

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
625 BROADWAY
ALBANY, NEW YORK 12233-1010

In the Matter

- of -

a Renewal and Modification of a State
Pollutant Discharge Elimination System
("SPDES") permit pursuant to Environmental
Conservation Law ("ECL") Article 17 and Title
6 of the Official Compilation of Codes, Rules
and Regulations of the State of New York ("6
NYCRR") Parts 704 and 750 *et seq.*

-by-

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

Permittee.

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

INTERIM DECISION OF THE ASSISTANT COMMISSIONER

August 13, 2008

INTERIM DECISION OF THE ASSISTANT COMMISSIONER¹

Entergy Nuclear Indian Point 2, LLC and Entergy Nuclear Indian Point 3, LLC (collectively, "Entergy" or "Permittee") seek to renew a State Pollutant Discharge Elimination System ("SPDES") permit for the Indian Point nuclear powered steam electric generating stations 2 and 3 (the "Stations"). The Stations are located on the east side of the Hudson River in the Village of Buchanan, Westchester County, New York. Staff of the New York State Department of Environmental Conservation ("Department" or "DEC") has proposed various modifications to the SPDES permit for the Stations, including new conditions to implement measures to minimize impacts to aquatic organisms from the Stations' cooling water intake systems.

Administrative Law Judge ("ALJ") Maria E. Villa issued a Ruling on Proposed Issues for Adjudication and Petitions for Party Status on February 3, 2006 ("Issues Ruling") in which she identified various issues for adjudication.

In the Issues Ruling, ALJ Villa directed that any participant in the proceeding that wished to appeal the Issues Ruling file a notice of appeal. By letters dated February 17, 2006, Department staff, Entergy, and a consolidated group of three environmental petitioners (Riverkeeper, Inc., Scenic Hudson, Inc., and Natural Resources Defense Council, Inc.; collectively, "Riverkeeper") filed notices of appeal. By letters dated February 17, 2006 and February 22, 2006, respectively, Assemblyman Richard L. Brodsky and the African American Environmentalist Association ("AAEA") provided notice that they did not intend to appeal the Issues Ruling.

Appeals were subsequently filed by Department staff, Entergy and Riverkeeper. Replies to appeals were filed by Department staff, Entergy, Riverkeeper, AAEA, and Assemblyman Brodsky.

Based upon consideration of the appeals, I hereby modify the Issues Ruling, as discussed below. By this interim decision, various issues are advanced to adjudication.

¹ By memorandum dated April 2, 2008, Commissioner Alexander B. Grannis delegated decision making authority in this proceeding to Assistant Commissioner J. Jared Snyder. A copy of the memorandum is being forwarded to the issues conference participants together with this interim decision.

TABLE OF CONTENTS

Background and Proceedings.....3
- Draft Permit.....3
- Issues Ruling.....5
- Appeals.....7

Standards for Adjudication.....7

BTA Analysis.....9

Adjudicable Issues.....14
- Issues Raised by Entergy.....14
- Entergy Issue 1.....14
- Entergy Issue 2.....18
- Entergy Issue 3.....21
- Entergy Issue 4.....23
- Entergy Issue 5.....26
- Entergy Issue 6.....28
- Entergy Issue 7.....29
- Entergy Issue 8.....32
- Entergy Issue 9.....33
- Entergy Issue 10.....34
- Entergy Issue 11.....35
- Entergy Issue 12.....36
- Condition 29 of the Draft SPDES Permit.....41
- Issues Raised by Riverkeeper.....42

Party Status.....44
- African American Environmentalist Association....44
- New York State Department of Public Service.....47

Other Matters.....50

Burdens of Proof.....50

Conclusion.....52

BACKGROUND AND PROCEEDINGS

The Stations are equipped with separate cooling water systems that withdraw water from the Hudson River and discharge that water back to the river through a shared discharge canal.

In each of these "once-through" non-contact cooling systems, the water is taken into the system and circulates past the condenser coils to absorb heat from operation of the generation equipment. The water is then discharged back to the river at a higher temperature than at the intake. Up to 2.5 billion gallons of water per day are withdrawn from the Hudson River through three intake structures along the shoreline. The heated non-contact cooling water is discharged to the river through sub-surface diffuser ports located along the wall of the discharge canal, south of the intake structures.

Department staff issued a SPDES permit for the Stations in 1987. In April 1992, Consolidated Edison and the New York Power Authority filed a timely SPDES renewal application with the Department. As a result, the Stations have continued to operate pursuant to section 401(2) of the State Administrative Procedure Act. The Issues Ruling outlines the history with respect to the SPDES permit issued for the Stations, including the transfer of permits for the Stations to Entergy in 2000 and 2001, the development of the Hudson River Settlement Agreement, and related litigation. See Issues Ruling, at 2-6.

In December 1999, the owners and operators of three steam electric generating facilities along the Hudson River submitted, pursuant to the requirements of the State Environmental Quality Review Act ("SEQRA"), a draft environmental impact statement ("DEIS") with respect to the renewal of SPDES permits for the three facilities. The three facilities included Bowline Point (units 1 and 2), Indian Point (stations 2 and 3), and Roseton (units 1 and 2). The final environmental impact statement was prepared by Department staff and adopted on June 25, 2003.

Draft Permit

On November 12, 2003, Department staff circulated a draft SPDES permit for the Stations. The draft permit contains conditions that address conventional industrial-wastewater pollutant discharge, thermal discharge, and cooling water intake.

For the Stations, Department staff has determined that a closed cycle cooling system is the site-specific best technology available ("BTA") to minimize the adverse environmental impact of

the cooling water intake structures² (with respect to entrainment³ and impingement⁴). Closed cycle cooling systems recirculate the water taken from the water source (after allowing it to cool in a tower or reservoir). Water is added to the system only to replace the water that is lost through evaporation. As a result, closed cycle cooling systems use far less water from the water source than once-through cooling.

The draft permit contains new conditions that address the thermal discharge and the implementation of measures that the Department has determined to be BTA for minimizing impacts to aquatic organisms from the cooling water intake system, including the installation of a closed cycle cooling system at the Stations. Specifically, special condition 28 of the draft permit provides, in part, that Entergy submit a pre-design engineering report within one year of the permit's effective date that addresses:

² Operators of facilities in New York State with cooling water intake structures that are subject to SPDES permits are required to comply with section 316(b) of the federal Clean Water Act ("CWA") and 6 NYCRR 704.5. Codified at section 1326(b) of title 33 of the United States Code ("USC"), CWA § 316(b) reads as follows: "Any standard established pursuant to [33 USC § 1311, "Effluent limitations"] or [33 USC § 1316, "National standards of performance"] and applicable to a point source shall require that the location, design, construction and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact" (emphasis added).

Section 704.5 of 6 NYCRR states: "[t]he location, design, construction and capacity of cooling water intake structures, in connection with point source thermal discharges, shall reflect the best technology available for minimizing adverse environmental impact" (emphasis added).

³ "Entrainment" is the process by which smaller organisms including larval fish and fish eggs are carried along with the intake water through any intended exclusion technology (such as screens) into the cooling system where they may be damaged or killed. See Matter of Athens Generating Co., LLP ["Matter of Athens"], Interim Decision of the Commissioner, June 2, 2000, at 12-13.

⁴ "Impingement" occurs when larger organisms, such as fish, are trapped against intended exclusion technology (such as screens) by the force of the intake water flows, which may result in either suffocation of, or injury to, the organisms. See Matter of Athens, Interim Decision of the Commissioner, June 2, 2000, at 13.

(i) the potential relocation of a segment of the Algonquin Gas Company's gas pipeline to construct closed cycle cooling;
(ii) the potential need for blasting to construct closed cycle cooling and the potential impacts of such blasting;
(iii) particulate emissions from cooling towers;
(iv) sequential construction outages at units 2 and 3, as opposed to simultaneous construction outages;
(v) the potential impacts to energy reliability and capacity associated with anticipated construction outages as well as the 42 day annual operating outages; and
(vi) additional measures to reduce potential impacts to energy reliability or capacity. See Draft SPDES Permit, Issues Conference Exhibit ("IC Exh") 11C, Special Condition 28(b).

Within one year after submission of the pre-design engineering report, Entergy must submit complete design plans that address all construction issues for conversion of the cooling water systems to closed cycle cooling. See id., Special Condition 28(e). However, the draft permit also allows Entergy, within one year of the effective date of the permit, to submit a pre-design engineering report for an alternative technology that will minimize adverse environmental impact to a level equivalent to that which can be achieved by closed cycle cooling. See id., Special Condition 28(c) & (d).

While steps are being taken to implement BTA, Entergy would be required to schedule and take annual generation outages between February 23 and August 23 of each year (which are the times when the highest level of entrainment occurs). Entergy must operate fish impingement mitigation measures and, to reduce entrainment, must reduce flows throughout the year according to a schedule specified in the permit. See IC Exh 3B, "DEC Fact Sheet," November 2003, at 3.

Issues Ruling

Pursuant to 6 NYCRR 624.5, the parties to any adjudicatory hearing include the applicant, Department staff and those who have been granted party status. In this proceeding, the ALJ granted party status to Riverkeeper, AAEA and Assemblyman Richard Brodsky. The ALJ denied a motion made by Entergy to join the New York State Department of Public Service ("DPS") as a party to the proceeding.

Entergy, Riverkeeper, AAEA and Assemblyman Brodsky all proposed issues for adjudication.

Entergy disputed a number of substantial terms and

conditions in the draft SPDES permit. The ALJ determined that twelve of the matters proposed by Entergy were adjudicable. In addition, Entergy requested clarification of four areas of the draft permit. Three of these were resolved or otherwise did not require adjudication. However, no resolution was reached regarding Entergy's request for deletion of Condition 29 of the draft SPDES permit, which would require Entergy to pay \$24 million into an escrow account established for the benefit of the Hudson River Estuary Restoration Fund. As a result, the ALJ advanced this matter to adjudication. See Issues Ruling, at 40-41.

With respect to the proposed issues raised by other parties, the ALJ identified four issues raised by Riverkeeper for adjudication. Assemblyman Brodsky raised the same issues for adjudication as Riverkeeper. In light of the foregoing, the ALJ directed Assemblyman Brodsky to confer with Riverkeeper to coordinate the presentation of evidence at the hearing. See id. at 55.

AAEA raised three issues for adjudication. The ALJ concluded that those three issues would be consolidated as one issue: "whether the draft SPDES permit has considered adequately the impacts on air quality if a closed-cycle cooling system is installed at the Stations." Id. at 49.

Subsequent to the issuance of the Issues Ruling, Entergy submitted a letter dated April 6, 2006 ("April 2006 Letter") in which it sought corrections or clarification with respect to the ruling. In part, Entergy requested a clarification that it may introduce evidence that established its compliance with the Phase II rule, which the United States Environmental Protection Agency ("EPA") had issued and which established requirements governing cooling water intake structures at large, existing power plants. Entergy also requested clarification that "all environmental impacts and other relevant SEQRA considerations may be addressed (in consideration of Entergy Issue 12) relating to the Department's implementation of SEQRA." April 2006 Letter, at 8. By letter dated April 17, 2006, Department staff responded to Entergy's submission. Staff requested that both of Entergy's requests be denied.

ALJ Villa, by memorandum dated April 26, 2006, addressed Entergy's requests. The ALJ stated that the determination in the Issues Rulings that the Phase II Rule was not applicable to this proceeding (see Issues Ruling, at 24-25) is the law of the case unless successfully challenged in a subsequent appeal. The ALJ noted that Entergy, in its appeal from the Issues Ruling, did not

challenge her determination that the Phase II Rule was inapplicable to this proceeding. In light of the foregoing, the ALJ determined that evidence concerning Entergy's compliance with the Phase II Rule would not be received at the adjudicatory hearing. The ALJ also stated that Entergy's request to adjudicate topics other than impacts on aesthetics, air quality and the electric system went beyond the scope of the Issues Ruling, which specifically restricted adjudication to those topics. Accordingly, the ALJ concluded that no clarification was required.⁵

Appeals

Appeals from the Issues Ruling were filed by Department staff, Entergy and Riverkeeper ("Staff Appeal," "Entergy Appeal," and "Riverkeeper Appeal," respectively). Replies to appeals were filed by Department staff, Entergy, Riverkeeper, AAEA, and Assemblyman Brodsky ("Staff Reply," "Entergy Reply," "Riverkeeper Reply," "AAEA Reply," and "Brodsky Reply," respectively).

