

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 article 17 of
the Environmental Conservation Law and title
6 of the Official Compilation of Codes, Rules
and Regulations of the State of New York
parts 704 and 750
et seq.

-by-

**DYNEGY NORTHEAST GENERATION, INC.,
ON BEHALF OF DYNEGY DANSKAMMER, LLC
(DANSKAMMER GENERATING STATION),**

Permittee.

DEC No: 3-3346-00011/00002
SPDES NO: NY-0006262

INTERIM DECISION OF THE DEPUTY COMMISSIONER

May 13, 2005

INTERIM DECISION OF THE DEPUTY COMMISSIONER¹

This proceeding involves the renewal and modification of the State Pollutant Discharge Elimination System ("SPDES") permit held by Dynegy Northeast Generation, Inc. on behalf of Dynegy Danskammer, LLC ("Dynegy") for the Danskammer Generating Station ("facility"). The facility, which generates electricity, is located on the western shore of the Hudson River at 992-994 River Road, in the Town of Newburgh, Orange County, New York (the "site").

Based upon my review of the record, I determine that the following two issues are to be adjudicated:

- whether a closed cycle cooling system can be located on the site and, if so, whether the facility must be retrofitted with such a system to satisfy the "best technology available" requirement contained in section 316(b) of the federal Clean Water Act and section 704.5 of title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York ("6 NYCRR"). With respect to the adjudication of this issue, the use of properties other than the site or the use of piers or barges in the Hudson River shall not be considered; and

- whether certain assumptions in the Danskammer Alternative Technology Evaluation Model ("DATEM"), which is to be used with respect to the flow reduction and outage program, are reliable.

In addition, the Administrative Law Judge ("ALJ") identified three legal issues for briefing following the close of the adjudicatory hearing. For the reasons discussed in this interim decision, I determine that it will be unnecessary for the parties to brief those legal issues.

¹ By memorandum dated February 8, 2005, Acting Commissioner Denise M. Sheehan delegated decision making authority in this proceeding to Deputy Commissioner Carl Johnson. This memorandum was forwarded to the issues conference participants by letter of same date.

BACKGROUND

Dynegy acquired the facility from Central Hudson Gas & Electric Company ("Central Hudson") in January 2001. The facility, consisting of four fossil-fueled steam turbines (units) with a total net generating capacity of 491 megawatts, withdraws water from the Hudson River for cooling purposes through an intake canal. The water, which is withdrawn from the river by pumps, passes through the facility once before it is discharged back into the river ("once-through cooling system") through three discharge pipes. A series of vertical traveling screens are located in front of the cooling water pumps in the intake canal to prevent debris from entering into the pump chambers and condensers. The screens also block the passage of larger aquatic organisms. Smaller organisms drawn into the intake canal pass through the screens and are subsequently returned to the river through the cooling water discharge pipes.

In 1982 staff of the New York State Department of Environmental Conservation ("Department staff") issued a SPDES permit for the facility to Central Hudson, and this permit was renewed in 1987. In May 1992 Central Hudson filed a renewal application with the Department. Following Dynegy's acquisition of the facility, Department staff transferred the permit from Central Hudson to Dynegy.

Subsequently, Department staff undertook steps to modify the facility's previously filed renewal application. On June 23, 2003, Department staff issued a negative declaration pursuant to the State Environmental Quality Review Act ("SEQRA") with respect to the modification and renewal of the facility's SPDES permit (the "action").

The permit modification would require Dynegy to implement various technologies, separately or in combination, to reduce entrainment and impingement of fish and other aquatic biota.² The draft permit³, as initially proposed, would provide

² "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, Interim Decision of the Commissioner, June 2, 2000, at 12-13). "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

for the immediate implementation of a flow volume reduction and outage program and seasonal deployment of a sonic fish deterrent device to reduce the impacts on aquatic organisms arising from the facility's withdrawal of water from the Hudson River and the return of that water to the river. In addition, the draft permit, as initially proposed, would require (a) the installation by February 23, 2008 of a Marine Life Exclusion System™ and/or alternate technologies (or combination of technologies) that would provide a level of fish protection approaching that which could be achieved by closed cycle cooling, or (b) additional fish protection outages to reduce the rates of impingement mortality by 90% and entrainment mortality by 80%.

The matter was assigned to ALJ Daniel P. O'Connell. In this proceeding, Riverkeeper, Inc., Natural Resources Defense Council, Inc. and Scenic Hudson, Inc. (collectively, "petitioners") filed a petition for party status. During the issues conference, Dynegy, Department staff and petitioners presented their positions on the question of what, if any, modifications to the cooling water intake structure would be required to satisfy the "best technology available" ("BTA") standard established in federal and State law,⁴ and specifically

either suffocation of, or injury to, the organisms (see id. at 13).

³ The draft SPDES permit, as submitted at the issues conference, was marked as Issues Conference Exhibit ("IC Exh") 3-A, with revised pages 12 and 16 marked as IC Exh 3-B. The SPDES permit fact sheet dated April 17, 2003, was also submitted as an exhibit (see IC Exh 3-C).

⁴ Operators of facilities in New York State with cooling water intake structures that, as point sources, 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

whether a closed cycle cooling system should be implemented at the facility. Department staff had determined, as stated in the negative declaration for this action, that to achieve BTA at the cooling water intake structure, "the environmental impacts from entrainment and impingement of aquatic organisms in the cooling water intake at Danskammer must be reduced to levels approaching that which could be achieved by closed cycle cooling" (Negative Declaration, IC 3-E, at 2).

In addition, the issues conference participants raised whether new regulations being promulgated by the United States Environmental Protection Agency ("EPA") for certain power producing facilities that employ cooling water intake structures ("Phase II Rule") would apply to this proceeding.⁵

ALJ O'Connell issued his ruling on proposed issues for adjudication and petitions for party status on March 25, 2004 ("March Ruling"). The March Ruling identified the following issues for adjudication:

- whether various conditions in the draft SPDES permit to which Dynegy objected should be retained, modified or deleted (see March Ruling at 7-16 [reviewing the objections of Dynegy to the draft permit conditions]);
- whether, in order to comply with the applicable BTA standard, the facility must be retrofitted with a closed cycle cooling system. The ALJ stated that

connection with point source thermal discharges, shall reflect the best technology available for minimizing adverse environmental impact" (emphasis added). For a further discussion of the current BTA standard, see generally Matter of Mirant Bowline, LLC, Decision of the Commissioner, March 19, 2002; Matter of Athens Generating Company, LP, Interim Decision of the Commissioner, June 2, 2000.

