitigation, restoration or any similar concept.” 211 Cal. App. 4th 579. Entergy’s argument that permanent forced outages would amount to mitigation or restoration is not persuasive. Permanent forced outages are not a restoration measure. Moreover, permanent forced outages are no more or less a mitigation measure than closed-cycle cooling and cylindrical wedge wire screens would be.

Other cases Entergy cites (*ConocoPhillips Co. v. EPA*, 612 F.3d 822 (5th Cir. 2010), and *Robertson County v. Texas Comm’n on Env’tl Quality*, 2014 Tex. App. LEXIS 7706 (Tex. App. July 17, 2014))⁵ construe Section 704.5’s use of the term “location” with reference to an intake structure. Entergy relies upon these cases for the proposition that Section 316(b) only allows regulation of the cooling water intake structure itself. Entergy’s argument that an outage does not relate to the intake structure, but rather the facility as a whole, fails because it is at least arguable that outages relate to the capacity of a cooling water intake structure, as Department Staff contends, and therefore could be a “technology” within the meaning of Section 704.5.

CP-52 makes reference to “operational measures,” including reducing water use. However denominated (as an operational measure or a technology), a factual record should be developed with respect to the possibility of implementing outages at IPEC as a means of minimizing impingement and entrainment. This will allow the decision maker to evaluate the environmental impacts, as well as the environmental benefits, derived therefrom.

Entergy’s Legal Issue No. 2

Entergy argued that the Department was preempted from advancing outages as BTA, because the Atomic Energy Act gives the Nuclear Regulatory Commission (“NRC”) exclusive jurisdiction “over the field encompassing (at a minimum) the ‘nuclear’ aspects of power generation at nuclear plants.” IC Exh. 17, p. 9. Entergy raised a number of concerns with respect to changes in the timing and frequency of outages, arguing that such changes would have “implications for a variety of operational considerations that are within the sole ambit of NRC, including, *inter alia*, fuel enrichment levels and assembly characteristics; spent fuel storage and handling; peak power levels; maintenance and repair schedules; planned radioisotope discharges; and so on.” *Id.*, p. 10.

At the issues conference, Entergy argued that “when it comes to preemption, the question isn’t what does a plant do of its own volition. The question is what can a State order a plant to do.” IC Tr. at 17. Entergy pointed out that the refueling outages presently taken at the Stations were normal operational outages, and observed that Department Staff, in its offer of proof, did

⁵ The opinion Entergy cited to (2014 Tex. App. LEXIS 6058 (Tex. App. June 6, 2014)) was withdrawn, and a new opinion substituted, at *Robertson County v. Texas Comm’n on Env’tl Quality*, 2014 Tex. App. LEXIS 7706 (Tex. App. July 17, 2014).

not identify a witness who could testify as to the operational implications of shutting down the plant for the outage periods proposed. Entergy took the position that adjudication of outages should not proceed until Department Staff identified experts competent to testify to the feasibility and NRC issues Entergy raised.

Department Staff responded that Entergy did not raise the issue of preemption with respect to the interim outages that were included in the 2003 draft SPDES permit. Department Staff went on to reference Entergy's 2003 ENERCON report (see Hearing Exh. Entergy 7A). Attachment 4 of the report discusses Indian Point's environmental protection plan ("EPP"), noting that Section 3.1 of the EPP requires that "[a]ll changes to Indian Point Units 2 and 3 are required to be reviewed for the possible impact on the licensing basis of the plant," and goes on to state that if an evaluation of such changes would result in a change in the EPP, a license amendment would be required. Hearing Exh. Entergy 7A, Attachment 4, p. 2. The 2003 ENERCON report goes on to state that changes in plant design or operation, and performance of tests or experiments which are required to achieve compliance with other federal, State or local environmental regulations are not subject to the requirements of Section 3.1 of the EPP. Department Staff acknowledged that the proposed outages would require a license amendment from the NRC, but went on to assert that "we don't understand why that would be a – would either be preempted or that it would be a safety issue. They already take outages every other year at each unit, so this would be adding just an additional outage at an additional unit each year." IC Tr. at 11.

In response to Entergy's statement that the NRC had referred to the proposed outages as unprecedented, Department Staff argued that the issue had already been advanced to adjudication in the Outages Ruling, and that the term "unprecedented" doesn't mean infeasible, it doesn't mean undoable, and it doesn't mean illegal." IC Tr. at 93. Department Staff observed that the NRC had yet to voice any concerns to Department Staff regarding the proposal. IC Tr. at 10, 93.

Riverkeeper also argued that Entergy's objections to adjudicating outages should have been raised in connection with the 2003 draft SPDES permits. Riverkeeper went on to assert that the Section 401 WQC application also implicated construction outages, and that Entergy failed to raise its preemption arguments at that time, except with respect to radiological leaks at IPEC. Riverkeeper contended that there was no difference between outages and the flow reductions required to accommodate construction of cylindrical wedge wire screens, or to retrofit IPEC for closed-cycle cooling.

In addition, Riverkeeper cited to Section 511(c)(2) of the Clean Water Act (42 U.S.C. Section 1371(c)(2)), arguing that this provision reserves to the States the authority to regulate water quality. Section 511(c)(2) provides that nothing in the National Environmental Policy Act of 1969 ("NEPA") "shall be deemed to authorize any Federal agency authorized to license or permit the conduct of any activity which may result in the discharge of a pollutant into the navigable waters to review any effluent limitation or other requirement established pursuant to this chapter or the adequacy of any certification under section 1341 [water quality certification] of this title."

Ruling: The Atomic Energy Act (“AEA”) provides that the NRC “shall retain authority and responsibility with respect to regulation of the construction and operation of any production or utilization facility or any uranium enrichment facility.” 42 U.S.C. Section 2021(c)(1). The Act goes on to state that “[n]othing in this section shall be construed to affect the authority of any State or local agency to regulate activities for purposes other than protection against radiation hazards.” 42 U.S.C. Section 2021(k). The doctrine of preemption forbids State regulation of an area if there is explicit or implicit exclusion of State regulation by Congress over a particular subject matter. *See, e.g., Jones v. Rath Packing Co.*, 430 U.S. 519, 525 (1977) (Congress may pre-empt State authority by so stating in express terms).

