

In the Matter of the Application of

**Entergy Indian Point Unit 2, LLC and
Entergy Indian Point Unit 3, LLC**

for a Water Quality Certificate Pursuant
to Section 401 of the Federal 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.

**Ruling on Proposed Issues
For Adjudication and Petitions
For Party Status**

DEC Application Nos.
3-5522-00011/00030 (IP2) and
3-5522-00105/00031 (IP3)

December 13, 2010

Background

On April 6, 2009, the New York State Department of Environmental Conservation (the “Department” or “DEC”) received a joint application for a federal Clean Water Act (“CWA”) Section 401 Water Quality Certificate (“WQC”) on behalf of Entergy Indian Point Unit 2, LLC, and Entergy Indian Point Unit 3, LLC (collectively, “Entergy” or “Applicant”).¹ The joint application for a section 401 WQC was submitted 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 3.² 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). Accordingly, in order to grant a WQC, the Department must determine whether continued operation of the Indian Point facilities meets State water quality standards pursuant to CWA § 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”) (see Matter of Erie Boulevard Hydropower L.P., Decision of the Deputy Commissioner at 10, 2006 N.Y. Env. LEXIS 2951127, * 7 (Oct. 6, 2006) (noting that the Department must find that “there are reasonable assurances that the activity will be conducted in a manner which will not violate applicable water quality standards” in order to grant a WQC); citing 40 C.F.R. Section 121.2(a)(3)).

Indian Point Units 2 and 3 (the “Facilities” or the “Stations”) are both Westinghouse four-loop pressurized water reactors (PWRs) with net capacities of 1,078 megawatts (“MWe”) and 1,080 MWe of electrical power, respectively. The Indian Point facilities are located on the east bank of the Hudson River in the Village of Buchanan, Westchester County. Each unit utilizes a once-through condenser cooling water system, with the cooling water intake structures

¹ Entergy Nuclear Indian Point 2, LLC and Entergy Nuclear 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.

² The current operating licenses for Units 2 and 3 will expire in 2013 and 2015, respectively.

(“CWISs”) on the bank of, and a shared discharge canal to, the Hudson River. Once-through cooling systems operate by withdrawing water from a source, such as the Hudson River, then passing that water through a steam condenser one time and discharging the heated water back to the source. The maximum flow rate of the cooling system for each unit is 840,000 gallons of water per minute (“GPM”), for a combined intake capacity of approximately 2.5 billion gallons of Hudson River water per day. Pursuant to Section 701.11 of 6 NYCRR, the area of the Hudson River where the Facilities are located is classified as an SB saline surface water. The regulation provides that the “best usages of Class SB waters are primary and secondary contact recreation and fishing. These waters shall be suitable for fish, shellfish and wildlife propagation and survival.”

By letter dated April 2, 2010, Department Staff denied the application, and the Applicant made a timely request for a hearing in a submission dated April 29, 2010 (the “Hearing Request”). Department Staff’s denial (the “Denial Letter”) concluded that the “location, design, construction and capacity” of the CWISs at the Facilities did not “reflect the best technology available [“BTA”] for minimizing adverse environmental impact,” due to the cooling structures’ entrainment and impingement³ of aquatic organisms in the Hudson River. Denial Letter, at 13. To reduce impingement and entrainment of aquatic organisms, the Indian Point facilities currently operate with dual (Unit 2) and variable (Unit 3) speed pumps, modified Ristroph screens, and a fish return system, as well as certain flow limitations.

Department Staff offered the following reasons for its denial:

1. The Facilities’ operation would continue to exacerbate the adverse environmental impacts upon aquatic organisms caused by the Facilities’ CWISs, and would therefore be inconsistent with the best usage of the Hudson River for fish, shellfish and wildlife propagation and survival (see Section 701.11 of 6 NYCRR). The Denial Letter stated that “[i]n particular, the withdrawal of approximately 2.5 billion gallons of Hudson River water per day and the mortality of nearly one billion aquatic organisms per year from the operation of Units 2 and 3 are inconsistent with fish propagation and survival.” Denial Letter at 11.
2. Leaks of radiological material, which Department Staff asserted are “deleterious substances” within the meaning of Section 703.2 of 6 NYCRR, have the potential to impair the best use of the Hudson River.
3. Noncompliant thermal discharges also impair the Hudson River for its best usage, “particularly where, as here, primary and secondary contact recreation is concerned.” Denial Letter at 11. According to Department Staff, the materials Entergy submitted in support of its application do not currently demonstrate compliance with thermal standards and criteria (see Sections 704.1 and 704.2 of 6 NYCRR).

³ Impingement “occurs when larger aquatic organisms, like fish, are trapped and are injured or killed by the pressure from the flow of large volumes of water against a CWIS.” Denial Letter, at 3, fn. 2. Entrainment “occurs when smaller aquatic organisms, like plankton, eggs, and larvae, are drawn into a [CWIS] and are injured or killed in the process.” *Id.*, at 3, n. 3.

4. The Facilities' cooling water intake structures do not minimize the adverse environmental impact of entrainment from the Facilities' CWISs, and therefore the Facilities are not in compliance with the requirements of Section 704.5 of 6 NCYRR. That provision requires 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 ["BTA"] for minimizing adverse environmental impact."
5. The "taking" (see ECL Section 11-0103(13) and 11-0535(2)) of endangered species (shortnose sturgeon) and threatened species (Atlantic sturgeon) is unlawful and impairs the best usage of the waters of the Hudson River for propagation and survival of these species (see Section 701.11 of 6 NYCRR).

Department Staff concluded that the facilities, whether operated as they have been for the last 35 years, or operated with the addition of cylindrical wedge wire screens, did not and would not comply with New York State water quality standards.

Proceedings

A notice dated June 9, 2010 (the "Notice"), announcing the public comment period, legislative public hearing, and issues conference was published in the June 9, 2010 edition of the Department's electronic *Environmental Notice Bulletin*. The Notice was also published on June 14, 2010 in the *Poughkeepsie Journal*, the *Kingston Daily Freeman*, and the *Times Herald-Record*; on June 15, 2010 in the *Journal News*; and on June 16, 2010 in the *New York Times*.

Legislative Public Hearing

Pursuant to the Notice, the legislative hearing was convened before administrative law judges ("ALJs") Maria E. Villa and Daniel P. O'Connell on Tuesday, July 20, 2010, at the Colonial Terrace, 119 Oregon Road, in Cortlandt Manor, New York. There were two hearing sessions, one beginning at 2:00 p.m. and a second at 7:00 p.m., to receive unsworn statements from members of the public.

Approximately 100 persons attended the afternoon session, including Sandy Galef, a New York State Assemblywoman. Forty persons offered comments on the record. Nine speakers supported the Department's denial of the application, and thirty-one speakers were opposed. Written comments were also received.

At the evening session, approximately 150 individuals were present, and thirty-six persons spoke, including several local elected officials. Fifteen speakers supported the denial, and twenty-one persons were opposed to the Department's position. Geri Shapiro and Enid Weishaus appeared on behalf of Senator Kirsten E. Gillibrand, and a representative from Congresswoman Nita Lowey's office was also in attendance. Written comments were also received.

Those who supported the Department's denial raised concerns about damage to the ecosystem of the Hudson River, particularly certain fish populations, as well as the release of radioactive material into the environment. Many speakers asserted that the plant was unsafe, and argued that a sustainable energy plan should be developed that did not rely on fossil fuels or necessitate the need to relicense generating facilities that are environmentally unsound. Some speakers contended that the plant was outmoded, and that newer technology must be employed. Two petitions were submitted, and some speakers urged that an investigation be undertaken into the integrity and safety of the buried piping at the nation's nuclear power plants.

Several speakers pointed out that the proposal to install wedgewire screens would not address the thermal discharge from the Facilities, and maintained that the discharge of heated water resulted in further adverse effects on the River's fish population. Speakers also mentioned the lack of an evacuation plan, as well as the fact that there is no insurance available to homeowners to cover losses in the event of a significant release of radioactive material. The problem of disposing of nuclear waste was also a concern. Speakers disputed Entergy's claims as to the efficacy of wedgewire screens, as well as the cost of cooling tower retrofit and the length of time required to install cooling towers at the plant. These speakers emphasized that Entergy's profits were sufficient to support the retrofit, and noted the large volume of water withdrawn from the Hudson River, a public resource, under current operations. Other speakers asserted that cooling tower technology was selected many years ago as the appropriate means of reducing adverse effects on the fishery as a result of the Facilities' operations.

Supporters of Entergy's position argued that the Facilities provide power at lower cost and with fewer adverse environmental impacts than generating plants that operate on fossil fuels. These speakers stated that the cost of cooling towers was prohibitive, and that if cooling towers were required, the plants would be shut down, at least temporarily, with a consequent increase in the costs of electricity and air pollution when other plants were brought on-line. A number of speakers expressed concern about maintaining the reliability of the electric grid, and pointed out that the Facilities are important to the local economy in terms of taxes, jobs, and community and educational involvement. Some speakers took the position that Entergy should be allowed to install wedgewire screens, at least as an initial strategy, and that the installation of cooling towers should be delayed while the benefits or drawbacks of the less expensive technology is evaluated.

A number of speakers stated that the cooling towers would be a visual blight on the Hudson River, and cited the adverse impacts associated with construction, including noise, blasting, traffic, and dust. Some of those who offered comments observed that wedgewire screens were already being used successfully at a neighboring resource recovery facility. Union representatives expressed concern about increased unemployment and the loss of skilled workers if the Facilities were shut down. Speakers pointed out the hardships associated with higher electric bills, particularly in a recession, urging that increasing the use of nuclear power would help to regenerate the economy. Many speakers stated that the power produced by Indian Point could not be replaced by wind, solar, or hydropower generation, and that a plentiful and reliable source of energy is a prerequisite to attracting industry and business to the area. In addition, speakers argued that the Hudson River fishery is healthy and supports a variety of species of sportfish.

Some speakers stated that environmental justice concerns are implicated by a decision to take the Facilities off-line, even temporarily while construction occurs. These speakers contended that minority communities would suffer disproportionately because older, more polluting sources of generation located in those communities would be brought on line to offset any shortfall, and also noted that uranium mines are located primarily in less affluent, third world nations.

Numerous written comments were received by mail and e-mail during the public comment period, which closed on Monday, July 26, 2010. Those comments reiterated the points made by speakers at the legislative hearing, and also included correspondence from State and county legislators, as well as local elected officials.

Issues Conference

The hearing notice set a deadline of Monday, July 12, 2010 for receipt of any petitions for party or amicus status. A timely joint petition for full party status was received from Riverkeeper, Inc., Scenic Hudson, and the Natural Resources Defense Council (“NRDC”) (collectively, “Riverkeeper”). The New York State Department of Public Service (“NYS DPS”) also filed a timely petition for full party status. In addition, petitions by the County of Westchester (“Westchester”) and the Town of Cortlandt (“Cortlandt”) were timely received. Both petitioners sought either full party status, or amicus status in the alternative. A July 16, 2010 late-filed petition for full party status from Richard Brodsky was sent via e-mail on that date, and an amended petition was sent later that same day. Hard copies of both submissions were received on July 21, 2010.

The New York Independent Power Producers (“IPPNY”) filed a timely petition for amicus status, as did the New York City Economic Development Corporation (“NYC EDC”). Central Hudson Gas & Electric (“CHG&E”) also filed a timely amicus petition.

The issues conference took place at 12:30 p.m. on Wednesday, July 21, 2010, at the Department’s Region 3 office, 21 South Putt Corners Road, New Paltz, New York. At the issues conference, the Applicant was represented by Elise N. Zoli, Esq. and John Englander, Esq., of the law firm of Goodwin Procter LLP, Boston, Massachusetts. Mark D. Sanza, Esq., Assistant Counsel, and William Little, Esq., Associate Counsel, both of the Department’s Office of General Counsel, appeared on behalf of Department Staff.

Deborah Brancato, Esq., and Rebecca Troutman, Esq. represented Riverkeeper. Steven Blow, Esq., Assistant General Counsel, appeared on behalf of the New York State Department of Public Service. Stewart M. Glass, Esq. represented the County of Westchester, and the Town of Cortlandt was represented by Daniel Riesel, Esq., of the law firm of Sive Paget & Riesel, P.C., in New York City. Sean Richardson, Esq. appeared on behalf of petitioner Richard Brodsky.

Sam M. Laniado, Esq., of the law firm of Reed and Laniado, LLP, Albany, New York, appeared on behalf of IPPNY. Michael J. Delaney, Esq. appeared on behalf of the NYC EDC, and Robert J. Glasser, Esq. represented CHG&E.

Following receipt of the transcript, a conference call was held on August 3, 2010 to discuss the briefing schedule. Closing briefs were filed on September 24, 2010 by Entergy (“Entergy Brief”), Department Staff (“Department Staff Brief”), Riverkeeper (“Riverkeeper Brief”), and the Town of Cortlandt (“Cortlandt Brief”). On that same date, IPPNY submitted a letter in lieu of a closing brief (the “IPPNY Letter”). On October 29, 2010, Entergy, Department Staff, Riverkeeper, Westchester, Cortlandt, NYC EDC, and CHG&E filed reply briefs. In lieu of a reply brief, IPPNY filed a letter response dated October 29, 2010 (the “IPPNY Reply Letter”).

By letter dated October 29, 2010, NYS DPS withdrew its petition for full party status, “given the mutual agreement between DPS and the Department of Environmental Conservation affording DPS Staff an opportunity to robustly participate in the related state pollutant discharge elimination system proceeding in connection with adjudicable issues within its expertise.” October 29, 2010 NYS DPS letter, at 1. Accordingly, this issues ruling does not address the petition for full party status filed by NYS DPS.

SPDES Proceeding

A separate proceeding, commenced upon the issuance of a draft State Pollutant Discharge Elimination System (“SPDES”) permit for the Facilities, is ongoing. In order to issue a SPDES permit, the Department must ensure that the permittee will be in compliance with the same water quality standards incorporated into the CWA Section 401 WQC process. See Sections 750-2.1(b) and (k) of 6 NYCRR. In the SPDES proceeding, Department Staff has advocated for a closed cycle cooling system as BTA for Indian Point. Riverkeeper, Scenic Hudson, and the Natural Resources Defense Council filed a joint petition for party status, as did Mr. Brodsky, and those petitions were granted.

As part of the SPDES proceeding, the Department is required to undertake a review of the environmental impacts of closed cycle cooling, pursuant to the State Environmental Quality Review Act (“SEQRA”). On June 25, 2003, a Final Environmental Impact Statement (“FEIS”) was adopted. In 2008, the Department ordered the preparation of a supplemental EIS (“SEIS”), which would assess the impacts of closed cycle cooling at the Facilities on air quality, aesthetics, and electric system reliability. See Matter of Entergy Nuclear Indian Point 2, LLC and Entergy Nuclear Indian Point 3, LLC, Interim Decision of the Assistant Commissioner, at 39-40, 2008 N.Y. Env. LEXIS 52, * 78-79 (August 13, 2008) (the “Interim Decision”).

At the issues conference, the parties offered comment concerning the potential for consolidation of the Section 401 WQC hearing with the SPDES proceeding. Entergy took the position that consolidation, at least with respect to certain issues, could be more efficient. The Town of Cortland, NYS DPS, IPPNY and CHG&E concurred. The NYC EDC did not take a position on this point.

Department Staff and Riverkeeper opposed consolidation. According to Department Staff, the two applications should be considered separately, because the Section 401 WQC hearing would involve issues that are not subject to adjudication in the context of the SPDES proceeding. Department Staff also pointed out that the burdens of proof would be different, and argued that there was a strong potential for confusion if the hearings went forward in tandem.

Riverkeeper asserted that consolidation would not be appropriate. According to Riverkeeper, the two proceedings arise from distinct regulatory contexts, “and, as such, implicate different issues to be addressed, different evidentiary burdens, different discovery obligations, and different parties.” Riverkeeper Brief at 30. Riverkeeper maintained that the focus of the SPDES proceeding was a BTA determination, and took the position that the Section 401 WQC inquiry was much broader. As to the latter, Riverkeeper asserted that the instant proceeding required “a specific assessment of whether the proposed activity as a whole, and not merely a discharge, would be consistent with all New York State water quality standards and other appropriate requirements of State law.” Id.

Riverkeeper observed that the SPDES proceeding did not involve an inquiry into issues such as the impacts of radiological releases from the Facilities, whether continued operation would violate endangered species laws, and whether the proposed activity would comply with the best usages of the water, and concluded that a wholly separate proceeding was warranted. Moreover, Riverkeeper argued that such an approach would be more expeditious, and prevent confusion, additional complexity, and “substantial delay.” Riverkeeper Brief at 31. The County of Westchester and Mr. Brodsky also indicated that they did not favor consolidation.

In its petition, the Town of Cortlandt took the position that the two proceedings “must be consolidated with the ongoing SPDES proceeding so that the assessment of environmental impacts being undertaken by DEC in the SPDES matter, pursuant to SEQRA, can also inform the ALJ’s present review of DEC Staff’s proposed BTA for Indian Point in its WQC analysis.” IC Exhibit 15, at ¶ 36. Cortlandt noted that the Interim Decision required completion of an SEIS, “in order to add an assessment of the impacts on air quality, aesthetics, and electric system reliability” of the proposed BTA. Id. at ¶ 39. Cortlandt indicated that it intended to submit comments on the draft SEIS when it was released, and went on to point out that because the Department’s Denial Letter “only considered environmental effects on aquatic organisms, the proposed BTA determination was not informed by a review of all environmental impacts as required by SEQRA.” Id. at ¶ 41. This petitioner concluded that

the correct course of action is to consolidate the present review of the Indian Point WQC denial with the related Indian Point SPDES proceeding. In a consolidated proceeding, the ongoing assessment of non-water quality related environmental impacts of potential closed-cycle cooling systems at Indian Point will apply not only to the SPDES proceeding, but also to the present adjudication of the WQC denial.

Id. at ¶ 43. Cortlandt argued that this would avoid duplicative hearings, inasmuch as the same ALJs were assigned to both matters, and would also allow Cortlandt to participate as an interested agency in the SEQRA review in both proceedings.

Department Staff responded that Cortlandt’s position was based upon an inaccurate assumption; specifically, that Department Staff mandated closed-cycle cooling at Indian Point. Department Staff took the position that the Section 401 WQC permit “covers other regulatory

areas and different water quality-related items [such as radiological releases and impacts on endangered species] than those that are subject to a SPDES permit.” Department Staff Brief at 40. Noting that the Department may act to fulfill the requirements of CWA Section 401 in many ways, Department Staff observed that “any more stringent State law, regulation or standard, including but not limited to water quality standards, may be employed by DEC in meeting the objectives of the Clean Water Act.” Id. at 40.

In response, Cortlandt argued that “because DEC Staff’s denial of Entergy’s WQC application implicates a BTA determination that Staff has made, the WQC proceeding has become fundamentally linked to DEC’s ongoing review, in the context of the SPDES proceeding, of Staff’s determination that closed-cycle cooling is BTA for Indian Point.” Cortlandt Reply Brief at 9. As a result, this petitioner maintained that “in the interest of avoiding duplication and confusion, it is prudent for DEC to consider consolidating those elements of the two proceedings that address the review, under SEQRA and other applicable law, of DEC Staff’s BTA determination for Indian Point.” Id.

CHG&E argued that Riverkeeper’s position was essentially a motion to bar consolidation, and argued that this was at odds with the substance of ECL Sections 15-0103, 0105, and 0109. As discussed below in connection with CHG&E’s petition for amicus status, CHG&E maintained that in addition to Department Staff’s obligations under SEQRA, Article 15 imposed an independent requirement that Department Staff consider the factors that CHG&E raised in connection with Department Staff’s evaluation of the application for a Section 401 WQC. CHG&E took the position that “[a]ny appearance of differing scopes [of review in connection with the SPDES permit and the Section 401 WQC] is an artifact of the incorrectly constrained Denial.” CHG&E Reply Brief at 21. CHG&E went on to contend that “a key portion of the Denial is the BTA determination” and that, as a result, the SPDES permit and the Section 401 WQC overlap significantly. This petitioner concluded that there was no legitimate basis to maintain two separate proceedings “to examine the appropriate regulatory requirements for one site, that, while housing two similar facilities, has been studied and analyzed as one for thirty years so as, among other reasons, to consider cumulative impacts.” Id. at 22.

Section 624.8(e) (“Joint hearings”) of 6 NYCRR provides that

[a] project may require submission of applications for more than one permit, or to more than one government agency, and public hearings may be required for more than one purpose. Whenever practicable, all such hearings will be consolidated into a single public hearing.

The regulation explicitly recognizes that under certain circumstances, joint hearings may be appropriate. Moreover, the regulations provide further that the ALJs have the authority to manage the hearing by adjusting the order of events or presentation of evidence, as well as to “take any measures necessary for maintaining order and the efficient conduct of the hearing.” Section 624.8(a) and (b)(1)(xv).

As discussed below, this issues ruling concludes that issues concerning releases of radiological materials and impacts on endangered species will be adjudicated. While the inquiry with respect to those issues would not be included in the SPDES proceeding, there is no reason why those issues cannot proceed to adjudication.

Similarly, the parties are in a position to evaluate the efficacy and feasibility of cylindrical wedge wire screens, the alternative proposed by Entergy as BTA for the Facilities. This issue is common to both proceedings and can be heard at this time. In addition, a number of parties in the Section 401 WQC proceeding have raised issues concerning consistency with the best usages of the Hudson River waters (see Parts 701-704 of 6 NYCRR), including some undisputed issues raised by Riverkeeper, and those issues may proceed to adjudication at this point. Furthermore, this ruling concludes that whether Department Staff properly denied the Section 401 WQC application based upon thermal considerations will be adjudicated. As discussed below, Entergy and Department Staff may resolve this issue, but at this point it is included among the issues to be advanced to hearing.

Finally, in the SPDES proceeding, Entergy has proposed to present its direct case as to whether hybrid closed cycle cooling towers can operate at Indian Point in compliance with air permitting regulations.⁴ This issue is also common to both proceedings, and in the interests of efficiency, Entergy's direct case will be heard. Any rebuttal presentations will be held in abeyance, as necessary to allow for review by other parties' consultants. Accordingly, this issue will proceed to hearing at the earliest possible date.

NRC SFEIS

Because the NRC has just released a final supplemental environmental impact statement ("FSEIS") as part of the relicensing process, a determination with respect to those issues that implicate SEQRA concerns will be deferred until the participants have had the opportunity to review the FSEIS. On or before Friday, January 28, 2011, Department Staff shall advise the ALJs and the parties as to whether the December 3, 2010 FSEIS is sufficient for Department Staff to make the findings required by Section 617.11 of 6 NYCRR (see also Section 617.15 ("Actions involving a Federal agency"), which provides that "[w]hen a draft and final EIS for an action has been duly prepared under the National Environmental Policy Act of 1969, an agency has no obligation to prepare an additional EIS under this Part, provided that the Federal EIS is sufficient to make findings under section 617.11 of this Part").

Any responses to Department Staff's filing, and comments on the FSEIS, are to be served on or before Friday, February 25, 2011. Department Staff is authorized to file a reply, to be served on or before Friday, March 25, 2011.

Attached to this issues ruling is a scheduling order, consistent with the rulings and conclusions herein.

⁴ See December 1, 2010 letter from Elise Zoli, Esq. to ALJs Villa and O'Connell, at 3 (noting that "[a]ir quality impacts to human health not involved with the legal air permitting status of cooling towers also may have SEQRA ramifications, the trial of which Entergy is not asking be expedited.")

Rulings

Party Status/Standards for Adjudication

Applications for water quality certifications pursuant to Section 401 of the Clean Water Act, and implemented by Part 608 of 6 NYCRR, for projects which require federal approval, are subject to the provisions of Part 621 of 6 NYCRR (“Uniform Procedures”). See Section 621.1(e). Pursuant to Section 621.8(g), a public adjudicatory hearing held in connection with such an application “will be held according to the provisions of Part 624 of this Title.” Section 624.5 of 6 NYCRR sets forth the requirements for hearing participation. The Applicant and Department Staff are mandatory parties, pursuant to Section 624.5(a). Other parties may participate by filing a petition that raises adjudicable issues.

Part 624 of 6 NYCRR sets forth the standard for adjudication of issues in the Department’s permit proceedings. Specifically, an issue is adjudicable if:

- (i) it relates to a dispute between the department staff and the applicant over a substantial term or condition of the draft permit;
- (ii) it relates to a matter cited by the department staff as a basis to deny the permit and is contested by the applicant; or
- (iii) it is proposed by a potential party and is both substantive and significant.

Section 624.4(c)(1)(i) – (iii). The regulation defines a “substantive” issue as one in which “there is sufficient doubt about the applicant’s ability to meet statutory or regulatory criteria applicable to the project, such that a reasonable person would require further inquiry.” Section 624.4(c)(2). An issue is “significant” if it “has the potential to result in the denial of a permit, a major modification to the proposed project or the imposition of significant permit conditions in addition to those proposed in the draft permit.” Section 624.4(c)(3).