⁵ On February 16, 2004, EPA issued its pre-publication version of the Phase II Rule. On July 9, 2004, the EPA published the Phase II Rule ("Final Regulations to Establish Requirements for Cooling Water Intake Structures at Phase II Existing Facilities") in the Federal Register, with an effective date of September 7, 2004. By implementation of this rule, EPA intends to minimize the adverse environmental impact of cooling water intake structures by reducing the number of aquatic organisms lost as a result of water withdrawals associated with these structures (see 69 Fed Reg 41576 [July 9, 2004]).

whether a closed cycle cooling system can be located on the site "is at the center of this issue" (March Ruling, at 17);

- whether certain assumptions in the Danskammer Alternative Technology Evaluation Model ("DATEM"), which is to be used with respect to the flow reduction and outage program, are reliable;
- whether sonic deterrence, alone or in combination with flow reductions, is available BTA technology for the facility to reduce adverse impacts of entrainment and impingement; and
- whether the installation of a Marine Life Exclusion System™ would be feasible and effective at the facility.

The ALJ granted party status to petitioners, and also determined that Dynegy, Department staff, and petitioners would have the opportunity to address the following three legal issues in their closing and reply briefs:

- "[w]hether the Department has the legal authority to order a technology change to the facility's cooling water intake structure in the context of this SPDES permit review process under: 6 NYCRR 704.5, 33 USC 1326(b), or both";

- "[w]hat are the appropriate legal standards to apply in making a 33 USC 1326(b) 'best technology available for minimizing adverse environmental impacts' determination"; and

- "[w]hether . . . articles 3, 8 or 15 [of the Environmental Conservation Law ("ECL")] require the Department to consider the benefits of its proposed modification, and to balance the social and economic value of [the facility] to the State, regional and local economies and the welfare of the people of New York" (March Ruling, at 24).

During early 2004, when the modification and renewal of the SPDES permit for the facility were being considered in this administrative proceeding, Department staff and Dynegy were discussing various modifications to the existing SPDES permit independent of the administrative proceeding. Several of these modifications were similar to the conditions in the draft SPDES permit being considered in the administrative proceeding.

By letter dated March 29, 2004, Dynegy submitted a

written proposal to Department staff which outlined certain modifications to the facility's existing permit "designed to provide . . . reductions in entrainment and impingement of aquatic organisms, and include both the immediate implementation of flow reduction and the deployment of a sonic deterrence system" ("March 29, 2004 proposal") (see Reply Affidavit of Mark D. Sanza, Esq., sworn to on July 16, 2004, Exh A). On May 18, 2004, Department staff modified the facility's existing SPDES permit. As part of the modification, Dynegy committed to conduct a research and development project to evaluate the effectiveness of a high frequency, high energy sonic fish deterrent device at the facility's intake canal. The evaluation period covers August 1 through October 31 in each calendar year. By memorandum dated May 24, 2004, the ALJ acknowledged receipt of modified pages to the existing SPDES permit for the facility which required Dynegy, among other things, to implement a flow reduction program, evaluate a high frequency/high energy sonic fish deterrent device, and develop a protocol for a tri-axial thermal study of the cooling water discharge.⁶

Meanwhile, Dynegy, by letter dated April 1, 2004, submitted to ALJ O'Connell: (1) a request for leave to reopen the record of the issues conference to allow for the receipt of new information concerning a failed transformer, as it related to impacts on electric system reliability; and (2) a request for clarification of the March Ruling concerning legal issues. In addition, Dynegy requested that the deadlines for taking an appeal from the March Ruling be stayed or revised in light of Dynegy's March 29, 2004 proposal to the Department to reduce adverse impacts related to entrainment and impingement.

By memorandum dated April 5, 2004, the ALJ reopened the record of the issues conference to allow Dynegy to submit the new information. Dynegy, in papers dated April 12, 2004, discussed the recent failure of a transformer that Central Hudson owned and operated at an East Fishkill substation. Dynegy contended that the transformer failure demonstrated that the requirements in conditions 13 and 15 of the draft SPDES permit for additional fish protection outages would adversely affect electric system reliability. By the April 5, 2004 memorandum, the ALJ also authorized Dynegy to file a motion for reconsideration of the March Ruling (at Section II.A.12) concerning those two draft

⁶ These modified pages were also included as Exhibit B to the Reply Affidavit of Mark D. Sanza, Esq. sworn to on July 16, 2004, which was attached to the reply brief of Department staff dated July 19, 2004.

permit conditions.⁷

Following receipt of submissions from Dynegey, Department staff, and petitioners, the ALJ issued a ruling on May 11, 2004 ("May Ruling"). The ALJ rejected Dynegey's argument that statewide electric reliability is an element of the BTA determination for the facility and, accordingly, denied Dynegey's motion for reconsideration of Section II.A.12 of the March Ruling.

Nevertheless, the ALJ acknowledged that implementing additional fish protection outages should be considered a "cost" which may be relevant to the required BTA determination. He indicated that the parties would have an opportunity to identify the cost analyses outlined in the draft EPA Phase II Rule that may apply to the facility. The ALJ observed that the cost analyses in the draft EPA Phase II Rule might be different from the "wholly disproportionate cost" standard that was applied in previous decisions by the Commissioner (see, e.g., Matter of Mirant Bowline, LLC [Decision of the Commissioner, March 19, 2002]) and Matter of Athens Generating Company, LP [Interim Decision of the Commissioner, June 2, 2000]) as part of a four-step BTA analysis.⁸

⁷ Proposed draft SPDES permit conditions 13 and 15 (see IC Exh 3-A, at 16-17) would have required Dynegey to reduce entrainment by 80% from current levels and impingement by 90% from current levels if a feasibility study demonstrated that using a Marine Life Exclusion System™, an alternative technology, or a combination of both, would not reduce entrainment and impingement to levels approaching that which could be achieved through a closed cycle cooling system. Although the draft permit conditions did not state how Dynegey was to achieve these percentage goals, the facility would likely have to schedule additional fish protection outages, during which the facility would shut down periodically in order to reduce the amount of water it withdraws from the Hudson River (see March Ruling, at 15-16).