STANDARDS FOR ADJUDICATION

Pursuant to 6 NYCRR part 624, which governs permit hearings, an issue is adjudicable where:

"(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

⁵By correspondence dated September 15, 2006, Entergy submitted to ALJ Villa a copy of an amicus curiae brief that Entergy had filed on August 31, 2006 with the United States Supreme Court in Commonwealth of Massachusetts v Environmental Protection Agency. Department staff submitted a letter in which it requested that the brief be precluded from the record of this proceeding. By letter dated September 26, 2006, Louis Alexander, Assistant Commissioner for Hearings and Mediation Services, advised Entergy and Department staff that no other submissions had been authorized, other than those provided for in the Issues Ruling. Accordingly, the amicus curiae brief and related correspondence would not be considered at this stage in the proceeding.

substantive and significant." 6 NYCRR 624.4(c)(1)(i-iii).

Accordingly, in this case, disputes between the permit renewal applicant and Department staff will be adjudicated where the dispute concerns a material term or condition of the draft permit. Where a dispute between applicant and Department staff concerns a legal issue that can be resolved without resolution of fact issues in material dispute, such a legal issue may be decided at the issues conference stage of the proceeding. See 6 NYCRR 624.4(b)(2)(iv).

Where contested issues are proposed by third parties, an issue must be both substantive and significant to be adjudicable. See 6 NYCRR 624.4(c)(1)(iii). An issue is substantive if 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. In determining whether such a demonstration has been made, the ALJ must consider "the proposed issue in light of the application and related documents, the draft permit, the content of any petitions filed for party status, the record of the issues conference and any subsequent written arguments authorized by the ALJ." 6 NYCRR 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." 6 NYCRR 624.4(c)(3).

Where Department staff has reviewed an application and finds that a component of the applicant's project, as proposed or as conditioned by the draft permit, conforms to all applicable requirements of statute and regulation, the burden of persuasion "is on the potential party proposing any issue related to that component to demonstrate that it is both substantive and significant." 6 NYCRR 624.4(c)(4).

In areas of Department staff's expertise, its evaluation is an important consideration in determining whether an issue is adjudicable. See Matter of Halfmoon Water Improvement Area No. 1, Decision of the Commissioner, April 2, 1982, at 2; Matter of Bonded Concrete, Inc., Interim Decision of the Commissioner, June 4, 1990, at 2.

With respect to the proof offered by a potential party, even where supported by a factual or scientific foundation, such offer of proof may be rebutted by the application, the draft permit and

proposed conditions, Department staff's analysis, the SEQRA documents, the record of the issues conference, and authorized briefs, among other relevant materials and arguments. See Matter of Thalle Industries, Inc., Decision of the Deputy Commissioner, November 3, 2004, at 19-20.

As to legal and policy issues, the Commissioner has discretion in the interim appeals process to offer legal and policy guidance "to optimize the permitting process and focus the hearing." Matter of the Saratoga County Landfill, Second Interim Decision of the Commissioner, October 3, 1995, at 3. On legal and policy issues, it is appropriate for the Commissioner to undertake a more probing review. See Matter of Hyland Facility Associates, Interim Decision of the Commissioner, August 20, 1992, at 2.

BTA ANALYSIS

The central issue raised on the appeals concerns the BTA analysis for the Stations. Because of recent developments in the law concerning BTA, a discussion of the applicable analysis is warranted.

BTA determinations by the Department have been conducted on a site-specific, case-by-case basis utilizing a four-step analysis. See, e.g., Matter of Dyneqy Northeast Generation, Inc. (Danskammer) ("Matter of Dyneqy"), Decision of the Deputy Commissioner, May 24, 2006, at 20; Matter of Athens, Interim Decision of the Commissioner, June 2, 2000, at 4; see also letter dated January 24, 2005 from DEC Deputy Commissioner Lynette Stark to EPA Assistant Commissioner Benjamin H. Grumbles. The four-step analysis involves the following determinations:

- (1) whether the facility's cooling water intake structure may result in adverse environmental impact;
- (2) if so, whether the location, design, construction and capacity of the cooling water intake structure reflect BTA for minimizing adverse environmental impact;
- (3) whether practicable alternate technologies are available to minimize the adverse environmental effects; and
- (4) whether the costs of practicable technologies are wholly disproportionate to the environmental benefits conferred by such measures.

The first step of a BTA determination under 6 NYCRR 704.5

considers whether an adverse environmental impact exists. In this analysis, "adverse environmental impact" relates exclusively to the impact on aquatic organisms from impingement and entrainment.

The second step of the BTA determination relates to whether the location, design, construction and capacity of the cooling water intake structure reflect BTA for minimizing entrainment and impingement. In the context of the second step, the term "minimizing" means the reduction to the smallest amount, extent or degree reasonably possible.

The third step of the BTA analysis addresses whether practicable alternate technologies are available to minimize impingement and entrainment. Availability of a technology is analyzed in the context of its suitability for the particular application, including its ability to be installed and operated at the site. In this regard, for example, the impacts of a technology on a facility's operation (that is, can it be engineered such that the facility will operate efficiently) are part of the BTA analysis. See, e.g., Matter of Dynegy, Decision of the Deputy Commissioner, May 24, 2006, at 14 (where cooling tower configurations could not be effectively integrated into facility's operations without detrimental effect, such configurations were not available technology). Whether adequate space exists to construct and operate the technology, or whether physical or other site constraints are present, are similarly relevant to the consideration of whether a technology is available. See id. at 8-14; see also Matter of Dynegy, Issues Ruling, at 17, 60-62 (where a component of a retrofit configuration would not fit on the site, the configuration is not available for consideration of the BTA determination).

The "wholly disproportionate" standard in the fourth step of the State's BTA analysis is not a simple cost-benefit analysis. See Matter of Athens, Interim Decision of the Commissioner, at 14-15; see also Issues Conference Transcript ("IC Tr"), at 102-103. It gives "presumptive weight" to the value of environmental benefits and places the burden on a permit applicant to demonstrate that the relative costs are unreasonable. See id. at 15. However, in light of the Second Circuit's decision in Riverkeeper, Inc. v EPA, 475 F3d 83 (2007) ("Riverkeeper II"), and its rejection of cost-benefit analysis, I am clarifying the application of the "wholly disproportionate" language in the fourth step of the BTA analysis.

As background, on July 9, 2004, EPA published in the Federal Register the Phase II Rule, which established requirements for

cooling water intake structures at large, existing power plants.⁶ The Phase II Rule became effective as of September 7, 2004. By implementation of this rule, the adverse environmental impact of cooling water intake structures was to be minimized by reducing the number of aquatic organisms lost as a result of water withdrawals associated with these structures. See "Summary," 69 Fed Reg 41576 (July 9, 2004). The Phase II Rule did not require such facilities to install closed cycle cooling systems, but facilities with closed cycle cooling systems were considered to be in compliance with the rule. See Riverkeeper II, at 93.

In Riverkeeper II, the Second Circuit remanded the Phase II Rule to EPA on various grounds. See Riverkeeper II, at 130-31. The Second Circuit expressly rejected the use of a cost-benefit analysis when making a BTA determination. It held that CWA § 316(b) "plainly indicates that facilities must adopt the best technology available [and] that cost-benefit analysis cannot be justified in light of Congress's directive." Riverkeeper II, at 98-99 (emphasis in original). Section 316(b) was construed to "expressly require[] a technology-driven result." Id. at 99. Accordingly, the court did not see consideration of costs in relation to benefits as consistent with the statutory provision.

Notwithstanding its rejection of the use of cost-benefit analysis, the Second Circuit stated that "cost" could be permissibly considered in two ways: "(1) to determine what technology can be 'reasonably borne' by the industry and (2) to engage in cost-effectiveness analysis in determining BTA." Id. at 99. According to the Court, once the most effective technology that may reasonably be borne by the industry is determined, other factors "including cost-effectiveness" may be considered to select a less expensive technology that achieves essentially the same results. Id. at 100.

Effective July 9, 2007, the EPA suspended nearly the entire Phase II Rule in response to the Second Circuit's decision. See 72 Fed Reg 37107-37109 (July 9, 2007). On April 14, 2008, the United States Supreme Court granted Entergy's petition for a writ of certiorari with respect to whether section 316(b) of the federal Clean Water Act (33 U.S.C. § 1326[b]) authorizes the EPA to compare costs with benefits in determining the best technology available for minimizing adverse environmental impact at cooling

⁶ The Phase I Rule, which was addressed by the Second Circuit in Riverkeeper, Inc. v EPA, 358 F3d 174 (2d Cir 2004) ("Riverkeeper I"), addressed cooling water intake structures at new power producing facilities.

water intake structures. Entergy Corp. v EPA, - US -, 128 S Ct 1867, 2008 WL 1699464.

Unless overturned or otherwise modified by the United States Supreme Court, the Second Circuit's construction of the federal Clean Water Act with respect to cost-benefit analysis governs this proceeding. Moreover, even if the United States Supreme Court were to determine that the federal Clean Water Act allows for cost-benefit analysis in determining BTA, New York State may, pursuant to section 510 of the federal Clean Water Act, adopt or enforce through its federally delegated SPDES permit program a more stringent approach than cost-benefit analysis. See 33 U.S.C. § 1370 (providing that a state may adopt or enforce through its SPDES permit program more stringent standards with respect to an effluent limitation "or other limitation, effluent standard, prohibition, pretreatment standard or standard of performance"). The federal Clean Water Act, however, establishes the statutory "floor" for New York State's SPDES program. See id.⁷

The lack of a Phase II rule does not prevent the Department from proceeding in this case. As here, in the absence of an applicable effluent limit guideline, best professional judgment ("BPJ") is exercised to develop appropriate effluent limitations. See, 33 U.S.C. § 1342(a)(1); 40 CFR § 125(3)(d). EPA's guidance manual for permit writers defines BPJ as "the highest quality technical opinion developed by a permit writer after consideration of all reasonably available and pertinent data or information that forms the basis for the terms and conditions of a NPDES permit." U.S. EPA NPDES Permit Writers' Manual, at 68 (1996). As indicated in the notice suspending the Phase II Rule, all permits for Phase II facilities should include conditions under section 316(b) of the Clean Water Act developed on a best professional judgment basis. See 72 Fed Reg 37107-37109.

Based upon my review of the Second Circuit's construction of section 316(b) and in furtherance of the State's responsibility and authority over its aquatic resources, I am modifying the language in the final step of the State's four-step BTA analysis to clarify that it is not intended to include a cost-benefit

⁷ Although this proceeding is governed by the Second Circuit's construction of the federal Clean Water Act, the Phase II rule itself was not applicable in this matter. The ALJ properly determined that the regulation did not apply because the SPDES permit application for the Stations was in process, and the draft SPDES permit had been issued, prior to the effective date of the Phase II Rule. See Issues Ruling, at 24-25.

analysis. Incorporating language from the Second Circuit decision, the fourth step of the analysis shall be reworded as follows: "whether the cost of the technology can reasonably be borne by the industry and, upon making the determination that it can, whether considerations of cost-effectiveness allow for selection of a less expensive but equally effective technology."

The Second Circuit's decision did not explicitly define the phrase "reasonably borne by the industry," and it is significant that the decision was addressing a generic rule that applied to this regulated sector. The court did, however, say that the determination should be based not on the "average" facility, but on the "optimally best performing" facilities. Riverkeeper II, at 99-100.

Applying this to New York's BTA determinations, the analysis of whether a proposed technology, such as closed cycle cooling, can be "reasonably borne by the industry" shall first consider whether the cost of the technology can reasonably be borne by the facility in question. If it can reasonably be borne by the facility, that would end the inquiry with respect to the "reasonably borne" prong and the inquiry would proceed to evaluate whether considerations of cost-effectiveness would allow for the selection of a less expensive but equally effective technology. If, however, the proposed technology cannot reasonably be borne by the facility, the "reasonably borne" analysis would then consider whether the cost of the technology could reasonably be borne by an "optimally best performing" facility. If the cost of the proposed technology can reasonably be borne by such a facility, the "reasonably borne" inquiry would be satisfied and the proposed technology would continue to be evaluated as BTA for the facility. If neither the specific facility nor an "optimally best performing" facility can reasonably bear the cost of the proposed technology, then the technology would not be further considered for implementation as BTA for the facility in question. See Riverkeeper II, at 99 (technology that is not reasonably borne "is not 'available' in any meaningful sense").

For purposes of this proceeding, in order to determine whether closed cycle cooling is BTA for Indian Point Stations 2 and 3, it would need to be initially determined whether the cost of closed cycle cooling can reasonably be borne by the Stations. If it can reasonably be borne, the "reasonably borne" inquiry would be satisfied and closed cycle cooling would continue to be evaluated as BTA for the Stations. If the cost of closed cycle cooling could not be reasonably borne by the Stations, the analysis would proceed to consider whether the cost of closed

cycle cooling could reasonably be borne by an "optimally best performing" facility. If the cost of closed cycle cooling could be borne by an "optimally best performing" facility, closed cycle cooling would continue to be evaluated as BTA for the Stations.