Pursuant to Section 624.5(b)(1), a petition must:

- (i) fully identify the proposed party together with the name(s) of the person or persons who will act as the party’s representative;
- (ii) identify petitioner’s environmental interest in the proceeding;
- (iii) identify any interest relating to statutes administered by the Department relevant to the project;
- (iv) identify whether the petition is for full party or amicus status;
- (v) identify the precise grounds for opposition or support.

In addition, Section 624.5(b)(2) requires that petitions for full party status must

- (i) identify an issue which meets the criteria of subdivision 624.4(c); and
- (ii) present an offer of proof specifying the witness(es), the nature of the evidence the petitioner expects to present and the grounds upon which the assertion is made with respect to that issue.

Pursuant to Section 624.5(b)(3), petitions for amicus status must fulfill all of the requirements in Section 624.5(b)(1), the provision applicable to petitions for full party status. In addition, an amicus petitioner must identify the nature of the legal or policy issues to be briefed which meet the criteria of section 624.4(c), and provide a statement explaining why the potential party is in a special position with respect to that issue.

Department Staff's Denial Letter

Section 401 of the Clean Water Act requires that

[a]ny applicant for a federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the State in which the discharge originates or will originate . . . that such discharge will comply with the applicable provisions of Sections 1311 ["Effluent limitations"], 1312 ["Water quality related effluent limitations"], 1313 ["Water quality standards and implementation plans"], 1316 ["National standards of performance"], and 1317 ["Toxic and pretreatment effluent standards"] of this title.

See 33 U.S.C. Section 1341(a); Jefferson County PUD No. 1 v. Washington Dept. of Ecology, 511 U.S. 700, 711-12 (1994). The statute goes on to require that

[a]ny certification provided under this section shall set forth any effluent limitations and other limitations, and monitoring requirements necessary to assure that any applicant for a Federal license or permit will comply with any applicable effluent limitations and other limitations, under section 1311 or 1312 of this title, standard of performance under section 1316 of this title, or prohibition, effluent standard, or pretreatment standard under section 1317 of this title, and with any other appropriate requirement of State law set forth in such certification, and shall become a condition on any Federal license or permit subject to the provisions of this section.

33 U.S.C. Section 1341(d). Section 608.9(a) of 6 NYCRR provides that

Water quality certifications required by section 401 of the Federal Water Pollution Control Act, Title 33 United States Code 1341 . . . Any applicant for a Federal license or permit to conduct any activity, including but not limited to the construction or operation of facilities that may result in any discharge into navigable waters as defined in section 502 of the Federal Water pollution Control Act (33 USC 1362), must apply for and obtain a water quality

certification from the department. The applicant must demonstrate compliance with sections 301-303, 306 and 307 of the Federal Water Pollution Control Act, as implemented by the following provisions:

- (1) effluent limitations and water quality-related effluent limitations set forth in section 754.1 of this Title;
- (2) water quality standards and thermal discharge criteria set forth in Parts 701, 702, 703 and 704 of this Title;
- (3) standards of performance for new sources set forth in section 754.1 of this Title;
- (4) effluent limitations, effluent prohibitions and pretreatment standards set forth in section 754.1 of this Title;
- (5) prohibited discharges set forth in section 751.2 of this Title; and
- (6) State statutes, regulations and criteria otherwise applicable to such activities.

Department Staff's Denial Letter stated that the Facilities, whether operated as they have been for the last 35 years (as originally proposed in Entergy's April 6, 2009 application), or with the addition of a cylindrical wedge-wire screen system to the Facilities' cooling water structure, as proposed in Entergy's February 12, 2010 submission, did not and would not comply with applicable New York State standards related to water quality. Denial Letter (Issues Conference Exhibit ("IC Exhibit __") 12) at 1-2.

Department Staff's Denial Letter stated further that the cylindrical wedge wire screen system, Entergy's proposed alternative, would not be "equivalent" to a closed cycle cooling system because the screen system would not reduce impingement and entrainment by at least 90 percent as much as a closed cycle cooling system. Denial Letter at 17-21. Citing to several studies, the Denial Letter stated that

[t]aken together, all of these reports and documents have concluded that conversion from a once-through cooling system to a closed-cycle cooling system, while expensive and involving a potentially lengthy construction process, is nevertheless the only available and technically feasible technology for Units 2 and 3 to completely satisfy the BTA requirement of 6 NYCRR § 704.5 and, therefore, comply with this State water quality standard.

Denial Letter at 15.

The Denial Letter referred to the Department's draft BTA policy, which was made available for public comment on March 10, 2010. See "Best Technology Available (BTA) for Cooling Water Intake Structures" (the "Draft Policy"). The Draft Policy proposes a minimum

performance goal for existing facilities such as Indian Point that would mandate wet closed cycle cooling or an equivalent technology capable of achieving reductions in impingement and entrainment, at least 90 percent as effectively as wet closed cycle cooling. Draft Policy at 2.

Entergy's Hearing Request

In its Hearing Request, Entergy proposed six issues that it characterized as threshold legal issues, and an additional four factual issues for adjudication. According to Entergy, “[b]ecause these threshold legal issues singly or collectively are dispositive of the need for any adjudicatory proceeding on the Notice, their prompt resolution will advance the timely and efficient resolution of this Proceeding and Entergy respectfully submits that they should be given the highest priority.” Entergy Brief at 5. Entergy requested that, if those threshold legal issues were not determined to be dispositive, those issues be adjudicated. Entergy’s threshold legal issues included:

1. Whether Department Staff improperly denied Entergy’s application where, as here, the Facilities hold, and must at all times during the license renewal period hold a valid and enforceable SPDES permit in order to operate?
2. Whether Department Staff’s purported denial of a WQC based on the potential release of radiological materials regulated under the Atomic Energy Act by the NRC is preempted, and therefore prohibited, by federal law?
3. Whether Department Staff improperly denied Indian Point’s WQC, because the release of AEA materials from an NRC-licensed facility is not subject to regulation under Section 401 of the CWA?
4. Whether Department Staff improperly denied Indian Point’s WQC, because Section 701 of 6 NYCRR does not apply to alleged impacts of cooling water intake structures?
5. Whether Department Staff improperly denied Indian Point’s WQC, because Department Staff cannot deny the application on the basis of alleged taking of endangered or threatened species in violation of ECL Article 11 or Section 701.11 of 6 NYCRR?
6. Whether, absent express deferral to the pending SEQRA analysis in the SPDES proceeding or the NRC’s FSEIS, Department Staff have properly established compliance with SEQRA?

The factual issues Entergy proposed were:

1. Whether the proposed denial of Indian Point’s WQC application based on thermal considerations is supported in fact and law?

2. Whether the proposed denial of Indian Point's WQC application based upon radiological considerations is supported in fact and law?
3. Whether the proposed denial of Indian Point's WQC application on the basis of alleged non-compliance with Section 704.5 of 6 NYCRR is supported by fact and law?
4. Whether the proposed denial of Indian Point's WQC application based on the alleged impairment of the waters of the Hudson River for sturgeon propagation and survival due to the alleged impingement and entrainment of sturgeon by the Stations is supported in fact and law?

Entergy's Threshold Legal Issue No. 1

Entergy argued that because the Facilities “hold, and must at all times during the NRC license renewal period hold, a valid SPDES permit in order to operate,” Department Staff could not deny the WQC application. Hearing Request at 4. According to Entergy, the Department is required to issue the WQC “because Entergy possesses and in the future will possess a SPDES permit that ensures compliance with New York Water Quality Standards (‘NYWQS’) and therefore as a matter of law provides the reasonable assurances necessary to satisfy the requirements of § 401(a).” Entergy Brief at 2. Entergy took the position that, at any SPDES-permitted facility (such as Indian Point), the Department has “reasonable assurances” of compliance with water quality standards, citing to Section 750-2.1(b) of 6 NYCRR, which provides that

[u]pon issuance of a SPDES permit, a determination has been made on the basis of a submitted application, plans, or other available information, that compliance with the specified permit provisions will reasonably protect classified water use and assure compliance with applicable water quality standards.

In light of this provision, Entergy argued that under federal and State law, a SPDES Permit “memorializes NYSDEC’s mandatory legal determination” that the permit assures compliance with NYWQS. Entergy Reply Brief at 7.

Entergy pointed out that the Facilities possess a current, effective SPDES permit, issued in 1987, and extended for five year periods pursuant to the Section 401 of the State Administrative Procedure Act (“SAPA”).⁵ Noting that the existing SPDES permit had been modified on six occasions, Entergy argued that the Department “necessarily confirmed the

⁵ Section 401(2) of SAPA provides that “[w]hen a licensee has made timely and sufficient application for the renewal of a license or a new license with reference to any activity of a continuing nature, the existing license does not expire until the application has been finally determined by the agency, and, in case the application is denied or the terms of the new license limited, until the last day for seeking review of the agency order or a later date fixed by order of the reviewing court.”

substance of Entergy's SPDES permit." Hearing Request at 6. According to Entergy, the Department has a duty to impose requirements in SPDES permits to ensure compliance with the sections of the CWA specified in CWA Section 401, including NYWQS.

In addition, Entergy noted that the Section 401 WQC issued for the Facilities in 1982 (the "1982 WQC" states that compliance with the SPDES permit "will result in compliance with all applicable provisions of Section 208(e), 301, 302, 303, 304, 306 and 307 of the [Clean Water] Act and the appropriate provisions of State law." Entergy maintained that the 1982 WQC supports the conclusion the SPDES permits provide reasonable assurances of compliance with NYWQS.⁶ Entergy went on to point out that "the Department has taken no material enforcement action against Indian Point with respect to its SPDES permit." Hearing Request at 5, fn. 3.

According to Entergy, Department Staff's suggestion that the Department's obligations pursuant to Section 704.5 of 6 NYCRR (the "best technology available" inquiry) support denial of the application for a Section 401 WQC is undercut by the statement in the Denial Letter that "[i]n order to obtain a SPDES permit from the Department, the facilities must demonstrate that their CWISs use the best technology available to minimize environmental harm." Denial Letter at 5. Entergy argued that when the Department issued the most recent SPDES permit, "it necessarily made a BTA determination – under § 704.5, which – as the Department concedes – existed at that time (promulgated in 1974) and has not been amended since." Hearing Request at 6 (emphasis in original). Entergy noted that the SPDES BTA determination was sustained "in each of five serially issued, judicially approved" stipulations of settlement and consent orders. *Id.* Moreover, Entergy observed that the Facilities' permit was modified as recently as 2004, and that therefore Department Staff's arguments as to its obsolescence were misplaced.

Entergy went on to assert that because any future SPDES permit would contain the standard permit provision of Section 750-2.1(b) of 6 NYCRR, a determination would have been made that compliance with the specified permit provisions would reasonably protect classified water use, and assure compliance with any applicable water quality standards. In addition, Entergy noted that in the case of other nuclear facilities in the State, such as Ginna, Nine Mile Point, and FitzPatrick,⁷ Department Staff deferred the Section 401 WQC certification. Entergy argued that the same procedure should be followed here.

Department Staff maintained that "Entergy's reliance upon a 5-year SPDES permit last issued for the Indian Point facilities in 1987 did not, and could not, provide reasonable assurances of compliance with applicable New York water quality standards in 2010 and beyond." Department Staff Brief at 3, citing Denial Letter at 14-16. Department Staff emphasized that the SPDES permit is nearly 25 years old, and has been the subject of several 5-year extensions. Department Staff concluded that "the current legal status of Indian Point's 1987 SAPA-extended SPDES permit at this point in time has clearly been found to be suspect." Department Staff Brief at 4 (citations omitted).

⁶ Entergy also did not concede any obligation to obtain a new WQC, "in light of its existing SPDES permit and WQCs."

⁷ All three of these facilities are located on Lake Ontario.

Department Staff also cited to the Interim Decision's determination that the operation of the Facilities' CWISs results in adverse environmental impact. Interim Decision at 16-17; 2008 N.Y. Env. LEXIS, * 34. Department Staff noted that the existing SPDES permit does not contain provisions that would require installation of technologies to minimize that adverse environmental impact. As a result, according to Department Staff, adverse impacts to aquatic organisms in the Hudson River will continue until the Department determines a final BTA for the Facilities in a renewed/modified SPDES permit, and such technologies are installed. According to Department Staff, "a SPDES permit determination for Indian Point will likely not be 'final' for several years." Department Staff Brief at 5.

Department Staff noted that a Section 401 WQC was last issued for the Facilities in 1982, and observed that the certification did not include a determination that the Facilities were in compliance with certain applicable State water quality standards, specifically, those governing thermal discharges (CWA Section 316 and Part 704 of 6 NYCRR). In addition, the 1982 Section 401 WQC "specifically did not assess the need for installing any technology to minimize the adverse environmental impact caused by the facilities' CWISs and, like Indian Point's 1987 SPDES permit, did not render a BTA determination as required by CWA § 316(b) and 6 NYCRR § 704.5." Department Staff Brief at 6. Department Staff challenged Entergy's argument that the provisions of the Hudson River Settlement Agreement ("HRSA"), incorporated into the 1982 and 1987 SPDES permits, satisfied State criteria governing thermal discharges. Department Staff argued that the 1982 Section 401 WQC specifically did not include a determination as to compliance with CWA Section 316(b) and Part 704 of 6 NYCRR, and reiterated that the Interim Decision determined that operation of the Facilities results in the mortality of more than one billion aquatic organisms annually.

Department Staff went on to contend that "persistent, ongoing discharges of radiological materials" from the Facilities into the waters of the State, including the Hudson River, "impair such waters for their best usages." Department Staff Brief at 6-7. According to Department Staff, "Entergy does not dispute, and, in fact, has acknowledged that radioactive materials, (including tritium, strontium-90, cesium, and nickel) from spent fuel pools, pipes, tanks and other systems, structures and components at Indian Point have reached the Hudson River via groundwater flow from the site and continue to do so." *Id.* at 7. Department Staff argued that as a result, Entergy's argument that it is currently in compliance was unfounded.

Department Staff maintained that the Facilities' operations pursuant to the 1987 SPDES permit "has harmed, and continues to harm ("take"), both shortnose sturgeon and Atlantic sturgeon by impinging them on the CWISs screens or entraining them in the CWISs." Department Staff Brief at 7. Citing to ECL Sections 11-0103(13) and 11-0535(2), Department Staff noted that such "taking" of any endangered or threatened species is expressly prohibited except pursuant to a license or permit issued by the Department. Department Staff argued that the SPDES permit does not constitute a permit for taking any endangered or threatened species, and that therefore the Facilities' operation is unlawful.

According to Department Staff, because the Department retains discretion to bring an enforcement action at any time, the fact that it has not commenced an enforcement action for violations of the statutes and regulations cited is "neither dispositive nor germane to this

inquiry.” *Id.* at 8, fn. 8. Department Staff also disputed Entergy’s argument that the Department had deviated from the process it followed in connection with three other non-Hudson River nuclear facilities, pointing out that the other facilities cited by Entergy

namely Ginna, Nine Mile Point, and FitzPatrick (i) are all located on Lake Ontario (a waterbody that is not as biologically diverse as the Hudson’s estuarine environment; (ii) did not have SPDES permits that had been SAPA-extended for decades without meaningful review; (iii) did not have persistent, ongoing releases of radiological materials; (iv) did not cause the mortality of more than one billion organisms per year from their respective CWISs; and (v) did not impinge or entrain threatened or endangered species.

Id. at 8, fn. 9 (emphasis in original).

Riverkeeper also disputed Entergy’s position with respect to this issue. According to Riverkeeper, “simply operating pursuant to a SPDES permit does not automatically ensure that a permittee is in compliance and will remain in compliance with all relevant New York State requirements.” Riverkeeper Brief at 4. This petitioner noted that while a SPDES permit requires compliance with NYWQS, “this does not serve as proof that a particular facility is *actually* operating in a manner that is consistent with such standards.” Riverkeeper Reply Brief at 5 (emphasis in original). Riverkeeper noted that the provision Entergy relied upon, Section 750-2.1(b) of 6 NYCRR, provides that the Department may require a permittee to take abatement action or require a modification of the permit (and prohibit operation until such a modification is in place) in order to prevent impairment of the best use of the waters or to assure maintenance of water quality standards.

Riverkeeper asserted that “despite the fact that Entergy holds a SPDES permit, the operation of the plant contravenes various water quality standards,” for example, the requirement that the CWISs at the Facilities reflect best technology available. Riverkeeper Brief at 4. Riverkeeper went on to observe that Entergy’s original permit, issued in 1987, “was premised upon the Hudson River Settlement Agreement (“HRSA”), which allowed the owners of Indian Point to essentially defer installing what had been determined to be BTA, that is, closed-cycle cooling.” *Id.*

With respect to Entergy’s argument that the SPDES permit issued at the conclusion of the SPDES proceeding would similarly assure compliance with applicable water quality standards, Riverkeeper countered that the inquiry in a Section 401 WQC proceeding is broader than that undertaken as part of a SPDES permit renewal process. Riverkeeper cited to a 2010 handbook entitled *Clean Water Act Section 401 Water Quality Certification: A Water Quality Protection Tool for States and Tribes*, (the “EPA Handbook”) prepared by the United States Environmental Protection Agency (“EPA”), Office of Wetlands, Oceans, and Watersheds. The EPA Handbook states that “[a]s incorporated into the 1972 CWA, § 401 water quality certification is intended to ensure that no federal license or permits would be issued that would prevent states or tribes from

achieving their water quality goals, or that would violate CWA provisions.” EPA Handbook at 16. According to the EPA Handbook, “[i]t is important to note that, while EPA-approved state and tribal water quality standards may be a major consideration driving § 401 decision [sic], they are not the only consideration.” Id.

Riverkeeper also cited to Section 401(d) of the CWA, which provides that any certification provided must assure that an applicant for a federal license will comply with “any other appropriate requirement of State law.” Riverkeeper argued that this provision mandates that the Facilities demonstrate compliance with, for example, the State’s endangered species laws and regulations. In addition, Riverkeeper argued that the Section 401 WQC proceeding must consider other relevant laws such as ECL Section 17-0807(1), which prohibits the discharge of radioactive waste. Riverkeeper argued that the Facilities are in violation of this provision, and that consequently, the Section 401 WQC was properly denied.

Riverkeeper went on to argue that CWA Section 401 “triggers an independent assessment of whether the proposed activity as a whole, not simply the discharge which is the subject of the SPDES proceeding, would comply with New York State water quality standards.” Riverkeeper Brief at 7. Riverkeeper contended that the focus in the SPDES proceeding is “primarily on compliance with the specific water quality standards set forth in 6 NYCRR § 704.5(b), and parallel federal law, pursuant to CWA § 316(b), requiring implementation of BTA.” Id. According to Riverkeeper, the Section 401 WQC proceeding “is broader, and involves a specific assessment of the impact of the continued operation of Indian Point on the various designated uses of the Hudson River, and other narrative water quality standards.” Id. at 7-8.

This petitioner concluded that “a new SPDES permit issued at some undefined point in the future for Indian Point is not an appropriate substitute for the comprehensive assessment required by CWA § 401 because any possible resolution of a BTA inquiry is far from the end of the § 401 inquiry.” Id. at 8. Furthermore, Riverkeeper observed that the ongoing SPDES proceeding is “highly contested” and that “any conclusions that the end result of the proceeding will be appropriate and correct, are highly speculative at this point, and subject to likely appeals.” Id. Riverkeeper concluded that it would be inappropriate for the Department to rely upon Entergy’s commitment to abide by the outcome of the SPDES proceeding, without performing the requisite assessment in this proceeding.

In support of its arguments, Riverkeeper cited to PUD No. 1, supra, 511 U.S. 700 (1994), in which the U.S. Supreme Court evaluated a determination on a Section 401 WQC for a hydroelectric plant. At issue was whether a minimum stream flow requirement the State imposed was a permissible condition of such a certification. 511 U.S. 700, 710. The Court concluded that “EPA’s conclusion that *activities* – not merely discharges – must comply with state water quality standards is a reasonable interpretation of § 401, and is entitled to deference.” Id. at 712 (emphasis in original) (citations omitted).

In light of the Court’s opinion, Riverkeeper argued that “CWA § 401 gives States latitude to ensure that the proposed *activity as a whole* complies with relevant state water quality standards *and* with any other appropriate State law requirements.” Riverkeeper Reply Brief at 5 (emphasis in original). This petitioner contended that the SPDES proceeding focused primarily

upon BTA and whether the Facilities would be in compliance with only one State water quality standard, set forth in Section 704.5 of 6 NYCRR. According to Riverkeeper, the Section 401 WQC proceeding

presents the State with the obligation and opportunity to assess whether *the proposed project, i.e., 20 additional years of plant operation*, would be consistent with all relevant New York State water quality standards, including “designated uses” of the Hudson River, as well as “any other appropriate requirement of State law,” certain of which are not the focus in the SPDES proceeding, such as endangered species law, and laws prohibiting radiological discharges.

Id. (emphasis in original) (citations omitted). Riverkeeper argued that in the context of a Section 401 WQC proceeding, the certifying agency can consider factors beyond numerical water criteria, and may evaluate the project’s impacts on, for example, recreation or fish habitat.

With respect to Entergy’s argument that Department Staff’s deferral of the Section 401 WQC determination at other facilities should be controlling in this case, Riverkeeper noted that the Facilities’ existing, 1982 Section 401 WQC “was premised on the now expired HRSA, and, as such, did not include an independent determination of compliance with all relevant water quality standards and other appropriate state laws.” Id. at 9. Riverkeeper went on to argue that “Indian Point has a uniquely profound impact upon a critical surrounding aquatic ecosystem, in violation of various state standards, and, as noted, is long overdue for a full permit technical review.” Id. According to Riverkeeper, the impact of the Facilities far exceeds that of the other plants cited by Entergy in its brief. Finally, Riverkeeper took issue with Entergy’s argument that the NRC generic license renewal EIS, and an EIS prepared for the FitzPatrick plant, indicate that a SPDES permit would be sufficient to satisfy the requirements of CWA Section 401. Riverkeeper pointed out that the EISs stated only that a NPDES permit implies certification, or that certification may be evidenced by a State permit, and were therefore not dispositive on this question.

In its reply brief, Entergy noted that Department Staff and Riverkeeper did not dispute that “pursuant to the plain terms of the CWA, SPDES permits require that a facility comply with all NYWQS.” Entergy Reply Brief at 3. Entergy went on to contend that Department Staff’s arguments as to the adequacy of the current SPDES permit were irrelevant, arguing that the question at hand is whether, during the future license renewal term, there are reasonable assurances that the Facilities will be in compliance with NYWQS. With respect to the argument that radiological discharges and impacts on endangered species must be taken into account, Entergy countered that

[t]his argument is unavailing because NYSDEC is required by both the CWA and New York law to enforce NYWQS through the SPDES program. Given that Indian Point must and will hold a valid SPDES permit in order to operate

during the license renewal term, and that a SPDES permit requires Indian Point to comply with all NYWQS, the WQC should be issued, as it has been for every other nuclear facility in New York.

Entergy Reply Brief at 3-4. Entergy took the position that Section 401 “has limited relevance for federal licenses to which SPDES permit programs already apply, but much greater relevance where SPDES permit programs do not apply,” by allowing State agencies to opine whether a future federally authorized discharge provides reasonable assurances of compliance. Entergy Brief at 11. Entergy argued that non-discharge activities are not a proper basis for denial of a Section 401 WQC, noting that “[i]nsofar as Staff and Riverkeeper suggest that a NYWQS may be outside of the SPDES program, it *cannot* have originated in the CWA and is not relevant to Staff’s WQC determination here.” Entergy Reply Brief at 6, fn. 4 (emphasis in original).

Entergy noted that its SPDES permit remains fully effective, and went on to assert that it is further entitled to protection under the “permit shield” provisions of the CWA and New York State regulations. Those provisions, set forth in 33 U.S.C. Section 1342(k) and 750-2.1(k) of 6 NYCRR, state that discharges authorized by a permit are deemed to be in compliance with State water quality standards incorporated into permit limitations. In conclusion, Entergy argued that it is entitled to have the denial quashed, “and to issuance of a WQC without the need for further proceedings.” Entergy Reply Brief at 14.

Ruling: Entergy’s argument that the existing SPDES permit is sufficient to establish compliance with applicable water quality standards is not persuasive. The fact that the Facilities currently hold a SPDES permit does not ensure that the requirements of CWA Section 401 have been or will be satisfied, and accordingly, this threshold legal issue is not dispositive. As Riverkeeper noted, Section 750-2.1(b) of 6 NYCRR, the regulation Entergy cites, goes on to provide that

[s]atisfaction of permit conditions notwithstanding, if operation pursuant to the permit causes or contributes to a condition in contravention of State water quality standards or guidance values, or if the department determines that a modification of the permit is necessary to prevent impairment of the best use of the waters or to assure maintenance of water quality standards or compliance with other provisions of ECL article 17, or the act or any regulations adopted pursuant thereto (see Section 750-1.24 of this Part), the department may require such a modification and the commissioner may require abatement action to be taken by the permittee and may also prohibit such operation until the permit has been modified pursuant to section 621.14 of this Title.