⁸ The four step analysis, which determines whether "best technology available" is being utilized by a particular facility, is as follows:

- (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 reflects best

The ALJ noted that, for the first time in the proceeding, petitioners in their papers responding to Dynegy's April 12, 2004 submission were requesting leave to present a closed cycle cooling configuration that would apply only to units 3 and 4 on the site. The ALJ granted the request, on the ground that it "refines, rather than expands," the issue that had been joined (May Ruling, at 7).

Appeals from the ALJ Rulings and Replies to the Appeals

Appeals from the March and May Rulings were filed by Department staff, Dynegy, and petitioners.

Department staff, in its brief dated June 17, 2004 which also included an affidavit sworn to by Mark D. Sanza, Esq. ("Department Staff Appeal Brief"), appealed from the ALJ's determination that special SPDES permit conditions 2 and 3, which relate to the decommissioning of the site, should be adjudicated. Department staff argued that these requirements had been previously approved and were part of the facility's 1987 SPDES permit, and, therefore, any challenge now is untimely.

Department staff also contended that the ALJ erred in allowing for the briefing as to whether 6 NYCRR 704.5 is invalid or was improperly promulgated by the Department. Department staff disputed the need to brief whether articles 3, 8 or 15 of the ECL require the Department to consider the benefits of its proposed modification, and to balance the social and economic value of the facility to the State, regional and local economies and the welfare of the people of New York. Finally, Department staff argued that the EPA Phase II Rule does not apply to the pending application.

Dynegy, in its appeal brief dated June 18, 2004 with an attorney affirmation by Robert J. Alessi, Esq. and an affidavit sworn to by Martin W. Daley ("Dynegy Appeal Brief"), argued that petitioners failed to identify a substantive and significant

technology available 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 (see Matter of Athens Generating Company, LP, Interim Decision of the Commissioner, June 2, 2000, at 4. For a discussion of the "wholly disproportionate cost" standard, see id., at 14-16).

issue with regard to: (1) the efficacy and availability of a closed cycle cooling system for the facility; (2) the use of DATEM to evaluate the efficacy of mitigation technologies at the facility; (3) the implementation of sonic deterrence technologies as a component of BTA to reduce impingement; and (4) the deployment of the Marine Life Exclusion System™. Accordingly, Dynegy contended that none of these issues should be adjudicated.⁹

In addition, Dynegy maintained that the ALJ's March and May Rulings incorrectly excluded consideration of electric system reliability from the BTA analysis. Dynegy also appealed from the ALJ's determination in the May Ruling that petitioners would be allowed to raise the possibility of installing a technology as BTA for only a part of the facility.

Petitioners, in their appeals brief dated June 18, 2004 ("Petitioners' Appeal Brief"),¹⁰ argued that the EPA Phase II Rule does not apply to, and should not be considered with respect to, the pending SPDES application for this facility. Petitioners also appealed from the ALJ's determination that only those closed cycle cooling configurations that were located on the site of the facility would be the subject of adjudication.

Reply briefs were filed by Dynegy, Department staff, and petitioners. Dynegy's reply dated July 20, 2004 included an affidavit sworn to by Martin W. Daley ("Dynegy Reply"). Dynegy disputed petitioners' claim that the ALJ erred in allowing the parties to brief the applicability of the EPA Phase II rule to this proceeding. In addition, Dynegy took issue with petitioners' argument that the ALJ erred in determining that potential configurations for closed cycle cooling at the facility would only include configurations on the site.

⁹ With respect to the Marine Life Exclusion System™, Dynegy contended that, although its installation at the facility was unwarranted, Dynegy was willing to study such installation.

¹⁰ Petitioners had filed an earlier appeal brief dated June 16, 2004 with Commissioner Erin M. Crotty. Subsequently, petitioners filed an "errata-corrected" appeal brief dated June 18, 2004 which was received by the Commissioner on June 21, 2004. Petitioners requested that the later appeal brief be accepted as a substitute and advised that Dynegy and Department staff had no objection to the substitution. Petitioners' request that the later filed brief be substituted is hereby granted.

Dynergy also contested Department staff's arguments that the ALJ should be reversed with respect to allowing briefing regarding the validity of 6 NYCRR 704.5 and whether ECL articles 3 and 15 require consideration of a balancing of costs and benefits. In addition, Dynergy maintained that the ALJ correctly identified special draft SPDES permit conditions 2 and 3 that relate to the decommissioning of the facility as an issue for adjudication.

Department staff, in its reply dated July 19, 2004 which also included an affidavit sworn to by Mark D. Sanza, Esq. ("Department Staff Reply"), argued that off-site closed cycle cooling configurations should not be considered as part of any BTA analysis for the facility. Staff also argued that EPA's Phase II Rule does not apply to the pending proceeding and that electric system reliability is not part of the Department's BTA analysis.

Department staff noted that, independent of this administrative proceeding, the facility's existing SPDES permit had been modified. In light of this, Department staff pointed out that various issues relating to the proposed SPDES permit that had been identified for adjudication in the March Ruling no longer required adjudication or were otherwise moot.

Petitioners, in their reply dated July 20, 2004 ("Petitioners' Reply"), argued that the EPA Phase II Rule would not preclude the imposition by New York State of more protective limitations on power plant cooling water intakes. Petitioners reiterated their position that the EPA Phase II Rule does not apply to pending permit applications or existing draft SPDES permits.

Petitioners contended that their offers of proof satisfied the "substantive and significant" standard established by 6 NYCRR Part 624 for adjudicable issues. With respect to DATEM, petitioners argued that DATEM overestimates reductions in entrainment and impingement and would provide inaccurate results. Petitioners also maintained that the ALJ's determination to consider the use of "partial cooling towers" as an option in evaluating whether a closed cycle cooling system was BTA for the facility should be upheld. Lastly, petitioners asserted that whether such alternative measures as sonic deterrence and the Marine Life Exclusion System™ should be considered permanent BTA for the facility should be adjudicated in this proceeding.

- Withdrawal of Certain Issues for Adjudication

Subsequent to the filing of the appeal briefs and replies, Department staff, by letter dated January 14, 2005 to then Commissioner Erin M. Crotty, advised that Department staff had reached agreement with Dynegy on certain revised provisions of the proposed SPDES permit for the facility. Staff expressed its belief that this agreement "resolves or otherwise moots the Rulings appeal brought on behalf of Dynegy."