To this end, the parties in this proceeding should be prepared to discuss the cost data utilized, including but not limited to the revenue stream developed for the Stations.⁸ The applicant would, in part, be expected to produce any material and relevant financial information relating to its facility in the consideration of BTA. In the event that the cost of closed cycle cooling cannot reasonably be borne by the Stations, and the analysis proceeds to whether the cost can reasonably be borne by an "optimally best performing" facility, additional general industry-related information may need to be considered.

ADJUDICABLE ISSUES

Issues Raised by Entergy

Entergy Issue 1⁹

The Issues Ruling determined the following issue to be adjudicable:

"Whether, as a threshold matter, the Department has demonstrated that the Station[s'] cooling water intake structures have caused an 'adverse environmental impact,' triggering the best technology available assessment under Section 316(b) and Section 704.5." Issues Ruling, at 26.

This issue concerns the first step of the Department's BTA analysis, that is: whether the facility's cooling water intake structure may result in adverse environmental impact. See Matter of Dynegy, Decision of the Deputy Commissioner, May 24, 2006, at

⁸ In this review, "cost" relative to the Stations would include the construction, operation and maintenance of the proposed BTA, any lost revenues arising from outages, and other related inefficiencies. Revenue data for the facility may be developed from industry sources (for example, data developed by the New York Independent System Operator), together with any facility-related data that has been obtained.

⁹ For ease of reference, the numbering of Entergy's issues in this decision corresponds to the numbering in the Issues Ruling.

20; Matter of Athens, Interim Decision of the Commissioner, June 2, 2000, at 4. Consistent with Department administrative precedent, and as acknowledged by the parties, the threshold for determining that adverse environmental impacts exist under this analysis is "very low." See Matter of Dynegy, Decision of the Deputy Commissioner, at 21; see also id., Hearing Report, at 80 ("[t]he threshold for determining whether any facility's cooling water intake structure would result in any adverse environmental impacts is very low"); see also Entergy Reply, at 10; Staff Appeal, at 3.

Department staff argues that "the requisite 'adverse environmental impact' specified in 6 NYCRR [704.5] . . . has been thoroughly demonstrated in the record of this proceeding" and, therefore, no reason exists to adjudicate this proposed issue. Staff Appeal, at 2. Staff notes that the Final Environmental Impact Statement for Indian Point Units 2 and 3, dated June 25, 2003 ("FEIS"), contains information regarding entrainment rates for five fish species and estimates that more than one billion individuals of these species will be entrained annually. Id. at 3 (citing FEIS, Table 1, at 2).

Furthermore, staff notes, the Department has determined that other facilities along the Hudson River cause adverse environmental impacts even though they withdraw less cooling water and entrain significantly lower numbers of fish than the Stations. Staff also cites prior State and federal determinations where the loss of aquatic organisms by impingement or entrainment was deemed to constitute an adverse environmental impact. Id. at 4-8.

Riverkeeper concurs with Department staff's assertion that there is no reason to adjudicate Entergy Issue 1 and argues that "it has already been established in this proceeding that the Stations cause adverse environmental impact." Riverkeeper Reply, at 3. Among other things, Riverkeeper cites to fish mortality information "measured by the permittees' own consultant" and argues that "the applicant has admitted . . . adverse environmental impact exists." Id. (citation omitted).

Assemblyman Brodsky notes that the Issues Ruling describes the threshold for finding adverse environmental impacts under the BTA analysis as "a low one." Brodsky Reply, at 15 (citing Issues Ruling, at 26). As such, he argues, "the uncontroverted fact of mortality of more than 1 billion fish per year [at the Indian Point Stations] exceeds that low threshold." Brodsky Reply, at 15. Assemblyman Brodsky contends that "there is no factual basis and no legal basis for re-opening the issue of whether or not

Indian Point's [cooling water intakes] cause adverse environmental impacts to the Hudson River." Id. at 3.

Entergy argues that Department staff's assertion that the operation of the Indian Point cooling water intake structures "results in a per se adverse environmental impact is in conflict with prior Department determinations." Entergy Reply, at 10. Although acknowledging that "the hurdle is a low one," Entergy maintains that staff may not presume adverse impacts exist, but rather must "affirmatively establish" the existence of such impacts. Id.

Entergy maintains that, at this stage of the proceeding, Department staff may not rely upon the record to establish the existence of adverse environmental impacts. Entergy also argues that the State and federal determinations that staff cites in support of its position are inapposite because those determinations concerned new facilities rather than existing ones. Id. at 13 n 11.

Contrary to Entergy's assertion, Department staff has not argued that operation of the cooling water intakes results in adverse environmental impacts per se. Rather, staff argues that the entrainment of more than 1.2 billion fish per year by the cooling water intakes at the Stations leaves "no question" that adverse environmental impacts result from operation of the Stations. Staff Appeal, at 8.¹⁰

Moreover, the FEIS data cited by staff is drawn directly from the DEIS that was prepared by the owners/operators of the Indian Point stations and two other power generating facilities along the Hudson River. The DEIS estimates an annual mortality rate of nearly 900,000 of the entrained fish. The FEIS concludes that "the generators' estimates [in the DEIS] represent the lower boundary of the actual mortality range" with the actual mortality rate falling somewhere between the generators' estimate and the "upper end" of fish entrained. FEIS, at 4.

The Second Circuit, in its decisions in both Riverkeeper I and Riverkeeper II, recognized that it is reasonable and appropriate to deem fish mortality to be an adverse environmental impact of intake structures on aquatic organisms at both existing

¹⁰ Department staff also demonstrates the adverse environmental impact of Indian Point in light of findings of adverse environmental impacts of other power plants along the Hudson River. See Staff Appeal, at 3-7.

and new facilities. See Riverkeeper I, at 196; Riverkeeper II, at 125.

As noted previously, at the issues conference stage of an adjudicatory proceeding under 6 NYCRR part 624, legal issues that are not dependent upon the resolution of facts in substantial dispute may be decided as a matter of law. See 6 NYCRR 624.4(b)(2)(iv). In this case, it is not necessary to resolve the factual issue concerning the actual fish mortality rate to determine that an adverse impact exists as a matter of law. Even accepting the "lower boundary" estimate of fish mortality in the DEIS, a mortality rate in the range of 900,000 fish per year far exceeds any de minimis level, represents excessive fish kills and is sufficient to establish that the operation of the Indian Point cooling water intakes results in an adverse environmental impact, thereby triggering further BTA analysis.¹¹

This conclusion is consistent with EPA's position regarding what constitutes adverse environmental impact under CWA § 316(b). EPA has expressly stated that the loss of aquatic organisms, by itself, constitutes an adverse environmental impact. See, e.g., 69 Fed Reg 41586 (with respect to the promulgation of the Phase II Rule, EPA determined that there are multiple types of undesirable and unacceptable environmental impacts that may be associated with Phase II existing facilities, including entrainment and impingement); see also Staff Appeal, at 8.¹²

I am satisfied that, in the context of this BTA

¹¹ Because the magnitude of the mortality rate at the Stations demonstrates that an adverse environmental impact exists as a matter of law, it is not necessary to reach the question whether any entrainment and impingement constitutes an adverse environmental impact.

¹² As noted, effective July 9, 2007, EPA suspended nearly the entire Phase II rule in response to the Second Circuit's decision in Riverkeeper II, which remanded several aspects of the Phase II rule to EPA for further consideration. Although the Second Circuit took issue with significant portions of the Phase II rule and its promulgation, it nevertheless "specifically rejected the view that 'the EPA should only have sought to regulate impingement and entrainment where they have deleterious effects on the overall fish and shellfish populations in the ecosystem, which can only be determined through a case-by-case, site-specific regulatory regime'" [and] emphasized that "'the EPA's focus on the number of organisms killed or injured by cooling water intake structures is eminently reasonable.'" Riverkeeper II, at 125 (quoting Riverkeeper I, at 196).

determination, it has been established that Indian Point's cooling water intake structures cause an adverse environmental impact. Accordingly, this issue is not adjudicable.

Entergy Issue 2

The Issues Ruling determined the following issue to be adjudicable:

"Whether the Department's site-specific determination that closed-cycle cooling is the best technology available for Indian Point 2 and Indian Point 3, provided both Stations are relicensed, fails to satisfy the applicable legal standard, or is otherwise arbitrary and capricious." Issues Ruling, at 27.

Here, Department staff does not oppose adjudication of the issue in its entirety. Rather, staff states that it is concerned that Entergy Issue 2 may be read to expand the scope of the inquiry into the Department's BTA determination "beyond aquatic species and the water quality of the water body in question." Staff Appeal, at 11. Staff cites the statement in the Issues Ruling that "Entergy asserted that the Department had not accounted for the adverse effects of the proposed BTA to the electric system, air quality, and aesthetics" (Issues Ruling, at 27) and argues that such adverse effects are not properly considered under the Department's BTA determination.

According to Department staff, to consider issues beyond aquatic biota and water quality as part of the BTA determination would be at variance with Department precedent. See Matter of Athens, Interim Decision of the Commissioner, June 2, 2000, at 12 n 8. Staff also cites to a 2004 issues ruling wherein the ALJ ruled that the applicant's "proposed issue with respect to the effect of additional fish protection outages on electric system reliability in New York is not relevant to the BTA determination." Matter of Dynegy, Issues Ruling, March 25, 2004, at 16.

Riverkeeper argues that "it would be improper and unproductive to allow the adjudication of these issues (the electric system, air quality, and aesthetics) with an open invitation to litigate matters having no direct connection with the SPDES permit conditions subject to this proceeding." Riverkeeper Appeal, at 16 (parenthetical in original). Riverkeeper "concur[s] with Staff's request that - consistent with DEC's administrative precedent - [Entergy Issue 2] 'be limited and/or clarified'" to avoid extending the BTA analysis

beyond impacts on aquatic resources. Riverkeeper Reply, at 11 (quoting Staff Appeal, at 9). Riverkeeper adds, however, that "all applicable Federal, State and local requirements (e.g., visual impacts) will need to be complied with prior to installation and operation of any new facilities at the Stations." Id.

Assemblyman Brodsky argues that the Issues Ruling could broaden the BTA determination "far beyond its appropriate scope, and graft a SEQRA determination onto this SPDES proceeding's BTA assessment." Brodsky Reply, at 7. Assemblyman Brodsky cites EPA and Department precedent which he argues demonstrate that BTA determinations are to consider only aquatic impacts and that "potential impacts to air quality, aesthetics or the electrical grid, where valid, could be addressed in a SEQRA proceeding." Id. at 8.

Entergy argues that this issue was properly identified for adjudication. Entergy asserts that the Issues Ruling correctly held that a dispute exists between Entergy and Department staff regarding what constitutes BTA for the Indian Point stations. Moreover, because this dispute relates to a substantial term of the draft permit, adjudication is appropriate. Entergy Reply, at 22-23. Entergy maintains that "existing technologies at the Stations, along with the flow restrictions set forth in the Consent Order,¹³ satisfy any and all concerns the Department may have regarding perceived aquatic impacts reasonably attributable to the Stations' cooling water intake structures in accordance with [CWA] §316(b) and/or [6 NYCRR] §704.5." Entergy Reply, at 22 (internal citation and quotation marks omitted).

Entergy directly challenges Department staff's assertion that the adverse environmental impacts to be considered under a BTA analysis are limited solely to aquatic organisms. Like Department staff, Entergy cites to the issues ruling in Matter of Dynegy in support of its position. Entergy states that in Dynegy

¹³The flow restrictions referenced by Entergy were initially established under the Hudson River Settlement Agreement ("HRSA"), signed by, among others, the Department, Consolidated Edison Company of New York, Inc. ("Con Ed") (Entergy's predecessor at Indian Point Unit 2), the Power Authority of the State of New York (now the New York Power Authority ["NYPA"]) (Entergy's predecessor at Indian Point Unit 3) and other Hudson River power generators on December 19, 1980 (and which became effective in 1981). The HRSA expired in 1991 but the flow restrictions and other aspects of the agreement remained in effect through a series of consent orders and, after the last of the consent orders expired in 1998, by agreement of the generators.

"the ALJ expressly stated that effects on electric generating capacity, air emissions, visual impacts of cooling towers, and visual impacts of cooling plumes - clearly non-aquatic potential adverse environmental impacts of the proposed technology - must be taken into consideration." Entergy Reply, at 49.