In light of this language, Entergy’s argument that an existing SPDES permit establishes compliance must fail. The regulation clearly contemplates situations where, despite the existence of a current SPDES permit, a permittee may still be in violation of NYWQS.

As Department Staff and Riverkeeper observed, the CWA Section 401 inquiry is necessarily broader than the inquiry undertaken in connection with the Facilities' SPDES permit renewal and modification. Section 401 requires "reasonable" assurances that the Facilities will be in compliance, and in this case, it cannot be said that the existing SPDES permit for the Facilities would, standing alone, provide such assurances. For example, as Department Staff notes, the provisions of the existing permit do not contemplate the installation of technologies to address the adverse environmental impacts at the Facilities. Entergy argues that the existing permit contains "numerous intake structure requirements and thermal discharge limitations developed by NYSDEC Staff." Entergy Reply Brief at 13. This contention overlooks the fact that BTA for the Facilities has yet to be determined, and, as Riverkeeper notes, that issue is contested. Moreover, Entergy's interpretation would render the CWA Section 401 process essentially superfluous in situations where an applicant holds a valid SPDES permit. This tautology is not supported by the statute or the regulations.

The case cited by Entergy, Port of Seattle v. Pollution Control Hearings Bd., 151 Wash.2d 568 (2004), is inapposite, inasmuch as the reviewing agency in that case had determined to rely upon a future National Pollutant Discharge Elimination System ("NPDES") permit, and the court reasoned that the agency's reliance was entitled to deference. Id. at 604. The situation here is clearly distinguishable, because Department Staff is unwilling to adopt Entergy's view that the current or future SPDES permit will provide reasonable assurances of compliance. Moreover, Entergy's reliance on Department Staff's grant of certifications pursuant to CWA Section 401 to other nuclear facilities, such as Ginna, Nine Mile Point, and FitzPatrick, is misplaced. Those facilities are clearly distinguishable, for the reasons articulated by Department Staff.

Entergy's Threshold Legal Issue No. 2

The Denial Letter stated that persistent, ongoing discharges of radiological materials, deleterious substances (including, but not limited to, radioactive liquids, solids, gases and stormwater) from the Facilities into the waters of the State (specifically, the Hudson River and groundwater) could impair those waters for their best usages. Denial Letter at 11. Department Staff noted that such materials had reached the Hudson River via groundwater flow, and continued to do so. Citing to Section 701.11 of 6 NYCRR, Department Staff denied the application based upon the failure to comply with this water quality standard.

Entergy maintained that federal law preempts State regulatory authority over radiological discharges from NRC-licensed nuclear power plants. In its Hearing Request, Entergy asserted that Department Staff could not deny the Section 401 WQC application based upon releases of materials regulated by the NRC under the Atomic Energy Act ("AEA materials"). According to Entergy, regulation of AEA materials is reserved to the federal government, and State agencies are preempted from such regulation. Entergy contended that the federal government occupies the field of regulatory authority over radiological discharges from NRC-licensed nuclear power plants, including any releases to surface water and groundwater.

In support of its arguments, Entergy cited to Train v. Colorado Public Interest Research Group, Inc., in which the United States Supreme Court held that “States are precluded from playing any role in several significant areas of regulation including the setting of limitations on radioactive discharges from nuclear power plants.” 426 U.S. 1, 17 and n. 12 (1976). Entergy also cited to the Eighth Circuit’s decision in Northern States Power Co. v. State of Minnesota, 447 F.2d 1143 (8th Cir. 1971), stating that “the United States Government has the sole authority under the doctrine of pre-emption to regulate radioactive waste releases from nuclear power plants to the exclusion of the states.” 447 F.2d 1143, 1149, aff’d, 405 U.S. 1035 (1972). In that case, a nuclear power plant that had received a federal license applied for a waste disposal permit from the State of Minnesota. The State attempted to impose conditions on discharges more stringent than the levels allowed by the Atomic Energy Commission (the NRC’s predecessor). Plaintiff, Northern States, challenged the State conditions, and the Eighth Circuit ruled in plaintiff’s favor, based on the doctrine of federal field preemption.

Entergy went on to contend that the scope of federal preemption in this regard “is not limited to planned releases of radiological material, as opposed to inadvertent releases or leakage of radiological material.” Entergy’s Brief at 25. Entergy cited to Pacific Gas & Electric Co. v. State Energy Resource Conservation and Dev. Comm’n, 461 U.S. 190 (1983). In that case, which dealt with the adequacy of spent nuclear fuel pools, the Supreme Court concluded that the federal government “maintains complete control of the safety and ‘nuclear’ aspects of energy generation.” 461 U.S. at 212. The Court went on to hold that the passage of the AEA gives the NRC “exclusive jurisdiction to license the transfer, delivery, receipt, acquisition, possession and use of nuclear materials. Upon these subjects, no role was left for the states.” Id. at 207.

Entergy also made reference to two memoranda of agreement (“MOA”) between New York State and the AEC, entered into in 1962 and 1965, respectively. The 1962 MOA contained language acknowledging the AEC’s authority and responsibility in connection with construction and operation of any production or utilization facility. 27 Fed. Reg. 10419, 10420 (1962). The 1965 MOA stated that New York would “use its best efforts to exempt activities licensed by the Commission from State regulations which are directed toward protection against radiation hazards from those radiation sources which are regulated by the Commission.” 30 Fed. Reg. 6883, 6884 (1965). In addition, Entergy relied upon the June 25, 2003 Final Environmental Impact Statement (“FEIS”) prepared in connection with the Facilities’ SPDES permit, which indicates that

the Department does not have the authority to require a SPDES permit renewal application to identify discharges that do not fall within its SPDES jurisdiction . . . concerns for possible radioactive releases in the cooling water discharged from Indian Point, or concerns for possible health effects from radioactive emissions, should be addressed directly to the NRC, not the Department, either as a license compliance matter or in the course of license extension proceedings.

FEIS, at 90-91. Based upon the above, Entergy took the position that the Department had “stated repeatedly that federal law preempts NYSDEC from exercising jurisdiction over the release of nuclear materials” from Indian Point. Entergy Brief at 29.

In response, Department Staff observed that Entergy did not offer any authority that would support the argument that discharges of radioactive materials, as a result of malfunctions or leaks, into the waters of the State would not constitute an independent basis for the Department’s consideration of a Section 401 WQC in the context of a federal licensing proceeding. Department Staff noted that prohibited discharges, such as the discharge of radiological materials, are not authorized pursuant to a SPDES permit and therefore cannot be regulated by permit limitations or conditions. See ECL Section 17-0807; Section 750-1.3(a) of 6 NYCRR.

In support of its position, Department Staff cited to S.D. Warren Co. v. Maine Bd. of Envtl. Protection, 547 U.S. 370 (2006). In that case, the U.S. Supreme Court held that, in a federal licensing proceeding, States could regulate any activity altering the integrity of the State’s waters. 547 U.S. at 386 (noting that Congress provided the States with power to enforce any other appropriate provision of state law by imposing conditions on federal licenses for activities that could result in a discharge). Department Staff asserted that “[r]ead as a whole, the CWA evidences a comprehensive intent on the part of Congress to allow states to manage their own environmental affairs within the framework established by the CWA.” Department Staff Reply Brief at 6. Department Staff emphasized the objectives of the CWA, including restoration and maintenance of “the chemical, physical and biological integrity of the Nation’s waters.” CWA Section 101(a). The statute goes on to provide that

It is the policy of the Congress to recognize, preserve and protect the primary responsibilities and rights of States to prevent, reduce and eliminate pollution, to plan the development and use (including restoration, preservation, and enhancement) of land and water resources.

CWA Section 101(b). In addition, Department Staff cited to S.D. Warren, supra, at 386 (noting that “[s]tate certifications under § 401 are essential in the scheme to preserve state authority to address the broad range of pollution.” The Court went on to observe that “[t]hese are the very reasons that Congress provided the States with power to enforce ‘any other appropriate requirement of State law,’ 33 U.S.C. § 1341(d), by imposing conditions on federal licenses for activities that may result in a discharge.” Id. Department Staff argued that “any more stringent State law, regulation or standard, including but not limited to specific water quality standard, may be employed by DEC in meeting the objectives of the CWA.” Department Staff Reply Brief at 6.

Department Staff went on to contend that the Department has a broad legislative mandate to protect the environment, and noted further that the definition of “pollutant” in New York’s statute “is more stringent than the definition in the CWA and includes, among other things, ‘radioactive materials.’” Id. at 7. As a result, according to Department Staff, “it is clear that the State has determined that the discharge of radioactive materials into New York waters

(groundwater or surface water) will, among other things, impair the quality of those waters and is prohibited.” Id. at 8.

Department Staff contended that there are important differences between Section 401 WQC authority and State permitting and licensing requirements, citing to Karuk Tribe of Northern California v. California Regulatory Water Control Bd., 183 Cal. App.4th 330, 340, fn. 6 (Cal. Ct. App. 2010) (noting that in the case of binding certifications, the State’s environmental requirements apply to the licensee through the federal licensing process, and as conditions of the federal license). Department Staff took the position that the Department is applying State statutes and regulations relating to radiological pollution and water quality, specifically, ECL Sections 3-0301(1)(i), 17-0807(1), 17-0105(17), and 6 NYCRR § 750-1.3(a), in the context of a federal licensing process, and that Entergy’s arguments concerning preemption in this context were misplaced. Department Staff reiterated that it is not attempting to block the Indian Point facilities from operating, but rather “it is only exercising its statutory and regulatory police power to abate water pollution – an ongoing nuisance of radiological discharges – emanating from the Indian Point site.” Department Staff Brief at 14.

Riverkeeper argued that Entergy’s interpretation of federal preemption and its applicability to this proceeding was overly broad. According to Riverkeeper, “DEC Staff is not directly regulating the operation of Indian Point, but rather appropriately applying state standards in an incidental manner, in the context of federal proceeding, in categories of impact appropriate for state review.” Riverkeeper Brief at 10.

In support of its arguments, Riverkeeper cited to a July 9, 2010 letter from Stephen G. Burns, Esq., the NRC’s general counsel, to Jim Riccio, a nuclear policy analyst for Greenpeace (the “NRC Letter”). IC Exh. 24. In the NRC Letter, Mr. Burns states that the NRC “does not have expansive preemptive authority that it can exercise unilaterally,” and that it has “certainly never denied that States have some authority over groundwater.” Id. at 1-2. Department Staff also cited to the letter, quoting the statement that “[e]ven when the controversy has been over releases of tritium from nuclear power plants, the agency [NRC] has generally avoided statements about what a State can and cannot do.” Id. at 1.

Riverkeeper went on to argue that states are only preempted from “*direct* regulation of radiological hazards of nuclear facilities.” Riverkeeper Brief at 11 (emphasis in original) (citations omitted). According to Riverkeeper, “there is a recognized difference between direct regulation under independent state authority, which is preempted, and the application of relevant state standards in the context of a federal licensing proceeding, which is not.” Id. Riverkeeper cited to S.D. Warren, supra, emphasizing the court’s recognition that state certifications under Section 401 “are essential in the scheme to preserve state authority to address the broad range of pollution.” 547 U.S. 370, 386.

Riverkeeper also made reference to the California appeals court’s decision in Karuk Tribe, supra. In that case, the plaintiffs appealed a judgment that denied a writ of mandate to compel defendants, a regional water quality control board, to apply State law with regard to hydroelectric dams operating under a federal license. Although the court affirmed the lower court’s judgment, the appellate court reasoned that federal preemption “does not automatically

mean that state input is categorically prohibited and state opinion of no consequence.” Id. at 359. The court went on to note that “[t]he Clean Water Act gives states what appears to be a very substantial role by requiring that an applicant for any federal license comply with state water quality procedures.” Id. at 359-360.

Riverkeeper also relied upon two New York decisions in the context of Section 401 WQC certifications for hydroelectric plants. In Matter of Chasm Hydro, Inc. v. New York State Dept. of Env'tl. Conservation, the Court of Appeals declined to find that the Department’s authority to impose conditions in a Section 401 WQC for a federally regulated dam was preempted by federal jurisdiction. 14 N.Y.3d 27, 31-32 (2010). The court held that whether construction and operation of the project as planned would be inconsistent with one of the water’s designated uses “should be determined, in the first instance, through the administrative process.” Id. at 32 (citations omitted).

In addition, Riverkeeper cited to Matter of Niagara Mohawk Power Corp. v. New York State Dept. of Env'tl. Conservation, 82 N.Y.2d 191 (1993), cert. denied, 511 U.S. 1141 (1994). In that decision, the Court of Appeals reviewed the Department’s determination that CWA certification for a license to be obtained from the Federal Energy Regulatory Commission (“FERC”) would be conditioned on compliance with certain provisions of the ECL. The court upheld the Appellate Division’s determination that “under settled New York law, such a broad reach is beyond DEC’s limited delegated powers.” Id. at 198. Nevertheless, the court observed that “Section 401 of the Clean Water Act also serves as the conduit for the incorporation of relevant State water quality standards in this otherwise Federally filled universe.” Id. at 197. Riverkeeper cited both cases for the proposition that “although the federal government typically retains exclusive regulatory authority for hydroelectric projects, states may evaluate applicable state law within the context of a § 401 WQC proceeding.” Riverkeeper Brief at 12.

In response, Entergy countered that Department Staff’s arguments were directly contrary to the Supreme Court’s ruling in Train, supra. Entergy argued that the Court’s decision,

as well as the three decades of decisions addressing the scope of NRC field preemption since Train, make clear both that (i) the scope of NRC’s field preemption is over the AEA-regulated materials themselves, which includes any AEA-regulated materials contained in water inadvertently released from Indian Point’s spent nuclear fuel pool, and (ii) that Congress, in enacting the CWA, did not alter its exclusive grant of authority to the NRC to regulate such materials, but rather confirmed the NRC’s field preemption.

Entergy’s Reply Brief at 15. According to Entergy, “the scope of NRC’s field preemption is over the AEA-regulated materials themselves, which includes any AEA-regulated materials contained in water inadvertently released from Indian Point’s spent nuclear fuel pool.” Id.

Ruling: This threshold legal issue is not dispositive, because it is an open question whether a State would be preempted from denying a Section 401 WQC based upon leaks of

radiological materials from a facility such as Indian Point. Research has not revealed, and the parties have not cited any authority, establishing that proposition.

In its brief, Entergy cited to Northern States, *supra*, noting that the Eighth Circuit held that the federal government “has exclusive authority under the doctrine of pre-emption to regulate the construction and operation of nuclear power plants, which necessarily includes regulation of the levels of radioactive effluents discharged from the plant.” 447 F.2d 1143, 1154. Entergy also cited to another section of the opinion, in which the court stated that control over construction and operation “necessarily includes control over radioactive effluents discharged from the plant incident to its operation.” 447 F.2d 1143, 1149, fn. 6 (emphasis added).

The phrase “incident to its operation” does not appear to contemplate a situation where, as here, radioactive materials are leaking from a facility. In that same footnote, the court cited to testimony at the Joint Committee on Atomic Energy hearings on amendments to the statute, during which a representative of the Atomic Energy Commission⁸ stated that “[t]he discharge of effluent from the reactor involve [sic] many questions relating to the design and construction and operating procedures. We did not think it could be considered by itself and broken away from overall responsibility for the reactor operation.” *Id.* This statement also casts doubt on Entergy’s position that the denial of a Section 401 WQC for a plant leaking radioactive material is equivalent to regulating the level of effluent discharged from a nuclear power plant as part of normal operations. Moreover, in Northern States, it was undisputed that the plant was “acting in compliance with all federal laws and with the radiation safety requirements of the AEC.” *Id.* at 1145. That is not the case here, because the radioactive material that has escaped from the Facilities is not a regulated discharge, or a release incident to operation. Rather, the situation is one where radioactive material is leaking from the Facilities, and consequently, those leaks may adversely affect the State’s groundwater and surface waters, impairing the best usages of those waters.

The decision in Train, *supra*, also considered a situation where a State was attempting to regulate the discharge of effluents from two nuclear plants, concluding that “the AEA created a pervasive regulatory scheme, vesting exclusive authority to regulate the discharge of radioactive effluents from nuclear power plants . . . and preempting States from regulating such discharges.” 426 U.S. at 16. It cannot be said that this language addresses a situation where radioactive material is leaking from a nuclear power plant and entering groundwater. Moreover, the Court noted that the facilities in question were “operated in conformity with radioactive effluent standards imposed by the [Atomic Energy Commission] pursuant to the Atomic Energy Act.” 426 U.S. at 4. That is not the case here. The decision in Pacific Gas is not controlling, because in that case, the Supreme Court considered a preemption argument in the context of amendments to a California statute conditioning construction of a nuclear plant on findings by the State that adequate storage facilities and disposal mechanisms would be available for nuclear waste. 461 U.S. at 195.

Moreover, the Supreme Court’s decision in S.D. Warren, *supra*, which was decided after Northern States and Train, supports Department Staff and Riverkeeper’s position. Therefore, this issue now becomes a fact question as to whether such leaks have adversely affected

⁸ The AEC was the predecessor of the Nuclear Regulatory Commission.

groundwater and surface waters, sufficient to provide a basis for Department Staff's denial of the Section 401 WQC. The issue will be adjudicated as Entergy's factual issue No. 2.

Entergy's Threshold Legal Issue No. 3

In its third threshold legal issue, Entergy asserted that the release of AEA materials from an NRC-licensed facility is not subject to regulation under Section 401 of the Clean Water Act. Entergy pointed to the provisions of Section 401(a)(1), which refers to a "discharge" into navigable waters, and requires that any such discharge comply with the applicable provisions of Section 301, 302, 303, 306 and 307 of the Act. Department Staff's position was that, in accordance with CWA Section 401(d) and Section 608.9(a)(6) of 6 NYCRR, the Department is explicitly authorized to prohibit the ongoing discharge of deleterious materials, such as radioactive substances.

Entergy argued that the word "discharge" in Section 401(a) of the CWA refers to discharge of a pollutant. See 33 U.S.C. Section 1362(16); Section 1362(12) (defining "discharge of a pollutant" as "any addition of any pollutant to navigable waters from a point source"). Entergy went on to cite to Train, supra, in which the Supreme Court held that a "pollutant" does not include AEA materials. Entergy reasoned that, as a result, the CWA does not regulate AEA materials, under Section 401 or any other provision of the statute. As a result, Entergy took the position that Department Staff's denial based upon releases of radiological materials was contrary to law.

In response, Department Staff pointed out that the State's definition of "pollutant" in ECL Section 17-0105(17) and Section 750-1.2(a)(66) of 6 NYCRR is more stringent than the definition in the CWA, and includes radioactive materials. Department Staff took the position that it is explicitly authorized to prohibit the ongoing discharge of such substances from the Facilities into groundwater and the Hudson River, because such discharges are proscribed by law. See ECL Sections 3-0301(1)(i), 17-0807(1), 17-0105(17), and Section 750-1.3(a) of 6 NYCRR.

Department Staff noted that the definition of "waters" or "waters of the State" is also broader than the CWA's definition, and cited to the NRC's June 2010 *Groundwater Task Force Final Report* (the "Task Force Report"). In that document, the NRC noted that there had been challenges by States to the NRC's authority to protect the environment from inadvertent releases of radioactive materials, particularly where a State has been delegated authority by the United States Environmental Protection Agency for protection of groundwater. See Task Force Report, at 3. Department Staff pointed out that Section 401 of the CWA requires that a WQC assure compliance with any other appropriate requirement of State law, and reasoned that it was fully authorized in invoking the Department's more stringent standards to meet the CWA's objectives.

Riverkeeper asserted that Entergy's interpretation of the statute was mistaken, and contended that the inquiry under CWA Section 401 focuses on the "activity" to be undertaken by an applicant, "not merely the discharge which triggered the review." Riverkeeper Brief at 14. Riverkeeper cited to the decision in PUD No. 1, supra, in which the Supreme Court stated that

[i]f § 401 consisted solely of subsection (a), which refers to a state certification that a “discharge” will comply with certain provisions of the Act, petitioners’ assessment of the scope of the State’s certification authority would have considerable force. Section 401, however, also contains subsection (d), which expands the State’s authority to impose conditions on the certification of a project. Section 401(d) provides that any certification shall set forth “any effluent limitations and other limitations . . . necessary to assure that *any applicant*” will comply with various provisions of the Act and appropriate state law requirements. 33 U.S.C. § 1341(d) (emphasis added). The language of this subsection contradicts petitioners’ claim that the State may only impose water quality limitations specifically tied to a “discharge.” The text refers to the compliance of the applicant, not the discharge. Section 401(d) thus allows the State to impose “other limitations” on the project in general to assure compliance with various provisions of the Clean Water Act and with “any other appropriate requirement of State law.” . . . And § 401(d) is most reasonably read as authorizing additional conditions and limitations on the activity as a whole once the threshold condition, the existence of a discharge, is satisfied.

511 U.S. 700, at 711-712.

Riverkeeper went on to echo Department Staff’s argument that Section 401(d) incorporates “other appropriate requirements of State law” into the review of an application, noting that the statute requires that such requirements “shall become a condition on any Federal License or permit subject to the provisions of this section.” Citing to PUD No. 1, *supra*, Riverkeeper maintained that the United States Supreme Court had interpreted Section 401(d) as expanding State authority to impose water quality standards beyond those specifically enunciated in the CWA. According to Riverkeeper, Department Staff’s assessment of radioactive releases “involves consideration of whether such leaks are consistent with New York State designated use standards, which are unequivocally ‘water quality standards.’” Riverkeeper Reply Brief at 16. Riverkeeper went on to note that while SPDES permits do not address discharges to groundwater, “because of the broad framework of § 401, DEC Staff can properly consider in this proceeding whether radioactive leaks to groundwater are consistent with State standards.” *Id.* at 17. Riverkeeper concluded that federal preemption in this area is not absolute, and that Department Staff was appropriately applying State standards “in the unique context of a § 401 proceeding.” *Id.*

In its reply brief, Entergy argued that Department Staff omitted a portion of ECL Section 17-0807(1), noting that the provision prohibits the discharge of “any radiological, chemical or biological warfare agent or high-level radioactive waste” into the waters of the State. Entergy asserted that the water released from its spent nuclear fuel pool is not a radiological, chemical or

biological warfare agent, nor is it a high-level radioactive waste. Entergy went on to note that Section 17-0807(1) “is contained within the law that created the SPDES permit program,” and noted that Department Staff has taken the position that it cannot regulate AEA materials at NRC-licensed facilities under its SPDES permitting authority. According to Entergy, if this provision does not permit Department Staff to regulate such materials through a SPDES permit, “it cannot provide NYSDEC with authority to regulate AEA materials at NRC-regulated nuclear facilities through § 401.” Entergy Reply Brief at 25.

Ruling: Department Staff and Riverkeeper’s reasoning on this issue is persuasive. As noted, Entergy argues that a “leak” is equivalent to a regulated “discharge.” Entergy principally relies upon the decision in Train, supra, in which the Supreme Court examined whether nuclear waste materials, subject to regulation by the federal government, that had been discharged into the nation’s waterways were “pollutants” within the meaning of the Federal Water Pollution Control Act (33 U.S.C. Section 1251 et seq.). 426 U.S. 1, 3-4. The Court further refined the issue to examine “whether source, byproduct, and special nuclear materials are ‘pollutants’ within the meaning of the FWPCA.” 426 U.S. 1, 9. The Court concluded that “States are precluded from playing any role in several significant areas of regulation including the setting of limitations on radioactive discharges from nuclear power plants.” 426 U.S. 1, 16, n. 12.

Here, Department Staff does not seek to impose more stringent limitations on any liquid radioactive materials emanating from the Facilities. This is not the same situation the Court analyzed in Train, and moreover, in that decision, the Court noted that “[t]he absence of any room for a state role under the AEA in setting limits on radioactive discharges from nuclear power plants stands in sharp contrast to the scheme created by the FWPCA, which envisions the development of state permit programs, and allows the States to adopt effluent limitations more stringent than those required or established under the FWPCA.” 426 U.S. 1, 16 (citations omitted). This observation suggests that the Court’s scrutiny was directed to the discharge of effluent, rather than a circumstance where the focus is on leaks of radioactive substances. This reasoning is supported by the Court’s opinion in PUD No. 1, supra, which was decided after Train. Under the circumstances, it cannot be said that uncontrolled, unintentional releases of radioactive material to the environment are analogous to a permitted discharge of radioactive effluent.

Department Staff’s Denial Letter indicates that leaks of radioactive material from the Facilities may impair the State’s waters for their best usages. As discussed below in the context of Entergy’s factual issue number 2, this issue will be advanced to adjudication, in conjunction with similar issues proposed by Riverkeeper and Westchester. This threshold legal issue is not dispositive.

Entergy’s Threshold Legal Issue No. 4

The Denial Letter stated that cooling water withdrawals by Units 2 and 3 at Indian Point cause significant adverse environmental impacts to aquatic organisms, and that continued operation of the Facilities in once-through cooling mode for an additional twenty years would continue to exacerbate the adverse impacts associated with the Facilities’ CWISs. The Denial Letter concluded that such impacts impair the best usages of the waters of the Hudson River, and

that such withdrawals, and associated aquatic organism mortality, “are inconsistent with fish propagation and survival.” Denial Letter, at 11.