Dynegy, by letter of same date, advised Commissioner Crotty that it "hereby withdraws all of its proposed issues for adjudication." Dynegy indicated that, notwithstanding this withdrawal of its proposed issues, it continued to oppose "all of the issues identified for adjudication by [Petitioners], including (but not limited to) those that relate to closed-cycle cooling and to the appropriateness of using DATEM."

Department staff prepared a revised draft SPDES permit to reflect the agreement with Dynegy on certain permit conditions. The revised draft permit was circulated to the parties on January 14, 2005 ("Revised Draft Permit").

On January 26, 2005, ALJ O'Connell conferred with representatives for Dynegy, petitioners and Department staff with respect to the letters submitted by Dynegy and Department staff and the Revised Draft Permit.

During that conference call, petitioners' counsel advised that he did not object to the Revised Draft Permit, but that petitioners' technical consultants had not yet completed their review. Petitioners' counsel indicated, however, that any comments from the technical consultants would be forthcoming. No objections or comments from petitioners or their consultants to the Revised Draft Permit were received.

The ALJ prepared and circulated a memorandum dated February 1, 2005 that summarized the matters raised during the conference call. The ALJ indicated that Dynegy stated that it withdraws the issues that it had proposed for adjudication. The ALJ further noted that, based on the Revised Draft Permit, Department staff and Dynegy agreed that the only issues identified in the March and May Rulings that remained outstanding are: (1) on-site, closed cycle, cooling tower configurations; (2) the accuracy of the DATEM assumptions; and (3) the three legal issues identified in § III of the March Ruling as clarified by the ALJ's memorandum dated April 5, 2004 (see February 1, 2005

memorandum, at 2).¹¹ The memorandum also noted arguments that were raised during the conference call on the BTA standard.

STANDARDS FOR ADJUDICATION

Pursuant to 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 substantive and significant" (6 NYCRR 624.4[c][1][i-iii]).

Accordingly, where contested issues are proposed by third parties, an adjudicable issue must be "both substantive and significant." 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 the Department staff has reviewed an application and finds that a component of the applicant's project, as

¹¹ The April 5, 2004 memorandum provided that parties could include the presentation of factual information at the adjudicatory hearing that might be needed to support a particular position with respect to these legal issues in closing arguments.

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, its 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 Commissioner, August 19, 1999, at 8 (citing Matter of AZKO Nobel Salt Inc., Interim Decision of the Commissioner, January 31, 1996, at 12)). Moreover, offers of proof, even where supported by a factual or scientific foundation, 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.

Where an ALJ's issues ruling is appealed, substantial deference is given to the ALJ on factual issues (see Matter of Saratoga County Landfill, Second Interim Decision, October 3, 1995, at 3). The commissioner, in considering the ALJ's ruling, will first review whether the ALJ has properly applied the substantive and significant standard. Where the commissioner determines that the substantive and significant standard has not been properly applied, the commissioner will not defer to the ALJ, but will conduct an independent review (see Matter of Thalle Industries, Inc., Decision of the Deputy Commissioner, November 3, 2004, at 20).

As to legal and policy issues, however, the Commissioner has greater 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).

DISCUSSION

Closed Cycle Cooling System

The ALJ ruled that whether the facility should be retrofitted with a closed cycle cooling system was an issue for adjudication. According to the ALJ, "[w]hether a closed cycle cooling system can be located on the site is at the center of this issue" (March Ruling, at 17).

As the ALJ noted, Dynegey and Department staff contend that insufficient space exists on the site to accommodate any closed cycle cooling system. Petitioners' proposed experts disagree, and in their petition for party status, petitioners list several closed cycle cooling tower configurations that could be located on the site of the facility (see Petition for Party Status, at 22 & Exh E).

I have reviewed the conflicting expert opinion and affirm the ALJ's ruling that a substantive and significant issue has been raised. The ALJ has identified various factual questions related to this issue, including but not limited to whether the costs associated with retrofitting the facility with a closed cycle cooling system are wholly disproportionate to the environmental benefits to be gained compared to other available alternative technologies (see March Ruling, at 18). These questions should be addressed in the adjudication of the issue.

The threshold question, however, is whether sufficient space exists to accommodate any such system. At the issues conference, petitioners contended that the Roseton site, which is adjacent to the facility, could provide additional room for retrofit or relocation of existing facilities. The ALJ limited the issue to consideration of configurations on the site of the facility, and excluded consideration of adjacent properties (see id. at 18-19).

Petitioners have appealed from the March Ruling, arguing that the ALJ erred in excluding the Roseton site (see Petitioners' Appeal Brief, at 23-29). Although contending that the two sites have "common ownership and control" (id. at 28),

petitioners make no sufficient offer of proof to show that these two facilities should be considered as one, and fail to cite any legal authority for their proposition that the Roseton site should be considered for cooling tower configurations for, or relocating existing facilities from, the Danskammer site.

In its reply brief, Dynegy reviews the corporate status of the Roseton and Danskammer facilities, explaining that the sites are owned by separate and independent companies (see Dynegy Reply Brief, at 11-12). The two companies have not been shown to be in a parent/subsidiary relationship, nor has it been shown that the companies have merged or that one is the alter ego of the other (see, e.g., Affidavit of Martin W. Daley, sworn to on July 19, 2004, at ¶¶ 3-7). Corporate forms cannot be summarily disregarded.

BTA determinations in New York are conducted on a site-specific basis (see, e.g., Matter of Mirant Bowline, LLC, Decision of the Commissioner, March 19, 2002, at 11; Matter of Athens Generating Company, LP, Interim Decision of the Commissioner, June 2, 2000, at 9 [BTA determinations made by employing a "point source by point source" application]). A private applicant is not required to consider parcels owned by separate and independent entities to meet the BTA standard.