In this case, the AEA contains no explicit exclusion of State regulation in connection with the proposed permanent forced outages. “In the absence of such explicit or functionally overt preemption, Congress’ intent to supersede state law may be found from a scheme of federal regulation . . . so pervasive as to make reasonable the inference that Congress left no room for the States to supplement it.” *Entergy Nuclear Vermont Yankee, LLC v. Shumlin*, 733 F.2d 393, 409 (2nd Cir. 2013) (internal quotations and citations omitted). This implied preemption indicates an intent by Congress to “occupy a given field to the exclusion of state law.” *Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293, 300 (1988). Where the federal government has occupied the field, the test of preemption is whether “the matter on which the State asserts the right to act is in any way regulated by the Federal Act.” *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 236 (1947).

Entergy maintains that the statutory language, and the cases that Entergy cites, stand for the proposition that “the exclusive jurisdiction Congress granted NRC over the nuclear aspects of plant ‘operation’ necessarily precludes a State from ordering a nuclear plant to cease operation for some period of months on an annual basis.” IC Exh. 17, p. 10. Nevertheless, Entergy has not cited, and research has not revealed, any authority that states that permanent forced outages, such as those proposed by Department Staff, amount to “operation” within the meaning of the statute.

Moreover, the statute itself, in Section 2021(k), provides for a limit on the preemptive effect of the AEA. That limitation has been recognized by the courts. In *Pacific Gas & Elec. Co. v. State Entergy Resources Conservation and Dev. Comm’n*, the U. S. Supreme Court considered whether the AEA preempted a California statute that imposed a moratorium on construction of new nuclear power plants until the State energy commission determined that a viable long-term spent nuclear fuel disposal method had been developed. 461 U.S. 190 (1983). The Court reasoned that

Congress [in passing the AEA] intended that the Federal Government should regulate the radiological safety aspects involved in the construction and operation of a nuclear plant, but that the States retain their traditional responsibility in the field of regulating electrical utilities for determining questions of need, reliability, cost, and other related State concerns.

461 U.S. at 205. The Court affirmed the determination of the Ninth Circuit Court of Appeals, holding that the California statute was not preempted.

The Ninth Circuit had considered the legislative history of AEA Section 2021, and concluded that Section 2021(c) must be read in conjunction with Section 2021(k). *Pacific Legal Foundation v. State Entergy Resources Conservation & Dev. Comm'n*, 659 F.2d 903, 921 (9th Cir. 1981). The court found that “Congress intended to preempt only state regulation of radiation hazards associated with nuclear power, and not state regulation for other purposes.” *Id.* The trial court, in construing Section 2021(k), noted that the statute’s legislative history “seems to indicate Congressional approval of the position that the precise extent of preemption under the section is to be determined by the courts in the light of all the provisions and purposes of the Atomic Energy Act.” *Pacific Legal Foundation v. State Entergy Resources Conservation & Dev. Comm'n*, 472 F. Supp. 191, 199 (S.D. Cal. 1979).

Entergy also cited to the Supreme Court’s decision in *English v. Gen. Elec. Co.*, a case that considered a state law claim for intentional infliction of emotional distress brought by a whistleblower at a nuclear fuels production facility. 496 U.S. 72 (1990). The Court discussed the holding in *Pacific Gas*, and concluded that “for a state law to fall within the pre-empted zone, it must have some direct and substantial effect on the decisions made by those who build or operate nuclear facilities concerning radiological safety levels.” 496 U.S. at 85. At this point, without the benefit of a factual record, it cannot be determined as a matter of law that a permit condition specifying outages as a means of complying with BTA requirements would have such a direct and substantial effect.

Another case cited by Entergy, *Connecticut Coalition Against Millstone v. Connecticut Siting Council*, 286 Conn. 57 (Conn. 2008), dealt with an application by the owner of a nuclear power plant to build an independent spent fuel storage facility (“ISFSI”). On appeal, the court affirmed the trial court’s determination that federal law preempted the Connecticut Siting Council’s jurisdiction to consider radiological risks and long-term environmental effects of the ISFSI, and upheld the council’s grant of a certificate of environmental compatibility and public need.

Reasoning that “considerations of environmental risks related to radiological safety fall squarely within the field preempted by federal law,” the court went on to conclude that “with respect to environmental concerns, . . . the council’s jurisdiction is limited to *nonnuclear* environmental effects.” 287 Conn. at 80 (emphasis in original). Noting that the council made findings of fact “limited to the following factors: the distance of the facility from residential areas, the flood zone, and tidal and inland wetlands; the impact of the facility on groundwater; the design of the facility; the impact on endangered, threatened or concerned species; and the impact on historic and archaeological resources,” the court held that “[t]o the extent that these nonnuclear environmental factors were considered separately from any radiation hazards, the council acted within its jurisdiction.” *Connecticut Coalition* considered spent fuel storage, as did another case cited by Entergy (*Maine Yankee Atomic Power Co. v. Bonsey*, 107 F. Supp.2d 47 (D. Me. 2000)). Under the circumstances, this case law is not dispositive as to whether outages at Indian Point would amount to “operation” within the meaning of the statute.

Department Staff’s proposed outages should be considered as a means of minimizing entrainment and impingement at Indian Point. If, as Entergy contends, outages at IPEC would

have an incidental effect on nuclear safety, a factual record should be developed in that regard. It does not appear that outages are an attempt by Department Staff to regulate nuclear safety at IPEC, and frustrate the NRC licensing program. The Clean Water Act is a law of general applicability, and other power plants in the State, including power plants on the Hudson River, have been required pursuant to their SPDES permits to take outages in order to minimize entrainment and impingement. IPEC therefore is not unique in this regard, and under the circumstances, Entergy's arguments are not persuasive, and this proposed threshold issue is not dispositive.

Entergy's Legal Issue No. 3

Entergy's third threshold legal issue asserted that Department Staff's proposal to adjudicate permanent forced outages was untimely, "far beyond the reasonable time period for agency action under applicable law," and disregarded the authority of the administrative law judges to set schedules. IC Exh. 17, p. 11. Entergy maintained that Department Staff should be estopped from advancing its proposal, in light of the prejudice to Entergy and other parties, and that Department Staff's proposal was substantively and procedurally flawed, because Department Staff did not advance permanent forced outages as an issue in a timely manner.