Entergy disputed Department Staff’s denial of the 401 WQC application based upon the adverse impacts associated with cooling water withdrawals by Units 2 and 3 at the Facilities. According to Entergy, Section 701 of 6 NYCRR “does not impose any requirement or limitation on cooling water withdrawals or cooling water intake structures with respect to compliance with the best usages of the Hudson River,” and consequently, the provisions of that regulation were not a proper basis for Department Staff’s denial. IC Exhibit 13, at 10.

Section 701.1 of 6 NYCRR provides that

[t]he discharge of sewage, industrial waste or other wastes shall not cause impairment of the best usages of the receiving water as specified by the water classifications at the location of discharge and at other locations that may be affected by such discharge.

Entergy argued that the regulation “is strictly limited to the impacts associated with the discharge of sewage, industrial waste or other wastes on the best usages of New York waters,” and that therefore, Department Staff’s denial was contrary to law. *Id.* at 11. Entergy argued that the Department cannot deny an application based on activities which are not discharges, and that there was, therefore, no basis for such a denial due to alleged impacts of water withdrawals or CWISs.

In response, Department Staff characterized Entergy’s interpretation of the regulation as “unnecessarily narrow and restrictive,” and relied upon the regulation’s reference to “other locations that may be affected by such discharge” to argue that the Facilities’ thermal discharge “stems from, and is connected with, the operation of the plant and CWISs for the facilities.” Department Staff Brief at 18-19. Department Staff pointed out that waste heat, or thermal discharges, from the operation of the Facilities constitute “industrial waste” within the meaning of Section 750-1.2(a)(44) of 6 NYCRR.⁹ Department Staff went on to note that the Hudson River is classified as an SB saline surface water, whose best usages are primary and secondary contact recreation and fishing, and which “shall be suitable for fish, shellfish and wildlife propagation and survival.” Department Staff Brief at 19 (citing Section 864.6 and 701.11 of 6 NYCRR). Department Staff then cited to Section 703.2 of 6 NYCRR, which provides narrative water quality standards for water classifications, including standards for thermal discharges.

According to Department Staff, “[t]here is no question, and Entergy cannot seriously dispute, that Indian Point’s thermal discharge stems from, and is connected with, the operation of the plant and CWISs for the facilities.” Department Staff Brief at 19. Consequently, Department

⁹ Section 750-1.2(a)(44) defines “industrial waste” to mean “any liquid, gaseous, solid or waste substance or a combination thereof resulting from any process of industry, manufacturing, trade, or business or from the development or recovery of any natural resources, which may cause or might reasonably be expected to cause pollution of the waters of the State in contravention of the standards adopted as provided herein.”

Staff reasoned that the location, design, construction and capacity of the Facilities' CWISs "are regulated in the context of thermal discharges because they are inextricably linked and connected with one another." Id. at 19-20.

Department Staff went on to assert that it is well established that thermal discharges "can and in this case do cause adverse environmental impact to aquatic organisms and fish." Department Staff Brief at 20 (citations omitted). Department Staff contended that such discharges are regulated pursuant to Parts 701, 703 and 704 of 6 NYCRR. In addition, Department Staff noted that the Hudson River, up to the federal dam in Troy, has been designated as Endangered Fish Habitat ("EFH"), and argued that the propagation and survival of various species, all of which have been affected by the Facilities' operations, as well as preservation of habitat and protection from adverse impacts due to thermal discharges, is essential. Department Staff concluded that because of the lack of a comprehensive thermal demonstration study, Entergy could not demonstrate that thermal discharges from the Facilities complied with applicable standards and criteria.

Riverkeeper also maintained that Entergy's reading of the regulations was improper, asserting that Section 701.1 "does not define the applicability of Part 701 overall, but rather sets forth 'General conditions applying to all water classifications.'" Riverkeeper Brief at 15. Riverkeeper argued that Entergy's interpretation "would render meaningless other DEC regulations which set forth criteria based on the water classifications of part 701." Id. As examples, Riverkeeper offered the narrative criteria for thermal discharges and flow, set forth in Section 703.2 of 6 NYCRR. Noting that the narrative standard for both requires that there be no impairment of the waters best usages, Riverkeeper pointed out, in contrast to Department Staff's argument, that thermal discharges and flow "are clearly not 'sewage, industrial wastes or other wastes.'" Id. at 16.

Riverkeeper went on to argue that because the CWA requires that states adopt standards consisting of designated uses and water quality criteria, and did not qualify the applicability of those standards, the State's water quality standards cannot be as limited as Entergy contended. Riverkeeper emphasized that the aim of setting the standards was to protect public health and welfare, enhance water quality, and take into consideration the use and value of the waters as a public water supply, and for propagation of fish and wildlife, as well as recreational, agricultural, and industrial purposes. Riverkeeper Brief at 16 (citing CWA Section 303(c)(2)(A)). Riverkeeper reiterated that it is the activity, not merely the discharge, which is regulated pursuant to CWA Section 410, including an examination of whether the activity is consistent with the best usages of the waters to be affected.

In its reply brief, Riverkeeper disputed Entergy's arguments, citing to PUD No. 1, supra, as well as the EPA Handbook, for the proposition that Section 401 expands the State's authority because it refers to the compliance of the applicant, not the discharge. Riverkeeper quoted from the EPA Handbook's statement that "states and tribes consider whether the activity leading to the discharge" will be in compliance. EPA Handbook at 11. Riverkeeper went on to cite to the Second Circuit's decision in Islander East Pipeline Co. v. McCarthy, 525 F.3d 141 (2d Cir. 2008), cert. denied, 129 S. Ct. 630 (2008). In that case, the court denied a petition for review of an agency's denial of a Section 401 WQC because of the adverse impacts to be anticipated from

a proposed pipeline project. In evaluating the State of Connecticut’s denial, the court noted that various activities associated with the pipeline project would have a negative effect on shellfish habitat, as well as the designated use of the waters for shellfishing purposes. *Id.* at 151-152. The court concluded that the agency did not act arbitrarily or capriciously, and that this basis for denial was appropriate. *Id.* at 158. Riverkeeper pointed out that the denial was upheld, despite the lack of any connection with a “discharge.” Riverkeeper also relied on *S.D. Warren*, *supra*, observing that the Supreme Court found that the operation of a dam “can cause changes in the movement, flow and circulation of a river,” and that such changes “fall within a State’s legitimate legislative business, and the Clean Water Act provides for a system that respects the States’ concerns.” 547 U.S. 376, 386.

Entergy countered that the plain language of Section 401(a) of the CWA authorizes States to regulate “discharges.” Entergy maintained that Department Staff cannot base its denial on the operation of the Facilities’ CWISs. Rather, according to Entergy, “[t]o the extent that NYSDEC has any authority under § 401 of the CWA to regulate Indian Point’s CWIS, such authority can only come from § 401(d), which solely authorizes a state to place *conditions* on a WQC to ensure compliance with state WQS.” Entergy Reply Brief at 28 (emphasis in original). Entergy maintained that, as a result, Department Staff’s denial was in excess of its authority.

Ruling: This threshold issue is not dispositive. An inquiry pursuant to Section 401 of the CWA cannot be limited strictly to discharges of sewage, industrial wastes or other waste. The statute regulates activities which may result in a discharge, which, in this case, would include water withdrawals, and Entergy’s interpretation is therefore unduly narrow. The inquiry in a Section 401 WQC proceeding must take into account whether that activity is consistent with the best usages of the affected waters.

Moreover, as the EPA Handbook indicates, “[i]t is important to note that § 401 certification is triggered by the potential for a discharge; an actual discharge is not required. . . . In addition, the potential discharge does not need to involve an addition of pollutants.” EPA Handbook at 4 (emphasis in original). This statement further undercuts Entergy’s attempt to limit the inquiry to sewage, industrial wastes or other waste. Moreover, the recent case law cited by Riverkeeper, including *Islander East*, *supra*, and *AES Sparrows Point LNG, LLC v. Wilson*, 589 F.3d 721 (8th Cir. 2009), reflects a judicial recognition of the State’s authority to regulate in this area. In *AES Sparrows Point*, the Eighth Circuit considered a challenge to the Maryland Department of the Environment’s determination to deny a Section 401 WQC for a proposed large-scale liquefied natural gas marine import terminal and pipeline project. The court rejected petitioner’s argument that the State lacked authority to deny the application based upon the effects of proposed deep-channel dredging on dissolved oxygen levels, and found that the State’s denial was not arbitrary and capricious. 589 F.3d at 732. In light of these decisions, Entergy’s argument that the Department may not deny the application, but only impose conditions pursuant to Section 401(d), is not compelling.

This issue will be adjudicated in the context of Entergy’s factual issue No. 1, and Riverkeeper Issue No. 4. Specifically, the issue to be addressed is whether, given the extent and scope of the Department’s authority under Section 701.1 of 6 NYCRR, Department Staff properly denied the WQC application based upon thermal considerations.

Entergy's Threshold Legal Issue No. 5

In its Hearing Request, Entergy took the position that the Department has no authority under Section 401(a) of the CWA to deny an application for a water quality certification based upon the taking of endangered species pursuant to ECL Article 11. Entergy argued that Article 11 is unrelated to the State's water quality standards, and that Department Staff's position has not been adopted by the courts in New York.

Entergy disputed the Denial Letter's determination that because the operation of the Facilities results in the impingement and entrainment of shortnose and Atlantic sturgeon, such operation is a "taking"¹⁰ within the meaning of ECL Section 11-0535. The Denial Letter stated that "[t]he taking of shortnose sturgeon by the operation of the Indian Point facilities is unlawful and also impairs the best usage of the waters of the Hudson River for propagation and survival of sturgeon. Accordingly, the Department has determined that Units 2 and 3 are not in compliance with ECL Article 11 and, therefore, in accordance with 6 NYCRR § 608.9(a)(6), must deny the § 401 WQC application." Denial Letter, at 23.

Section 11-0535(2) of the ECL prohibits the taking of any endangered or threatened species of fish, except pursuant to a license or permit issued by the Department. It is undisputed that the shortnose sturgeon is listed as an endangered species in New York State, pursuant to Section 182.6(a) of 6 NYCRR. This species is found in the Hudson River in the vicinity of the Facilities. The Atlantic sturgeon is protected pursuant to federal law, and is a candidate for listing as threatened or endangered. Atlantic sturgeon also inhabit the waters of the Hudson River where the Facilities are located.

According to Department Staff, "[t]he historical biological data for the Indian Point facilities confirms that the operation of Units 2 and 3 harm ("take") both shortnose sturgeon and Atlantic sturgeon by impinging them on the CWISs screens or entraining them in the CWISs." Denial Letter at 22. Acknowledging that sampling has not taken place for this species over the past twenty years, and therefore no recent estimates as to the number of sturgeon impinged or entrained are available, Department Staff stated that "during limited sampling conducted at Indian Point from 1975 to 1990, numbers of both shortnose sturgeon and Atlantic sturgeon were impinged by Units 2 and 3." *Id.* Department Staff contended that it is reasonable to conclude that operation of the Facilities continue "to cause mortality to the sturgeon species in the Hudson River," and that this unlawful taking impairs the best usage of the Hudson River for propagation and survival of sturgeon. *Id.* Department Staff took the position that Section 608.9(a)(6) of 6 NYCRR requires an applicant to demonstrate compliance with "all State statutes, regulations and criteria otherwise applicable to such activities." Denial Letter at 22.

Entergy maintained that Department Staff's denial on the basis of non-compliance with ECL Article 11 was unfounded, because "neither § 401, nor 6 NYCRR § 608.9(a)(6)" supports such a denial. Hearing Request at 11. Entergy pointed out that Article 11 is not among the sections enumerated in Section 401 with which an applicant must comply. Moreover, Entergy

¹⁰ The term "taking" is defined in ECL Section 11-0103(13) to include "killing, capturing, trapping, snaring and netting fish . . . and all lesser acts such a [sic] disturbing, harrying or worrying."

urged that Section 608.9(a)(6) of 6 NYCRR must be read in its entirety, noting that the regulation states that

[t]he applicant must demonstrate compliance with sections 301-303, 306 and 307 of the Federal Water Pollution Control Act, as implemented by the following provisions:

- (1) effluent limitations and water quality-related effluent limitations set forth in section 754.1 of this Title;
- (2) water quality standards and thermal discharge criteria set forth in Parts 701, 702, 703 and 704 of this Title;
- (3) standards of performance for new sources set forth in section 754.1 of this Title;
- (4) effluent limitations, effluent prohibitions and pretreatment standards set forth in section 754.1 of this Title;
- (5) prohibited discharges set forth in section 751.2 of this Title; and
- (6) State statutes, regulations and criteria otherwise applicable to such activities.

Entergy argued that this language compels the conclusion that the regulation requires that an applicant demonstrate compliance with New York statutes, regulations and criteria that implement §§ 301-303, 306, and 307 of the Clean Water Act, not regulatory requirements found in separate State statutes, such as ECL Article 11.

Entergy went on to maintain that Department Staff's reference to Section 701.11 of 6 NYCRR in connection with impingement and entrainment was contrary to law, asserting that Part 701 is strictly limited to impacts on the best usages of the State's waters associated with the discharge of sewage, industrial wastes or other wastes.

Department Staff noted that its concern over sturgeon at the Facilities is shared by the National Marine Fisheries Service ("NMFS"), and that in the context of the NRC relicensing proceeding, NMFS commented that the biological assessment was deficient. Specifically, NMFS urged that if NRC was unable to require Entergy to undertake thermal modeling, the best available data should be used to estimate shortnose sturgeon exposure to higher temperatures. Department Staff also cited to the EPA Handbook, which states that

[w]ater quality certifications under §401 reflect not only that the licensed or permitted activity and discharge will be consistent with the specific CWA provisions identified in sections 401(a) and (d), but also with "any other appropriate requirements of State [and Tribal] law." Some State regulations explicitly identify considerations relevant for §401 certification, while others do not. . . . Another relevant consideration when determining if granting 401

certification would be appropriate is the existence of state or tribal laws protecting threatened and endangered species, particularly where the species plays a role in maintaining water quality or if their presence is an aspect of a designated use. Also relevant may be other state and tribal wildlife laws addressing habitat characteristics necessary for species identified in a waterbody's designated use.

EPA Handbook at 21 (Section III.C.4).

Entergy contended that endangered species are afforded appropriate protection under Article 11, and noted further that, pursuant to the Department's cooperative agreement with the National Marine Fisheries Service ("NMFS"), the Department has deferred to NMFS's permitting process with respect to such species, including the shortnose sturgeon. According to Entergy, in light of these provisions, Department Staff's attempts to regulate under Section 401 were misplaced.

With respect to this threshold legal issue, Riverkeeper offered arguments similar to those it advanced in the context of the previous legal issues. Specifically, Riverkeeper maintained that CWA Section 401 provides for a broad analysis of the activity to be undertaken, in order to assure compliance with NYWQS and any appropriate requirement of State law. Riverkeeper argued that the EPA has explicitly acknowledged that such requirements include the protection of endangered species, referring to the section of the EPA Handbook relied upon by Department Staff. Riverkeeper went on to point out that shortnose and Atlantic sturgeon "are an aspect of the designated use of the Hudson River as suitable for fish propagation and survival, and this is also part of the water quality analysis." Riverkeeper Brief at 18.

In addition, this petitioner argued that "[i]n light of the undeniable impact that the operation of Indian Point has had, and likely will continue to have, on endangered and threatened species in the Hudson River," "it would be absurd to conclude that DEC Staff's assessment of compliance with New York's endangered species law is 'wholly unrelated' to water quality of the River." Riverkeeper Reply Brief at 18. Riverkeeper went on to note that the National Marine Fisheries Service had proposed that the Atlantic sturgeon be listed on the Endangered Species List. Riverkeeper concluded that Department Staff's denial on this basis was appropriate.

Ruling: This issue will be advanced to adjudication as a fact issue (see discussion of Entergy's Factual Issue No. 4, infra). The "otherwise applicable" language in Section 608.9(a)(6) of 6 NYCRR, as well Section 401's provision for consideration of any appropriate requirement of State law, supports the conclusion that impacts on endangered and threatened species may be taken into account in evaluating an application for a water quality certification. Moreover, the guidance offered in the EPA Handbook makes specific reference to State laws protecting threatened or endangered species. Under the circumstances, Entergy's arguments on this threshold legal issue are unpersuasive, and the issue cannot be decided in Entergy's favor.

Entergy's Threshold Legal Issue No. 6

Entergy argued that, as a threshold matter, Department Staff had not satisfied SEQRA in its review of the application. In its Hearing Request, Entergy asserted that the action, which was determined by Department Staff to be a Type II action pursuant to SEQRA, instead warranted further environmental review. Entergy maintained that, absent express deferral to the pending SEQRA analysis in the SPDES proceeding, Department Staff had not established compliance with the statute.

In response, Department Staff noted that the application for a Section 401 WQC was subsequently identified as a Type I action pursuant to SEQRA, “based on the fact that the proposed activity, namely, the relicensing of the Indian Point nuclear facilities (*i.e.*, “project”) as currently constructed and as proposed to operate in the future, will ‘use . . . surface water in excess of 2,000,000 gallons per day.’” Department Staff Brief at 27 (citations omitted); see Section 617.4(b)(6)(ii) of 6 NYCRR. As noted previously, the current operation of Indian Point Units 2 and 3 requires approximately 2.5 billion gallons of Hudson River water per day. Department Staff took the position that because the Section 401 WQC was only one part of the relicensing application, subject to a draft and final EIS to be prepared by the NRC pursuant to NEPA, Section 617.15(a) is applicable to the proposed action. That section provides that

[w]hen a draft and final EIS for an action has been duly prepared under the National Environmental Policy Act of 1969, an agency has no obligation to prepare an additional EIS under this Part, provided that the Federal EIS is sufficient to make findings under section 617.11 of this Part. However, except in the case of Type II actions listed in section 617.5 of this Part, no involved agency may undertake, fund or approve the action until the Federal final EIS has been completed and the involved agency has made the findings prescribed in section 617.11 of this Part.

In light of this provision, Department Staff contended that as long as the NRC's FSEIS is sufficient for the Department to make findings pursuant to Section 617.11, “which, based upon staff's review of the draft and supplemental versions of NRC's EIS issued to date, staff has reason to believe that DEC can make such findings,” SEQRA's requirements will have been satisfied. Department Staff Brief at 28. Department Staff noted that because of the timing of the application and the one-year statutory period of review pursuant to the CWA, “strict compliance with 6 NYCRR § 617.5(a) was not possible due to the persistent delays occasioned by NRC's completion of the FSEIS.” Department Staff Brief at 28, fn. 17.¹¹ Moreover, citing to Matter of Niagara Mohawk, supra, Department Staff noted that the Court of Appeals rejected SEQRA as one of the State statutes that the Department might take into consideration in evaluating a Section 401 WQC application. 82 N.Y.2d at 198.

Riverkeeper offered similar arguments, and asserted that an assessment of the SEQRA impacts must be distinct from the BTA inquiry. Riverkeeper took the position that SEQRA

¹¹ As noted above, that document was issued on December 3, 2010.

issues would be beyond the scope of the instant proceeding, and that an independent assessment of such issues was unnecessary in light of the preparation of the federal FSEIS. According to this petitioner, the procedures that the NRC followed pursuant to NEPA were sufficient to satisfy Department Staff's SEQRA obligations in the Section 401 WQC proceeding. Riverkeeper concluded that "the discrete inquiry required under § 401 involves whether the state can certify that applicable law has been complied with, and does not require an assessment of any and all environmental impacts that are unrelated to that inquiry, such as the potential impacts of a power plant shutdown which could occur following the denial of a § 401 WQC." Riverkeeper Brief at 20.

In its reply brief, Entergy pointed out that Department Staff determined that the action on the application was Type I, "necessitating SEQRA review that all agree has not yet been performed." Entergy Reply Brief at 2, fn. 2. Entergy reserved its rights to dispute the Department's compliance, "as NYSDEC makes and documents further determinations under SEQRA." *Id.*

Ruling: Department Staff has indicated that it believes that sufficient SEQRA findings can be made based upon the FSEIS, but this has not yet been determined.

As discussed below, a number of petitioners proposed SEQRA issues for adjudication. The NRC's FSEIS was issued on December 3, 2010, and as indicated above, the parties will have an opportunity to review that document and comment on the need for any further supplementation. In light of this, a determination as to Department Staff's compliance with SEQRA would be premature, and this threshold legal issue is not dispositive.

Entergy's Factual Issue No. 1

The Denial Letter stated that "the Department has determined to deny Entergy's application for a WQC because the supporting materials do not currently demonstrate compliance with the referenced thermal standards and criteria." Denial Letter at 13. The Denial Letter went on to indicate that Department Staff could reconsider its position if Entergy provided a verified thermal model to demonstrate compliance. Department Staff contended that noncompliant thermal discharges into the Hudson River, a Class SB water, "also impair the water for its best usage particularly where, as here, primary and secondary contact recreation is concerned." Denial Letter at 11. Entergy requested clarification on this point, and asserted that to the extent Department Staff "actually denied the Application on this basis," the denial was arbitrary, capricious, and not in accordance with applicable law. Hearing Request at 13.

Entergy went on to maintain that the materials it had provided, and supplemental information submitted, provide reasonable assurances that the Facilities will comply with applicable thermal discharge criteria during the renewed license term. In addition, Entergy argued that Department Staff had not provided any rationale for its contention that thermal discharges impaired the water for its best usages, or any evidence that Department Staff had performed a thermal analysis or had the requisite expertise to evaluate the Facilities' thermal discharge. Entergy went on to note that it had provided empirical (in-River) thermistor monitoring and a fully calibrated, verified three-dimensional thermal model that demonstrated

compliance with applicable thermal criteria, including under worst-case conditions. Entergy requested adjudication of this issue.

Department Staff asserted that based upon information Entergy submitted with its application, “and upon Entergy’s failure to submit thermal information that was specifically requested by DEC to support the 401 WQC application during the applicable one-year review period (April 6, 2009 to April 2, 2010),” Entergy failed to demonstrate compliance with applicable thermal discharge regulations, standards or criteria. Department Staff Brief at 29. Department Staff disputed Entergy’s contention that the denial was unlawful, noting that because thermal sampling had not been undertaken at the Facilities since the 1970s, “a current triaxial thermal study of the facilities’ thermal discharge to the Hudson River was necessary for DEC to make all of the necessary findings or determinations required by law.” *Id.* at 30 (emphasis in original). Department Staff stated that, in particular, Entergy’s failure to run a thermal model during critical conditions, such as all plants at capacity) and with in-stream data gathered during the July to September critical periods, Entergy could not demonstrate compliance with thermal standards and criteria, and therefore, Department Staff was authorized to deny the application on this basis.

Ruling: Pursuant to Section 624.4(c)(1)(ii) of 6 NYCRR, this issue relates to a matter contested by the Applicant, which was cited by Department Staff as a basis for denial. The issue will be advanced to adjudication. The issue to be adjudicated is whether Department Staff properly denied the WQC application based upon thermal considerations.

Nevertheless, the issue may be resolved without a hearing, if Entergy provides the information requested by Department Staff, and Department Staff finds that information sufficient to satisfy the requirements of Part 704 of 6 NYCRR. *Tr.* at 122-124. As discussed below, both Riverkeeper, in its Issue No. 4, and Westchester, in its Issue No. 7, raise concerns with respect to the impact of thermal discharges on the best usages of the Hudson River. These issues may not require adjudication, depending upon the outcome of any resolution reached by Entergy and Department Staff.

Entergy’s Factual Issue No. 2

As discussed above in the context of Entergy’s second threshold legal issue, Department Staff’s Denial Letter stated that releases of radiological materials from the Facilities “could impair,” or “have the potential to impair,” the best usages of the Class SB waters of the Hudson River. Denial Letter, at 10; *see* Section 701.11 of 6 NYCRR (“The best usages of Class SB waters are primary and secondary contact recreation and fishing. These waters shall be suitable for fish, shellfish and wildlife propagation and survival”).

Entergy contended that Department Staff’s basis for the denial was entirely speculative, and therefore arbitrary, capricious, and not in accordance with applicable law. Entergy pointed out that the phrase “deleterious substances” appears in Section 703.2 of 6 NYCRR as a component of a narrative water quality standard. Specifically, for Class SB waters such as the Hudson River, “taste-, color- and odor-producing, toxic and other deleterious substances” are prohibited “in amounts that will adversely affect the taste, color or odor thereof, or impair the

waters for their best usages.” Entergy noted that the Denial Letter states only that releases of radiological materials “could” or “have the potential” to impair the best usages. According to Entergy, Department Staff failed to apply the appropriate legal standard, and went on to assert that the application and supplemental materials provided reasonable assurances of compliance with the narrative water quality standard.