The SEQRA regulations provide a useful analogy where private entities are concerned. In preparing an environmental impact statement, "[s]ite alternatives may be limited to parcels owned by, or under option to, a private project sponsor" (6 NYCRR 617.9[b][5][v]; Horn v International Bus. Machs. Corp, 110 AD2d 87, 95-96 [2nd Dept 1985], lv denied, 76 NY2d 602 [1986]; see also Matter of St. Lawrence Cement Co., LLC, Initial Rulings of the ALJs, December 7, 2001, at 128 [noting that it would be "an illogical and unwarranted extension of SEQRA to require every private developer to address in its EIS the possible development of other sites over which it has no control" [citation omitted]]; see also Matter of TransGas Energy Systems, LLC, Interim Decision of the Commissioner, March 12, 2004, at 20-21 [where applicant is a private entity, [6 NYCRR] Part 231 alternative sites proposed by an intervenor must be sites owned or controlled by applicant]; cf. Citizens for the Hudson Valley v. New York State Board on Electric Generation Siting and the Environment, 281 AD2d 89, 97 [3d Dept 2001][Siting Board "rationally determined that a private applicant, lacking the power of eminent domain, cannot be required to present alternative sites that it neither owns nor has an option to purchase"]).

Petitioners' arguments are conclusory and unsupported.

Petitioners have not made an adequate showing that the Roseton site and the Danskammer site can be treated as one for the purpose of implementing closed cycle cooling for the Danskammer facility. I concur with, and affirm, the ALJ's determination (see March Ruling, at 19-20) that petitioners' argument is not persuasive. The Roseton site shall not be considered for the placement of a closed cycle cooling system for the Danskammer facility or relocation of existing facilities.¹²

Following the issues conference, petitioners requested clarification from the ALJ whether the March Ruling "contemplates a lesser included retrofit, in particular cooling towers for units 3 and 4 alone" (letter dated May 4, 2004 from petitioners, at 3, fn3). According to petitioners, "[s]uch inclusion would allow for the benefits of closed cycle cooling for the vast majority of Danskammer's generation, including eliminating Dynegy's concern about problems with the reliability of electrical transmission, at substantial savings" (id.). The ALJ granted petitioners' request on the ground that the request "refines, rather than expands, the issue joined in [the March Ruling]" (May Ruling, at 7).

Dynegy appeals from that ruling, contending that petitioners were untimely in raising this issue. Dynegy argues that the manner in which petitioners raised it precluded Dynegy (and Department staff) from an effective opportunity to comment, and that it was not raised in accordance with Department regulations (Dynegy Appeal Brief, at 28-31).

A review of the record, however, reveals that such lesser included retrofits were discussed in an exhibit to the petition for party status with respect to sizing, cost and potential locations. Specifically, Exhibit E, which is a letter from William Powers, P.E. (one of petitioners' proposed expert witnesses), discusses configurations for units 3 and 4, apart from all four units (see Exh E, at 2-3 [referencing, under "Wet Tower Option", a 10-cell tower for units 3 and 4; under "Air-Cooled Condenser (ACC) Option," retrofitting costs for dry cooling for only units 3 and 4]). It would be useful and appropriate to consider the benefits of lesser included retrofits for purposes of a BTA determination in the adjudicatory hearing. This cannot be said to be unanticipated in light of the presentation in Exhibit E to the petition for party status.

¹² Accordingly, petitioners' request for discovery to "ascertain commonality of real ownership interest and control" (Petitioners' Appeal Brief, at 29) is denied.

However, to promote an efficient hearing and to ensure fairness to all parties, I direct that petitioners submit, at a time prior to the adjudicatory hearing to be determined by the ALJ, the specific configurations and lesser included retrofits that petitioners are proposing for consideration. The issue will be limited to the configurations proposed in the petition for party status (see March Ruling, at 18-19) and any closed cycle cooling configuration for units 3 and 4 (see May Ruling at 7).

The ALJ may, at his discretion, limit the number of configurations submitted solely for units 3 and 4. With respect to the location of lesser included retrofits, the ALJ stated that the configuration that would apply only to units 3 and 4 "presumably would be located on the site" (May Ruling, at 7). In accordance with this interim decision, all configurations, including any lesser included retrofits, must be located within the boundaries of the Danskammer site.

In addition, petitioners, in their appeal, raise for the first time the possibility of using "temporary piers or barges in the Hudson River" for potential cooling tower configurations (Petitioners' Appeal Brief, at 24-25). Petitioners contend that one significant advantage of temporary piers or barge-mounted closed cycle systems "is their portability, allowing for rental on a year-to-year basis rather than capital construction" (id. at 26).

Department staff argues that, in light of the facility's location "in relative close proximity to the Federal shipping channel," the use of piers or barges would lead to interference or intrusion upon the Hudson River's navigation channel (see Department Staff Reply, at 25). Department staff also effectively distinguishes the Danskammer site from the Mirant Lovett site which petitioners reference in support of using piers or barges (id. at 24-25 [different site specific conditions at the Mirant Lovett facility which is situated in a cove and is not located in close proximity to the federal navigation channel]).

In contrast to the lesser included retrofit issue, petitioners' "piers and barge" issue was not presented for consideration prior to a ruling by the ALJ. Accordingly, other than by reply brief, the delay in raising this potential location for cooling towers precluded argument by Dynegy and Department staff.

Issues that are raised for the first time in appeal briefs are untimely and are generally excluded from consideration

(see, e.g., Matter of Town of Brookhaven, Interim Decision of the Commissioner, July 27, 1995 [attempt by local civic and community organizations to raise new issues in their appeal of the ALJ's issues ruling rejected as untimely]; see also Matter of Pete Drown, Inc., ALJ Memorandum on Rulings and Party Status, September 1, 1993, at 21; cf. 6 NYCRR 624.5[c][2]). Petitioners in this proceeding have offered no justification for the delay in raising this issue concerning the use of piers and barges. Furthermore, petitioners did not seek nor were they granted permission by the ALJ to raise this issue at this stage in the proceeding.

Although the untimely raising of this issue is sufficient to exclude it, I note further that petitioners fail to make an adequate offer of proof with respect to the proposal. No location that may be suitable for such piers and barges was identified, and no showing was made that the shipping channel would not be impacted. The concerns that Department staff raise regarding the proximity of the facility to the shipping channel underscore the deficiencies in petitioners' late-raised proposal. Because petitioners' presentation of this alternative was neither timely nor adequate, the possible use of piers or barges will not be adjudicated in this proceeding.