Entergy asserted that it was not aware of any circumstances "in which DEC Staff has attempted to hit the reset button a decade into a contested proceeding as it proposes to do here." IC Exh. 17, p. 11. Entergy pointed out that the draft SPDES permit, which identified closed cycle cooling as BTA for Indian Point, was issued in 2003, and noted that in February 2010 the administrative law judges directed Department Staff to advise of any changes in Department Staff's position with respect to BTA. At that time, Department Staff identified only the possibility of a variation on closed cycle cooling, with a reservation of rights. Entergy pointed out that Department Staff's contractor, Tetra Tech, did not identify outages as a potential BTA. Entergy argued that under the circumstances it would be appropriate to equitably estop Department Staff from pursuing the outages proposal.

At the issues conference, Department Staff responded that Entergy's arguments had been considered previously, and rejected, in the Outages Ruling. Department Staff pointed out that the fact sheet issued with the 2003 draft SPDES permit considered and rejected 32 week outages, but noted that such outages were not part of the current proposal. Specifically, Department Staff stated that the outages under consideration were of much shorter duration than the 32-week outages considered in the 2003 SPDES fact sheet, and that the evaluation of more abbreviated outages should not be precluded. Citing to the Interim Decision, Department Staff maintained that all BTA proposals should be evaluated now, rather than waiting until a later time (see Interim Decision, at 25), and argued further that the State Environmental Quality Review Act ("SEQRA") requires that alternatives, such as permanent outages, be considered.

Riverkeeper argued that the requirements for public participation under the federal Clean Water Act and SEQRA had been satisfied, as well as under New York's Uniform Procedures Act. Riverkeeper noted that it "had raised the necessity for Indian Point to achieve cooling water capacity and entrainment reductions commensurate with closed-cycle cooling (by any means, including outages)" in its 2004 petition for full party status in the SPDES proceeding. IC Exh.

18, p. 13. Consequently, according to Riverkeeper, Entergy could not be heard to argue that the issue of permanent forced outages was new to the proceeding.

Ruling: Entergy's arguments with respect to the untimeliness of Department Staff's proposal were considered in the Outages Ruling, which advanced the issue to adjudication. Although Entergy maintains that its estoppel arguments were not part of the motion addressed in the Outages Ruling, the factual basis for those arguments was considered, and will not be revisited.

Entergy's Legal Issue No. 4

Entergy argued that Department Staff should be required "to streamline its BTA case by eliminating the Outages Proposal or narrowing the number of outage scenarios submitted for adjudication." IC Exh. 17, p. 14. Entergy maintained that Department Staff should be required to present a single permanent outage scenario, as Riverkeeper was required to do with respect to Riverkeeper's proposed closed-cycle cooling configurations. According to Entergy, the sheer number of BTA proposals advanced by Department Staff (including two closed-cycle cooling configurations, as well as six outages proposals) was unfair to the parties and to the public.

Entergy went on to argue that Department Staff did not appear to support some of the proposals. Specifically, Entergy noted that the Outages Fact Sheet stated that the option of 42 days of outages at both units would only reduce entrainment by approximately 66 percent, "thereby not meeting the efficacy goal required by the 2008 Interim Decision or the entrainment performance goal in Department Policy CP-52." IC Exh. 16, p. 12. In addition, the Outages Fact Sheet concludes that "a number of the protective outage options presented in this fact sheet would likely be less protective than the efficacy and performance goals identified in [the Interim Decision and CP-52] for entrainment reductions. In fact, several protective outage options fall short of the reductions in impingement mortality achievable with a full closed-cycle retrofit." *Id.*, p. 13. Entergy concluded that if there were outage scenarios that Department Staff did not support, those outage scenarios should not be adjudicated, and that Department Staff should be limited to one proposed outage scenario covering both units.

In response, Department Staff pointed out that the Outages Ruling advanced permanent forced outages to adjudication, and took the position that it would be up to the decisionmaker to decide which levels of reductions would constitute BTA at IPEC, "given all the other circumstances and the SEQQR component that lies ahead with respect to each proposal." IC Tr. at 12. Riverkeeper maintained that the outages "are not separate configurations. It's just a question of days." IC Tr. at 57.

Ruling: Department Staff should identify which of the proposed outage scenarios Department Staff believes would meet the performance standard set forth in CP-52: "wet closed-cycle cooling or its equivalent as the performance goal for existing industrial facilities that operate a CWIS in connection with a point source thermal discharge" (Entergy Exhibit 400, p. 2). Those proposed outage scenarios will be adjudicated. To the extent that Department Staff will not be offering a particular outage scenario at the hearing, Department Staff shall advise the ALJs and the parties on or before **Friday, February 20, 2015**. If Department Staff does not

intend to so limit its presentation, it shall advise the parties and the ALJs accordingly, on or before that same date.

Riverkeeper's Comments

Riverkeeper also filed comments on July 11, 2014 (“Riverkeeper Comments”) (IC Exh. 18). In its comments, Riverkeeper asserted that “the only permanent annual fish protection outages mentioned in the SPDES Outages Fact Sheet which serve to demonstrate compliance with 6 NYCRR § 704.5 are the 32-week outages listed on Table 3 thereof.” IC Exh. 18, p. 2. Riverkeeper argued that Department Staff’s other outage scenarios would not meet the best usages requirement of Section 704.11 of 6 NYCRR, and would fail to satisfy the Department’s antidegradation policy and the requirements of 40 Code of Federal Regulations (“C.F.R.”) Section 131.12.

Riverkeeper went on to assert that the proposed outages would not address “(1) the incremental ecological impacts of Indian Point’s thermal discharge plume and cooling water intake structures (CWIS) and (2) compliance with thermal water quality criteria, best usages, antidegradation and SEQR.” IC Exh. 18, p. 2 (citations omitted).