In addition, Entergy observed that while the Denial Letter noted Entergy’s position that assessments of the ongoing radiological leaks from the Facilities did not indicate potential adverse environmental or health risks, the Denial Letter did not provide any contrary findings. In further support of its argument, Entergy cited an NRC inspection report from May of 2008, which concluded that “[o]ur inspection determined that public health and safety has not been, nor is likely to be, adversely affected, and the dose consequence to the public that can be attributed to current on-site conditions associated with groundwater contamination is negligible.”¹²

Entergy went on to maintain that both DEC and the New York State Department of Health “drew the same conclusions relative to the lack of any impact to fish or to people after the completion of an extensive independent radiological assessment of fish in the river in 2007.” Hearing Request at 15. Entergy quoted the conclusion reached by the agencies in a report entitled *Measurement of Strontium-90 (90Sr) and other Radionuclides in Edible Tissues and Bone/Carapace of Fish and Blue Crabs from the Lower Hudson River, New York*.¹³ The report indicates that the findings “reinforce[] the previous determination made by the DOH that there is no public health concern, relative to Sr-90, related to eating fish caught in the Hudson River,” and went on to observe that levels of radionuclides, including Strontium-90, “were two to five orders of magnitude lower than criteria established for protection of freshwater ecosystems.” Entergy argued that this basis for denial should, therefore, be adjudicated.

In response, Department Staff stated that the denial was based upon information contained in the materials prepared and submitted by Entergy in support of the application for a Section 401 WQC. Department Staff cited to a January 2008 report entitled *Hydrogeological Site Investigation Report for Indian Point Energy Center*, prepared by GZA GeoEnvironmental, Inc., which “acknowledges and confirms that radioactive materials (including tritium, strontium-90, cesium, and nickel) from spent fuel pools, pipes, tanks and other systems, structures and components at Indian Point have reached the Hudson River via groundwater flow from the site and continue to do so.” Department Staff Brief at 31. Department Staff contended that some of these leaks have been ongoing since at least 1994, and also cited to the NRC’s *Groundwater Task Force Final Report* from June of 2010. Department Staff concluded that these releases are not speculative, and noted that Entergy had not been able to abate or prevent these releases. Department Staff asserted that, as a result, the denial was authorized.

¹² Indian Point Nuclear Generating Units 1 & 2 – NRC Inspection Report Nos. 05000003/2007010 and 05000247/2007010.

¹³ See <http://www.dec.ny.gov/chemical/61387.html>.

Ruling: Pursuant to Section 624.4(c)(1)(ii) of 6 NYCRR, this issue relates to a matter contested by the Applicant, which was cited by Department Staff as a basis for denial. The issue will, therefore, be advanced to adjudication.

The issue to be adjudicated is whether Department Staff properly denied the WQC application based upon radiological considerations. As discussed below, both Riverkeeper and Westchester raised issues with respect to this topic, and those issues will be considered as part of the adjudication of this issue.

Entergy's Factual Issue No. 3

The Denial Letter indicated that compliance with the 1987 SAPA-extended SPDES permit

does not, and cannot, demonstrate compliance with the BTA requirement of 6 NYCRR § 704.5. That 5-year SPDES permit is now nearly 25 years old and, because of the provisions of the now-expired HRSA, does not mandate the installation of any technology to reduce the adverse impact of entrainment from the operation of the CWISs for Units 2 and 3. Thus, the provisions of, and continued operation under, the 1987 SPDES permit for Indian Point do not comply with existing legal requirements.

Denial Letter at 14. Entergy maintained that “the relevant question for purposes of Entergy’s Application is not whether the current SPDES permit comports with § 704.5, but whether the renewed SPDES permit (and any subsequent renewals) with which Entergy must comply during the License Renewal Period provides reasonable assurances of compliance” with that provision. Hearing Request at 16. Entergy noted that this was the subject of the ongoing SPDES proceeding, and pointed out that it will abide by the outcome of that proceeding and any subsequent judicial appeals, “because that outcome will be reflected in the renewed SPDES Permit with which Entergy must comply in order to operate the Stations.” *Id.* Entergy concluded that, as a result, compliance with Section 704.5 was reasonably assured, and argued that Department Staff’s denial on this basis was arbitrary, capricious, and not in accordance with law.

Department Staff countered that it is now established that Section 704.5 is a water quality standard relating to thermal discharges associated with CWISs for industrial cooling purposes, and concluded that “any State law, regulation or standard, including but not limited to water quality standards, may be employed by DEC in meeting the objectives of the CWA.” Department Staff Brief at 32 (citing Matter of Entergy Nuclear Indian Point 2, LLC v. New York State Dept. of Env’tl. Conservation, 23 A.D.3d 811 (3rd Dept. 2005), lv. dismissed in part and denied in part, 6 N.Y.3d 802 (2006) (noting that State legislature authorized the Department to promulgate regulations to comply with CWA)).

Department Staff noted that while Entergy had employed certain measures in an effort to reduce impingement mortality, the Facilities have not yet installed any technology “to minimize the adverse environmental impact of entrainment caused by the CWISs.” Department Staff Brief at 33. Department Staff concluded that “it is now well established that operation of Indian Point’s CWISs, as currently licensed and operated, results in the entrainment mortality of approximately one billion aquatic organisms each year.” *Id.* (citations omitted).

Because Entergy’s application and supplemental materials sought approval for continued operation of Units 2 and 3 in once-through cooling mode, as those units have operated for the past 35 years, and because such operation does not minimize the adverse environmental impacts associated with entrainment, Department Staff took the position that the Facilities do not meet the requirements of Section 704.5 of 6 NYCRR.

Noting that Entergy had made a number of submissions in support of its position that the Facilities comply, and will comply in the future, with that regulation, Department Staff asserted that none of Entergy’s proposals demonstrated compliance, and that therefore, Department Staff’s denial of the application was appropriate. First, Department Staff took issue with Entergy’s position, discussed above, that compliance with its SPDES permit would provide reasonable assurances of future compliance with applicable NYSWQS. Second, Department Staff disputed Entergy’s contention, also discussed above, that the existing 1982 WQC was sufficient to provide such assurances. Third, Department Staff argued that closed-cycle cooling is an available technology at Indian Point, and finally, that cylindrical wedge wire screens were not a reasonable alternative intake system. In that regard, Department Staff pointed out that the use of cylindrical wedge wire screens at the Facilities would not address radiological releases, thermal discharges to the waters of the State, or the unauthorized “taking” of endangered species. As a result, Department Staff contended that its denial on the basis of noncompliance with Section 704.5 was appropriate.

Ruling: Pursuant to Section 624.4(c)(1)(ii) of 6 NYCRR, this issue relates to a matter contested by the Applicant, which was cited by Department Staff as a basis for denial. This issue will, therefore, be adjudicated. The issue to be adjudicated is whether Department Staff properly denied the WQC application based upon non-compliance with Section 704.5 of 6 NYCRR. This issue has been raised by other parties, as indicated on the attached issues list.

In the related SPDES permit proceeding, a determination as to the best technology available to minimize the adverse environmental impacts at the Facilities must be made, and both Department Staff and Riverkeeper are finalizing their BTA proposals in that proceeding. Accordingly, adjudication of this issue will be deferred until discovery is completed with respect to those proposals in the SPDES proceeding.

Entergy’s Factual Issue No. 4

Entergy disputed the Denial Letter’s determination that because the operation of the Facilities results in the impingement and entrainment of shortnose and Atlantic sturgeon, such

operation is a “taking”¹⁴ within the meaning of ECL Section 11-0535. The Denial Letter stated that “[t]he taking of shortnose sturgeon by the operation of the Indian Point facilities is unlawful and also impairs the best usage of the waters of the Hudson River for propagation and survival of sturgeon. Accordingly, the Department has determined that Units 2 and 3 are not in compliance with ECL Article 11 and, therefore, in accordance with 6 NYCRR § 608.9(a)(6), must deny the § 401 WQC application.” Denial Letter, at 23. Entergy took the position that this basis for the denial was arbitrary, capricious, and not in accordance with law.

Section 11-0535(2) of the ECL prohibits the taking of any endangered or threatened species of fish, except pursuant to a license or permit issued by the Department. It is undisputed that the shortnose sturgeon is listed as an endangered species in New York State, pursuant to Section 182.6(a) of 6 NYCRR. This species is found in the Hudson River in the vicinity of the Facilities. The Atlantic sturgeon is protected pursuant to federal law, and is a candidate for listing as threatened or endangered. Atlantic sturgeon inhabit the waters of the Hudson River where the Facilities are located.

According to Department Staff, “[t]he historical biological data for the Indian Point facilities confirms that the operation of Units 2 and 3 harm (“take”) both shortnose sturgeon and Atlantic sturgeon by impinging them on the CWISs screens or entraining them in the CWISs.” Denial Letter at 22. Acknowledging that sampling has not taken place for this species over the past twenty years, and therefore no recent estimates as to the number of sturgeon impinged or entrained are available, Department Staff stated that “during limited sampling conducted at Indian Point from 1975 to 1990, numbers of both shortnose sturgeon and Atlantic sturgeon were impinged by Units 2 and 3.” *Id.* Department Staff contended that it is reasonable to conclude that operation of the Facilities continue “to cause mortality to the sturgeon species in the Hudson River,” and that this unlawful taking impairs the best usage of the Hudson River for propagation and survival of sturgeon. *Id.*

In its Hearing Request, Entergy argued that “[e]ven if there were a requirement to demonstrate that impingement and entrainment of sturgeon at Indian Point does not impair the waters of the Hudson River for sturgeon propagation and survival, the empirical evidence confirms that any such impingement and entrainment – to the extent it occurs at all – does not impair sturgeon propagation and survival.” Hearing Request at 19. To support this assertion, Entergy cited to a report entitled “Response to Biological Aspects of NYSDEC 401 Certification Letter,” a report prepared for Entergy by Drs. Barnhouse, Heimbuch, Mattson, and Young. Hearing Request, Exhibit D (IC Exhibit 13D). Entergy concluded that this basis for denial was improper.

In response, Department Staff referred to its arguments in connection with Entergy’s fifth threshold legal issue, discussed above.

Ruling: This issue will be advanced to adjudication. Pursuant to Section 624.4(c)(1)(ii), the issue relates to a matter contested by the Applicant, which was cited by Department Staff as a basis for denial. The issue to be adjudicated is whether Department Staff properly denied the

¹⁴ The term “taking” is defined in ECL Section 11-0103(13) to include “killing, capturing, trapping, snaring and netting fish . . . and all lesser acts such a [sic] disturbing, harrying or worrying.”

WQC application based upon impacts to endangered species (shortnose sturgeon) and threatened species (Atlantic sturgeon), including impairment of best usages of the Hudson River for fish propagation and suitable fish habitat for these species.

Riverkeeper's Petition

In its petition, Riverkeeper identified six issues that it proposed for adjudication, as follows:

1. Extended operation of Indian Point with a once-through cooling water intake structure, as currently operated or with installation of cylindrical wedge wire screens, will violate New York State's water quality standard that cooling water systems reflect the best technology available for minimizing adverse environmental impacts.
2. Extended operation of Indian Point with a once-through cooling water intake structure, as currently operated or with installation of cylindrical wedge wire screens, will be inconsistent with the designated best use of the Hudson River as suitable fish habitat.
3. Extended operation of Indian Point with a once-through cooling water intake structure, as currently operated or with installation of cylindrical wedge wire screens, will be inconsistent with the designated best use of the Hudson River for recreational fishing purposes.
4. Extended operation of Indian Point with a once-through cooling water intake structure, as currently operated or with installation of cylindrical wedge wire screens, will be inconsistent with New York State's narrative standard that all thermal discharges support healthy fish habitat.
5. Extended operation of Indian Point with a once-through cooling water intake structure, as currently operated or with installation of cylindrical wedge wire screens, will be inconsistent with the designated best use of the Hudson River as suitable fish habitat for endangered species.
- 6A. Radioactive leaks at Indian Point will cause inconsistency with New York State's water quality standard designating best use of groundwater for potable purposes during a period of extended operation.
- 6B. Radioactive discharges from Indian Point will cause inconsistency with New York State's water quality standard designating the best use of the Hudson River for primary contact recreational purposes.

There was no objection to Riverkeeper's environmental interest in the proceeding by any participant, but Entergy objected to issues 6A and 6B, for the reasons discussed above in connection with Entergy's threshold legal issues 2 and 3, and factual issue 3.

Department Staff took the position that all of Riverkeeper's proposed issues were substantive and significant, and should proceed to adjudication. No other participant objected to the issues proposed in Riverkeeper's petition.

Ruling: Riverkeeper's petition for full party status is granted. As noted above, there was no objection by any participant to Issues 1 through 5, and those issues will be adjudicated. With respect to issues 6A and 6B, as discussed above in connection with Entergy's threshold legal issues 2 and 3, and factual issue 2, Entergy's objections and legal arguments are insufficient to warrant excluding these issues. Consequently, they will also be adjudicated.

In the discussion in its petition in connection with Issue 6A, Riverkeeper asserted that radioactive leaks at the Facilities over a period of many years have resulted in at least two extensive groundwater plumes, and that Entergy has acknowledged that the potential for future leaks cannot be completely ruled out. Riverkeeper took the position that any preventative measures are inadequate. According to Riverkeeper, these persistent accumulations of radioactive materials in groundwater will violate the State narrative standard that provides that deleterious substances may not impair waters for their best usages, which, in the case of Indian Point's groundwater, is as a potable water supply. Riverkeeper noted that it is immaterial whether the groundwater is actually used for this purpose. Riverkeeper argued that failure to ensure compliance with this water quality standard supports Department Staff's denial, or at a minimum, the imposition of conditions to ensure compliance with NYWQS.

With respect to Issue 6B, Riverkeeper raised similar arguments, asserting that the leaking of deleterious substances (specifically, radioactive materials) could impair the waters of the Hudson River for their best usages for primary contact recreational activities. For its offer of proof for both issues, Riverkeeper relied upon several studies, including, among others, Entergy's Groundwater Investigation, as well as tables from the most recent quarterly groundwater monitoring report showing radionuclide levels in excess of maximum contaminant levels determined by the U.S. Environmental Protection Agency.

As noted in the context of Entergy's factual issue No. 2, there is dispute between Entergy and Department Staff as to the nature, scope and impact of radiological contamination at the Facilities. Riverkeeper seeks to adjudicate a similar question. Therefore, Issues 6A and 6B will be advanced to hearing. This is consistent with the court's decision in Matter of Chasm Hydro, Inc., *supra*, at 32 (noting that the administrative process, in the first instance, should consider the limitations on a State's authority to determine whether operation of a project would be inconsistent with one of the designated uses of the water); *see* PUD No. 1, *supra*, 511 U.S. 700, 714-15 (holding that the certifying agency must ensure that a project is consistent with both designated uses and water quality criteria, and stating that "a project that does not comply with the designated use of the water does not comply with the applicable water quality standards").

County of Westchester's Petition

The County of Westchester¹⁵ filed a timely petition for party status. Westchester indicated that the Facilities' compliance with water quality standards, specifically, those standards related to best uses of the Hudson River fish, shellfish, and wildlife propagation and survival, groundwater in the vicinity of the Facilities, and thermal impacts pursuant to Section 704.1(a)¹⁶ of 6 NYCRR, were of particular concern to the County.

In its petition, Westchester indicated that the following issues should be considered:

1. Whether continued operation of Indian Point with a once-through cooling water structure, as currently operated or with installation of cylindrical wedge wire screen, will violate New York State's water quality standard that cooling water systems reflect the best technology available for minimizing adverse environmental impacts.
2. Whether Entergy violated New York State's water quality standard requiring Best Technology Available ("BTA") and whether cooling towers constitute BTA considering other potential environmental impacts.
3. Whether continued operation of Indian Point with a once-through cooling water intake structure, as currently operated or with installation of cylindrical wedge wire screens, will be inconsistent with the designated best use of the Hudson River as a suitable fish habitat, including for endangered species.
4. What standard Department Staff may use to base denial of Entergy's application for a WQC as it relates to the designated usages of the Hudson River.
5. Whether Entergy is in violation of New York State's designated best use of the Hudson River and the ramifications of such determination on Westchester.
6. Whether continued operation of Indian Point with a once-through cooling water intake structure, as currently operated or with installation of cylindrical wedge wire screens, will be inconsistent with the best use of the Hudson River.
7. Whether continued operation of Indian Point with a once-through cooling water intake structure, as currently operated or with installation of cylindrical wedge wire screens, would be inconsistent with New York State's narrative standard that all thermal discharges support healthy fish habitat.

¹⁵ The Facilities are located in the Village of Buchanan, in Westchester County.

¹⁶ In this regard, although the petition recites to the language of Section 704.5 of 6 NYCRR, the citation in Westchester's petition is to Section 704.1(a), which provides that "[a]ll thermal discharges to the waters of the State shall assure the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife in and on the body of water." IC Exhibit 16, at 5.

8. Whether the extent and type of current and future radioactive leaks at Indian Point would be inconsistent with New York State water quality standards and whether radioactive leaks at Indian Point would be inconsistent with New York State's water quality standard designating best use of groundwater for potable purposes during a period of extended operation and whether it would be in violation of the best use of the Hudson River for primary contact recreation.
9. Department Staff's legal authority to ensure radioactive leaks comply with New York State water quality standards, including whether Department Staff can apply State water quality standards to AEA materials in a Section 401 proceeding notwithstanding the claim that the Clean Water Act does not regulate radiological discharges from NRC-licensed facilities.

These issues are similar to those raised by Riverkeeper in its petition for full party status. There was no objection to Westchester's environmental interest. Tr. at 29-30. Westchester indicated that if its petition for full party status were denied, it requested amicus status, in the alternative.

Department Staff asserted that Westchester's petition must be denied, because Westchester affirmatively stated that "Westchester does not intend at this time to sponsor any witnesses or take a position relative to the issues." IC Exhibit 16, at 1. Department Staff argued that the petition failed to make an adequate offer of proof. In its petition, Westchester took the position that its participation through cross-examination, as well as providing pertinent data, would contribute to a full record. Westchester asserted that its ability to participate "should not be limited because it is currently reserving judgment on the significant issues to be addressed." Id. at 2.

In its reply brief, Westchester countered that it would "use the witnesses of other parties to bring to light issues of concern to the residents of the County." Westchester Reply Brief, at 1. Westchester took the position that Department Staff overlooked the fact that, as the "host" location of the Facilities, any decision with respect to the WQC application affects Westchester "more than any other municipal entity, other than the Town of Cortlandt." Id. According to Westchester, "it would be premature and irresponsible" to take a position at this juncture as to whether Entergy's proposals would minimize adverse environmental impact, as required by Section 704.5 of 6 NYCRR.

Westchester went on to argue that full party status, rather than amicus status, should be granted, because of its obligations to its 950,000 residents to balance environmental concerns with the interests of surrounding communities and the citizens of the County. Westchester stated that its objective would be "to bring to light issues that do not affect other parties involved, to assure that no issue is overlooked, and that the residents of the County are fully represented." Id. at 2. Westchester argued that amicus status would not allow it to raise issues, "merely to point to them before the close of the proceeding." Id. Westchester concluded that

[r]eserving judgment on the specific positions and proposals does not preclude meaningful participation or the ability to raise substantive and substantial [sic] issues related to the DEC's denial and the dispute with the Applicant. The County would be able to elicit evidence relevant to the ultimate decision through cross-examination of the witnesses of the other parties, assuring that the concerns of the residents of the County are fully addressed.

Id.

Department Staff countered that the petition was “fundamentally flawed insofar as it is based upon the incorrect presumption that DEC’s Denial Notice determined that a closed-cycle cooling system was required at Indian Point.” Department Staff Brief at 55. Department Staff emphasized that “the Denial Notice does not require Entergy to install and operate a closed-cycle cooling system at Indian Point because Entergy did not propose to install any such system” in support of its 401 WQC application. Id. Department Staff noted that Entergy had consistently taken the position that a closed-cycle cooling system was not an available technology for the Facilities. As a result, the Denial Notice concluded that Entergy’s two proposals (continued use of once-through cooling, or the installation of cylindrical wedge wire screens) “would not minimize adverse environmental impact as required by 6 NYCRR 704.5 and as had been previously determined by the NRC.” Id. at 56.

Department Staff observed that Westchester is an active participant in the ongoing NEPA process and the relicensing proceedings before the NRC. In light of this, Department Staff took the position that the issues raised by Westchester are already the subject of inquiry into the environmental impacts of alternatives to license renewal in the NRC proceeding, such as the “no action” alternative, installation of closed-cycle cooling, replacement of capacity with alternative generation sources, importing power from other sources, or combinations of generation and conservation measures to replace power generated by the Facilities. Department Staff concluded that Westchester “is, and has been, in a position to raise or comment on any deficiencies and issues it believes should be investigated, reflected or otherwise pursued in the NEPA review by NRC for Indian Point.” Id. at 57. In Department Staff’s view, full party status should not be granted, and Westchester should be permitted to proceed as an amicus party on “narrowly defined, discrete issues.” Id.

In response, Westchester stated that Department Staff’s position was inconsistent, inasmuch as Department Staff had argued that the two proceedings should continue exclusive of each other. According to Westchester,

[j]ust as the DEC has taken the position that it is required to regulate water quality above and beyond the determinations of the NRC, the County’s position is that the County’s interests are relevant and necessary in each proceeding concerning the Applicant. Indeed, the fact that the County has been involved in and raised issues in other proceedings

concerning licensing of the Applicant supports the County's position that full party status should be granted in this proceeding, as the County's unique and substantial interests have been recognized by other agencies.

Westchester Reply Brief, at 2. Westchester went on to assert that, contrary to Department Staff's arguments, the petition did not limit the inquiry to the suitability of closed-cycle cooling at the Facilities, but rather, specifically made reference to wedge wire screens or some other alternative means of protecting the Hudson River resource. Id.

Riverkeeper did not object to Westchester's issues, which Riverkeeper acknowledged "align directly" with the issues Riverkeeper raised. Riverkeeper Brief at 30. Riverkeeper stated that it only disputed Westchester's petition "to the extent Westchester's broad reference to issues raised by 'other' parties indicates a desire to weigh in on issues that are not within the scope of this proceeding." Id.

No other participant objected to Westchester's petition, except for Entergy's objections to issues relating to radiological considerations, discussed above.

Ruling: Westchester's petition for full party status is granted. The issues raised by Westchester are similar to Riverkeeper's issues, and may therefore be adjudicated in conjunction with those issues. As noted above, there was no objection raised to Riverkeeper's issues, other than the issues dealing with radiological materials. As set forth in the attached issues list, Westchester's issues will be adjudicated as part of the issues advanced by Riverkeeper. Specifically, Westchester issues 1 and 2 will be adjudicated in conjunction with Riverkeeper's issue 1; Westchester issues 3, 4, 5, 6, and 7 will be adjudicated in conjunction with Riverkeeper's issues 2 and 3; and Westchester issue 8 will be heard in conjunction with Riverkeeper issues 6A and 6B. Westchester issue 3 will also be heard in conjunction with Riverkeeper issue 5.

With respect to issue 8, as was the case with Riverkeeper's issues 6A and 6B, Entergy's objections and legal arguments are insufficient to warrant excluding this issue.

Westchester's issue 9 has been resolved.

As to Department Staff's objections, Westchester has demonstrated a significant environmental interest, and may participate in this proceeding through cross-examination in the event it determines that it will not offer witnesses. In addition, Westchester has shown that it can make a meaningful contribution to the record regarding a substantive and significant issue raised by another party, in this case, Riverkeeper. See Section 624.5(d)(1)(ii).

Town of Cortlandt's Petition

The Town of Cortlandt, in conjunction with its Supervisor, Linda Puglisi, sought full party status in this proceeding, or amicus status in the alternative. The Facilities are located in the Village of Buchanan, in the Town of Cortlandt, and Cortlandt is a participant in the ongoing NRC licensing proceeding.

Cortlandt stated that it had a significant environmental interest in the outcome of the proceeding, “which is likely to affect the historic viewshed, air quality, noise and traffic patterns in the Town.” IC Exhibit 15, at ¶ 13. Cortlandt noted that it would be affected by any modifications the Department determined would be needed to satisfy the BTA requirement for the Facilities’ CWISs. This petitioner asserted that “implementing a closed-cycle cooling system may require the installation of two massive cooling towers on the Town’s river shoreline, each having a footprint doubling that of Yankee Stadium and a height of 168 feet.” *Id.* at ¶ 17. Cortlandt noted that the project would double the Facilities’ current industrial profile, disturb twenty-two acres of riverfront land, and “impact more than 50 places defined as scenic resources of statewide significance or other places that contribute to overall scenic beauty of a coastal area.” *Id.* Cortlandt went on to assert that during “wet” mode operation, the towers would emit large and highly visible vapor plumes which could exceed 2,600 feet in length downwind and greater than 1,200 feet in height above the cooling tower. Cortlandt took the position that the Department’s BTA determination did not take into account several environmental impacts and non-monetary costs.

Cortlandt noted that it did not take a position as to the type of technology that should be installed at Indian Point, but emphasized that it had “a strong interest in making certain that competing technologies are properly analyzed.” Cortlandt Brief at 2. Cortlandt acknowledged that a full analysis might lead to the conclusion that closed-cycle cooling is actually necessary, but asserted that such an analysis is currently lacking and as a result, Department Staff’s BTA determination lacks the proper foundation.