Accuracy of the DATEM Assumptions

The purpose of DATEM is to evaluate the potential biological benefits (reduced entrainment and impingement mortality) that might be expected if particular technologies or operating scenarios were implemented at the facility. Condition 11 of the draft SPDES permit (IC Exh 3-A, at 15-16) provided that Dynegy would implement a flow reduction and outage program by actively managing flow and cooling water discharge temperature on a daily basis by using DATEM prepared by Applied Science Associates to operate the plant. Plant operations were to be altered to use the minimum volume of water necessary to provide cooling and to comply with the thermal limits in the permit. Using DATEM, cooling water flow was to be correlated to the numbers of fish impinged and entrained at the facility.

Subsequent to the May 2004 modification of the existing SPDES permit for the facility, Dynegy implemented a flow reduction and outage program. As previously noted, in early 2005 a Revised Draft Permit was circulated for purposes of this administrative proceeding. Special Condition 11 of the Revised Draft Permit provides for the continuation of the flow reduction and outage program and the use of DATEM to correlate cooling water flow to the number of fish impinged and entrained at the

facility. During the first two years of the permit term, flow minimization must reduce impingement mortality of fish and shellfish by at least 80% and entrainment mortality of fish eggs and larvae by at least 70% as calculated using DATEM. During the last three years of the permit term, greater reductions of impingement and entrainment mortality are to be achieved (see Revised Draft Permit, Special Condition 11b). DATEM will serve as an important measurement tool in evaluating reductions in entrainment and impingement.

The ALJ identified the accuracy of DATEM assumptions as an issue for adjudication, in part, because of the dispute between Dynegy and Department staff concerning the need to collect additional entrainment and impingement data, and the appropriateness of using DATEM results to manage the cooling water through the facility. Dynegy's withdrawal of its appeals with respect to the draft SPDES permit conditions renders that disagreement moot.

The ALJ, however, also found that petitioners raised a substantive and significant issue about the reliability of DATEM, noting that petitioners' proposed expert disputes certain DATEM assumptions.

Petitioners in their petition for party status point to biases and inaccuracies in DATEM, and reference three areas of concern:

- (1) the use by DATEM of full pumping capacity to calculate the baseline "despite the fact that the plant never operates near capacity;"
- (2) the assumption in DATEM with respect to entrained organisms' survival when estimating actual mortality which was different from the assumption used for baseline mortality; and
- (3) the use in DATEM of inaccurate parameters as DATEM fails to account for a recent increase in river temperature and only accounts for certain species of Hudson River fish in estimating mortality levels (see Petition for Party Status, at 23-24).

Petitioners list six elements in their offer of proof with respect to DATEM (see id., at 24-25 ¶¶ 8-13). In their reply brief, petitioners state, however, that other potential inaccuracies in DATEM "pale in comparison" to the above-referenced items (1) and (2) which petitioners characterize as "the two fundamental biases" (see Petitioners' Reply, at 19).

Dynegy, in its appeal, argued that the ALJ made no

determination regarding the qualification of petitioners' experts and failed to analyze the adequacy of petitioners' offer of proof on DATEM. Dynegy submitted that petitioners' concerns with DATEM ignore the fact that DATEM's baseline assumptions are consistent with calculation methods for entrainment and impingement mitigation effectiveness "pursuant to USEPA's Phase II rules" (Dynegy Appeal Brief, at 24). Dynegy indicated that DATEM's entrainment survival estimates are based upon numerous studies gathered pursuant to the Hudson River Settlement Agreement (see Dynegy's Appeal Brief, at 24).

Petitioners in their reply contend that they provided sufficient detail regarding their objections to DATEM to identify the points of contention. Petitioners also argue that Dynegy failed to present data at the issues conference that rebutted petitioners' analyses (see Petitioners' Reply, at 19-20).

Both Department staff and Dynegy agreed that DATEM, which accounts for various factors such as temperature and flow rates and different fish species, would be effective for measuring entrainment and impingement reductions at the facility.

Clearly, DATEM is important for providing reliable data that will be important in determining the appropriate technology for the facility. Upon my review of the record in this proceeding, including but not limited to the document "Ecological issues relating to the draft SPDES permit for the Danskammer Generating Station" that is attached to the Petition for Party Status, I determine that petitioners' offer of proof was sufficient to raise an adjudicable issue as to DATEM, but only as to certain of the matters on which petitioners made offers of proof. A review of the record does not demonstrate that all of petitioners' challenges to the accuracy of certain assumptions in DATEM were effectively rebutted. Accordingly, I concur with the ALJ's determination that petitioners have raised an adjudicable issue concerning the accuracy of the assumptions in DATEM, with respect to above-referenced items (1) and (2).

With respect to item (3), however, Department staff effectively addressed petitioners' argument regarding the use of six fish species by noting that these six species account for over 90% of the fish species impacted by the facility, and that adding other species that inhabit the Hudson River would be inconsequential (see IC Transcript ("Tr."), at 121-122). The results from DATEM will be compared to approximately 25 years of river data that has been collected (see Tr., at 121; see also Danskammer [sic] Point Generating Station Biological Fact Sheet ["Fact Sheet"], IC Exh 3-D, at 2 [discussing how over the past 29

years, biological monitoring studies have been conducted at the facility "which have provided information on the species and numbers of fish impinged (1974-2001) and entrained (1982-1987)" at the facility's cooling water intake, and how the entrainment data has been updated "by incorporating an adjustments factor for the selected species derived from Longitudinal River Survey data (1996-2001) collected in the region of the Hudson River where Danskammer is located"). Petitioners' general assertions regarding DATEM's use of "old and imprecise" fish population proportions is insufficient to raise an adjudicable issue in light of Department staff's presentation regarding the data being employed and the information set forth in the Fact Sheet.

As to temperature assumptions in DATEM, petitioners appear to discount that issue in their reply brief. However, as the record does not fully rebut petitioners' offer of proof that the DATEM temperature assumptions are incorrect, the accuracy of the assumptions in DATEM concerning temperature will also be adjudicable.

To the extent that petitioners have sought to raise other concerns regarding the assumptions in DATEM, a review of the record indicates that those concerns are too speculative or too general to warrant adjudication.

Sonic Deterrence

Proposed condition 10 of the draft SPDES permit that was considered at the issues conference (IC Exh 3-A, at 15) would have required Dynegy to evaluate the effectiveness of a high frequency, high energy sonic deterrent device that would be deployed at the facility's intake canal from August 1 through October 31 each calendar year. According to Department staff, sonic deterrence reduced the adverse effects of entrainment and impingement at another generating station, and a similar result is projected for this facility.