Riverkeeper took the position that the issue of permanent forced outages should be adjudicated, and argued further that an outage of longer duration should be required. According to Riverkeeper, two outage periods per year of 118 days per unit annually would be necessary to achieve the goals of the Clean Water Act and State law and regulations. Under Riverkeeper’s proposal, the 92-day full facility outage discussed in the Outages Fact Sheet would be supplemented by an additional 26-day full facility outage between February 23 and March 30, for the purpose of protecting Atlantic tomcod and white perch.

Riverkeeper concluded its comments by stating that the Outages Fact Sheet was consistent with the requirements of the federal Clean Water Act and New York’s Uniform Procedures Act. Riverkeeper stated that in its petition for full party status in the SPDES proceeding, it raised the need for IPEC to achieve entrainment reductions commensurate with closed-cycle cooling. As a result, Riverkeeper argued that Entergy could not contend that permanent outages should not be considered at this juncture.

Entergy submitted the July 21, 2014 affirmation of Kevin P. Martin (IC Exh. 19) in response to Riverkeeper’s submission. Entergy argued that Riverkeeper should be precluded from advancing Riverkeeper’s own outages proposal for the same reasons that Department Staff’s proposal should be rejected: because outages were not a “technology,” and also were preempted by the federal Atomic Energy Act. In addition, Entergy asserted that Riverkeeper’s proposals were untimely, and could have been identified in 2004, or as late as May of 2010. Entergy went on to note that at the time Department Staff submitted its offer of proof in November 2013, describing outages of 42 to 92 days per unit, Riverkeeper did not submit any offer of proof, nor did it do so during the months that elapsed between November 2013 and July 2014, when Riverkeeper filed its comments.

According to Entergy, Riverkeeper's proposals did not meet the standard for substantive and significant issues proposed for adjudication by intervenors under Part 624. Moreover, Entergy contended that Riverkeeper had not considered whether these outages would be feasible, and had not offered expert witnesses who could competently testify with respect to the effect of outages at a baseload nuclear power plant.

At the issues conference, Department Staff expressed confusion as to whether Riverkeeper had in fact advanced a new BTA proposal. Counsel for Department Staff stated that

I don't know how it should be characterized or even if it should be characterized as such . . . I don't know how we could preclude someone from saying that what Staff is proposing is not adequate. This is their position, and now I presume they would have to – if we go to hearing on these issues, they would put in testimony from whomever their experts are to say that “What we're doing, the proposals, 42, 62, or 92 day, is not sufficient.”

IC Tr. at 98-99. Riverkeeper stated that its comments were directed towards the ability of Indian Point

to meet the statutory and regulatory criteria that are applicable to Indian Point and the need for further inquiry with respect to the periods and the timing of the outages. We expect that these comments should result in either an outright permit denial or the imposition of significant permit conditions . . . It's not a new BTA.

IC Tr. at 100-101. In response, Entergy pointed out that the witnesses Riverkeeper proposed to offer were two economists and one biologist. Entergy maintained that none of these witnesses would be qualified to testify as to the feasibility of two separate outages totaling 118 days at both units, and reiterated that Riverkeeper failed to identify such outages as an option in 2003 or even in 2010. Riverkeeper countered that the ALJ had advised the parties that it was not necessary to submit petitions for party status for this phase of the proceeding, and that as a result Riverkeeper had not done so. Riverkeeper contended that, in any event, its comments were sufficient to raise a substantive and significant issue, and that it was not necessary to offer a witness with expertise in nuclear engineering. Entergy responded that

having a single construction outage in order to install closed-cycle cooling is a very different issue than taking the normal operational profile of the plant and changing it from outages for refueling and maintenance and repairs every two years to outages that occur every year or, in Riverkeeper's case, outages that occur twice a year at each unit.

IC Tr. at 110.

The AAEA and the City of New York

At the issues conference, the AAEA stated that it was not in favor of outages, in part because of concerns with respect to storage of fuel and nuclear waste during an extended outage. In addition, the AAEA stated that “any outage during [the] ozone season is a problem for us.” IC Tr. at 90. The AAEA went on to urge the parties to give greater attention to environmental justice issues.

The City took the position that the threshold issues Entergy raised should be explored before the issue of permanent forced outages reached adjudication, if in fact the issue were adjudicated at all. IC Tr. at 79. With respect to preemption, the City contended that it was entirely appropriate for an administrative agency to examine its own jurisdiction, and maintained that Entergy had raised serious concerns about the potential for outages to amount to regulation of the plant, in derogation of the NRC’s authority. *Id.* at 80. The City took the position that the potential retirement of the facility was not outside the scope of the hearing, and that because the outages would occur during the summer,

which is the peak period on the electric system and would have a material impact on Entergy’s annual revenues, it’s entirely appropriate to examine the potential effect of annual fish protective outages on whether or not the facility would continue operating, because that, as we’ve already seen from testimony submitted earlier this year with respect to closed-cycle cooling, an extended outage of Indian Point could have a serious impact on system reliability, on customer price impacts, as well as air emissions. A permanent retirement of the facility clearly would have a similar impact.

IC Tr. at 82. In addition, the City agreed with Riverkeeper that “in this phase of the proceeding we should be continuing to look at the potential impacts on electric system reliability, on the price impacts associated with outages in all its aspects, whether it pertains to wholesale energy price or retail price impacts.” *Id.* at 83. The City also agreed that potential impacts on air emissions in connection with outages should be evaluated.

Entergy’s Proposed Factual Issues

Entergy also raised five proposed factual issues for adjudication with respect to permanent forced outages, in the event that the threshold legal issues Entergy raised were not decided in Entergy’s favor. Entergy’s proposed factual issues for adjudication were:

- (1) Whether the six scenarios in the outages proposal are feasible (available) on a site-specific basis at Indian Point.
- (2) Whether, even if DEC Staff is not field preempted from forcing outages at Indian Point, DEC Staff’s outage proposal conflicts with NRC regulations.
- (3) Whether DEC Staff’s outage proposal satisfies the fourth step for determining BTA under 6 NYCRR § 704.5.
- (4) Whether DEC Staff’s outage proposal complies with the State Environmental Quality Review Act (“SEQRA”).

- (5) Whether any outage constitutes a regulatory/temporary taking requiring compensation under the Fourteenth Amendment to the United States Constitution.