No participant raised any objections to the Town of Cortlandt’s environmental interest. Cortlandt proposed six issues, three issues that it characterized as factual, and three procedural issues. In its reply brief, this petitioner indicated that the three factual issues “are not independent issues. Rather, they are incorporated into Cortlandt’s three procedural issues.” Cortlandt Reply Brief at 2. Specifically, this petitioner argued that cooling towers would severely alter the Town’s physical landscape, decrease air quality, and result in substantial noise and traffic impacts. Cortlandt also argued that “should the requirement to build cooling towers cause Entergy to abandon Indian Point rather than pay for the retrofit, major economic upheaval would affect Cortlandt’s social fabric and community character.” *Id.* at ¶ 22. Cortlandt proposed to address these issues at hearing.

Cortlandt also proposed to evaluate the environmental costs of cooling towers as opposed to cylindrical wedge wire screens or similar mechanical means of reducing impingement and entrainment. This would include an evaluation of economic and environmental costs, compared with any incremental benefits to aquatic life, of using closed-cycle cooling as opposed to other options. In addition, Cortlandt indicated that it sought to adjudicate the efficacy of alternatives to closed-cycle cooling systems, such as wedge wire screens or other devices, which could include evidence concerning other studies of wedge wire screens at a proposed desalinization plant at Haverstraw and at the Brooklyn Navy Yard. For its offer of proof, Cortlandt indicated that it would offer an expert, Edward Vergano, P.E., a Town official charged with responsibility for environmental concerns of its residents, to testify with respect to these concerns.

In its post-issues conference brief, Cortlandt noted that the Interim Decision acknowledged that assessments of economic costs, environmental benefits, and environmental impacts beyond the effects on aquatic organisms may be considered in determining whether a given technology is “available.” Cortlandt asserted that the Town has a number of unique characteristics relevant to any BTA selected for the CWISs at the Facilities: “it derives much value from its aesthetic qualities and its near bucolic way of life, it is in a nonattainment zone for certain air pollutants, and it relies heavily on Indian Point as a taxpayer and an employer of Cortlandt residents.” Cortlandt Brief at 13-14. Consequently, this petitioner argued that Department Staff should have evaluated the availability of various alternatives with those facts in mind, as well as the issues of cost and protection of aquatic organisms.

With respect to SEQRA, Cortlandt argued that “[t]he issue of DEC’s inadequate SEQRA compliance casts doubt on the validity of the BTA standard used by DEC Staff in evaluating Indian Point’s WQC application, because that standard has not been subject to proper SEQRA review.” Cortlandt Brief at 15. Cortlandt contended that the environmental impacts of implementing closed-cycle cooling or its equivalent were not evaluated in an EIS, and SEQRA review in the context of the SPDES proceeding has not been completed. Cortlandt argued that if preparation of an EIS were consolidated with the pending SEIS being prepared in the SPDES proceeding, it may be determined that closed-cycle cooling “is inappropriate due to the high environmental costs it imposes on the surrounding community.” Cortlandt Brief at 16. Cortlandt went on to contend that the issue of Department Staff’s compliance with SEQRA cannot be resolved until after an adjudicatory hearing in which Cortlandt participates, and pointed out that it had offered to provide testimony establishing that the potential adverse impacts on Cortlandt associated with cooling towers would be significant and adverse, triggering an EIS.

Cortlandt’s first procedural issue stated that the 401 WQC proceeding should be consolidated with the SPDES proceeding. This issue is discussed above, in the section of this issues ruling that deals with consolidation.

The second procedural issue in Cortlandt’s petition stated that Department Staff’s BTA determination was not based on analyses that were current and comprehensive with regard to the environmental costs of the proposed BTA. Cortlandt argued that Department Staff’s Denial Letter failed to address the environmental costs or non-monetary impacts of a closed-cycle cooling system on the surrounding community. Moreover, Cortlandt argued that the Denial Letter relied on isolated excerpts from Entergy’s SPDES permit application, and statements about closed-cycle cooling systems in reports that were issued in the 1970s. Specifically, Cortlandt took issue with the Denial Letter’s reference to the 2003 FEIS. Cortlandt contended that Department Staff’s evaluation of environmental impacts at the Facilities “is limited to a single estimate of entrainment mortality from the 2003 EIS, which itself is based on in-plant abundance sampling from 1981-87.” IC Exhibit 15, at ¶ 51. Cortlandt characterized this study as “a thin record” on which to base an analysis of the environmental benefits of a BTA alternative. *Id.* Cortlandt noted that a supplemental EIS is to be prepared as part of the SPDES proceeding, to address these deficiencies in the existing record.

This petitioner also criticized reports issued during the 1970s, and referenced in the Denial Letter. Specifically, Cortlandt noted that the Denial Letter referred to FEISs dating from

1972, 1975, 1976 and 1979, which, according to the Denial Letter, “taken together,” demonstrate that closed-cycle cooling is the only appropriate technology which would satisfy Section 704.5 of 6 NYCRR. Denial Letter, at 15. Cortlandt argued that “[i]nferences based on environmental assessments from the 1970s do not constitute a site-specific, case by case evaluation of the applicable technology standard nearly forty years later.” IC Exhibit 15, at ¶ 52. In addition, Cortlandt noted that these reports did not address the full range of environmental impacts that would be scrutinized today, and concluded that “the BTA determination must rely on better sources,” asserting that the analysis “should make use of the discussion of air quality, aesthetic, and electric supply reliability impacts in the supplemental EIS being developed in the SPDES permit process.” *Id.* at ¶ 54. In its post-issues conference brief, Cortlandt noted further that “underlying environmental conditions, such as air quality and traffic conditions in Cortlandt, have changed significantly since the 1970s,” in support of its contention that an updated assessment is required. Cortlandt Brief at 14. In that regard, Cortlandt pointed out that the NRC is not relying upon the documentation that formed the basis for Department Staff’s denial, but instead has undertaken a contemporary review.

For its third procedural issue, Cortlandt asserted that Department Staff inappropriately relied upon a draft policy (the “Draft Policy,” discussed above) that has yet to be finalized in making its BTA determination. According to Cortlandt, at the time the Denial Letter was issued, the Draft Policy was simply a proposal undergoing notice and comment, and had no legal effect. Nevertheless, Cortlandt argued, Department Staff “cites the draft policy as if it were a final rule establishing BTA performance standards for water intake systems.” *Id.* at ¶ 59. Cortlandt objected to this procedural defect, arguing that the Draft Policy was the only substantive source Department Staff relied upon “to establish the estimated reduction in impingement and entrainment through use of a closed-cycle cooling system and to establish that other technologies must achieve ‘commensurate minimization benefits,’ defined as at least 90 percent of that level of reduction, to qualify as alternatives.” *Id.* at ¶ 60. Cortlandt concluded that this amounts to treating the Draft Policy as a binding rule.

Department Staff opposed a grant of party status to this petitioner. According to Department Staff, Cortlandt’s position was fundamentally flawed because it presumed that the Denial Letter affirmatively determined that closed-cycle cooling was required at Indian Point. According to Department Staff, “the Denial Notice does not require Entergy to install and operate a closed-cycle cooling system at Indian Point because Entergy did not propose to install any such system in support of its § 401 WQC application.” Department Staff’s Brief at 39. Department Staff asserted that the Denial Letter indicated only that Entergy’s two proposals for meeting the requirements for a Section 401 WQC – the continued use of once-through cooling, or the installation of cylindrical wedge wire screens – would not minimize adverse environmental impacts as required by Section 704.5 of 6 NYCRR.

Department Staff went on to argue that the issues proposed by this petitioner were identified in the Interim Decision as being SEQRA-related items, for example, air quality, and that this topic was unrelated to water quality or aquatic resources. Consequently, Department Staff concluded that electric system reliability was not a proper subject for adjudication in this proceeding.

Department Staff cited to the Court of Appeals' decision in Matter of Niagara Mohawk, supra, observing that the court rejected SEQRA as one of the state laws that the Department might consider in deciding whether to certify a FERC-licensed project under CWA Section 401. 83 N.Y.2d 191. Department Staff went on to cite to Section 624.4(c)(6) of 6 NYCRR, which provides that in a case where another agency serves as SEQRA lead agency, and that agency has required the preparation of a DEIS,

no issue that is based solely on compliance with SEQRA and not otherwise subject to the department's jurisdiction will be considered for adjudication unless:

- (1) the department notified the lead agency during the comment period on the DEIS that the DEIS was inadequate or deficient with respect to the proposed issue and the lead agency failed to adequately respond; or
- (2) the department is serving as lead agency for purposes of supplementing the FEIS. In such case, only issues that are the subject of the supplementation will be considered for adjudication.

Department Staff contended that neither of these two provisions applied to this proceeding, inasmuch as the NRC is the lead agency for NEPA review of the relicensing, and is itself finalizing the SEIS. Department Staff indicated that it did not notify the NRC during the DEIS comment period that the DEIS was inadequate or deficient with respect to a Department-identified issue. Department Staff noted further that the Department is not serving as lead agency for purposes of supplementing the NRC-issued FEIS.

Department Staff pointed out that Cortlandt is a participant in the current relicensing proceedings before NRC, and noted that the NRC is in the process of examining a number of environmental impacts, including impacts raised by NYC EDC in its petition. In light of this, Department Staff took the position that Cortlandt's concerns should be addressed in that process.

With respect to Cortlandt's arguments concerning the Draft Policy, Department Staff cited to a January 24, 2005 letter from Lynette M. Stark, Deputy Commissioner, NYS DEC, to Benjamin H. Grumbles, Assistant Administrator, U.S. EPA, Office of Water (the "Stark Letter"). In that letter, Deputy Commissioner Stark stated that

[i]n keeping with the Department's established, stringent BTA requirements for facilities with cooling water intake structures in New York (as determined by 6 NYCRR § 704.5), the Phase II rule minimum stated performance standards (*i.e.*, 80% reduction in impingement and 60% reduction in entrainment) represent the minimum "floor" and the Department will seek to impose the higher end of these ranges (*i.e.*, 95% reduction

in impingement and 90% in entrainment) in its SPDES permit process for existing facilities.

Stark Letter, at 6. Department Staff stated that the provisions of the Stark Letter “have been the basis of BTA determinations for various existing facilities in New York since its issuance and its authority has been upheld in DEC administrative hearings and by independent judicial review.” Department Staff Reply Brief at 27 (citations omitted). Department Staff indicated that while the Denial Letter referred to the Draft Policy, it was not utilized as a basis for the denial itself. In response, Cortlandt pointed out that the Stark Letter is not referenced in the Denial Letter, which makes repeated reference to the Draft Policy.

Department Staff also objected to Cortlandt’s offer of proof, maintaining that the petition did not offer a resume or *curriculum vitae* for Mr. Vergano, and that the offer of proof did not provide the grounds for Cortlandt’s assertions as to the issues it proposed to raise. Department Staff concluded that this petitioner should be granted *amicus* status.

In its reply brief, Riverkeeper argued that Cortlandt had mischaracterized Department Staff’s denial letter as making a BTA determination. According to Riverkeeper, “Department Staff’s obligation in this proceeding is to determine whether Entergy has demonstrated compliance with the BTA requirement, i.e., whether or not Entergy’s proposed cylindrical wedgewire screens will meet the standard.” Riverkeeper Reply Brief at 25. Riverkeeper maintained that Department Staff has not required Entergy to implement closed-cycle cooling, and argued further that to the extent Cortlandt was advocating for a cost-benefit assessment, such an assessment was inappropriate in the context of a BTA determination. According to Riverkeeper, the issues of aesthetics, air quality, traffic, and impacts on community character were SEQRA issues, beyond the scope of this proceeding, and that an EIS need not be prepared to address them. As for Cortlandt’s arguments concerning Department Staff’s reliance on the BTA Policy, Riverkeeper maintained that Department Staff’s “assessment of Entergy’s compliance with the BTA requirement is based on decades of evidence and legal authority,” not the BTA Policy. *Id.* at 27.

Amicus petitioner CHG&E challenged Department Staff’s SEQRA analysis,¹⁷ asserting that the decision in Matter of Niagara Mohawk reflected “a State effort to block preemptive Federal Power Act licensing authority over a new hydroelectric project through expansionistic interpretation of state water quality standards and SEQRA.” CHG&E Reply Brief at 14-15. CHG&E went on to contend that “[t]he gist of the present case is an attempt to block Nuclear Regulatory Commission (“NRC”) licensing authorization for continued operation of an existing nuclear power generation facility through a narrowing and exclusionary reading of state water quality standards and SEQRA.” *Id.* at 15.

¹⁷ Department Staff’s Brief reiterates substantially similar SEQRA arguments in response to the filings by Cortlandt, Mr. Brodsky, IPPNY, NYC EDC, and CHG&E. Because CHG&E’s response also addressed the implications of the court’s decision in Matter of Niagara Mohawk, CHG&E’s arguments on this point are included here.

CHG&E noted that, despite the similarity between the attempts, in both cases, “to avoid federally-determined outcomes through specific interpretations of State water quality standards and SEQRA,” the context in this case is different from the situation in Niagara Mohawk. Id. at 15. In CHG&E’s view, the Court of Appeals in that case recognized that the Department’s position that the CWA eliminated the federal government’s earlier preemption prerogatives under the Federal Power Act was an attempt by the Department to use SEQRA and water quality standards as a means to an end, and therefore rejected the Department’s position. CHG&E argued that “[t]he case is properly understood as proscribing efforts at employing any portion of state law artificially, as it were, to produce intended outcomes in the context of a proposed new hydroelectric facility licensed under the Federal Power Act.” CHG&E Reply Brief at 16.

Cortlandt took the position that it is an interested agency, with a right to participate in the SEQRA review process. IC Exhibit 15, at ¶ 35. This petitioner argued further that “[t]he fact that both DEC and Riverkeeper disagree with Cortlandt’s contentions and have engaged with the merits of Cortlandt’s arguments in their respective briefs only emphasizes that Cortlandt has raised substantive and significant issues that deserve fuller exposition in an adjudicatory hearing.” Cortlandt Reply Brief at 1. Cortlandt argued that Department Staff’s reliance on Matter of Niagara Mohawk was misplaced, contending that the decision “refutes the existence of DEC’s authority to consider SEQRA compliance and other factors outside of New York’s water quality standards in determining the WQC eligibility of a hydroelectric facility. It does not restrict SEQRA compliance in establishing a BTA standard.” Cortlandt Brief at 17. Cortlandt took the position that it did not seek environmental review of NRC’s licensing decision, but rather the environmental review of DEC Staff’s establishment of a state water quality standard. Cortlandt argued further that Department Staff’s expressed intention of relying on the NRC FSEIS “demonstrates DEC’s concession that all environmental impacts of the BTA standard it established for Indian Point should be considered in a comprehensive environmental review prior to that BTA standard’s implementation.” Id. at 18.

In its reply brief, Cortlandt asserted that its issue concerning Department Staff’s SEQRA compliance was adjudicable, and its proposal “to remedy this deficiency through full or partial consolidation with the ongoing SPDES proceeding, deserves serious consideration.” Cortlandt Reply Brief at 7. Cortlandt argued that Department Staff could have avoided the problem by deferring to the results of the review of the BTA standard before making a WQC determination. As for Department Staff’s reliance on the NRC FSEIS, Cortlandt asserted that the draft SEIS, “as a whole, does not specifically target the environmental impacts of a BTA standard requiring closed-cycle cooling.” Id. at 8. As a result, Cortlandt contended that the NRC’s review cannot satisfy Department Staff’s obligation to review environmental impacts associated with this alternative. Cortlandt maintained that the denial of the Section 401 WQC implicates Department Staff’s BTA determination that is fundamentally linked to the review of that technology in the SPDES proceeding.

Cortlandt argued that Department Staff has determined that closed-cycle cooling is BTA at Indian Point. Cortlandt maintained that “[t]he bare fact is that Staff contends that if Entergy does not install a closed-cycle cooling system or otherwise replicate the impact reductions afforded by such a system – and Staff states that Entergy has done neither – it faces the denial of a water quality certification for Indian Point.” Cortlandt Reply Brief at 4. Cortlandt pointed out

that the Denial Letter repeatedly refers to closed-cycle cooling, and does not discuss any other technologies as meeting the BTA standard. Cortlandt contended that “[t]his is how the regulated entities, the local communities, and the general public, interpret the Denial Notice.” *Id.* at 4. Cortlandt argued further that Department Staff “could not have determined that Entergy’s proposed operations did not meet BTA if it did not know what BTA was.” *Id.* at 5. Cortlandt observed that, as early as 2003, Department Staff proposed closed-cycle cooling as BTA at the Facilities. Cortlandt noted that the BTA review in the SPDES proceeding is ongoing, and that Department Staff did not defer to that review, compelling Cortlandt to raise issues for adjudication in this proceeding.

With respect to those issues, Cortlandt argued that consideration of environmental impacts or costs is an appropriate component of the “availability” of a proposed technology. Contrary to Riverkeeper’s objections, Cortlandt stated that its assertion that the environmental costs of such a technology should be considered “should not be conflated with an argument for the imposition of simple economic cost-benefit such as that allowed, but not required, by the U.S. Supreme Court.” Cortlandt Reply Brief, at 6, fn. 2 (citing Entergy Corp. v. Riverkeeper, Inc., 129 S. Ct. 1498 (2009)). This petitioner argued that Department Staff’s Denial Letter summarily dismissed the environmental costs presented in the February 12, 2010 report for Entergy prepared by Enercon, entitled *Engineering Feasibility and Costs of Conversion of Indian Point Units 2 and 3 to a Closed-Loop Condenser Cooling Water Configuration*.

Cortlandt argued that Department Staff’s objections to its offer of proof and proposed witness were without merit, noting that there is no regulatory requirement that the professional resume or curriculum vitae of a proposed witness be provided. Cortlandt reiterated that “the fact that DEC Staff has made a BTA determination for Indian Point is beyond dispute,” and maintained that evidence concerning closed-cycle cooling would be an appropriate part of the hearing. Cortlandt Reply Brief at 10.

Entergy did not oppose Cortlandt’s petition. No other potential intervenor voiced any opposition.

Ruling: Cortlandt’s petition for full party status is granted. There was no objection to this petitioner’s environmental interest, which Cortlandt has demonstrated in its petition. In addition, this petitioner has identified substantive and significant issues, specifically, with respect to the BTA determination under Section 704.5 of 6 NYCRR. This petitioner has argued that Department Staff’s denial was not based on current and comprehensive analyses. This relates to a matter cited by Department Staff as a basis to deny the permit, and is contested by the applicant, as discussed above in connection with Entergy’s factual issue No. 3, as well as Riverkeeper’s Issue No. 1. Moreover, this petitioner seeks to adjudicate the efficacy of various BTA alternatives. These issues will be advanced to hearing.

With respect to the issues raised by this petitioner that implicate SEQRA concerns, this petitioner may provide comments on Department Staff’s determination as to whether the requisite SEQRA findings may be made based upon the NRC’s FSEIS, consistent with the scheduling order attached.

Mr. Brodsky's Petition

The petition filed by Richard Brodsky was similar to the NYS DPS petition, which, as noted above, was withdrawn during the post-issues conference briefing period. Mr. Brodsky's petition was untimely, and therefore must meet not only the standards for a petition for full party status, but must also include:

- (i) a demonstration that there is good cause for the late filing;
- (ii) a demonstration that participation by the petitioner will not significantly delay the proceeding or unreasonably prejudice the other parties; and
- (iii) a demonstration that participation will materially assist in the determination of issues raised in the proceeding.

Section 624.5(c)(1) and (2)(i) – (iii).

To demonstrate good cause for the late filing, Mr. Brodsky stated in his petition that the ongoing budget process was disruptive of a number of the Assemblyman's duties.¹⁸ The petition also stated that Mr. Brodsky's participation would not significantly delay the proceeding or prejudice any other party, and that this petitioner's "longstanding expertise in all material issues in the proceeding" demonstrated that his participation would be of material assistance. IC Exhibit 23, at 3.

In his petition, Mr. Brodsky indicated that he was interested "in the effect on air quality of potentially replacing nuclear generation with fossil fuel generation, as well as energy efficiency." IC Exhibit 23, at 2. This petitioner noted that part of the BTA determination "relates to whether the technology under discussion can be installed and operated at the site (including whether the facility will operate efficiently if the technology is installed, whether site constraints exist)." *Id.* In addition, Mr. Brodsky noted that another part of the BTA determination relates to the costs of the technology, including impacts on system reliability, electric energy market price estimates, electric capacity market price estimates, and increased air pollutant emissions associated with various construction and operating scenarios. *Id.* at 2-3.

At the issues conference, Entergy objected to this petitioner's environmental interest. According to Entergy, Mr. Brodsky's participation in the SPDES proceeding was not based upon his status as an assemblyman, and to the extent he petitioned in this case as an individual, he failed to demonstrate the requisite environmental interest. In response, Mr. Brodsky, through his counsel, argued that he lives near the Hudson River, frequently uses the River for recreation, and, at the time of the issues conference, represented a constituency whose social and economic interests would be affected by this proceeding.

Entergy also objected to Mr. Brodsky's filing because, in Entergy's view, the petition did not include any reason for its untimeliness. Entergy argued further that this petitioner had not raised a substantive and significant issue, because he had not provided an offer of proof.

¹⁸ At the time of filing, Mr. Brodsky was a New York State Assemblyman representing the 92nd District (Westchester County).

Department Staff indicated that, based upon this petitioner's participation in the SPDES proceeding, his future participation would not be an obstacle. Tr. at 19.

In response, Mr. Brodsky argued that "the question of what is the Best Technology Available for cooling water intake structures is an adjudicable issue as it relates to the matter cited by department staff as a basis to deny the permit and is contested by the applicant or is proposed by a potential party and is both substantive and significant." Tr. at 23. Mr. Brodsky argued that his role as a full party in the SPDES proceeding "is closely related to this new application." Tr. at 24. Although he did not intend to offer witnesses, this petitioner argued that it was sufficient for him to cross-examine witnesses offered by other parties.

Department Staff noted that the issues raised by Mr. Brodsky were "virtually identical" to those advanced by NYS DPS. Department Staff Brief at 62. Department Staff offered the same objections that it had advanced with respect to NYS DPS's petition. Specifically, Department Staff argued that the petition focused exclusively on what constitutes BTA for the CWISs at Indian Point, as well as the impacts from imposition of BTA at the facilities including such topics as operational efficiency, costs, electric system reliability, and electric energy market prices. Department Staff noted that the petition did not address any water quality-related standard or criteria mentioned in the Denial Letter, other than BTA for CWISs. Arguing that this sole issue was already the subject of the ongoing SPDES permit administrative proceeding, in which Mr. Brodsky is a full party, Department Staff took the position that Mr. Brodsky's participation in the Section 401 WQC proceeding should be limited to the BTA proposals (continued use of once-through cooling, or the use of cylindrical wedge wire screens) articulated by Entergy in support of its application.

Department Staff went on to argue that the issues proposed by this petitioner were identified in the Interim Decision as being SEQRA-related items, for example, electric system reliability, and that this topic was unrelated to water quality or aquatic resources. Consequently, Department Staff concluded that electric system reliability was not a proper subject for adjudication in this proceeding.

Department Staff reiterated the SEQRA arguments it advanced in connection with Cortlandt's petition. In addition, Department Staff argued that Mr. Brodsky did not identify any potential witness, or make an appropriate offer of proof. Department Staff took the position that Mr. Brodsky should be permitted to proceed as an amicus party.

Riverkeeper also objected to the petition, asserting that the issues proposed for adjudication were not properly within the scope of the proceeding. Specifically, Riverkeeper contended that the Interim Decision found that the issues proposed were within the purview of the SEQRA assessment, and not an element of Department Staff's inquiry in making a BTA determination. In addition, Riverkeeper objected to the proposed issues to the extent that a cost-benefit analysis would be required by Department Staff. Riverkeeper argued that the Interim Decision in the SPDES proceeding explicitly rejected such an analysis model, and adopted the "reasonably borne by the industry" standard. While Riverkeeper acknowledged that this issue is on appeal in the SPDES proceeding, Riverkeeper cited to the U.S. Supreme Court decision on this issue, arguing that a cost-benefit analysis was merely permissible, not required, and that the

Supreme Court endorsed the “reasonably borne” standard. *Id.* (citing Entergy Corp. v. Riverkeeper, Inc., 129 S. Ct. 1498 (2009)).

No other participant objected to the petition.

Ruling: Mr. Brodsky’s petition for full party status is granted. The issues proposed by this petitioner are substantive and significant, and have been advanced by other parties. See Section 624.5(d)(1)(ii) of 6 NYCRR. Specifically, the issues proposed are incorporated into the BTA determination, because of considerations of feasibility as well as the cost analysis required in making that determination. Tr. at 157. As indicated above in connection with Westchester’s petition, there is no bar to his participation solely through cross-examination of the witnesses offered by other parties. Although the petition was untimely, it does address the additional criteria outlined at Section 624.5(c)(2) of 6 NYCRR, and the requisite demonstrations have been made. Moreover, his participation will not significantly delay the proceeding.