Entergy Issue 2 raises the issue of the "applicable legal standard" for making a BTA determination. As noted, the Department uses a four-step analysis in making a BTA determination. For purposes of this proceeding and in the context of current policy, the BTA analysis shall be undertaken in conformance with that four-step process, as modified with regard to the last (fourth) factor. See BTA Analysis, supra.

The parties' disagreement regarding this issue implicates the relationship between the BTA determination process and the SEQRA review process. It appears that Entergy is arguing that the BTA determination process and the SEQRA review process should be merged or otherwise considered as one, but I view the processes to be sequential. In drafting a SPDES permit for this type of facility, Department staff should first apply the four-step BTA analysis to determine the appropriate BTA technology. This four-step BTA analysis focuses upon the adverse impact on aquatic resources, that is entrainment and impingement.¹⁴

Once the BTA determination is made, the proposed BTA technology must then be reviewed in accordance with SEQRA. This review may lead to modifications in the design, construction or operation of the identified technology. To the extent that the SEQRA review identifies mitigation or other modification to the location, construction or operation of the technology to address environmental impact(s), such mitigation or modification can be reflected in permit conditions, or revisions to the technology's design, location or operation.

Conceivably, an environmental impact may be identified in the SEQRA review that is of such magnitude that it could preclude the construction and operation of the proposed BTA technology (for example, if it were determined that construction of the BTA technology would impact an endangered species or a freshwater or tidal wetland, and no appropriate mitigation were available). In those circumstances, it may be determined that the proposed BTA technology would not satisfy the requirements of SEQRA, and

¹⁴ See, e.g., Matter of Dynegy, ALJ Ruling on Proposed Issues, March 25, 2004, at 16 (effect of additional fish protection outages on electric system reliability not relevant to the BTA determination).

Department staff may then be obligated to revisit the BTA determination.

The Issues Ruling, in discussing Entergy Issue 2, references Entergy's assertion that the Department had not accounted for adverse effects of the proposed BTA with respect to the electric system, air quality and aesthetics. See Issues Ruling, at 27. Testimony on these issues will be evaluated as part of the SEQRA analysis of the proposed technology after the BTA analysis has been completed.¹⁵

As previously discussed, the first step in the BTA analysis, that is whether the Stations' cooling water intake structure results in an adverse environmental impact (entrainment and impingement), has been answered in the affirmative. See Entergy Issue 1, supra. Therefore, the scope of Entergy Issue 2 will be limited to addressing the remaining three steps of the BTA analysis with respect to Department staff's determination that closed cycle cooling is BTA for the Stations.

Entergy Issue 3

The Issues Ruling determined that the following issue was adjudicable:

"Whether the Department has appropriately assessed the costs and benefits of its proposal in the Draft Permit." Issues Ruling, at 27.

Here, as with Entergy Issue 2, Department staff does not oppose adjudication of this issue in its entirety but rather seeks to narrow the inquiry. Staff states that it "would not raise this concern but for the way the Issues Ruling uses the phrase 'compared to other available alternative technologies[.]'" Staff Appeal, at 14 (quoting Issues Ruling, at 29) (brackets added by Department staff). Staff argues that the appropriate analysis is solely whether the cost of the BTA proposed by staff is "wholly disproportionate" to the environmental benefit achieved. Such analysis, Department staff argues, does not entail an assessment of the relative costs of other available technologies, nor does it require a formal cost-benefit analysis where environmental benefits must be "monetized." Id. at 13. Accordingly, staff seeks clarification to avoid irrelevant argument and testimony at hearing regarding matters outside the "wholly disproportionate" analysis.

¹⁵ See Entergy Issue 12, infra.

Riverkeeper seeks to ensure that the "economic factors and the supporting evidence in the instant matter [are] limited to: environmental benefits to be gained by protecting aquatic resources; costs of a closed cycle cooling retrofit, including annual capital cost of the retrofit and annual operation and maintenance; and expected revenues for the sale of electricity." Riverkeeper Appeal, at 11. For reasons similar to those advanced by Department staff, Riverkeeper seeks clarification of the "wholly disproportionate" standard. As with Department staff, Riverkeeper argues that neither formal cost-benefit analysis nor cost comparisons between technologies intended to reduce fish mortality are appropriate. Riverkeeper Reply, at 12.

Assemblyman Brodsky requests "that the Commissioner clarify that the 'wholly disproportionate' test is not a cost-benefit analysis, and exclude such evidence and argument from this proceeding." Brodsky Reply, at 6. Moreover, the Assemblyman states that the proper cost analysis in this proceeding is "whether the costs of constructing closed-cycle cooling at Indian Point are wholly disproportionate to the practical elimination of the adverse impacts of entrainment and impingement of aquatic organisms." Id.

Entergy states that, under the BTA analysis, the applicable cost-benefit analysis is "whether the costs of practicable technologies are wholly disproportionate to the environmental benefits conferred by such measures." Entergy Reply, at 23 (internal citations and quotation marks omitted). Entergy argues that "both EPA and New York officially have concluded that monetization of environmental benefits should occur where feasible." Id. at 58.

As previously discussed, the inquiry in the fourth step of the Department's BTA analysis, which contains the "wholly disproportionate" standard, is modified in light of the Second Circuit's construction of Clean Water Act § 316(b) in Riverkeeper II. As modified and for purposes of this proceeding, the fourth step of the analysis shall address whether the cost of the proposed BTA technology (closed cycle cooling) can reasonably be borne by the industry (see, supra, at 12) and, upon making the determination that it can, whether considerations of cost-effectiveness allow for selection of a less expensive but equally effective technology. Cost-benefit analysis is not part of the Department's BTA determination process.

Entergy's assertion that environmental benefits should be monetized is in error, and the citations it references are not relevant here. Cost-effectiveness considerations go to

evaluation of whether alternate technologies would achieve the same environmental benefit with respect to aquatic organisms. Monetizing environmental benefits is not required or appropriate.

On the other hand, I deny Department staff's request to preclude cost-effectiveness comparisons between technologies. Provided that the proposed technologies achieve essentially the same environmental benefit, neither federal nor State law precludes implementation of the less costly alternative.¹⁶ For the purposes of such comparisons, costs associated with retrofitting the facility, including but not limited to modification or relocation of existing structures, would need to be considered.

Accordingly, Entergy Issue 3 is modified to read as follows:

"Whether the Department has adequately (i) assessed whether the costs of its proposal in the draft permit can be reasonably borne by the industry, and (ii) considered the cost-effectiveness of equally effective alternative technologies."

As this issue is encompassed by the fourth step of the BTA determination, it will be adjudicated as part of Entergy Issue 2.¹⁷

Entergy Issue 4

The ALJ, in the Issues Ruling, modified the issue proposed by Entergy. As modified by the ALJ, Entergy Issue 4 now reads:

¹⁶ With respect to the term "cost-effectiveness" as used in the fourth step, a comparative example is set forth in the Riverkeeper II decision. According to the court, where power plants can reasonably bear the price of a technology that costs \$100 to save 99-101 fish and a technology that costs \$150 to save 100-103 fish, the less expensive technology could be chosen based on cost-effectiveness considerations Riverkeeper II, at 100. We do not decide here whether additional fish impact that is properly considered de minimis would disqualify an alternative technology from consideration.

¹⁷ Various SEQRA-related issues are also discussed in the Issues Ruling under Entergy Issue 3 (that is, impacts to the electric system, aesthetics, and evaporative losses). Because the only environmental impact considered in the four-step BTA analysis relates to entrainment and impingement, such other environmental impacts shall be considered as part of the SEQRA review (see Entergy Issue 12, infra) and not part of the four-step BTA analysis.

"[W]hether cooling towers can be sited at the Stations, assuming that Entergy's design is adopted, in light of the expense associated with moving the Algonquin pipeline." Issues Ruling, at 30.

The ALJ noted that the issue would be considered in the context of the "wholly disproportionate" analysis. See id. at 29-30.

Riverkeeper has requested that Entergy submit the specific retrofit configuration that Entergy is proposing for consideration prior to the adjudicatory hearing (at a time to be determined by the ALJ). Riverkeeper Reply, at 8. Presently, the draft SPDES permit requires that Entergy, within one year of the effective date of the permit, submit a pre-design engineering report addressing regulatory and engineering issues, including but not limited to:

- (i) the potential relocation of a segment of the Algonquin pipeline;
- (ii) the potential need for blasting to construct closed cycle cooling and its potential impacts;
- (iii) particulate emissions from cooling towers;
- (iv) sequential construction outages at the Stations as opposed to simultaneous construction outages;
- (v) the potential impacts to energy reliability and capacity associated with anticipated construction outages as well as the 42 day annual operating outages; and
- (vi) additional measures to reduce potential impacts to energy reliability or capacity. See IC Exh 11C, Special Condition 28(b).

Based upon my review of the record and the issues to be adjudicated, consideration of Riverkeeper's request, and the interests of ensuring efficiency in the administrative process, I conclude that the information to be contained in the pre-design engineering report should be considered in this pending proceeding. The information is relevant to the issues that have been identified for adjudication and whether Department staff's selection of closed cycle cooling as BTA for this facility is appropriate. In particular, some of the information is relevant to steps 3 and 4 of the BTA analysis.

For example, it would not be useful to adjudicate Entergy Issue 4 regarding the Algonquin pipeline without having the information on the potential relocation of a segment of the Algonquin pipeline contemplated by Special Permit Condition 28(b) (i). In addition to cost considerations relating to moving

the pipeline, adjudication of this issue should also address whether the Algonquin pipeline would preclude the siting of cooling towers or otherwise make them unavailable for this site, given the impact on facility operations of moving the pipeline. If the movement of the pipeline (or movement of any other physical impediment) is so disruptive of facility operations that it would result in the permanent closure of the facility, a technology that requires movement of the pipeline would not be "available" for this site. See, e.g., Matter of Dynegy, Decision of the Deputy Commissioner, May 24, 2006, at 13-14.

To the extent that Entergy believes that other site constraints exist with respect to closed cycle cooling, such constraints should be raised in this proceeding. Consequently, Entergy Issue 4 is modified as follows:

"Whether cooling towers can be sited at the Stations, in light of existing physical features and the expense of removing or relocating such impediments including but not limited to the Algonquin pipeline."

In addition, the draft SPDES permit (see IC Exh 11C) also provides that, within one year of the effective date of the permit, Entergy may submit a pre-design engineering report for an alternative technology(s) that will "minimize adverse environmental impact to a level equivalent to that which can be achieved by closed-cycle cooling." Id. at Special Condition 28(c). Department staff would then evaluate the capability of the proposed alternative. If it determines that the proposed alternative may be substituted for closed cycle cooling, Department staff would, if appropriate, commence a proceeding to modify the permit accordingly. Id. at Special Condition 28(d).

These permit provisions would allow for subsequent submission of alternate proposals, and the potential revisitation of the closed cycle cooling determination at some later date. The result could be further delay in addressing the ongoing adverse environmental impact on aquatic organisms at this facility. Any viable alternative to closed cycle cooling that is equally effective should be considered now, and not reserved for some future proceeding. This proceeding is the appropriate forum for a final BTA determination that would be incorporated into the SPDES permit, enabling the necessary construction and installation to commence as promptly as possible.

Accordingly, for purposes of administrative efficiency and to ensure a complete record in making a final BTA determination, I direct that information on any alternative BTA proposals must

be submitted and considered in this proceeding. If Entergy seeks to have an alternative to closed cycle cooling considered, including but not limited to any retrofit configurations, it should submit that alternative to Department staff and the other parties prior to the commencement of the adjudicatory hearing in accordance with a schedule to be established by the ALJ. Such submissions should include but not be limited to aquatic impact information, relevant cost information (for example, cost of construction, installation and operation), and the proposed location of the technology at the site.¹⁸

In light of the foregoing, Special Condition 28(c) and (d) would be rendered moot and, depending upon the adjudication, other provisions of the draft permit may similarly be rendered moot or otherwise require modification. If after consideration of any alternative proposed by Entergy, Department staff and the other parties do not agree that such alternatives represent BTA for the Stations, Entergy shall present those alternatives that it seeks to have considered as part of its direct case at the adjudicatory hearing.

Finally, several aspects of the pre-design engineering report involve SEQRA-related impacts rather than issues relevant to the four-step BTA determination: blasting (Special Condition 28[b][ii]); particulate emissions (Special Condition 28[b][iii]); construction outages (Special Condition 28[b][iv]); and impacts to electric reliability and capacity (Special Condition 28[b][v] & [vi]). This information should be considered in this proceeding, as part of Entergy Issue 12 (see infra) addressing SEQRA concerns.