Petitioners, however, argued that such sonic deterrence devices are experimental and not effective for all fish species (see Petition for Party Status, at 25[¶ 14]). I note that petitioners suggest that sonic deterrence should be used, albeit as a complement to closed cycle cooling, "as a part of Best Technology Available" (id. at 24).

The ALJ found that petitioners, based on their offer of proof, had raised a substantive and significant issue. According to the ALJ, the issue for adjudication was whether sonic deterrence, alone or in combination with flow reductions, is an

available BTA technology for the facility (March Ruling, at 22).

Dynegy appeals from the ALJ's ruling and argues that, because petitioners only appeared to challenge sonic deterrence as a short-term BTA measure, petitioners have withdrawn this issue (Dynegy Appeal Brief, at 25-26). Dynegy contends that petitioners failed to address how incorporating sonic deterrence as a BTA technology at the facility "created doubt about Dynegy's ability to meet applicable regulatory criteria" (*id.*, at 26). Dynegy also emphasizes the longstanding, successful deployment of sonic deterrence at a number of facilities in the United States (*id.*, at 27). Petitioners in their reply brief contend that Dynegy's statement that they have withdrawn the issue is "incorrect and invalid" (Petitioners' Reply, at 26).¹³ However, petitioners acknowledged that they were not contesting the use of such technologies as sonic deterrence in the short term, but only the prospective use "for permanent BTA" (*id.*).

Upon my review of the record, I conclude that petitioners failed to raise a substantive and significant issue with respect to the issue of sonic deterrence.

Dynegy has fully addressed petitioners' concerns at the issues conference. It indicated that sonic deterrence had been used for more than twenty years, and noted its success at reducing entrainment and impingement (IC Tr., at 115). Dynegy

¹³ Subsequent to the ALJ's March Ruling, the facility's existing permit was modified to allow Dynegy to implement certain changes to the facility's operation. As part of these changes, Dynegy committed to design, install and evaluate a sonic deterrence system to further reduce impingement effects at the facility.

Condition 10 of the Revised Draft Permit that was circulated among the parties in January 2005 provides for the continued deployment of the device in order to evaluate its effectiveness. During the 2005 and 2006 deployment period, Dynegy will conduct a monitoring study designed to quantify the effectiveness of the sonic deterrent. By the terms of the draft permit condition, additional years of monitoring may be required if the 2005 and 2006 studies prove insufficient to quantify the effectiveness of the sonic fish deterrent. Consequently, the effectiveness of sonic deterrence at this facility will be monitored for purposes of determining the extent to which it will be an available BTA technology for the facility.

further noted that sonic deterrence was "well established with regard for certain species" for which it was being proposed at this facility, and that sonic deterrence was also being successfully used at the FitzPatrick facility on Lake Ontario (id.). Dynegy, in its appeal, enumerated additional facilities where sonic deterrence has been successfully deployed.

Various documents in the record also address the concerns raised by petitioners. As set forth in the Negative Declaration, the sonic deterrent system would be used during the peak migration system for alewife, American shad and blueback herring which, according to a study by the New York State Power Authority, have been shown to respond to sonic deterrents and which are most significantly impacted by impingement at the facility (see IC Exh 3-E, at 4-5; see also Fact Sheet, IC Exh 3-D, at 2-3 [noting the use of sonic deterrence with respect to species spawning in the Hudson River and that a Department-approved monitoring plan would be conducted to evaluate the success of its use]). I also note Department staff's position opposing the adjudication of the proposed issue and staff's arguments as to the effectiveness of the use of sonic deterrence.

Petitioners' claim about the experimental nature of sonic deterrence was successfully rebutted, and petitioners did not adequately develop their argument about its stressing individuals of some species. Such mere assertions are insufficient to establish an adjudicable issue. The record indicates the reasons for which sonic deterrence technology was selected, the purposes for which it is to be used, and the fact that it has been used successfully at other facilities and for considerable time. It is also important to note that, with a commitment to its implementation and the undertaking of a monitoring program to evaluate its effectiveness, additional information will be obtained regarding sonic deterrence's ability to reduce entrainment and impingement.¹⁴

Marine Life Exclusion System™ ("MLES™")

The draft SPDES permit that was considered at the

¹⁴ The ALJ had indicated that a relevant factor to be considered is whether the cost of sonic deterrence is wholly disproportionate to the environmental benefits to be gained compared to other proposed alternatives. In light of Dynegy's commitment to deploying the sonic fish deterrent device, this concern is now moot.

issues conference contained three conditions related to the MLES™ (IC Exh 3-A, at 16-17). Draft condition 13 would have required Dynegy to undertake a feasibility study to evaluate the deployment of an MLES™ device at the facility. Assuming that the results of the feasibility study demonstrated that an MLES™ device should be deployed, draft condition 14 would have required Dynegy to prepare an engineering report for such deployment. Deployment of the MLES™ device would then occur by February 23, 2008 (draft condition 15).

Petitioners argued that an MLES™ device would not be suited to this facility given the likelihood of biofouling (which occurs when plankton and debris suspended in the water column become trapped in the device's fabric to an extent that water cannot pass through the device). Petitioners also contended that MLES™ performance has "generally fallen below the entrainment mitigation expected" and does not represent a BTA substitute, and that MLES™ would not approach the protectiveness of closed cycle cooling (Petition for Party Status, at 27).

Dynegy indicated that it would evaluate the use of the MLES™ device at the facility in response to Department staff's request, but that it was challenging the proposed draft conditions related to the device's feasibility, design and installation (see March Ruling, at 11-13, 23).

The ALJ, in the March Ruling, reviewed the arguments raised by Dynegy and petitioners against the use of an MLES™ device. He noted that Dynegy and Riverkeeper had similar views about the feasibility and effectiveness of installing such a device at the facility, and that Dynegy was contesting the proposed draft SPDES conditions relative to the MLES™ device. Accordingly, the ALJ determined that a substantive and significant issue had been raised. The ALJ indicated that a relevant factor to be considered is whether the cost of the MLES™ device is wholly disproportionate to the environmental benefits to be gained compared to other proposed alternatives (March Ruling, at 23). However, in light of Dynegy's withdrawal of its appeals,¹⁵ and the fact that, upon review, petitioners' concerns standing alone fail to raise a substantive and significant issue, no adjudicable issue exists with respect to the MLES™ device.