In light of Mr. Brodsky’s limited participation to date in the ongoing SPDES proceeding, it is appropriate at this stage to determine whether he still intends to take an active role in either of the two hearings. Accordingly, on or before Friday, January 14, 2011, this petitioner is to notify the ALJs and the participants in both the SPDES proceeding, and the Section 401 WQC proceeding, whether he will continue to participate in these hearings. If no response is received by that date, the petition will be deemed withdrawn.

As noted above, the New York Independent Power Producers, the New York City Economic Development Corporation, and Central Hudson Gas & Electric each petitioned for amicus status. Each petition is discussed below.

New York Independent Power Producers Petition for Amicus Status

The IPPNY is a not-for-profit trade association representing the independent power industry in New York State. According to its petition, its members include “nearly 100 companies involved in the development, operation and ownership of electric generating facilities, and the marketing and sale of electric power in New York’s wholesale and retail markets.” IPPNY Petition, at 6. IPPNY’s members own and operate generating facilities that employ a variety of fuel sources. IPPNY stated that its environmental interest “centers on the role nuclear power plants [such as Indian Point] play in the mix of generating resources that supply electricity to the State of New York.” IPPNY Petition, at 1-2.

In its petition for amicus status, the New York Independent Power Producers (“IPPNY”) noted that the Facilities “play a key role in minimizing the contribution of greenhouse gases from the pool of electric generating sources.” *Id.* at 2. IPPNY opposes closure of the Facilities, and contended that a shutdown of the Facilities as a result of the denial of the application could have a significant adverse impact on the environment, as well as electric system reliability. This petitioner noted that, pursuant to SEQRA, the lead agency is required to make findings that take into consideration the economic and social implications of a proposed action, which would include electric generating capacity or other electric system needs. IPPNY went on to assert that a denial of the Section 401 WQC could lead to a shutdown of the Facilities, with a consequent

adverse effect on reliability by creating generating capacity shortages and voltage control issues that could lead to service interruptions.

IPPNY cited to a report prepared in 2009 by the Westchester Business Alliance, which indicated that the closure of Indian Point would increase the cost of electricity in the region by 150 percent. Moreover, IPPNY contended that replacing the Facilities with even the most efficient fossil-fuel based power plant would likely create a significant rise in carbon dioxide, nitrogen, and sulfur dioxide emissions. IPPNY cited to the New York State Independent System Operator's 2009 Reliability Needs Assessment, which stated that if a major nuclear unit were lost, the State's ability to fulfill Regional Greenhouse Gas Initiative ("RGGI") goals would be compromised, because the State would not have sufficient allowances to operate the program successfully.¹⁹

In light of this, IPPNY proposed to brief

the policy issues concerning the positive contribution that continued operation of Indian Point would make to (1) the State's efforts to reduce greenhouse gas emissions and (2) the State's electric system's ability to meet reliability criteria in order to satisfy customer demand in a safe and reliable manner.

Id. at 5. IPPNY contended that these issues relate to a dispute between Department Staff and the Applicant over a substantial term or condition of the Section 401 water quality certification, specifically, the installation of cooling towers. Accordingly, IPPNY maintained that the petition satisfied the requirements of Part 624.4(c)(1)(i) and (ii).

None of the participants objected to IPPNY's environmental interest. In its petition, IPPNY noted that the organization "regularly participates in every major proceeding affecting the generation of electricity in New York State conducted by the Department, the New York Independent System Operators, the New York Public Service Commission and the Federal Energy Regulatory Commission." IPPNY Petition, at 6.

Department Staff and Riverkeeper objected to IPPNY's petition, arguing that the issues proposed were outside the scope of this proceeding. Department Staff contended that, like the petitions for party status submitted by the Town of Cortlandt, the County of Westchester, NYS DPS, and Mr. Brodsky, IPPNY's petition "suffers from the fundamental flaw that it is based upon the incorrect presumption that DEC's Denial Notice determined that a closed-cycle cooling system was required at Indian Point. This flaw is evident from IPPNY's reference to cooling towers." Department Staff Brief at 63. According to Department Staff, as a result, the petition failed to raise a substantive and significant issue.

Department Staff went on to assert that the Denial Letter does not require Entergy to install closed-cycle cooling, because Entergy did not propose to install that technology, and in

¹⁹ N.Y. Independent System Operator, 2009 Reliability Needs Assessment at 35 (http://www.nyiso.com/public/webdocs/newsroom/press_releases/2009_RNA_2009_Final_1_13_09.pdf).

fact claimed that it was not available at the Facilities. Department Staff stated that the only two proposals Entergy advanced were to continue to use once-through cooling, or to install cylindrical wedge wire screens on its existing CWISs. According to Department Staff, the issues IPPNY proposed to brief “have nothing to do with and are not related in any way to water quality-related standards or criteria delineated in DEC’s Denial Notice.” *Id.* at 64. Department Staff argued that IPPNY’s issues were SEQRA-related items and not appropriate for consideration in this proceeding, and offered similar arguments to those in opposition to the Town of Cortlandt’s petition, discussed above.

Department Staff contended that NRC is in the process of examining a number of environmental impacts, including the policy issues raised by IPPNY in its petition. In light of this, Department Staff took the position that IPPNY’s concerns “have been or are still being investigated, reflected or otherwise pursued in the NEPA review by NRC for Indian Point.” *Id.* at 68. Department Staff concluded that IPPNY failed to raise a substantive and significant issue, and therefore its petition should not be granted.

According to Riverkeeper, the NRC license renewal proceeding is the appropriate forum for the two policy issues raised by IPPNY relating to the potential shutdown of Indian Point. Riverkeeper pointed out that “the NRC has already prepared a draft EIS which explicitly examines the potential impacts of Indian Point ceasing to operate.” Riverkeeper Brief at 25. Riverkeeper maintained that “[t]he instant proceeding is related only to the question of whether the proposed activity, i.e., the continued operation of Indian Point for an additional 20 years, is consistent with relevant New York State water quality standards and other appropriate State laws. DEC Staff’s only obligation is to arrive at the aforementioned determination.” Riverkeeper Brief at 24.

IPPNY provided a letter as its post-issues conference submission. In its letter, IPPNY maintained that Department Staff and Riverkeeper’s objections were solely procedural, and were without merit. With respect to Department Staff’s argument that the scope of a 401 WQC proceeding is limited to water quality issues, IPPNY countered that Department Staff has determined that the proposal to renew the licenses and continue to operate the Facilities is a Type I action pursuant to SEQRA. IPPNY argued that, as a result, the Department must take a “hard look” at the environmental, social, and economic considerations of the proposed action. Citing to the Interim Decision in the SPDES proceeding, IPPNY asserted that those considerations “properly are related to a decision whether to allow the Facilities to operate with or without closed-cycle cooling.” IPPNY Letter at 2.

IPPNY emphasized that needless duplication should be avoided, and opined that these issues should be considered once in one of the proceedings. IPPNY went on to point out that “for large power plants, it was typical practice for the New York Board on Electric Generation Siting and the Environment (which Board includes the NYSDEC Commissioner) to condition a Section 401 Certification on compliance with the requirements of a SPDES permit.” *Id.* IPPNY noted that in those proceedings, a single record was developed and used, “as is the practice now under Article VII of the Public Service Law.” *Id.*

With respect to Department Staff and Riverkeeper's assertion that the issues IPPNY proposed should have been raised in the NRC license renewal proceeding, IPPNY pointed out that the comment period with respect to that proceeding has closed. IPPNY went on to contend that the suggestion was unreasonable, "considering that the Department is embarking upon compiling the Supplemental Environmental Impact Statement for the pending SPDES proceeding and that forum is available to consider the reliability and air pollution issues raised by IPPNY and other parties." Id.

IPPNY disputed Department Staff and Riverkeeper's contention that the basis for the denial was not Entergy's failure to propose closed-cycle cooling. IPPNY noted that the Denial Letter "recounts in detail the proceedings to compel closed-cycle cooling presumably as a basis for the denial." Id. at 3. According to IPPNY, a number of reasons for the denial are linked to the absence of closed-cycle cooling. IPPNY concluded that if it were determined that the issues IPPNY raised should be considered in conjunction with the pending SPDES proceeding, IPPNY should be allowed to participate in the compilation of a joint record.

IPPNY provided a timely reply by letter dated October 29, 2010. With respect to Department Staff's assertion that the impact of plant closure, due to the imposition of cooling towers, on electric system reliability and greenhouse gases, were unrelated to the Denial Letter, IPPNY countered that it is not asserting, as a matter of law, that the Denial Letter determined that closed-cycle cooling was required at the Facilities. IPPNY argued that "the lack of closed-cycle cooling was an important rationale used to deny the § 401 Certification." IPPNY Reply Letter at 2.

IPPNY pointed out that Department Staff acknowledged the need for an environmental review by stating that it would rely on the NRC's FSEIS. IPPNY argued that, as a result, "Staff cannot argue that SEQRA review is not required in this 401 proceeding but then rely upon the NRC EIS to perform the very SEQRA review it denies may be undertaken." Id. IPPNY distinguished the opinion in Northern States, supra, arguing that Federal Power Act preemption in the context of hydroelectric licensing "is far more pervasive than under the AES regulation of nuclear plants." Id. (citing to Northern States, 447 F.2d 1143, 1151-1153 (States are permitted to regulate nuclear power plant activities for "purposes other than protection against radiation hazards")). IPPNY concluded that Department Staff has more latitude under SEQRA to examine issues related to a Section 401 WQC application when it has been determined that SEQRA review is required.

IPPNY went on to dispute Department Staff's contention that the NRC is examining the two policy issues IPPNY proposed to brief in the SFEIS. IPPNY stated that a review of the draft SEIS "indicates review of environmental impacts only, and not comprehensive review of electric system reliability impacts due to a possible shut-down of Indian Point." IPPNY Reply Letter at 3. IPPNY pointed out that it, and other petitioners, seek to address this point, noting that increased carbon dioxide emissions are addressed in the draft SEIS, "but not employing simulations of the New York electric system that the New York Independent System Operator and New York Public Service Commission ordinarily employ to measure the emission impacts of adding or removing a facility from the electric grid." Id.

This petitioner also challenged Department Staff's assertion that it has no obligation to prepare an additional EIS because it may rely upon NRC's FSEIS. IPPNY pointed out that Section 617.15(a) provides that Department Staff may do so only if the federal EIS is sufficient to make findings. IPPNY pointed out that there was no vehicle for interested parties to provide input, inasmuch as no notice was ever provided by Department Staff that it would be relying upon the NRC SEIS for its SEQRA determination. IPPNY concluded that "the SEQRA review to be conducted in the pending Entergy SPDES proceeding is the obvious choice for the IPPNY policy issues to be addressed." IPPNY Reply Letter at 3.

Entergy did not object to IPPNY's petition. There was no objection to the petition by any other potential intervenor.

Ruling: IPPNY's petition for amicus status is granted. No participant objected to IPPNY's environmental interest, which is demonstrated by its petition. In addition, IPPNY is in a special position to brief the following issue: whether the December 3, 2010 Final Supplemental Environmental Impact Statement issued by the Nuclear Regulatory Commission, Atomic Health and Safety Board, is sufficient for Department Staff to make findings pursuant to Section 617.11 of 6 NYCRR. If the FSEIS is found to be insufficient, IPPNY may provide additional comments and arguments to address this insufficiency.

New York City Economic Development Corporation Petition for Amicus Status

The NYC EDC's petition stated that its Energy Policy Department "serves as the principal energy policy advisor to the City of New York." IC Exhibit 20, at 1. Citing to the City's 2007 long-term sustainability plan, entitled PlaNYC, this petitioner stated that it had undertaken a number of long-range planning and strategic energy initiatives in order to advance the City's goals related to energy system reliability and the reduction of pollutants associated with electric generation.

NYC EDC went on to note that James Gallagher, the Senior Director of its Energy Policy Department, is the Chair of the New York City Energy Planning Board (the "Board"), composed of key energy stakeholders in the New York market. Those stakeholders include the City, NYC EDC, the New York Power Authority, and the regulated entities that supply the City's electric and natural gas. According to the petition, the Board "focuses on strategic issues affecting the security of the City, and on related environmental concerns." *Id.* at 1-2. Mr. Gallagher is also the Chair of the New York City Energy Policy Task Force, which is "a broader public-private group of City energy stakeholders that was created at the direction of Mayor Bloomberg in 2003." *Id.* at 2. Michael Delaney, NYC EDC's counsel, indicated that he represents the City in the relicensing proceeding before the Atomic Safety and Licensing Board of the NRC, in which the City is authorized to participate as an "interested government body," pursuant to 10 Code of Federal Regulations Section 2.315(c).

In its discussion of its environmental interest in this proceeding, NYC EDC noted that the City and much of the State is in a designated non-attainment area under the federal Clean Air Act, and that "[a] significant portion of the airborne pollution in the City can be attributed to fossil-fueled power plants, particularly under summer peak load conditions when air quality is

typically most compromised.” IC Exhibit 20, at 2. NYC EDC maintained that this proceeding would have significant implications for the City, noting that “[s]ome 30% of the overall electricity used in the New York City metropolitan area currently originates at Indian Point.” *Id.* at 3. This petitioner noted further that the City’s master supply agreement extends to the year 2017, “well beyond the existing federal licensing period of both [Indian Point] units.” *Id.*

NYC EDC argued that it has a direct environmental interest, because of its commitment to reduction in airborne pollutants and greenhouse gases. Stating that “production alternatives on the very large scale needed to replace the output of Indian Point would inevitably involve fossil-fueled generation,” NYC EDC maintained that an increase in air pollution in and around the City would be inevitable, and would also have a disproportionate impact on historically underserved communities. *Id.* at 4. While NYC EDC stated that it did not take a position as to Department Staff’s Denial Notice or Entergy’s request for a hearing, this petitioner stated that “it is noteworthy that Entergy contends that even the least intrusive measure proposed by Staff – the installation of cooling towers to replace the once-through cooling water system – if feasible at all, would result in a minimum plant shutdown period of 42 weeks” under a “best-case scenario.” *Id.* NYC EDC also expressed concerns associated with increased risks to the City’s significant reliance on natural gas if output from Indian Point were decreased.

NYC EDC asserted that it has significant expertise with respect to energy and capacity issues, electric system reliability, and the “range of air quality concerns associated with fossil fuel-fired electric power production.” *Id.* at 5. NYC EDC argued that those air quality concerns were significant, and therefore adjudicable, because “they directly involve environmental concerns that will be inextricably intertwined” with the outcome of the 401 WQC proceeding. *Id.* According to the petition, “no other party or entity in this proceeding before the Department of Environmental Conservation can adequately represent the interests of NYCEDC and the City that it serves.” *Id.* at 6.

In its petition, NYC EDC advised that it had retained the services of an energy economics consulting firm, Charles River Associates, Inc. (“CRAI”). According to the petition, CRAI will examine “1) the reliability and environmental implications that could be expected from the temporary or permanent loss of the Indian Point power plant, and 2) proposed contingency plans for possible alternative sources of energy, capacity and ancillary services in the event that replacement is needed.” *Id.* at 5. NYC EDC indicated that it would share CRAI’s findings with the parties as those findings become available, thus providing a third-party perspective on the topics to be examined.

NYC EDC went on to note that the Board would shortly be undertaking a multiparty review of issues surrounding Indian Point, “and in doing so it will draw on the analysis of key Planning Board members such as Con Edison and NYPA.” *Id.* The petition stated that, in addition, the New York Independent System Operator (“NYISO”) “has indicated its willingness to cooperate in the assessment by the Board and to lend its expertise, drawing on such valuable resources as the latest NYISO *Draft Reliability Needs Assessment*.” *Id.* at 5-6.

Department Staff took the position that NYC EDC’s petition failed to comply with the requirements for a petition for amicus status, and that such status should be denied. According to

Department Staff, as was the case with the Cortlandt, Westchester, DPS, IPPNY, and CHG&E, NYC EDC's petition "suffers from the same fundamental misunderstanding of the scope of DEC's Denial Notice, namely, that DEC mandated closed-cycle cooling at Indian Point." Department Staff Brief, at 74. Department Staff went on to state that the petition did "not address, or even mention, a single water-quality related standard or criteria mentioned in DEC's Denial Notice." Id.

According to Department Staff, the Interim Decision in the SPDES proceeding identified the issues that NYC EDC proposed to brief as SEQRA-related topics. Department Staff contended that "the topic of electric system reliability has previously been determined to be SEQRA-related and have [sic] nothing to do with water quality or aquatic resources." Id. at 75 (citations omitted). Department Staff concluded that electric system reliability and related issues are not a proper subject for briefing in the 401 WQC proceeding, and offered arguments similar to those advanced in connection with the Town of Cortlandt's petition, and discussed above.

Department Staff pointed out that NYC EDC "is also an active participant in the ongoing NEPA process and relicensing proceedings before NRC for the Indian Point facilities." Id., at 77. Department Staff contended that NRC is in the process of examining a number of environmental impacts, including impacts raised by NYC EDC in its petition. In light of this, Department Staff took the position that this petitioner's concerns "could have been and should appropriately be addressed in the NEPA process." Id. at 78.

Riverkeeper offered objections similar to those raised by Department Staff, contending that NYC EDC's proposed issues were outside the scope of the 401 WQC proceeding. Riverkeeper argued that "[i]t is clear from the tenor of NYCEDC's petition, that they are primarily concerned about, and wish to inform the record regarding the impacts of the shutdown of Indian Point." Riverkeeper Brief at 29. Riverkeeper reiterated that consideration of this concern in this proceeding would be inappropriate. Riverkeeper also took issue with the petition "to the extent NYCEDC is asserting that impacts of temporary shutdown due to due to a retrofit of Indian Point to closed-cycle cooling must be considered in this proceeding." Id. According to Riverkeeper, these issues related to the SEQRA assessment, rather than the BTA inquiry.

In response, NYC EDC countered that at the issues conference, Department Staff indicated that it had no objection to NYC EDC's participation. Tr. at 156. Nevertheless, NYC EDC noted that Department Staff did object in its post-hearing brief, and went on to assert that Department Staff's concerns with respect to NYC EDC's proposed briefing on reliability and air quality issues were not raised when those issues were advanced by other participants. NYC EDC took the position that Department Staff's position was therefore arbitrary and capricious.

NYC EDC asserted that its proposed issues "are directly relevant to DEC, and lie wholly or partly within its jurisdiction, and its overall mission to improve environmental quality." NYC EDC Reply Brief at 3. NYC EDC argued that "[t]o focus solely on remediating alleged Hudson River issues without regard to the air quality implications of the remedial steps contemplated is to adopt a short-sighted and potentially counterproductive approach – one that may ultimately prove antithetical to the interests of the DEC." Id.

NYC EDC went on to state that Department Staff's contention that nothing in the Denial Letter should be taken to mean that any form of closed cycle cooling would be necessary for a Section 401 WQC to issue was difficult to reconcile with the language of the Denial Letter, and amounted to a semantic distinction. This petitioner pointed to the Denial Letter's juxtaposition of closed-cycle cooling as a technically feasible alternative that would meet BTA standards, with the statement that cylindrical wedge wire screens would not be a reasonable alternative. Denial Letter at 17. NYC EDC noted that in another proceeding, Department Staff acknowledged that it has requested for many years that cooling towers be installed at the Facilities. NYC EDC disputed Department Staff's claim that closed cycle cooling is not necessarily relevant to this proceeding.

Moreover, NYC EDC went on to point out that Riverkeeper raised the issue of closed cycle cooling, and contended that the issue "is highly relevant to the issues that NYC EDC seeks to have examined in this proceeding, in that it illustrates why DEC jurisdictional issues such as maintaining and improving air quality are directly implicated by what is nominally a CWA § 401 matter." NYC EDC Reply Brief at 5. Citing to an April 29, 2010 letter to Department Staff from the National Economic Research Associates ("NERA"), NYC EDC emphasized that NERA, Entergy's consultant, stated that if closed cycle cooling were to be installed, a minimum plant shutdown of 42 weeks would be a "best-case scenario." IC Exhibit 13, attachment A, at 3 (citing to February 12, 2010 report by Enercon Services, Inc. entitled *Engineering Feasibility and Costs of Conversion of Indian Point Units 2 and 3 to a Closed-Loop Condenser Cooling Water Configuration*).

NYC EDC referred to various submissions prepared by Entergy noting the increased risks to New York City's already substantial reliance on natural gas, with a corresponding increase in pollutants, if the Facilities' output were lost. In such a case, NYC EDC observed that even using conservative assumptions, a report prepared by TRC Environmental Corporation in 2002 estimated that annual additive carbon dioxide emissions would be approximately 7 million tons. NYC EDC noted that TRC also examined the effect using relatively less efficient simple cycle plants, and concluded that this would result in even greater air emissions. NYC EDC maintained that these relatively more polluting plants would be dispatched when necessary to balance the system under peak demands. NYC EDC reasoned that "[i]t is of course under these same conditions when air quality is most likely to be compromised, and when concern over additional pollution loading is most acute." NYC EDC Reply Brief at 7. NYC EDC stated that "the basic conclusion is apparent: the shutdown of the Indian Point facility would appreciably affect air quality in an adverse manner." *Id.* NYC EDC concluded that treating only water quality issues in isolation from other related environmental impacts would be an unduly narrow view.

With respect to Department Staff and Riverkeeper's objections to the adjudicability of electric system reliability and air quality because those issues are being considered in the NRC proceeding, NYC EDC maintained that "the entire federal process could be rendered essentially meaningless by the outcome here." *Id.* at 10. NYC EDC noted that the State's denial of the Section 401 WQC "would under governing law effectively preclude reissuance by the NRC of 20-year operating licenses for Indian Point Units 2 and 3, thereby making all the proceedings before the NRC and the ASLB [Atomic Safety and Licensing Board] a virtual nullity." *Id.* NYC EDC pointed out that "while it is true as a technical matter that the question of shutdown would

remain within the purview of the Nuclear Regulatory Commission, it is more important to note that DEC has an effective veto over relicensing in the form of its own authority over the § 401 decision.” *Id.* NYC EDC concluded that as a result, it was critical that all environmental and public health concerns, particularly issues of air quality, be addressed in this proceeding. NYC EDC that air pollution concerns must enjoy equal status with issues of water quality under the Department’s broad statutory mandate.

Entergy did not object to NYC EDC’s petition. There was no objection from any other potential intervenor.

Ruling: NYC EDC’s petition for amicus status is granted. No participant objected to NYC EDC’s environmental interest, which is demonstrated by its petition. In addition, NYC EDC is in a special position to brief the following issue: whether the December 3, 2010 Final Supplemental Environmental Impact Statement issued by the Nuclear Regulatory Commission, Atomic Health and Safety Board, is sufficient for Department Staff to make findings pursuant to Section 617.11 of 6 NYCRR. If the FSEIS is found to be insufficient, NYC EDC may provide additional comments and arguments addressing the insufficiency.

Central Hudson Gas & Electric’s Petition for Amicus Status

Central Hudson Gas & Electric submitted a timely petition for amicus status. According to the petition, CHG&E’s environmental interests in the proceeding derive from this petitioner’s corporate commitments to environmental stewardship and sustainability of natural resources, as well as its mission as a public utility. CHG&E noted that, as part of its concerns with respect to its carbon footprint, CHG&E has purchased power from the Facilities, and has ongoing contracts to do so through 2013, “at least partly because of the fact that the facility does not emit hydro-carbon precursors to greenhouse gasses.” IC Exhibit 21, at 3. According to CHG&E, if cooling towers were mandated at Indian Point, heat emissions would increase, and the Facilities’ thermodynamic efficiency would decrease, contributing to global warming.

CHG&E went on to assert that a denial of the application, or the imposition of unacceptable conditions, “would equate to a denial of the operating license renewal that the Applicant is seeking from the Nuclear Regulatory Commission and thereby compel the shut-down of the facility.” *Id.* at 3-4. CHG&E expressed concerns with respect to the environmental impacts to be anticipated from replacement power. Stating that it is a member of the New York Independent System Operator (“NYISO”), this petitioner indicated that the NYISO’s comprehensive planning process is intended to assure the continuous availability of the facilities required to maintain the reliability of the inter-connected electrical grid. CHG&E asserted that it is critical that needs for future facilities be identified as soon as possible, so that any necessary permitting and construction for replacement facilities can take place to ensure that such facilities are available. In its petition, CHG&E indicated that

[t]he NYISO currently estimates that the loss of generation at Indian Point would result in violation of mandatory reliability standards relating to resource adequacy and transmission security. These adverse reliability impacts would have to be

alleviated through construction of new generation facilities, transmission/distribution facilities, or some combination of those types of facilities. Those “replacement facilities,” or some of them, may be required as soon as 2014, and will have their own environmental impacts from construction and operation.

Id. at 4-5. CHG&E concluded that, in its judgment, “continued operation of the Applicant’s facility is preferable from an environmental standpoint . . . to a shut-down of the facility before the end of its useful life (as may be permitted by the NRC) and the replacement of its functions through construction of new, environmentally-impacting facilities.” Id. at 5. CHG&E took no position as to the type of intake structure technology that should be required at the Facilities.