Entergy Issue 5

The Issues Ruling determined the following issue to be adjudicable:

“Whether closed-cycle cooling is an available technology for an existing nuclear station comparable in size and configuration to the Stations.” Issues Ruling, at 30.

¹⁸As discussed in the review of Entergy Issue 1, it has been demonstrated that the Stations’ cooling water intake structures have caused, and are continuing to cause, an adverse environmental impact. For purposes of review of any alternative technologies, however, further information may be received with respect to the numbers of fish that are entrained and impinged at the Stations as part of the evaluation of alternative technologies.

Department staff argues that this issue "should not be adjudicated because it is clear that closed cycle cooling is an available BTA technology." Staff Appeal, at 19. Staff asserts that, by "recounting negative statements made by Entergy at the Issues Conference" and by a "misplace[d] . . . reliance on EPA's Preamble to the Phase II Rule," the Issues Ruling appears to question whether there is sufficient historical data to justify retrofitting existing facilities with closed cycle cooling systems. Id. at 15. Staff argues that the BTA determination is "facility-specific, and one may not categorically rule out an available technology for an existing [cooling water intake structure]." Id. at 16. Accordingly, staff seeks reversal of Entergy Issue 5 or, alternatively, that the issue be limited to whether closed cycle cooling is BTA under the facts and circumstances specific to the Stations.

Entergy counters that the preamble to EPA's final Phase II rule "confirms that EPA concluded that [retrofitting existing facilities with closed cycle cooling systems] is not available on a national scale." Entergy Reply, at 19. Entergy cites to sections of the preamble to the final Phase II rule that indicate such retrofitting may be "'not economically practicable.'" Id. (quoting the preamble to the Phase II rule, 69 Fed Reg 41601 and 41606).

Entergy also argues that Department staff has acknowledged that closed cycle cooling may not be feasible at the Stations. In support of this contention, Entergy points to the draft permit requirement for a pre-design engineering report. This requirement, Entergy argues, demonstrates that the Department recognizes that closed cycle cooling could be unavailable because of site-specific conditions at the Indian Point stations. See Entergy Reply, at 20-21.

Riverkeeper writes in support of Department staff's opposition to Entergy Issue 5, stating that "adjudicating the 'availability' of the closed-cycle cooling technology for the Stations . . . is unnecessary and improper." Riverkeeper Reply, at 5-6. Riverkeeper asserts that "[t]he very fact that EPA and the Department have considered closed-cycle cooling viable for [several existing power stations along the Hudson River] . . . refutes Entergy's argument . . . that there is a need to adjudicate the 'availability' of closed-cycle cooling for the [Indian Point] Stations." Id. at 8. Moreover, Riverkeeper notes that there have been a series of reports that considered retrofitting the Stations and that "[b]ased on these reports, although retrofitting closed-cycle technology to Indian Point presents a number of economic and engineering issues, none of

these issues relate to the general 'availability' and 'practicability' of a closed-cycle cooling system for the Stations." Id. at 10.

As previously noted, EPA suspended the Phase II rule in response to the Second Circuit's decision in Riverkeeper II. Of particular note is the court's discussion of EPA's decision not to designate closed cycle cooling as BTA. The court cites EPA's use of the phrase "not economically practicable," the very phrase from the Phase II rule cited by Entergy, as part of the court's "deepen[ing]" concern that EPA impermissibly undertook cost-benefit analysis in determining BTA. Riverkeeper II, at 102. Moreover, the Phase II rule indicated that flow reduction "commensurate with a closed-cycle" system was a compliance alternative. Phase II rule, 40 CFR 125.94(a)(1)(i). Furthermore, Riverkeeper appropriately notes that the record is replete with demonstrations that closed cycle cooling is an available technology for power generating facilities.

BTA determinations are site-specific. In making this determination, the Department applies the four-step BTA analysis, using its best professional judgment. The issue of whether closed cycle cooling is an available technology for the Stations will be adjudicated in the context of Entergy Issues 2 and 4, and this Entergy Issue 5 shall not be adjudicated separately.¹⁹

Entergy Issue 6

ALJ Villa, in the Issues Ruling, modified Entergy's Issue 6 for purposes of adjudication to read as follows:

"[W]hether the costs associated with retrofitting the Stations with a closed cycle cooling system are wholly disproportionate to the environmental benefits to be gained, compared to other available alternative technologies." Issues Ruling, at 31.

Department staff argues that this issue is similar to Entergy Issue 3 and, therefore, these two issues should be consolidated. Staff restates its concern, noted in its challenge to Entergy Issue 3, that the Issues Ruling invites an inappropriate comparison of the proposed technology with other alternatives. Riverkeeper also considers this issue to be interrelated with Entergy Issue 3 and advances the same arguments

¹⁹ As noted, Entergy Issue 3 will be adjudicated as part of Entergy Issue 2.

for clarification in relation to both issues. See Riverkeeper Appeal, at 2-11.

Entergy notes that its comments on the draft permit "include extensive discussion of its position that the costs of retrofitting the Stations with closed-cycle cooling are wholly disproportionate to any purported environmental benefit." Entergy Reply, at 23. Entergy argues that staff's arguments demonstrate the existence of a factual dispute over a substantial condition of the draft permit and, therefore, the ALJ properly held the issue is adjudicable.

The Department's BTA determinations are not based on a cost-benefit analysis. However, as discussed, comparisons of the cost-effectiveness of technologies that achieve essentially the same environmental benefit are appropriate. Because the fourth step of the BTA analysis will be adjudicated as part of Entergy Issue 2 (as modified by this decision), adjudication of Entergy Issue 6 will be subsumed within the adjudication of Entergy Issue 2. Accordingly, Entergy Issue 6 shall not be separately adjudicated.

Entergy Issue 7

The ALJ modified Entergy's proposed Issue 7 regarding outages, and rephrased it as follows:

"[W]hether planned fish protection outages, which would limit the amount of water withdrawn with corresponding effects on the Stations' capacity, are an appropriate interim measure during the design and construction phases of closed cycle cooling implementation at the Stations." Issues Ruling, at 34.

Department staff argues that this ruling should be overturned for several reasons. First, staff asserts that the 42-day forced outage requirement contained in the draft permit is "derived directly from the two SPDES permits previously issued for Indian Point Units 2 and 3." Staff Appeal, at 21. Staff cites to permits issued in 1982 and 1987, both of which "expressly incorporated" requirements, including the 42-day forced outage provision, contained in the Hudson River Settlement Agreement ("HRSA"). Id. Moreover, staff argues, as the transferee of the 1987 permit, "Entergy's failure to challenge the outage condition for Indian Point in a timely manner constitutes a waiver of its right to challenge those special conditions now." Id. at 23 (citations omitted).

Staff states that the applicable statute of limitation for challenging a condition of a SPDES permit is that established for an Article 78 proceeding. According to staff, this provides for a sixty day period (or in other circumstances four months) for a transferee to challenge a condition set forth in the permit being transferred. In the instant matter, Entergy's request to have the SPDES permit for the Stations transferred from Consolidated Edison and the New York Power Authority to Entergy was approved by the Department in 2001 and 2000, respectively. Thus, staff argues, the statute of limitation for challenging the outage provision has long since expired. See Staff Appeal, at 23-24.

Entergy responds that the provision is not a mere continuation of an existing permit condition. Rather, Entergy argues, the outage provision represents a substantial modification to the permit and, "[t]hus, Entergy may challenge this and any other modifications proposed by Department staff." Entergy Reply, at 29 (citations omitted). According to Entergy, the HRSA has expired, as have the series of consent orders that extended certain HRSA provisions. Thus, "[t]he instant Proceeding represents Entergy's first - and only - opportunity to challenge these conditions." Id. at 31.

Department staff's various arguments relating to the timeliness of Entergy's challenge to the forced outage provision are unpersuasive. As the ALJ ruled, Entergy Issue 7 concerns a dispute between Department staff and the applicant that "relates to a substantial condition of the draft SPDES permit, and is therefore adjudicable pursuant to Section [624.4](c)(1)(i) of 6 NYCRR." Issues Ruling, at 34.

Regardless whether the forced outage provision is a carryover provision that was contained in prior permits, it is plainly a provision of the draft permit under consideration here. As such, this proceeding provides an appropriate forum for the permittee to challenge the forced outage provision. See 6 NYCRR 624.2(m) (defining a "draft permit" as "a document prepared by department staff which contains terms and conditions staff find are adequate to meet all legal requirements associated with such a permit, but is subject to modification as a result of public comments or an adjudicatory hearing") (emphasis supplied).²⁰

²⁰ Department staff cites no provision of law or regulation that precludes an issue from adjudication solely because it relates to a permit condition that is being renewed. In the absence of such an express preclusion, an issue that relates to a dispute between Department staff and the applicant over a substantial term of a draft

Proceeding to the merits of this permit condition, Entergy argues that the forced outage requirement is "unjustifiable, contrary to the legal standard, arbitrary and capricious, and a temporary taking." Entergy Reply, at 25. Entergy asserts it will "establish that operation of the Stations has not resulted in an adverse environmental impact" and, therefore, it "disputes whether there is a factual basis for the imposition of any forced outage." Id. at 26 (emphasis in original). Entergy also argues that the forced outages will temporarily deprive Entergy "of all economically beneficial use of [the power stations], resulting in a taking subject to compensation under . . . the Constitution of the United States," (id. [citations omitted]), and that it is entitled to compensation for forced outage periods. See Issues Ruling, at 32.

In response to Entergy's takings claim, Department staff argues that the regulatory scheme serves a legitimate public interest and that the forced outage provision furthers that purpose. In addition, staff asserts that the 42-day outage only results in approximately 15 additional days of outage because refueling the units requires approximately 28 days and water intake will be minimal during that time. Thus, any loss in energy production will be limited and short-lived. Staff further argues that Entergy has made no offer of proof to establish that "it would experience any economic loss or deprivation that could be recognized as a taking." Staff Appeal, at 27 (citations omitted).

The question whether the forced outage provision constitutes a taking under the U.S. Constitution is not an appropriate matter for adjudication in this administrative proceeding. In Matter of Haines v Flacke, 104 AD2d 26 (2d Dept 1984), the Appellate Division denied petitioner's request for an order directing the Department to "hold an evidentiary hearing on the taking issue." Id. at 33. The court held that "[t]he proper practice is to assert such a claim in the proceeding seeking judicial review and to buttress that claim with a supporting affidavit outlining the basis for the confiscation claim. . . . Therefore, the evidence on the confiscation issue must be presented to Special Term."

permit, regardless whether that term is pre-existing or new, is an appropriate issue for adjudication. See 6 NYCRR 624.4(c)(1). Furthermore, in this matter, disagreement exists as to whether the forced outage provision is simply a "carryover" provision. See, e.g., Entergy Reply, at 29 (Stations have not been subject to forced outages for years); Issues Conference Transcript, at 128 (Riverkeeper position that outage requirements in draft permit are more lax than prior requirements).

Id.; see also Matter of Brotherton v Department of Env'tl. Conservation, 189 AD2d 814, 816 (2d Dept 1993). Moreover, the issue whether the imposition of an environmental control constitutes a temporary taking is not relevant to the determination whether such an environmental control satisfies statutory and regulatory standards under the federal CWA, the ECL, and the applicable regulations and, thus, is not relevant in a permit hearing proceeding under Part 624. Accordingly, the taking issue proposed by Entergy will not be considered in this administrative proceeding.

Pursuant to ECL 17-0815(7), it is within the Department's discretion to include in a permit "such other terms, provisions, requirements or conditions as may be necessary to meet the requirements of the [Clean Water] Act."²¹ Here, Department staff has determined that the fish protection outages are a necessary interim measure. To conform the phrasing of this issue with the standard set forth under ECL 17-0815(7) and to reflect that alternative technologies to closed cycle cooling may be considered in this proceeding, Entergy Issue 7 is revised to read:

"Whether the planned fish protection outages, which would limit the amount of water withdrawn with corresponding effects on the Stations' capacity, are a necessary interim measure prior to the implementation of BTA at the Stations."

Entergy Issue 7 identifies a substantial term of the draft permit that Entergy seeks to modify over the objections of Department staff. Accordingly, this issue shall be adjudicated.

Entergy Issue 8

ALJ Villa modified Entergy's proposed Issue 8 relating to flow reductions as follows:

"[W]hether flow reductions, which would limit the amount of water withdrawn with corresponding effects on the Stations' capacity, are an appropriate interim measure during the design and construction phases of

²¹ The Clean Water Act contains a similar provision. See 33 U.S.C. § 1342(a)(1) (providing that "the Administrator may . . . issue a permit for the discharge of any pollutant . . . [with] such conditions as the Administrator determines are necessary to carry out the provisions of this chapter").

closed cycle cooling implementation at the Stations.”
Issues Ruling, at 34-35.