Entergy's Factual Issue No. 1: Whether the six scenarios in the outages proposal are feasible (available) on a site-specific basis at Indian Point

In its first factual issue, Entergy stated that the first step of the BTA analysis required Department Staff to prove that the outages proposal was “available” at IPEC, within the meaning of Section 704.5 of 6 NYCRR. Entergy argued that, contrary to Department Staff’s assertions, outages could not be implemented immediately. According to Entergy,

[t]he periodic shutdown of Indian Point Units 2 and 3 has direct consequences for nuclear operations for each Unit, each of which is presently designed and operated to run for 23 consecutive months between refueling outages. While it is possible (though unlikely) that a layperson might think that simply “turning off” a nuclear plant is as straightforward as flipping a switch, it will come as no surprise that the process is substantially more complicated than that and will require substantial time to assess and, if feasible, implement.

IC Exh. 17, p. 16. Entergy argued that the plant could not operate efficiently under the scenarios proposed by Department Staff, and contended that the outages proposal “suggests a veiled effort to shut down Indian Point, not a genuine technology-forcing mission focused on legitimate environmental policy.” Id. Entergy raised a number of other concerns, including the disruptive nature of the proposed outages, the uncertain availability of internal or consulting personnel to accomplish the outages, the uncertainty of meeting industry standards with respect to fuel handling and fuel quality and assembly, radioisotope dose and discharges, “and the implications for stagnant water and protracted non-use in the steam generators, condensers, circulating water pumps and other balance of plant system components, particularly during periods of highest bio-fouling and the challenges this represents for restarting the units.” Id. Entergy went on to state that it expected to demonstrate at the hearing “that the site is too constrained, and skilled personnel in the country are too few, to provide the resources necessary to accomplish the simultaneous shutdown, and then simultaneous startup, of both Indian Point units every year.” Id.

Department Staff did not object to adjudication of this issue. IC Tr. at 12. Riverkeeper asserted that Entergy failed to exhaust its administrative remedies in connection with this issue, because, as noted above, Entergy discussed outages in various reports submitted during the course of the adjudicatory hearing. Riverkeeper argued that Entergy was not entitled to avoid environmental regulation by asserting that IPEC was regulated by the NRC.

Ruling: The availability of outages as a means of reducing the impact of impingement and entrainment at the Indian Point facility will be adjudicated. As stated above, by **Friday, February 20, 2015**, Department Staff is to advise the parties and the ALJs as to which of the six proposed outage scenarios Department Staff intends to advance at the hearing. Those proposed

outage scenarios will be adjudicated. If Department Staff does not intend to limit its presentation, it shall advise the ALJs and the parties accordingly, on or before that same date.

Similarly, by **Friday, February 20, 2015**, Riverkeeper is to advise the ALJs and the parties as to whether it intends to offer evidence and testimony concerning the 118 days of outage proposed by Riverkeeper in its comments. If so, Riverkeeper will provide, as part of its prefiled testimony in this proceeding, a SEQRA analysis for consideration at the hearing with respect to the proposed 118 days of outage, consistent with the requirements of the Interim Decision. See Interim Decision, p. 40 (“As the various technologies proposed by the parties as BTA for the Stations are presented at the hearing, the proponents of each technology should present an analysis of the environmental impacts associated with such technologies pursuant to SEQRA.”)

In its comments, Riverkeeper also appeared to advance 32-week outages as a possible alternative. Such outages were considered and rejected by Department Staff in developing the 2003 SPDES permit. Any proposal by Riverkeeper to consider 32-week outages should have been included in Riverkeeper’s petition for party status in the SPDES proceeding, and is therefore untimely. Outages of 32 weeks will not be adjudicated.

The issue for adjudication is whether permanent forced outages are available at IPEC as a means of reducing entrainment and impingement.

In addition, the parties will address the two interim measure issues advanced to adjudication in the SPDES proceeding, specifically, Entergy Issue No. 7 – whether the planned fish protection outages, which would limit the amount of water withdrawn with corresponding effects on the Stations’ capacity, are a necessary interim measure prior to the implementation of BTA at the Stations (Interim Decision, p. 32), and Entergy Issue No. 8 – whether flow reductions, which would limit the amount of water withdrawn with corresponding effects on the Stations’ capacity, are a necessary interim measure prior to the implementation of BTA at the Stations (Interim Decision, p. 33).

Entergy’s Factual Issue No. 2: Whether, even if DEC Staff is not field preempted from forcing outages at Indian Point, DEC Staff’s outage proposal conflicts with NRC regulations

With respect to this factual issue, Entergy maintained that “annual outages have implications for reactor management. Annual outages also necessarily increase the frequency of fuel handling, and spent fuel and spent fuel pool management, which represent challenges to maintaining current dose limitations for on-site personnel and site boundary dose limits in a manner with NRC-administered goals.” IC Exh. 17, p. 17. Entergy asserted that Department Staff had not acknowledged, “let alone addressed and satisfactorily resolved,” potential conflicts with NRC regulations as a result of implementing outages at the Stations.

Department Staff contended that Entergy’s issue number 2 was the same as the preemption argument raised in Entergy’s threshold legal issues, and that this issue therefore was not appropriate for resolution in this forum. Riverkeeper offered a similar argument, and

contended that Entergy failed to raise these concerns at an earlier stage of the proceeding, despite discussion of outages in Entergy's exhibits received into the hearing record, as discussed above. According to Riverkeeper, those exhibits "do not mention any feasibility issues, and they're discussing outages. There's no discussion of NRC's safety or preemption or concerns about exposure of workers, nothing in there about that." IC Tr. at 58.

Ruling: Entergy factual issue No. 2 will not be adjudicated. Rather, Entergy factual issue No. 2 will be reframed as follows. Section 125.94(f)⁶ of 40 Code of Federal Regulations ("C.F.R.") provides that

[i]f the owner or operator of a nuclear facility demonstrates to the Director, upon the Director's consultation with the [NRC], . . . that compliance with this subpart would result in a conflict with a safety requirement established by the Commission, . . . the Director must make a site-specific determination of best technology available for minimizing adverse environmental impact that would not result in a conflict with the Commission's . . . safety requirement.