CHG&E also raised concerns with respect to SEQRA, contending that the Denial Letter did not provide any weight, “much less the ‘appropriate weight’ mandated by SEQRA” to the protection and enhancement of human and community resources, or to social and economic considerations. Id. at 6. CHG&E argued that the Denial Letter did not include suitable balancing, or a meaningful analysis of alternatives. CHG&E went on to assert that although Department Staff determined that the issuance of a 401 WQC is a Type I action subject to SEQRA, the Denial Letter does not include an analysis that would satisfy either the disclosure or substantive requirements of SEQRA.

CHG&E maintained that the Denial Letter did not consider factors other than impacts to fishery resources in the immediate vicinity of the Facilities. CHG&E argued that review of the application requires a full EIS process, including consideration of alternatives as well as social and economic considerations, and a balancing of relevant factors. CHG&E concluded that the Denial Letter was “contrary to the procedures and substance required by SEQRA.” Id. at 7.

In its petition, CHG&E identified the following issues for briefing:

1. whether the Department, in reviewing an application for a WQC that it has determined to be a Type I action, must complete a DEIS to support its denial of the application and have the DEIS accompany the Department’s determination through the remainder of the application process;
2. whether the Department, in reviewing an application for a WQC that it determines to be a Type I action, must include appropriate consideration to relevant social and economic factors in reaching any formal determination on the application;
3. whether the Department, in reviewing an application for a WQC that it determined to be a Type 1 action, must establish a “suitable balance of social, economic, and environmental factors” as part of its determination;

4. whether the Department, in reviewing an application for a WQC that it determined to be a Type I action, must consider the environmental impacts from replacement facilities that will be required to serve the functions of the existing facility for which the Department denied a WQC; and
5. whether the Department, in reviewing an application for a WQC, must consider environmental impacts of its proposed determination, including global warming impacts.

Id. at 8. CHG&E maintained that these issues were substantive and significant, within the meaning of Part 624. According to CHG&E, Department Staff proposed “modifications” within the meaning of Section 624.4(c)(8) of 6 NYCRR, the identified issues relate to a dispute over a substantial term of the Denial Letter, and the substantive and procedural adequacy of the matters cited in the Denial Letter. CHG&E contended that the issues were substantive because they pertain to the matters that are legally necessary to the determination. According to CHG&E, the issues were significant because they relate to whether the Denial Letter’s major modification of the relief Entergy sought is warranted. In the alternative, CHG&E argued that the issues may be considered pursuant to Section 624.4(c)(6)(1), as SEQRA issues, “in the context in which there has not been coordinated review and the Department is the lead agency.” Id. at 9.

Department Staff objected to CHG&E’s proposed issues, for the same reasons articulated in connection with the issues raised by other amicus petitioners. Department Staff maintained that CHG&E’s focus on SEQRA-related topics was misplaced, and that such topics were outside the purview of this proceeding. According to Department Staff, “the SEQRA-related issues proposed for briefing by CHGE have already been raised, and have been or are still being investigated, reflected or otherwise pursued in the NEPA review by NRC for Indian Point.” Department Staff’s Brief at 73. Department Staff went on to argue that CHG&E failed to mention any water quality standard or criteria referenced in the Denial Letter, and noted that because the topics proposed by this petitioner were not water quality-related, they were irrelevant to a Section 401 WQC determination. With respect to CHG&E’s arguments concerning modification, Department Staff asserted that it did not initiate a modification to an existing permit in the Denial Letter, and noted further that such modifications “are subject to an entirely separate regulatory process and set of criteria than a denial as outlined in 6 NYCRR § 621.13.” Id. at 73, n. 27.

Riverkeeper contended that the issues CHG&E proposed to brief were outside the scope of this proceeding, because the issues “stem from concerns regarding the potential shut-down of Indian Point.” Riverkeeper Brief at 26. According to Riverkeeper, Department Staff need not complete a DEIS to support its denial, inasmuch as NEPA has undertaken the requisite inquiry. Riverkeeper took the position that Department Staff is not required to consider social and economic factors in reaching its determination, because Department Staff’s inquiry “is focused only on whether ongoing operation of Indian Point will comply with New York State water quality standards and other relevant requirements of state law.” Id. Riverkeeper maintained that Department Staff is not obliged to balance social, economic and environmental factors, for the same reason.

Riverkeeper went on to argue that Department Staff need not consider the impacts of replacement generation, “since the impacts of shutdown are not within the scope of this proceeding, and, in any event, such impacts are being considered in the environmental review process accompanying the license renewal proceeding.” *Id.* Riverkeeper concluded that Department Staff is not required to independently assess the environmental impacts of the proposed determination, including global warming impacts, because an EIS has been prepared, pursuant to NEPA, in the license renewal proceeding.

In response, CHG&E asserted that its concern with the Denial Letter’s omission of factors CHG&E believed should be included, and its references to SEQRA, should not be taken to mean that such factors were exclusive of water quality standards. According to CHG&E, “[t]he mutual exclusion concept is flawed. The contention that the factors are ‘neither relevant nor germane’ is incorrect.” CHG&E Reply Brief at 4. CHG&E argued that the factors it identified “should have been considered as part of the SEQRA analysis that should have been prepared together with the Denial to accompany this admitted Type I action through the administrative process.” *Id.*

CHG&E argued that Department Staff did not respond directly to its contention that the Denial Letter made environmental factors (and only those related to aquatic resources) the sole consideration in reaching its determination, and failed to include a balance of social, economic, and environmental factors. According to this petitioner, the June 25, 2003 FEIS for the Hudson River power plants “did not examine all site-specific environmental impacts associated with the actual construction and operation of closed cycle cooling at the Stations.” CHG&E Reply Brief at 6, fn. 6. CHG&E argued that the need for further review was recognized in the litigation over the FEIS. CHG&E argued that Department Staff’s position was irrational, because the Denial Letter evaluated the BTA proposed by Entergy, but did not subject either those proposals or the Denial Letter’s conclusions to SEQRA review. The result, according to CHG&E, is inconsistent with the Interim Decision’s statement that SEQRA-related factors be considered as part of a BTA determination.

CHG&E argued that Department Staff’s position would mean “that an applicant’s treatment by the Department depends critically upon which decision the Department makes first – either a SPDES permit or a § 401 WQC.” CHG&E Reply Brief at 7-8. CHG&E maintained that while SPDES-related issues would be considered in the former, they would not be the subject of the latter proceeding, a result CHG&E characterized as irrational and not consistent with law.

Because Section 401 permits States to condition certification upon limitations that ensure compliance with NYWQS or any other appropriate requirement of State law, CHG&E argued that Department Staff’s Denial Letter failed to do so “because it excluded factors affirmatively required by two separate portions of the ECL.” *Id.* at 9. Specifically, CHG&E pointed to Article 8, as well as Article 15. With respect to the latter, CHG&E asserted that ECL Section 15-0103(5) sets forth an explicit finding that adequate water supplies for power and industrial purposes “is essential to the health, safety and welfare of the people and economic growth and prosperity of the state.” *Id.* at 12. CHG&E pointed out that ECL Section 15-0105(7) requires

that reasonable standards of purity and quality of waters be maintained consistent with the State's industrial development, and that therefore, the factors identified by this petitioner must be considered 'as an integral part of water quality standards.' Id. As a result, CHG&E concluded that Section 15-0105(7) "explicitly establishes that the 'industrial development of the state' is equivalent to 'public health, safety and welfare' and 'the propagation of fish and wildlife.'" Id. CHG&E contended that Department Staff had ignored power and industrial development considerations "in favor of exclusive consideration of aquatic resources." Id. at 13. According to CHG&E,

[t]he flaw in both the Denial and Staff's Brief, in Central Hudson's opinion, is that they have entirely read out of the statute both the legitimacy of "power" as a "public, beneficial purpose" and the requirement that "industrial development" be considered along with aquatic resource protection and other factors in determining "reasonable standards of purity and quality." By excluding factors that the statute mandates be integral parts of water quality standards determinations, the Denial produced "unreasonable standards."

Id. CHG&E stated that, in its view, the Interim Decision's approach of a four-step BTA analysis, followed by a SEQRA analysis, was likewise inconsistent with the statute, because the approach "provides presumptive correctness to a purely aquatic resource-based (entrainment/impingement) determination and relegates the "power" and "industrial development" considerations to inappropriate subsidiary roles." Id. CHG&E argued that "impacts on future carbon emissions, environmental 'costs,' electric system reliability, social and economic considerations, and compliance with SEQRA itself," are all factors "necessary to good decision-making in the interests of the People of the State." Id. at 22.

According to CHG&E, Department Staff's reliance on Matter of Niagara Mohawk, *supra*, was misplaced to the extent Department Staff used the decision as a basis, in its denial of the Section 401 WQC, for excluding consideration of the impacts CHG&E had identified in its petition. CHG&E pointed out that ECL Sections 15-0103, 15-0105, and 15-0109 were not considered in that decision, and that therefore, the case provides no basis for Department Staff's failure to consider those provisions. CHG&E noted that these portions of the statute were also not considered in another case Department Staff cited in support (see Matter of Eastern Niagara Power Alliance v. New York State Dept. of Envtl. Conservation, 42 A.D.3d 857 (3rd Dept. 2007)). CHG&E argued further that Matter of Eastern Niagara had been effectively overruled by the decision in Matter of Port of Oswego Auth. v. Grannis, 70 A.D.3d 1101 (3rd Dept. 2010), *lv. denied*, 14 N.Y.3d 714 (2010).

In Matter of Port of Oswego, a coalition of petitioners sought review of a judgment dismissing its application to review certain conditions of a water quality certification issued by the Department. The Department's certification contained various conditions to protect the State's waters against the introduction of invasive aquatic species through ballast water discharged from vessels. 70 A.D.3d 1101, 1102. The court held that "ample scientific evidence and expert opinion exists in the record to support DEC's determination that the challenged

conditions are necessary to ensure federal permittees' compliance with New York's existing water quality standards." *Id.* at 1103. The court went on to note that "the ECL requires 'the use of all known available and reasonable methods to prevent and control the pollution' of state waters (ECL 17-0101; *see* ECL 17-0501[17]; 6 NYCRR 700.1[a][42]), and existing regulations limit 'toxic and other deleterious substances' to amounts that will not 'impair the waters for their best usages' (6 NYCRR 703.2; *see also* ECL 17-0301, 17-0501; 6 NYCRR parts 701, 703)." *Id.* at 1104.

CHG&E also relied upon the Second Circuit's decision in American Rivers, Inc. v. FERC, 129 F.3d 99 (1997). In that case, the court held that FERC did not have authority to exclude conditions the State of Vermont sought to impose in a Section 401 WQC in connection with a Federal Power Act license. 129 F.3d at 108. FERC claimed that the conditions were beyond the State's authority under CWA Section 401, but the court reasoned that Section 401(d), "reasonably read in light of its purpose, restricts conditions that states can impose to those affecting water quality in one manner or another." *Id.* at 107. CHG&E argued that the factors it had identified in its petition "affect" water quality standards, because SEQRA requires consideration of those factors, as does Article 15 of the ECL. CHG&E concluded that "[i]t follows that consideration of these factors is not preempted, as Staff's Brief claims." CHG&E Reply Brief at 18.

In response to Department Staff's suggestion that such consideration is outside its jurisdiction in the context of a Section 401 WQC application, CHG&E maintained that such a posture was inconsistent with the Interim Decision's direction that SEQRA factors be considered in relation to the BTA determination, as well as Department Staff's "attempt to raise Article 11 of the ECL in relation to endangered species, in contrast to Article 15, as a basis for the Denial." CHG&E Reply Brief at 18. CHG&E reiterated that "ECL Article 15 itself, in §§ 15-0103, 0105, and 0109, affirmatively imposes an obligation that the Department consider the factors raised by Central Hudson as part of the Department's water quality standards-related determinations." *Id.* at 19. CHG&E concluded that consideration of these factors is squarely within Department Staff's jurisdiction.

CHG&E went on to note that Department Staff may have misconstrued its position. CHG&E stated that it did not take the position that an entirely new SEQRA EIS be prepared. Rather, CHG&E maintained that the Department was required to consider all of the factors identified and present a full-scale SEQRA analysis, either by preparing a new EIS or a supplemental EIS as an adjunct to "any Indian Point-related EIS analyses, federal or state, that are adequately comprehensive and not stale." *Id.* at 20. According to CHG&E, Department Staff's claims that adequate consideration to SEQRA factors "will be given in unrelated documents is not relevant to the Department's obligation to consider the factors as an integral part of its determination of the WQC application in the Denial." *Id.* at 19, fn. 23.

CHG&E argued that the Denial Letter reflects the determination that cooling towers, or an equivalent, would be necessary to comply with NYWQS. CHG&E maintained that this reflects a modification of the relief sought by Entergy in its application, as supplemented. In CHG&E's view, Department Staff bears the burden to provide a prima facie case for the

conclusions stated in its Denial Letter. CHG&E argued that if that is not a modification, “the difference between a modification and Staff’s affirmative burden is immaterial.” *Id.* at 21.

Entergy did not object to CHG&E’s petition. No other potential intervenor objected to CHG&E’s petition.

Ruling: CHG&E’s petition for amicus status is granted. This petitioner has demonstrated the requisite environmental interest, and no participant raised any objection to that interest. Moreover, this petitioner is in a special position to brief the following issue: whether the December 3, 2010 Final Supplemental Environmental Impact Statement issued by the Nuclear Regulatory Commission, Atomic Health and Safety Board, is sufficient for Department Staff to make findings pursuant to Section 617.11 of 6 NYCRR. If the FSEIS is found to be insufficient, CHG&E may provide additional comments and arguments regarding any insufficiency.

This petitioner’s arguments concerning the applicability of Article 15 reflect CHG&E’s interest in addressing larger resource and energy planning concerns in the context of this Section 401 water quality certification proceeding. The cited provisions address the need to maintain the purity and quality of the State’s waters, consistent with industrial development, and according to CHG&E, these goals are closely related to the purposes of CWA Section 401 and must be taken into account. Nevertheless, it is clear that the State’s role pursuant to CWA Section 401 is not without limit, and the implication must be that a wide ranging inquiry into energy policy concerns is not contemplated by the statute. *See PUD No. 1, supra*, 511 U.S. at 712 (“[a]lthough § 401(d) allows the State to place restrictions on the activity as a whole, that authority is not unbounded”).

A review pursuant to Article 15 is also distinguishable from the inquiry related to Article 11, as discussed above, where U.S. EPA guidance specifically states that the existence of State laws protecting endangered or threatened species, “particularly where the species plays a role in maintaining water quality or if their presence is an aspect of a designated use,” is relevant to an evaluation of an application for a Section 401 WQC. EPA Handbook at 21. Under the circumstances, a review of the application pursuant to Article 15 is not an appropriate basis for the issue this petitioner seeks to advance.

Summary of Rulings on Requests for Party Status and Amicus Status

Riverkeeper's petition for full party status is granted. Westchester's petition for full party status is granted. Cortlandt's petition for full party status is granted.

Mr. Brodsky's petition for full party status is granted. On or before **Friday, January 14, 2011**, Mr. Brodsky is to advise the parties and the ALJs as to whether he will participate in the Section 401 WQC proceeding, and whether he intends to continue his participation in the related SPDES proceeding. If notification is not provided by that date, Mr. Brodsky's petition will be deemed withdrawn. NYS DPS has withdrawn its petition for full party status, and therefore no ruling with respect to that petition is required.

The petitions for amicus status by IPPNY, the NYC EDC, and CHG&E are granted.

Conference Call

The participants shall advise the other parties and the ALJs as to their availability for a conference call to be held during the first week in January. Tentatively, the conference call is scheduled for 10:00 a.m. on Thursday, January 6, 2011. If that date and time are not convenient, please advise the ALJs as soon as possible. The attached scheduling order will be the subject of the conference call.

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, this deadline will be extended. Any appeals are to be filed on or before **Friday, January 21, 2011**. Responses to any appeals are to be filed on or before **Friday, February 18, 2011**.

The original and three copies of any appeal from this issues ruling must be received by Assistant Commissioner J. Jared Snyder no later than 4:30 p.m. on **Friday, January 21, 2011**, at the following address: Assistant Commissioner J. Jared Snyder (att'n: 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 Chief Administrative Law Judge James T. McClymonds. 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. 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.

An original and three copies of any response to an appeal must be received by Assistant Commissioner Snyder no later than 4:30 p.m. on **Friday, February 18, 2011**. One copy of the response must be served on each party on the Service List in the same manner and at the same time as the submission is sent to the Assistant Commissioner. Submissions should also be sent via electronic mail to the Service List, including the Administrative Law Judges. Submissions filed via telefacsimile will not be accepted.

As indicated above, on or before **Friday, January 28, 2011**, Department Staff shall advise the ALJs and the parties as to whether the December 3, 2010 FSEIS is sufficient for Department Staff to make the findings required by Section 617.11 of 6 NYCRR. Any responses to Department Staff's filing are to be served on or before **Friday, February 25, 2011**. Department Staff is authorized to file a reply, to be served on or before **Friday, March 25, 2011**.

/s/

Maria E. Villa
Administrative Law Judge

Dated: December 13, 2010
Albany, New York

To: Hon. Daniel P. O'Connell, Administrative Law Judge
Attached Service List: Section 401 WQC Proceeding
Attached Service List: SPDES Proceeding

EXHIBIT CHART

*Matter of Entergy Indian Point Units 2 and 3 – Water Quality Certificate
July 21, 2010*

Exhibit No.	Description	ID'd?	Rec'd?	Offered By	Notes
1A	June 9, 2010 Notice of Public Comment Period, Legislative Public Hearing, and Issues Conference	✓		N/A	
1B	June 9, 2010 Notice of Public Comment Period, Legislative Public Hearing, and Issues Conference, as published in the June 9, 2010 <i>Environmental Notice Bulletin</i>	✓		N/A	
1C	Affidavit of Publication of June 9, 2010 Notice of Public Comment Period, Legislative Public Hearing, and Issues Conference in the <i>New York Times</i> , <i>Journal News</i> , <i>Poughkeepsie Journal</i> , <i>Kingston Daily Freeman</i> , and <i>Middletown Times Herald Record</i>	✓		N/A	
2	CD: NRC License Renewal, Indian Point Units 2 and 3: Application for Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act	✓		N/A	
3	CD: Correspondence: April 2009 – December 2009	✓		N/A	
4	Response CD from ASA (November 2009) to Request for Additional Information Regarding Joint Application for CWA § 401 Water Quality Certification for Indian Point Units 2 and 3	✓		N/A	
5	CD: February 12, 2010 detailed responses to NYSDEC's request for information dated May 13, 2010)	✓		N/A	
6	CD: February 12, 2010 Evaluation of Alternative Intake Technologies at Indian Point Units 2 & 3	✓		N/A	
7	CD: February 12, 2010 Engineering Feasibility and	✓		N/A	

Exhibit No.	Description	ID'd?	Rec'd?	Offered By	Notes
	Costs of Conversion of Indian Point Units 2 & 3 to a Closed-Loop Condenser Cooling Water Configuration				
8	March 15, 2010 letter from Elise N. Zoli, Esq. to Christopher M. Hogan, Project Manager, NYSDEC, and Mark D. Sanza, Esq. re: tri-axial thermal study requirement at Indian Point Units 2 and 3	✓		N/A	
9	Hydrothermal modeling of the Cooling Water Discharge from the Indian Point Energy Center to the Hudson River (March 10, 2010)	✓		N/A	
10A	Historical Facility Documents: Discharge Monitoring Reports	✓		N/A	Separate box
10B	Historical Facility Documents: Assorted Reports (Box 1 of 2)	✓		N/A	Separate box
10C	Historical Facility Documents: Assorted Reports (Box 2 of 2)	✓		N/A	Separate box
10D	Historical Facility Documents: Thermal Report	✓		N/A	Separate box
10E	401 Certification Amendment Requests, Effluent Reports, Annual Operating Reports, Fish Tabulations and EPP	✓		N/A	Separate box
11A	February 26, 2010 Notice of Complete Application for Units 1 & 2	✓		N/A	
11B	February 26, 2020 Notice of Complete Application for Unit 3	✓		N/A	
11C	February 26, 2020 Notice of Complete Application for Unit 2 and 3 (combined)	✓		N/A	
11D	March 17, 2010 Affidavit of Publication – Westchester <i>Journal News</i>	✓		N/A	
12	April 2, 2010 letter from to William R. Adriance, Chief Permit Administrator, NYSDEC, to Dara F. Gray,	✓		N/A	

Exhibit No.	Description	ID'd?	Rec'd?	Offered By	Notes
	Entergy Nuclear Operations, Inc., denying Entergy's application for a federal Clean Water Act Section 401 Water Quality Certification				
13	April 29, 2010 cover letter from Elise N. Zoli, Esq., Goodwin Procter, to William R. Adriance, Chief Permit Administrator, NYSDEC, requesting hearing on denial of application for 401 Water Quality Certification	✓		N/A	
13A	April 29, 2010 letter from David Harrison, Jr., Ph. D., Senior Vice President, and Eugene Meehan, Senior Vice President, NERA Economic Consulting to NYSDEC	✓		N/A	
13B	April 29, 2010 <i>Response to the NYSDEC CWA § 401 Water Quality Certification Notice of Denial Related To Thermal Discharges at Indian Point</i> (Applied Science Associates, Inc.)	✓		N/A	
13C	April 2010 <i>Response to NYSDEC's CWA § 401 Water Quality Certification Notice of Denial</i> (Enercon Services, Inc.)	✓		N/A	
13D	Response to Biological Aspects of NYSDEC 401 Certification Letter (Lawrence W. Barnthouse, Ph. D.; Douglas J. Heimbuch, Ph. D.; Mark T. Mattson, Ph. D.; John R. Young, Ph. D.)	✓		N/A	
14	Riverkeeper, Inc., Natural Resources Defense Council, and Scenic Hudson Petition for Full Party Status (July 10, 2010)	✓		N/A	
14A	<i>Curriculum vitae:</i> Peter Alan Henderson, Ph. D.	✓		N/A	
14B	<i>Curriculum vitae:</i> Bill Powers, P.E.	✓		N/A	
14C	<i>The Status of Fish Populations and the Ecology of the Hudson</i> , Pisces Conservation Ltd. (April 2008)	✓		N/A	
14D	<i>Entrainment, Impingement, and Thermal Impacts at</i>	✓		N/A	

Exhibit No.	Description	ID'd?	Rec'd?	Offered By	Notes
	<i>Indian Point Nuclear Power Station, Pisces Conservation Ltd. (November 2007)</i>				
14E	United States Nuclear Regulatory Commission: <i>Generic Environmental Impact Statement for License Renewal of Nuclear Plants</i> (Supplement 38 Regarding Indian Point Nuclear Generating Unit Nos. 2 and 3 – Draft Report for Comment Main Report)	✓		N/A	
14F	<i>Groundwater Investigation Executive Summary, Indian Point Energy Center, Entergy (January 2008)</i>	✓		N/A	
14G	United States Nuclear Regulatory Commission: <i>Safety Evaluation Report, Related to the License Renewal of Indian Point Nuclear Generating Unit Nos. 2 and 3</i>	✓		N/A	
14H	<i>Final IPEC Quarterly Long-Term Groundwater Monitoring Report, Quarter Four 2008, GZA GeoEnvironmental of New York (September 1, 2009)</i>	✓		N/A	
14I	Enclosure 1 to NL-09-045: <i>2008 Annual Radioactive Effluent Release Report</i>	✓		N/A	
14J	<i>BEIR VII: Health Risks from Exposure to Low Levels of Ionizing Radiation</i>	✓		N/A	
15	Town of Cortlandt Petition for Full Party Status (July 9, 2010)	✓		N/A	
16	County of Westchester Petition for Full Party Status, or in the Alternative, for Amicus Status (July 12, 2010)	✓		N/A	
17	NYS Department of Public Service Petition for Full Party Status (July 12, 2010)	✓		N/A	
18	Independent Power Producers of New York (“IPPNY” Petition for Amicus Status (July 8, 2010)	✓		N/A	
19	New York City Economic Development Corporation, Energy Policy Department Petition for Amicus Status	✓		N/A	Amended; see

Exhibit No.	Description	ID'd?	Rec'd?	Offered By	Notes
	(July 12, 2010)				Exhibit 20
20	New York City Economic Development Corporation, Energy Policy Department Petition for Amicus Status (July 12, 2010)	✓		N/A	
21	Central Hudson Gas & Electric Petition for Amicus Status (July 9, 2010)	✓		N/A	
22	Richard L. Brodsky Petition for Full Party Status (July 15, 2010)	✓		N/A	Revised; see Exhibit 23
23	Richard L. Brodsky Petition for Full Party Status (July 15, 2010) (revised)	✓		N/A	
24	July 9, 2010 letter from Stephen G. Burns, Esq., General Counsel, United States Nuclear Regulatory Commission, to Jim Riccio, Nuclear Policy Analyst, Greenpeace, with attached May 25, 2010 letter from Paul Gunter, Beyond Nuclear, Richard Webster, Eastern Environmental Law Center, Jim Riccio, Greenpeace, Geoffrey H. Fettus, NRDC, Phillip Musegaas, Riverkeeper, and Dave Lochbaum, Union of Concerned Scientists	✓		Riverkeeper	