Department staff states that the flow reduction provisions, like the permit condition addressed in Entergy Issue 7, are long-standing conditions carried over from earlier versions of the permit, and incorporate flow restrictions established under the HRSA. Staff argues that Entergy’s proposed issue is time-barred. Staff also asserts that the condition is necessary to fulfill State and federal statutory requirements for maintaining water quality standards. See Staff Appeal, at 29-30.

Entergy again argues that the HRSA has expired and is no longer germane to this process. Entergy asserts that the HRSA has been supplanted by orders on consent that “authorize the Stations to utilize efficient flows, rather than the more restrictive flows in the Draft Permit.” Entergy Reply, at 36 (citation omitted).

For the reasons discussed under Entergy Issue 7 (see supra), I hold that the ALJ properly determined that Entergy Issue 8 is adjudicable. As with Entergy Issue 7, I am revising Entergy Issue 8 to incorporate the standard for permit conditions established by ECL 17-0815(7) and to reflect that alternative technologies to closed cycle cooling may be considered in this proceeding. The issue for adjudication shall read as follows:

“Whether flow reductions, which would limit the amount of water withdrawn with corresponding effects on the Stations’ capacity, are a necessary interim measure prior to the implementation of BTA at the Stations.”

Entergy Issue 9

The ALJ modified Entergy Issue 9, limiting the inquiry to the following:

“[What] methodology [is] to be employed to establish the Stations’ compliance with the requirements of [6 NYCRR 704.2].” Issues Ruling, at 36.

No appeals were filed with respect to this issue, and it shall, as modified by the ALJ, advance to adjudication.

Entergy Issue 10

The Issues Ruling determined the following issue to be adjudicable:

“Whether the Department appropriately should require Entergy to conduct River-wide biological monitoring, and if so, whether the Department appropriately should require Entergy alone to bear the cost of such monitoring, which historically has been financed by a consortium of station owners.” Issues Ruling, at 36.

Department staff argues for reversal of the Issues Ruling determination to adjudicate this issue. Staff argues that “[a]s with the subjects of proposed issues 7 and 8 . . . [the requirement for river-wide monitoring] is a longstanding express condition of the Indian Point SPDES permits and review of this condition . . . is time barred as well.” Staff Appeal, at 31. Staff also states that this requirement is necessary to fulfill requirements pertaining to maintenance of water quality standards.

Entergy briefly reiterates its position that it is not time-barred from raising this issue in this proceeding. Entergy also argues that Department staff’s assertions that this requirement is a mere continuation of an existing permit provision and is temporary are both misleading. Entergy asserts its participation in the river-wide monitoring program was voluntary under both the HRSA and the subsequent consent orders.

Entergy challenges any assertion that this provision is temporary because the draft permit requires Entergy to fund the program “during the entire permit term.” Entergy Reply, at 39 (citation omitted) (emphasis supplied by Entergy). Entergy also notes that Department staff has not cited, and Entergy is unaware of, any instance where the Department required a station to undertake biological monitoring “outside the sphere of influence of a station.” Id.

Entergy, which previously was one of several entities funding the program, would under the draft permit be the sole funding source. For the reasons discussed under Entergy Issue 7 (see supra), I hold that the ALJ properly determined that Entergy Issue 10 is adjudicable. As with Entergy Issues 7 and 8, I am revising Entergy Issue 10 to incorporate the standard for permit conditions established by ECL 17-0815(7). The issue for adjudication shall read as follows:

"Whether the requirement for Entergy to conduct River-wide biological monitoring is necessary to meet the requirements of the Act, when the cost of such monitoring historically has been financed by a consortium of station owners."

Entergy Issue 11

The Issues Ruling determined the following issue to be adjudicable:

"Whether the Department inappropriately omitted from the Draft Permit provisions recognizing the emergency use of equipment and operation of the Stations." Issues Ruling, at 37.

Department staff argues that the fact "[t]hat the draft SPDES permit does not contain a condition with requirements or protocols dictating behavior for operating a nuclear power plant under emergency conditions in the State-wide electric system is not adjudicable in this forum." Staff Appeal, at 32. Staff states that it is not qualified to anticipate every emergency that may arise at the Stations nor is it qualified to determine the appropriate response thereto. Staff asserts that these concerns are better left to other regulators, such as the Nuclear Regulatory Commission. Id. at 32-33. Department staff further notes that the Department retains prosecutorial discretion in the event of noncompliance with a SPDES permit. Id. at 36.

Entergy argues that the SPDES permits should include provisions regarding operation of the Stations in emergency situations. Entergy states that it is "settled law" that safety concerns under the aegis of NRC take precedence over SPDES issues. Entergy Reply, at 41 (citation string omitted). Moreover, Entergy also states that the HRSA and the consent orders contain language similar to that sought by Entergy here, allowing the forced outage requirement to be excused "to the extent necessary, as certified by the chairman of the New York State Public Service Commission . . . to avoid an imminent and undue risk of an inadequate supply of electricity." Id. at 42-43.

What Entergy seeks here, however, is far broader than the narrow exception to the forced outage provision set forth in the HRSA. Entergy's request is for a provision that would

"allow[] the Stations to respond promptly to safety or reliability concerns without risk of

subsequent Department enforcement action, and to provide clear and reasonable guidelines for both the Stations and the Department in any subsequent enforcement proceeding for evaluating whether any particular action by the Stations falls within the emergency provisions." Entergy Reply, at 44.

There is no factual dispute that unforeseen emergency or reliability concerns may potentially arise at the Stations and that such emergencies may require the Stations to operate outside the parameters of the SPDES permit. The question presented by Entergy Issue 11 is whether a Department SPDES permit must include a provision precluding or limiting the risk of subsequent Department enforcement action in the wake of an emergency. No requirement exists for such a provision to be incorporated into Department permits and, based on the issues conference record, no sufficient offer has been made for the inclusion of such language here. Accordingly, Entergy Issue 11 shall not be adjudicated.²²

Entergy Issue 12

The Issues Ruling determined the following issue to be adjudicable:

"Whether the Department has appropriately implemented SEQRA initially and in its efforts to unilaterally modify the Existing Permit." Issues Ruling, at 37.

Entergy argues that the Department failed to appropriately implement SEQRA in the Department's consideration of the SPDES

²² Entergy's reliance on the Phase II rule in support of its position is misplaced. As Entergy notes, the preamble to the final rule states that EPA added language to the rule to ensure that "in cases of conflict between an EPA requirement under this rule and an NRC safety requirement, the NRC safety requirement take[s] precedence." See Entergy Reply, at 41; Preamble to the Phase II Rule, 69 Fed Reg 41585. The Phase II rule, however, contained an express provision that, in the event of a conflict between an EPA BTA determination and an NRC safety requirement, "the [EPA] Director must make a site-specific determination of [BTA] . . . that would not result in a conflict." 40 CFR 125.94(f). Here, Entergy has not argued that any condition of the draft permit conflicts with an NRC safety requirement. Accordingly, even if the Phase II Rule were controlling, it would not require a permit provision "recognizing the emergency use of equipment and operation."

permit renewal application. Entergy asserts that the Department had not accounted for the adverse effects of the proposed BTA on the electric system, air quality and aesthetics. According to Entergy, the potential visual impacts associated with cooling tower components and plumes, the frequency and duration of visible plumes and their anticipated size, and the potential effects of plumes on vegetation and highway safety would have to be considered as part of the review pursuant to SEQRA and would have to be taken into account in any final BTA determination. Such impacts might lead, for example, to changes in the height and size of cooling towers or their location. Entergy also argues that air quality issues attributable to emissions from the installation and operation of a proposed BTA would need to be addressed, as appropriate.

In evaluating Entergy's SEQRA argument, the ALJ concluded that the impacts of the installation of cooling towers at the Stations on aesthetics, air quality and the electric system must be considered at the adjudicatory hearing. According to the ALJ, Entergy's comments would be considered in the adjudication of the BTA determination (Entergy Issue 2) and the Department's assessment of costs and benefits (Entergy Issue 3).

Department staff seeks to have this issue clarified and narrowed. Staff argues that "[a]ny inquiry as to the purported impact of the draft SPDES permit on aesthetics, air quality, and the electric system must necessarily be an inquiry into the SEQRA process for this SPDES permit renewal and Department-initiated modification" and "is per se not an element of the inquiry made by Department Staff to make a BTA determination." Staff Appeal, at 37. Staff further argues that "[t]o the extent there is any inquiry, it may pertain to a SEQRA review and the Issues Ruling should limit it accordingly." Id.

While acknowledging the need to develop a complete record and to finalize the SEQRA process, Riverkeeper argues that it would be improper and unproductive to allow the adjudication of these issues (electric system, air quality, and aesthetics)." Riverkeeper Appeal, at 16 (parenthetical in original). Riverkeeper "concur[s] with Staff's request that . . . '[Entergy Issue 12] be clarified or narrowed'" to avoid extending the environmental impact assessment associated with the BTA analysis beyond the protection of water quality and aquatic resources. Riverkeeper Reply, at 11 (quoting Staff Appeal, at 37). As with Entergy Issue 2, Riverkeeper adds that "all applicable Federal, State and local requirements (e.g., visual impacts) will need to be complied with prior to installation and operation of any new facilities at the Stations." Id.

Entergy asserts that Department staff's challenge to Entergy Issue 12 "simply re-iterates [staff's] unfounded objection to the consideration of these factors [i.e., electric system reliability, air quality and aesthetics] in the BTA analysis, but raises no objection to their consideration in the context of SEQRA." Entergy Reply, at 55 (emphasis in original).

As discussed previously, the four-step BTA analysis does not consider the environmental impacts of a control technology, other than entrainment and impingement. However, the completion of that four-step analysis does not end the inquiry. Once BTA is proposed for a facility, the environmental impacts of the technology will be subject to SEQRA review.

The June 2003 "Final Environmental Impact Statement for State Pollutant Discharge Elimination System Permits for Bowline Point 1 and 2, Indian Point 2 and 3, and Roseton Steam Electric Generating Stations," expressly contemplated further scrutiny of the environmental impacts associated with the site-specific BTA chosen for the Stations. See, e.g., FEIS, at 4, 28. Although the FEIS examined some of the environmental impacts associated with closed cycle cooling at the Stations (see, e.g., FEIS, Appendix F-IV, ESSA Technologies Ltd., "Review of the Draft Environmental Impact Statement for SPDES Permits" [2000], at 26-27), the FEIS did not examine all site-specific environmental impacts associated with the actual construction and operation of closed cycle cooling at the Stations. The need for further SEQRA review was recognized during litigation over the FEIS. See, e.g., Matter of Entergy Nuclear Indian Point 2, LLC v New York State Dept. of Env'tl. Conservation, 3 Misc 3d 1070, 1073 (Sup Ct, Albany County 2004) ("[t]he FEIS on its face indicates that considerably more environmental review is necessary and is specifically contemplated").

Moreover, the Department, as lead agency, must make SEQRA findings prior to imposing any particular BTA through the SPDES permit for the Stations. See 6 NYCRR 624.4(c)(6)(i)(b); see also FEIS, at 28.

In recognition of these circumstances, the ALJ authorized supplementation of the SEQRA record to address the aesthetic, air quality and electric system impacts associated with closed cycle cooling at the Stations. See Issues Ruling, at 38-39.

Under the circumstances presented in this case, I conclude that the appropriate vehicle to address this environmental information is by a supplemental EIS ("SEIS"), applying the standards set forth in 6 NYCRR part 617. Pursuant to 6 NYCRR

617.9(a)(7), an SEIS may be required where specific significant adverse environmental impacts have not been adequately addressed in the environmental impact statement, where such impacts arise from changes to a proposed project, newly discovered information, or a change in circumstances related to the project.

Here, Department staff has proposed closed cycle cooling as BTA. However, the specific impacts of closed cycle cooling at the Stations, as well as such interim measures as flow reductions and fish protection outages proposed in the draft permit, were not fully examined in the FEIS. Likewise, the FEIS did not examine the impacts associated with any of the as-yet undeveloped alternatives to closed cycle cooling that Entergy may propose. Accordingly and in light of the unique circumstances of this case, an SEIS should be prepared to examine the significant adverse environmental impacts that are not already addressed in the FEIS for closed cycle cooling, the proposed interim measures, and any alternative technologies that Entergy may propose as BTA for the Stations. This examination should include an evaluation of potential impacts of closed cycle cooling at the Stations upon aesthetics, air quality, and electric system reliability, as identified by the ALJ. For purposes of this review:

- air quality impacts shall include impacts on air quality arising from particulate and other emissions from the operation of cooling towers;
- aesthetic impacts shall include the visual impacts of the cooling towers and any associated plumes (including the frequency and duration of any visible plumes and their anticipated size); and
- impacts on electric system reliability shall include the impacts of the construction and operation of the closed cycle cooling system, and any permit-required outages, on the provision of energy by the Stations. Sequential and simultaneous construction outages may be considered. Impacts on the use and conservation of energy shall also be considered. See 6 NYCRR 617.9(b)(5)(iii)(e).