At the hearing, the parties may introduce expert testimony and other evidence about Station operations, such as with regard to fuel handling and spent fuel management in connection with permanent forced outages. This will provide the factual record necessary in the event that a consultation between the decisionmaker and the NRC takes place.

Entergy's Factual Issue No. 3: Whether DEC Staff's outage proposal satisfies the fourth step for determining BTA under 6 NYCRR § 704.5

The fourth step of the BTA analysis requires consideration of whether the costs of feasible technologies are "wholly disproportionate" to the environmental benefits to be gained by implementing such technologies. Fourth Step Ruling, at 8. Entergy stated that it intended to offer expert testimony at the hearing that Department Staff's application of the wholly disproportionate test in its Outages Fact Sheet was arbitrary and capricious, and contrary to Department precedent.

Entergy asserted further that it would offer expert testimony to show that Department Staff's analysis of the costs of permanent forced outages "which seemingly is limited to Entergy's lost revenues, ignores entirely the costs of implementing outages, including, e.g., the costs incurred in annual outages at each Unit, rather than biennial outages." IC Exh. 17, p. 18. Entergy argued that the incremental costs of implementing the proposed outages would be wholly disproportionate to the incremental environmental benefits, and went on to contend that the benefits of the proposed outages would be no more than Entergy's cylindrical wedge wire screen alternative. According to Entergy, Department Staff overstated the likely reductions in entrainment, and Entergy maintained further that such reductions were "highly uncertain and

⁶ Subpart J of 40 C.F.R., which addresses requirements applicable to cooling water intake structures for existing facilities under Section 316(b) of the CWA, was suspended on July 9, 2007 (72 Fed. Reg. 37107, 37109). The suspension was lifted and Subpart J was revised, effective October 14, 2014 (79 Fed. Reg. 48300, 48430 (Aug. 15, 2014)).

variable, depending upon the timing or the entrainment peaks in any given year.” *Id.* Finally, Entergy asserted that outages would provide no impingement reductions outside the outage period, “while it is undisputed that [wedge wire screens] will almost entirely eliminate impingement year-round.” *Id.*

Ruling: The parties raised no objection to a hearing on Entergy’s proposed factual issue No. 3, and therefore it will be adjudicated.

Entergy’s Factual Issue No. 4: Whether DEC Staff’s outage proposal complies with SEORA

Entergy’s factual issue No. 4 included several sub-issues, as follows:

- (a) Adverse impacts to Station operations.
- (b) Adverse air quality impacts associated with the deployment or new construction of fossil-fuel fired power sources to replace Indian Point’s baseload during outage periods.
- (c) Adverse effects to electricity consumers and the corresponding increase in wholesale electricity and capacity prices.
- (d) Adverse impacts to electric system reliability.
- (e) Adverse impacts to air quality, visual resources, terrestrial ecology, archaeological resources, noise, water quality, transportation and navigation, human health and environmental justice communities associated with the construction and operation of a cooling tower at Unit 2.
- (f) Adverse impacts to environmental justice communities as a result of outages and resultant local and regional emissions increases.
- (g) The risk that Entergy would respond to an outages mandate by retiring the facility, which Entergy argued “would lead to a magnification of all the above impacts and directly and indirectly cost New York thousands of jobs.” IC Exh. 17, p. 20.

At the issues conference, Staff stated that it did not oppose adjudication of Entergy’s proposed SEQRA issues. Riverkeeper stated its understanding that outages would be a SPDES permit term, and noted its reservation of rights “with respect to the 401 insofar as the ancillary environmental impacts are in fact something for NEPA [National Environmental Policy Act] review in the EIS [environmental impact statement] that is in front of the NRC.” IC Tr. at 60. Riverkeeper argued that the NRC’s review under NEPA would be circumscribed, and that the NRC would not be entitled to “second-guess the State on water quality.” IC Tr. at 61.

Riverkeeper then addressed Entergy’s sub-issues. With respect to sub-issue (a) (adverse impacts to Station operations), Riverkeeper argued that this was rebutted by the application materials, in which Entergy considered outages at IPEC as a means of reducing impingement and entrainment. According to Riverkeeper, sub-issues (b) and (e) were duplicative, but Riverkeeper did not object to sub-issues (c) (effects on electricity consumers) or (d) (electric system reliability). Riverkeeper objected to sub-issue (e), arguing that there was no offer of proof as to visual resources, terrestrial ecology, archeological resources, and noise impacts, and that outages would have a beneficial effect on water quality, transportation, navigation and human health.

Riverkeeper also objected to Entergy's sub-issue (e), as well as sub-issue (f), contending that Entergy had no standing to raise an environmental justice issue. Riverkeeper concluded that sub-issue (g) was speculative, and amounted to a business decision on Entergy's part as to whether to retire Indian Point.

Ruling: The issue of whether Department Staff's outage proposal complies with SEQRA will be adjudicated, but not all of the sub-issues proposed by Entergy will be considered at the hearing. The Interim Decision provides that "[a]s the various technologies proposed by the parties as BTA for the Stations are presented at hearing, the proponents of each technology should present an analysis of the environmental impacts associated with such technologies pursuant to SEQRA. Other parties may also offer evidence concerning the impacts they assert will be associated with a proposed technology." Interim Decision, p. 40. Accordingly, Department Staff, as the proponent of outages as BTA, must present a SEQRA analysis as part of its direct case. Other parties may rebut that analysis, or offer evidence with respect to impacts pursuant to SEQRA in connection with Department Staff's proposal. Sub-issues (a), (b), (c), (d), and (f) will be adjudicated.

Entergy's sub-issue (e) would require consideration of the environmental impacts associated with the construction and operation of closed-cycle cooling at IPEC Unit 2. The parties have had an opportunity to develop the record with respect to such impacts. Accordingly, because the hearing record is cumulative, any additional evidence and testimony with respect to this topic will not be considered. To that end, the parties and the ALJs will meet following submission of direct prefiled testimony, prior to submission of rebuttal prefiled testimony, to consider any motions to strike. In addition, Entergy's sub-issue (g), which would address the potential retirement of Indian Point, is irrelevant, and will not be adjudicated.