In addition, the SEIS should address any other significant adverse environmental impacts that may be associated with closed cycle cooling relating to the above-referenced matters or other impacts, including but not limited to noise, icing and fogging, deposition on vegetation, blasting during the construction of closed cycle cooling, and other environmental impacts arising from construction activities. The SEIS should also consider any significant adverse environmental impacts associated with

proposed interim measures. Similarly, significant adverse environmental impacts associated with any alternative technology that may be proposed shall also be developed to ensure that the appropriate "hard look" is taken.²³

Because the final determination of whether closed cycling cooling is BTA for the Stations has not yet been made, nor have any alternatives to closed cycle cooling been developed, I conclude that it would be inefficient to remand the development of the draft SEIS to Department staff. Cf. Matter of Peckham Materials Corp., Interim Decision, January 27, 1992, at 5. Instead, administrative efficiency warrants using the adjudicatory proceeding to develop the draft SEIS and to address environmental impacts as discussed herein.

Accordingly, by this Interim Decision, Entergy Issue 12, as phrased in the Issues Ruling, is reframed to expand the scope of SEQRA review and to set forth a procedure for developing an SEIS. As the various technologies proposed by the parties as BTA for the Stations are presented at hearing, the proponents of each technology should present an analysis of the environmental impacts associated with such technologies pursuant to SEQRA. Other parties may also offer evidence concerning the impacts they assert will be associated with a proposed technology. Applying the standards established at 6 NYCRR 617.9(a)(7), the ALJ will be responsible for assuring that the impacts that the parties seek to develop are relevant and significant, and not otherwise adequately addressed in the FEIS.

At the conclusion of the hearing, the ALJ's hearing report will constitute the draft SEIS, and the SEQRA process shall be completed in accordance with the procedures established by 6 NYCRR 617. Accordingly, the ALJ at that time may remand the draft SEIS to Department staff to publish notice of completion of the draft SEIS and to receive public comments. See 6 NYCRR 617.9(a)(3). The determination whether to conduct further public comment hearings on the draft SEIS will be made consistent with the requirements of 6 NYCRR 617.9(a)(4). If a determination is made that a public comment hearing should be held pursuant to section 617.9(a)(4), the ALJ shall conduct the hearing.

After the period for written comments has passed, and after any hearing held pursuant to section 617.9(a)(4), Department staff shall prepare a response to comments. Staff shall then

²³ Pursuant to the SEQRA review, additional SPDES permit conditions may be imposed.

forward all comments and the response to comments to the ALJ for her review and consideration. The ALJ, as she may deem appropriate, shall have the discretion to modify the procedural steps set forth herein with respect to the consideration of the SEIS, as long as such modifications satisfy the applicable SEQRA requirements in 6 NYCRR part 617.

After conducting any further proceedings the ALJ deems appropriate, the ALJ shall prepare a supplemental hearing report. The supplemental hearing report, together with the draft SEIS, the comments, and the response to comments, shall constitute the final SEIS, and shall be forwarded to the Commissioner. The final Commissioner's decision will include the required SEQRA findings for the technology that is determined as BTA for the Stations, and will be based upon the 2003 FEIS and the SEIS developed through this hearing process.

Condition 29 of the Draft SPDES Permit

As noted in the Issues Ruling, Entergy also requested that Condition 29 of the draft SPDES permit, which requires Entergy to pay \$24 million into an escrow account established for the benefit of the Hudson River Estuary Restoration Fund, be deleted. The ALJ advanced this matter to adjudication. See Issues Ruling, at 40-41.

Department staff requests a "narrowing or clarification" of the inquiry into how the dollar amount for the Hudson River Estuary restoration, enhancement and protection programs was derived. Staff Appeal, at 38. Staff argues that "to the extent this matter is adjudicated at all, participants [should] be directed to address this as an interim SEQRA measure, effective only until commencement of construction of the Department's BTA condition (closed cycle cooling)." Id. (parenthetical in original).

Entergy argues that this provision should be deleted from the permit and that, if it is not deleted, Department staff should clarify how the \$24 million figure was derived. Entergy Reply, at 36. Entergy states that "the ALJ properly ruled that this issue should be adjudicated as it involves a substantial condition of the permit," but Entergy also states that it "reserves all of its rights to challenge both the factual and legal bases" for imposing the \$24 million restoration fund. Id. at 37.

I reject Entergy's request to strike the provision from the permit at this juncture. Entergy, however, may challenge the

legal, as well as the factual, basis for this permit condition during the adjudicatory hearing. Similarly, Department staff (as well as intervenors) may assert whatever legal or factual bases it deems appropriate in support of the condition. I do not see a reason, based on the arguments presented on the appeals, to limit adjudication of this issue, as requested by Department staff.

With respect to this issue, I direct Department staff to provide information regarding how the \$24 million figure in Condition 29 was derived to Entergy and intervenors prior to the commencement of the adjudicatory hearing in accordance with a schedule established by the ALJ.

Issues Raised by Riverkeeper

As previously noted, four of Riverkeeper's five issues were advanced to adjudication. These include the following:

1. Whether closed cycle cooling, augmented by design protections such as wedgewire and Ristroph screens, is the best technology available to minimize Indian Point's adverse environmental impacts;
2. Whether closed cycle cooling is available technology at Indian Point within the five year SPDES permit period or shortly thereafter;
3. Whether the "technologies" required by the permit will not equal or even approach the protection offered by closed cycle cooling; and
- 5.²⁴ Whether DEC would unnecessarily delay implementation of BTA requirements years after the expiration of the permit.

Department staff requests that the four Riverkeeper issues that were accepted by the ALJ for adjudication be consolidated into a single issue as follows: "[w]hether closed cycle cooling can be implemented within the first five-year SPDES permit term." Staff Appeal, at 38. According to Department staff, Riverkeeper's first issue "can be subsumed within Entergy's second and fifth questions" which, "in combination, ask whether closed cycle cooling is BTA and whether closed cycle cooling is

²⁴ As a result of discussions between Department staff and Riverkeeper, Riverkeeper advised the ALJ that it was withdrawing its issue denominated as "4." See Issues Ruling, at 43-44.

an available technology for making a BTA determination." Staff Appeal, at 39 (underscoring omitted). Staff further states that Riverkeeper's second and fifth issues are "fairly included in" staff's restatement of Riverkeeper's first issue. Finally, staff argues that Riverkeeper's third issue is "superfluous" because it inappropriately "attempts to equate the Department's interim measures with Staff's BTA determination." Id.

Riverkeeper argues that, because Department staff did not raise an objection to the issues Riverkeeper proposed for adjudication during the issues conference or in subsequent written arguments authorized by the ALJ, Department staff's request is "improper and unnecessary." Riverkeeper Reply, at 13. Notwithstanding the foregoing, Riverkeeper offers to consolidate its issues, but in a manner that "preserv[es] the integral nature of the issues and the corresponding offers of proofs." Id. at 14. Specifically, Riverkeeper proposes to adjudicate Riverkeeper Issues 1 and 5. Riverkeeper states that Riverkeeper Issues 2 and 3 may be subsumed into Riverkeeper Issue 1, again provided that "the offers of proof related to th[ese] issue[s] are preserved." Id. at 17.

Riverkeeper's position that the objections of Department staff to the Riverkeeper issues are untimely is correct. The appropriate time for staff to raise argument in opposition to a proposed issue for adjudication is at the issues conference, not initially on appeal (see, e.g., 6 NYCRR 624.4(b)(2)(iii) [stating that a purpose of the issues conference is "to hear argument on whether disputed issues of fact that are not resolved meet the standards for adjudicable issues"]). No arguments have been advanced that warrant consideration of Department staff's objections at this time.

None of the participants in the issues conference objected to the adjudication of Riverkeeper's proposed issues. See Issues Ruling, at 42. Neither the ALJ, Riverkeeper nor the other participants had the opportunity to address or consider staff's request (first raised on appeal) to combine Riverkeeper's issues at the issues conference. To allow such matters to be raised by a party at a stage subsequent to the issues conference would result in serious inefficiencies in the permit hearing process. It is essential to the administrative process that matters be raised in a timely fashion so that they may be considered fully and in a manner that will not result in prejudice to the other parties. See, e.g., Matter of Saratoga County Landfill, Second Interim Decision of the Commissioner, October 3, 1995, at 2; Matter of the Town of Brookhaven, Interim Decision of the Commissioner, July 27, 1995, at 5.

In accordance with Riverkeeper's proposal to consolidate its issues, Riverkeeper's Issues 2 and 3 shall be subsumed within, and adjudicated as part of, Riverkeeper Issue 1. Riverkeeper's offers of proof related to Issues 2 and 3 shall be considered as part of the adjudication of Riverkeeper Issue 1. Riverkeeper Issue 5, as set forth above, shall also be adjudicated.

Riverkeeper further offered to subsume its Issue 1 into Entergy Issue 2 if the latter were clarified or narrowed in a manner consistent with Riverkeeper's appeal. Riverkeeper's Issue 1, as consolidated with Riverkeeper Issues 2 and 3, overlaps with Entergy Issue 2, as set forth in this Interim Decision. I will, however, defer to the ALJ whether it would be more administratively efficient to adjudicate Riverkeeper Issue 1 (as consolidated) and Entergy Issue 2 jointly or separately.

PARTY STATUS

African American Environmentalist Association ("AAEA")

AAEA filed a timely petition for party status in this proceeding. See IC Exh 4. AAEA's petition stated that it was seeking party status to bring its "unique perspective to the Indian Point . . . permitting process and to raise the issue of environmental justice." Id. at 3.²⁵

AAEA argued that in order to reduce impingement and entrainment of fish in the Hudson River, the draft SPDES permit "substantially limits" the Stations' ability to generate electricity and might lead to reduced energy production or possibly even their closure. See id. at 1. According to AAEA, other nearby fossil fuel burning electric generation plants would then be called upon to supply electric power to the region, with a corresponding increase in air pollution and decrease in air quality in low-income and minority communities, where most such plants are located. Thus, AAEA argues, the permits would cause adverse air quality impacts and these impacts would be

²⁵To the extent that AAEA is relying on Commissioner's Policy 29 (Environmental Justice and Permitting) ("CP-29"), that reliance is misplaced. CP-29 applies to permit applications received after its effective date, and in this instance, the SPDES permit application was received years prior to the effective date of CP-29. Notwithstanding the foregoing, an environmental justice issue that is raised by a party that is entitled to party status and meets the standard for an adjudicable issue (see 6 NYCRR 624.4[c] & 624.5[d]) may be considered.

disproportionately borne by low-income and minority communities.

At the issues conference, both Department staff and Riverkeeper raised objections to AAEA's petition and the issues that it raised. See Issues Ruling, at 47-48. Entergy indicated that it had no objection to the environmental interest advanced by AAEA, nor did it object to any of the issues AAEA proposed for adjudication. Id. at 47.

The ALJ granted AAEA's petition for full party status and consolidated AAEA's three issues into one: "whether the draft SPDES permit has considered adequately the impacts on air quality if a closed-cycle cooling system is installed at the Stations." Id. at 49.

Department staff, in its appeal, contends that AAEA's concerns arise from its "erroneous assumption" that the Stations will be offline for such an extended amount of time that significant adverse air quality impacts will result. Id. at 43. Staff asserts that only a limited number of additional days of shutdown will be necessary to implement the 42 day outage provision in the draft permit. Department staff also maintains that, in the event that generation is reduced at the Stations, any replacement generation sources must comply with their permit conditions, which establish limitations protective of human health. Id. at 44.

AAEA, in its reply, argues that it has demonstrated an "environmental interest" in the proceeding and has raised a substantive and significant issue that supports its request for full party status in this proceeding. Entergy, in its reply, maintains that the ALJ correctly granted party status to AAEA and that AAEA has proposed a substantive and significant issue for adjudication. See Entergy Reply, at 61-62.

By regulation, an ALJ's ruling of entitlement to full party status is based on the following:

"(i) a finding that the petitioner has filed an acceptable petition pursuant to paragraphs (b)(1) and (b)(2) of [6 NYCRR 624.5];

"(ii) a finding that the petitioner has raised a substantive and significant issue or that the petitioner can make a meaningful contribution to the record regarding a substantive and significant issue raised by another party; and

"(iii) a demonstration of adequate environmental interest."
6 NYCRR 624.5(d) (1) (i)-(iii).

For purposes of party status, a potential party's assertions cannot be simply conclusory or speculative but must have a factual or scientific foundation. See Matter of Bonded Concrete, Interim Decision of the Commissioner, June 4, 1990, at 2; see also Matter of Ramapo Energy Limited Partnership, Interim Decision of the Commissioner, July 13, 2001, at 5. Conducting an adjudicatory hearing "where 'offers of proof, at best, raise [potential] uncertainties' or where such a hearing 'would dissolve into an academic debate' is not the intent of the Department's hearing process." Matter of Adirondack Fish Culture Station, Interim Decision of the Deputy Commissioner, August 19, 1999, at 8.

AAEA's petition for party status and the contentions that it has raised meet, albeit narrowly, the regulatory standard. AAEA has raised an issue with respect to potential negative impacts on air quality in environmental justice communities that is adjudicable in the SEQRA portion of the hearing. These impacts relate to circumstances when, pursuant to the conditions in the draft SPDES permit, the Stations will be offline or will be required to reduce their generating capacity. Accordingly, AAEA shall have full party status in this proceeding.

In addressing this issue in the adjudicatory proceeding, generalized and nonspecific arguments will not be sufficient. AAEA should present evidence regarding air quality impacts on specific environmental justice communities, and should address the extent to which such impacts on those communities are disproportionate. In support of its contentions, AAEA should identify those power plants that would be expected to provide replacement energy during offline or reduced generation periods and that would be the sources of negative impacts on air quality. AAEA should also identify the specific air pollutants of concern.²⁶

²⁶ I note, however, that other general matters upon which AAEA proposes to offer testimony, including the negative health effects of fossil fuel plants, and the number of power plants in minority communities in the Hudson Valley/New York metropolitan area (see IC Exh 4, at 15-16), of themselves, lack sufficient specificity and do not raise any substantive and significant issues. Such testimony would be only relevant to the extent that it is directly tied to the potential negative impacts on air quality in environmental justice communities when, pursuant to the conditions in the draft SPDES permit, the Stations will be offline or will be required to reduce

New York State Department of Public Service ("DPS")

Entergy moved to join DPS as a party in this proceeding. In denying the motion, ALJ Villa noted that the Department's hearing regulations do not provide for mandatory joinder, and that DPS had not sought to intervene in this proceeding. See Issues Ruling, at 20-21. She also noted that counsel for DPS indicated that it would "act in an advisory capacity [to DEC staff], provide testimony, and participate in any adjudicatory hearing." Id. at 21.

Entergy appeals the denial of its motion, contending that a fair adjudication and complete record require DPS's participation as a full party in this proceeding. In support of its position, Entergy argues that an ALJ had compelled DPS to participate as a full party in another proceeding (see Matter of Besicorp-Empire Development Co. ["Matter of Besicorp"], Hearing Report and Recommended Decision of the ALJ, January 9, 2004), and that the circumstances of this matter warrant the same action.

Entergy further maintains that the anticipated "consulting relationship" between DPS and DEC violates Entergy's due process rights. As a result of this relationship, Entergy states that it would be unable to subpoena and cross-examine DPS's experts and to conduct full discovery. In addition, Entergy contends that DPS's unique legislative mandate, expertise and history compel DPS's independent involvement in this proceeding on public policy grounds.

Department staff, after addressing misstatements it alleges were made in Entergy's appeal, contends that the pending SPDES permit application does not trigger any jurisdictional authority of DPS, the Public Service Commission or the New York State Board on Electric Generation Siting and the Environment ("Siting Board"). Department staff also disputes Entergy's claim that Entergy would be denied due process if DPS were not joined as a party. Department staffnotes that, in the event that DPS were to file testimony in this proceeding, Entergy would have the opportunity to cross-examine the DPS staff witnesses. Department staff also rejects the argument that Matter of Besicorp provides precedent to compel DPS to be made a party. Finally, Department staff contends that DPS is not a necessary party to this proceeding.

Riverkeeper and Assemblyman Brodsky also oppose Entergy's

their generating capacity.

appeal seeking to include DPS as a party. Riverkeeper maintains that a full and complete record and fair adjudication would be achieved without imposing full party status on DPS. Riverkeeper also maintains that the current role of DPS in the proceeding does not deny Entergy due process. See Riverkeeper Reply, at 18-22. Assemblyman Brodsky argues that no legal precedent exists for joining DPS to this DEC administrative proceeding as an indispensable party and that such joinder would be against public policy. See Brodsky Reply, at 9-15. He similarly contends that Matter of Besicorp affords no precedent in support of Entergy's motion. See id. at 12-13.

I affirm ALJ Villa's denial of Entergy's motion. The pending SPDES permit application does not implicate the jurisdictional authority of DPS, the Public Service Commission or the Siting Board. Nor do the provisions of DPS's general statutory authority mandate party status for DPS. DPS has not requested or otherwise filed for party status in this proceeding, nor is it a mandatory party for purposes of a Part 624 proceeding. See 6 NYCRR 624.5(a). DPS clearly has the discretion to determine the manner of its participation.²⁷

Entergy has not cited any statute or regulation that would require compulsory joinder of a state agency in this proceeding. Entergy's reliance on Matter of Besicorp as support for its motion is misplaced. The two proceedings are distinguishable. The Besicorp proceeding involved an application subject to review pursuant to article X of the Public Service Law and the Environmental Conservation Law, where a single record was being made for both proceedings. See Matter of Besicorp, Hearing Report and Recommended Decision of the ALJ, January 9, 2004, at 5, 9. In contrast to Matter of Besicorp where the application was subject to the jurisdiction of both DEC and the Siting Board, the instant proceeding is solely before a Department ALJ to determine whether a DEC SPDES permit should be issued pursuant to the Environmental Conservation Law and the authority delegated to the Department pursuant to the federal Clean Water Act. Full party status for DPS is not required to develop the record on this SPDES application for which DEC has sole jurisdiction.

²⁷ Counsel for DPS advised that the question of DPS's participation in this proceeding "was raised with [DPS] senior management, with the chairman, and the decision was made that DPS would participate by continuing to assist DEC staff." IC Tr, at 18. DPS Counsel further noted that he thought DPS staff "would present testimony on the areas of [its] expertise with respect to issues that [are determined] to be adjudicable." Id. at 19.

Entergy's reliance on other authorities is also misplaced. For example, Entergy cites Matter of Stissing Valley Farms, Inc. in support of its position. In that proceeding on a mining permit application, the ALJ noted that certain traffic issues were under the jurisdiction of the Dutchess County Department of Public Works (the "DPW"), which had not sought party status in the proceeding. The ALJ indicated that the applicant was not relieved from obtaining whatever local approvals were necessary, and directed that copies of submissions on traffic issues be forwarded to the DPW. See Matter of Stissing Valley Farms, Inc., Issues Ruling of the Administrative Law Judge, November 4, 1996, at 23. The ALJ did not, however, direct that the DPW participate in DEC's proceeding.

Furthermore, Entergy's due process arguments are rejected. To the extent that DPS staff testifies in this proceeding, such staff will be subject to cross-examination by Entergy, and any related discovery will be available in accordance with the discovery provisions of 6 NYCRR part 624. See 6 NYCRR part 624.7(b) & (c). Entergy may also, consistent with the New York Civil Practice Law and Rules, issue subpoenas in this proceeding. See 6 NYCRR 624.7(f).

I have further considered the case law that Entergy has referenced, and based upon my review of the record, the legal authorities and the arguments in the respective briefs, I find Entergy's arguments to be unavailing. For example, Entergy equates DPS's role in this proceeding to the role of witnesses that it argues was rejected by the Appellate Division in Matter of Alvarado v State, 110 AD2d 583 (1st Dept 1985). See Entergy Appeal, at 17-18. In Alvarado, witness reports were introduced without the witnesses' testifying and no opportunity was provided for cross-examination. See Alvarado, at 584-85; see also Borchers & Markell, New York State Administrative Procedure and Practice, § 3.8, at 48-49 (noting "general agreement" that the right of cross-examination extends only to those witnesses that appear, and to the extent that Alvarado suggests otherwise is "clearly dictum"). In this proceeding, DPS staff who submit testimony will be subject to discovery in accordance with 6 NYCRR part 624 and will be available for cross-examination by the other parties.

Entergy also cites to Matter of Doe v Axelrod, 123 AD2d 21 (1st Dept 1986), revd, 71 NY2d 484 (1988), for the proposition that it is "entitled to have access to DPS in an unfettered manner." Entergy Appeal, at 14. That decision, which addressed whether individuals who have filed complaints regarding medical misconduct should be produced as witnesses in the face of

countervailing considerations for their confidentiality, is inapposite here. Discovery and the right to cross-examination will be available in the instant proceeding. Furthermore, Entergy's arguments that the State Administrative Procedure Act is violated because of an inability to conduct cross-examination are similarly lacking in merit.

Entergy also cites to the requirement in SAPA § 302(2) that an agency make a complete record of all adjudicatory proceedings conducted before it in support of its argument that DPS is required to be a full party to this proceeding. Again, however, DPS has no jurisdictional authority over DEC's consideration of this SPDES application, and its participation as a party is not required for a complete record. Furthermore, DPS will have the same opportunity as the public and other agencies to provide comments on the SEIS in accordance with the requirements of SEQRA. See Entergy Issue 12, supra.

I note also that Entergy has the right, pursuant to the State's Freedom of Information Law, to request access to publicly available records directly from DPS for Entergy's use in this proceeding.

The ALJ's denial of Entergy's motion is affirmed.

OTHER MATTERS

I have reviewed the remaining appeals to the ALJ's Rulings not specifically addressed here and find no reason to overturn the ALJ on these other matters.

BURDENS OF PROOF

In its appeal of Entergy Issue 5, Department staff argues that it will be Entergy's burden to show that the Department's selection of BTA technology does not meet regulatory requirements. See Staff Appeal, at 17. Department staff cites to Matter of Athens for the proposition that the burden is on a permit applicant to demonstrate that the relative costs are unreasonable. See Matter of Athens, Interim Decision, June 2, 2000, at 15. Entergy, in its reply, argues that the burden of proof is on Department staff to demonstrate that closed cycle cooling "is feasible, practicable, and without wholly disproportionate cost to the Stations." Entergy Reply, at 16 n 12.

The parties' characterization of the burdens of proof at the evidentiary portion of the adjudicatory proceeding is incomplete and incorrect. As the party applying for permit renewal, Entergy has the burden of proof. See, e.g., State Administrative Procedure Act ("SAPA") § 306(1); 6 NYCRR 624.9(b)(3). Accordingly, Entergy has both the initial burden to produce evidence and the ultimate burden of persuasion to demonstrate that the permitted activity is in compliance with all applicable laws and regulations administered by the Department. See id.

To the extent Entergy proposes to modify the permit sought to be renewed, or proposes new conditions not approved by Department staff and agreed to by intervenors, Entergy must produce evidence demonstrating that its proposed modifications and conditions will be in compliance with all applicable laws and regulations administered by the Department. See id.

Department staff and intervenors (that is, Riverkeeper, AAEA and Assemblyman Brodsky) also bear burdens at the evidentiary stage of the proceeding. Each bears a burden to produce evidence either in rebuttal to Entergy's evidence or in support of contrary factual assertions, or both. See Matter of Karta Corp., Decision of the Executive Deputy Commissioner, April 20, 2006, at 4-5; Matter of St. Lawrence Cement Co., LLC, Second Interim Decision of the Commissioner, Sept. 8, 2004, at 126-127. Where, as here, applicant objects to permit conditions proposed by Department staff on the renewal that were not included in the original permit, staff bears a burden of production on those additional permit conditions. See Response to Comment, Part 624 Public Comment Responsive Document, 624.9 Evidence, Burden of Proof and Standard of Proof. Thus, Department staff will be required to produce evidence establishing the factual or legal basis of the conditions it proposes to which Entergy objects. See id.

Similarly, to the extent that an intervenor seeks the imposition of permit conditions that are not proposed by Department staff and not agreed to by Entergy or the other intervenors, it will bear a burden of production to establish the factual and legal basis of its proposed conditions.

At the close of the evidentiary hearing, Entergy bears the ultimate burden of persuasion that it is entitled to permit renewal subject to the modifications it proposes. Where factual matters are at issue, the standard of proof Entergy must satisfy is by the preponderance of the evidence. See 6 NYCRR 624.9(c).

At this stage of the proceeding, the parties have the

To: Service List