Entergy's Factual Issue No. 5: Whether any outage constitutes a regulatory/temporary taking requiring compensation under the Fourteenth Amendment to the United States Constitution

Entergy noted that in its comments on the 2003 draft SPDES permit, Entergy raised an issue under the takings clause in connection with the proposed interim outages in that permit. Entergy stated that without waiving that issue, it now sought to expand it to include Department Staff's permanent forced outages proposal. According to Entergy, it planned "to demonstrate through expert witness testimony that Entergy is deprived of the economically beneficial use of its property during the period of outage for the asserted public purpose of saving fish eggs and larvae" and that consequently, Entergy was entitled to compensation consistent with the Fourteenth Amendment. IC Exh. 17, p. 20. Entergy acknowledged that "the Interim Decision concluded that takings claims are a matter to be addressed in a judicial forum, rather than adjudicated in this administrative proceeding, but respectfully submits that development of relevant evidence before this Tribunal may assist in the development of a complete record for review by the ultimate decisionmaker." *Id.*, p. 20, fn. 4.

Department Staff responded that Entergy's issue number 5 was a "rehashing" of Entergy's temporary taking argument that was excluded in the Interim Decision (IC Tr. at 13; see Interim Decision, p. 31). Riverkeeper echoed Department Staff's position.

Ruling: Entergy's proposed factual issue No. 5 will not be adjudicated, inasmuch as it is beyond the scope of this administrative proceeding. In the Interim Decision, the Assistant Commissioner denied Entergy's appeal with respect to the takings argument, and that denial is controlling here.

Scheduling Order

A scheduling order is attached to this ruling. As discussed above, after receipt of direct prefiled testimony, and before rebuttal prefiled is submitted, the parties and the ALJs will meet to discuss and resolve any motions to strike.

Appeals

A ruling of the ALJ to include or exclude any issue for adjudication, a ruling on the merits of any legal issue made as part of an issues ruling, or a ruling affecting party status may be appealed to the Commissioner on an expedited basis (see Section 624.8(d)(2) of 6 NYCRR). Ordinarily, expedited appeals must be filed with the Commissioner in writing within five days of the disputed ruling (see Section 624.6(e)(1)).

Due to the length of these rulings, the deadline will be extended. Any appeals are to be filed on or before **Friday, March 6, 2015**. Responses to any appeals are to be filed on or before **Friday, April 10, 2015**. Filing by e-mail is authorized, with hard copy to follow by overnight mail.

The original and three copies of any appeal from this issues ruling must be received by Assistant Commissioner Louis A. Alexander no later than 4:30 p.m. on **Friday, March 6, 2015**, at the following address: Louis A. Alexander, Assistant Commissioner for Hearings and Mediation Services, New York State Department of Environmental Conservation, 625 Broadway, 14th Floor, Albany, New York 12233-1010. Upon receipt, two copies will be forwarded to the administrative law judges, and one copy will be forwarded to James T. McClymonds, Chief Administrative Law Judge. One copy of the appeal must be served upon each party on the Service List in the same manner and at the same time as the submission is sent to the Assistant Commissioner, with the exception of those parties on the Service List designated as e-mail only. Submissions should also be sent via electronic mail to the Service List, including the administrative law judges. Submissions sent via telefacsimile will not be accepted.

_____/s/_____

Maria E. Villa
Administrative Law Judge

February 3, 2015

c: Daniel P. O'Connell, Administrative Law Judge

Attachments: Updated SPDES Proceeding Issues Conference Exhibit List
Scheduling Order

Scheduling Order – Outages/Interim Measures/Flow Reductions

February 3, 2015

Date	Action
Friday, February 20, 2015	Department Staff and Riverkeeper to advise administrative law judges and parties as to which outage scenarios will be advanced at the adjudicatory hearing. If neither party intends to limit its respective presentation, Department Staff and Riverkeeper will advise the administrative law judges and the parties accordingly.
Friday, March 6, 2015	Service of appeals of outages issues ruling.
Friday, March 27, 2015	Service of discovery requests related to issues of outages, interim measures, and flow reductions.
Friday, April 10, 2015	Service of responses to appeals of outages issues ruling.
Friday, May 1, 2015	Service of discovery responses, objections, and production or responsive, non-privileged documents not subject to objection concerning issues of outages, interim measures, and flow reductions.
Friday, May 15, 2015	Discovery motions to be served.
Friday, May 29, 2015	Deadline for service of opposition to discovery motions.
Friday, June 26, 2015	Deadline for submission of pre-filed direct expert testimony related to issues of outages, interim measures, and flow reductions.
Wednesday, July 15, 2015	Pre-hearing motion conference.
Friday, August 7, 2015	Deadline for submission of pre-filed rebuttal expert testimony related to issues of outages, interim measures, and flow reductions.
Monday, September 14 to Friday, October 2, 2015	Adjudicatory hearing on issues of outages, interim measures, and flow reductions.
Friday, November 20, 2015	Initial briefs on closed cycle cooling, outages, interim measures, and flow reductions portion of hearing.
Friday, December 18, 2015	Reply briefs on closed cycle cooling, outages, interim measures, and flow reductions portion of hearing.

Service is to be made on or before 4:30 p.m. on the due date. Service via e-mail is authorized, with hard copy to follow.

So ordered.

_____/s/_____

Maria E. Villa
Administrative Law Judge

February 3, 2015

EXHIBIT LIST
Entergy Indian Point 2 and 3
SPDES Permit Issues Conference – March 3, 2004
Buchanan (Westchester)
Permanent Forced Outages Issues Conference – July 23, 2014
New Paltz (Ulster)

Exhibit No.	Description	ID	Rec'd	Offered By	Notes
1	Notice of Public Hearing, published in <i>Environmental Notice Bulletin</i> on November 12, 2003	✓	✓	N/A	
2A	Affidavit of Publication of Notice of Public Hearing, published in November 14, 2003 edition of the <i>New York Times</i>	✓	✓	N/A	
2B	Affidavit of Publication of Notice of Public Hearing, published in November 14, 2003 edition of the <i>Journal News</i>	✓	✓	N/A	
2C	Affidavit of Publication of Notice of Public Hearing, published in November 14, 2003 edition of the <i>Kingston Daily Freeman</i>	✓	✓	N/A	
2D	Affidavit of Publication of Notice of Public Hearing, published in November 14, 2003 edition of the <i>Poughkeepsie Journal</i>	✓	✓	N/A	
2E	Affidavit of Publication of Notice of Public Hearing, published in November 14, 2003 edition of the <i>Middletown Times Herald-Record</i>	✓	✓	N/A	
3A	Draft SPDES Permit	✓	✓	N/A	
3B	Permit Fact Sheet	✓	✓	N/A	

Exhibit No.	Description	ID	Rec'd	Offered By	Notes
4	African American Environmentalist Association Petition for Full Party Status, dated received February 13, 2004	✓	✓	N/A	
4A	Comments of AAEA on Draft SPDES Permit	✓	✓	AAEA	
4B	Statement of Norris McDonald, President, AAEA, at Legislative Hearing	✓	✓	AAEA	
4C	Publication: Air Injustice & Power Plant Pollution, October 2002	✓		AAEA	
4D	Publication: Death, Disease and Dirty Power, Clean Air Task Force, October 2000	✓		AAEA	
4E	November 3, 2003 Memorandum from David Schlissel, David White and Geoff Keith, Synapse Energy Economics, to David Gordon, Esq. and Reed Super, Esq., Riverkeeper	✓		AAEA	
4F	Emissions Avoidance Study for Entergy Indian Point 2 & 3, prepared by TRC Environmental, Revised August 2002	✓		AAEA	
4G	Resume, Norris McDonald, AAEA	✓		AAEA	
4H	Resume, John L. McCormick	✓		AAEA	
5	Riverkeeper, Scenic Hudson, and Natural Resources Defense Counsel Joint Petition for Full Party Status	✓	✓	N/A	
5A	October, 2003 Ecological Analysis of Entergy's Response to DEC's Information Request (Pisces Conservation Ltd.)	✓		Riverkeeper, et al.	

Exhibit No.	Description	ID	Rec'd	Offered By	Notes
5B	<i>Curriculum Vitae</i> – Peter Alan Henderson, Ph.D.	✓		Riverkeeper, et al.	
5C	November 3, 2003 letter from Bill Powers, P.E., Powers Engineering, to David Gordon, Esq., Riverkeeper, re: Closed Cycle Cooling Assessment and Outline of Alternatives	✓		Riverkeeper, et al.	
5D	<i>Curriculum Vitae</i> – Bill Powers, P.E., Powers Engineering	✓		Riverkeeper, et al.	
6	February 5, 2004 Comments of Entergy Nuclear Indian Point 2, LLC and Entergy Nuclear Indian Point 3, LLC, with Exhibits (marked as 6A-6D)	✓	✓	N/A	
6A	February 5, 2004 Letter from Elise N. Zoli, Esq., Goodwin, Procter to Betty Ann Hughes, NYSDEC, with four attachments: 9/7/01 letter from E. Zoli to M. Merriman; SPDES Industrial Application Form; 3/8/95 letter from P. Kolakowski to J. Blake; Water Flow Diagram, Discharge 007	✓		Applicant	
6B	March 8, 1995 Letter from Paul J. Kolakowski, NYSDEC to John W. Blake, NYPA	✓		Applicant	
6C	February 28, 2000 Notice of Complete Application	✓		Applicant	
6D	Record of Entergy's Challenge to the FEIS (Albany County Supreme Court)	✓		Applicant	
7	Final Environmental Impact Statement for Applications to Renew SPDES Permits for Roseton 1 & 2, Bowline 1 & 2, and Indian Point 2 & 3 Electric Generating Stations, accepted June 25, 2003	✓	✓	N/A	

Exhibit No.	Description	ID	Rec'd	Offered By	Notes
8	February 20, 2004 Motion of Entergy Indian Point 2 and Entergy Indian Point 3 to Join the NYS Department of Public Service as a Party	✓	✓	N/A	
9	March 1, 2004 Response of Department Staff to Entergy's Motion to Join NYS DPS	✓	✓	N/A	
10	March 1, 2004 Response of Riverkeeper, et al. to Entergy's Motion to Join NYS DPS	✓	✓	N/A	
11A	November 12, 2003 Draft SPDES Permit (duplicate of Exhibit 3A)	✓	✓	N/A	
11B	March 1, 2004 Revised Draft Permit (Clean Copy)	✓	✓	N/A	
11C	March 1, 2004 Revised Draft Permit (Redlined Copy)	✓	✓	N/A	
11D	Revised Draft Permit Page No. 10	✓	✓	N/A	
12	March 2, 2004 Petition for Full Party Status by Richard Brodsky, Esq.	✓	✓	N/A	
13	March 3, 2004 Response of Entergy to Riverkeeper's and Department Staff's Opposition to Entergy's Motion to Join NYSDPS	✓	✓	N/A	
14	Notice of Public Hearing, published in <i>Environmental Notice Bulletin</i> on May 21, 2014	✓	✓	N/A	
15A	Affidavit of Publication of Notice of Public Hearing, published in May 30, 2014 edition of the <i>New York Daily News</i>	✓	✓	N/A	
15B	Affidavit of Publication of Notice of Public Hearing, published in May 29, 2014 edition of the <i>Poughkeepsie Journal</i>	✓	✓	N/A	

Exhibit No.	Description	ID	Rec'd	Offered By	Notes
15C	Affidavit of Publication of Notice of Public Hearing, published in May 30, 2014 edition of the <i>Middletown Times Herald Record</i>	✓	✓	N/A	
15D	Affidavit of Publication of Notice of Public Hearing, published in May 29, 2014 edition of the <i>Kingston Daily Freeman</i>	✓	✓	N/A	
15E	Affidavit of Publication of Notice of Public Hearing, published in June 2, 2014 edition of the <i>Journal News</i>	✓	✓	N/A	
16	DEC Staff Fact Sheet – May 9, 2014	✓	✓	N/A	
17	Entergy's July 11, 2014 Comments	✓	✓	N/A	
18	Riverkeeper's July 11, 2014 Comments	✓	✓	N/A	
19	Affirmation of Kevin Martin, Esq. – July 21, 2014	✓	✓	N/A	
20	Florida Power Corporation – Crystal River – Findings & Determination (September 1, 1988)	✓		N/A	