¹⁵ The ALJ also found an issue based on Dynegy's objections to three permit conditions that related to the MLES™ device (see March Ruling, at 11-13), which objections Dynegy has also withdrawn.

At the issues conference, Department staff noted that the MLES™ device is a "proven technology" that has been found to be BTA at other facilities (Tr. at 135-36) (see Matter of Mirant Bowline, LLC, Decision of the Commissioner, March 19, 2002 [addressing the efficacy of a similar device [Gunderboom] and its being an available technology to meet BTA requirements]; see also Fact Sheet, IC Exh 3-D, at 3 [noting in-situ studies at Lovett Station indicating that an MLES, utilized in conjunction with flow minimization, "has the clear potential to reduce impacts to aquatic organisms to a level equivalent to that which could be achieved by a closed-cycle system"]).

Dynegy, in its appeal, contends that petitioners have failed to demonstrate that the deployment of the MLES™ device would cause Dynegy to violate any applicable regulatory standard (Dynegy Appeal Brief, at 27). Dynegy also argued that, although it considers the installation of the device unwarranted, it does not contend that it is necessarily infeasible or unavailable for use at the facility (id., at 28).

Dynegy characterizes the concerns that petitioners raised regarding the infeasibility of the device's deployment and the allegation that performance has "generally fallen" below the entrainment performance expected to be nothing more than uncertainties (id.). I agree. The offer of proof by petitioners on this issue was speculative and conclusory. Although the ALJ is correct in noting that the installation of the MLES™ device at other electric generating stations is not dispositive of its effectiveness at this facility, petitioners have not provided an adequate offer of proof to challenge the device's effectiveness at the Danskammer facility. Their concerns about biofouling may raise uncertainties, but, absent greater specificity, do not provide a basis for identifying this as an adjudicable issue. No factual foundation was presented by petitioners to support their assertions regarding MLES™ performance.

Moreover, the three conditions that related to the MLES™ were deleted from the Revised Draft Permit that was circulated in January 2005. A new condition 14 provides that, three years after issuance of a SPDES permit, Dynegy will submit a list of technologies and operational measures that will have the potential to reduce impingement mortality of fish by at least 90%, and entrainment mortality of fish eggs and larvae by at least 80%.

Following Department approval of the list, Dynegy will analyze the feasibility and merits of each technology and operational measure for reaching the referenced per cent

reductions. Selection and implementation of technologies and/or operational measures will occur in the term of the permit that follows the permit now under consideration, subject to applicable permit renewal procedures.

Legal Issues Identified for Briefing

The ALJ determined that the parties would have the opportunity to address three legal issues in their closing and reply briefs. In light of developments following the issuance of the March and May Rulings, the arguments that the parties have raised on the appeals and in response to a February 1, 2005 memorandum of the ALJ, other aspects of the record, and relevant legal authority, I determine that it is not necessary to brief any of the three legal issues that were identified in the March Ruling.

In addition, Department staff noted in its appeals brief that it appeared that briefing had been authorized in connection with two other "unnumbered" legal issues, that is (1) the alleged invalidity of, or a defect with, the Department's promulgation of 6 NYCRR 704.5; and (2) the applicability to this proceeding of cost analyses from EPA's Phase II Rule (see Department Staff Appeal Brief, at 2). To the extent that these "unnumbered rulings" are not incorporated within the three legal issues identified by the ALJ, it is my determination that briefing of the "unnumbered rulings" is similarly unnecessary.

A review of each of the legal issues follows.

- First Legal Issue for Briefing: whether the Department has the legal authority to order a technology change to the facility's cooling water intake structure in the context of this SPDES permit review process under 6 NYCRR 704.5, 33 USC 1326(b), or both.

The Department has exercised its authority to make BTA determinations under CWA § 316(b) [33 USC 1326[b]] since EPA approved the State's SPDES program in 1975. As Department staff noted in its appeals brief, on April 16, 1974, Attorney General Louis J. Lefkowitz certified, pursuant to CWA § 402(b), that the laws of the State of New York provided adequate legal authority to implement the Department's SPDES program. Subsequently, on October 28, 1975, New York's SPDES program was approved by the United States Environmental Protection Agency and the Department became the permitting authority for CWA within New York State.

Pursuant to EPA's approval of the State program, a

SPDES permit for a facility in New York that includes a cooling water intake structure must comply with whatever additional requirements the Department determines are necessary under State law, in addition to fully complying with the federal standard. In accordance with its EPA-approved permitting program, the Department is required by the federal CWA to enforce that legislation's basic mandates. Department staff describes in detail in its appeals brief the statutory provisions and applicable case law which authorizes the State to operate the SPDES program (see also Environmental Law and Regulation in New York, Ginsberg, W. and Weinberg, P., Chapter 6 [2001]), and to regulate cooling water intake structures through the requirements incorporated in SPDES permits.

New York State, pursuant to CWA § 510, may adopt or enforce through its SPDES permit program more stringent standards than those established by the federal government with respect to an effluent limitation "or other limitation, effluent standard, prohibition, pretreatment standard or standard of performance." For a review of the State's application of BTA determinations, see, e.g., Matter of Athens Generating Company, LP, Interim Decision of the Commissioner, June 2, 2000, at 7-17 (discussing the application of BTA to an electric generating facility); Matter of Mirant Bowline, LLC, Decision of the Commissioner, March 19, 2002, at 9 (noting that decision relies upon both federal [§ 316(b)] and independent State authority in reaching the BTA determination for the project).

Accordingly, it is well settled that the Department has the legal authority to consider appropriate changes to a facility's cooling water intake structure pursuant to the federal Clean Water Act and the applicable State statutory and regulatory authority.

Department staff notes that the March Ruling references Dynegey's contention that 6 NYCRR Part 704 is invalid "due to a procedural defect in its promulgation" (March Ruling, at 25). The March Ruling indicates that the parties may discuss this issue in their respective closing and reply briefs (id.). Department staff in its appeal presented a comprehensive review of the promulgation and application of 6 NYCRR 704.5 (see Department Staff Appeals Brief, at 16-43). Staff contends that 6 NYCRR 704.5 was duly promulgated and the consideration of its validity is inappropriate in this forum.

Part 704 of 6 NYCRR sets forth the State's regulatory criteria governing thermal discharges. Section 704.5 ("Intake Structures") of 6 NYCRR establishes the Department's authority to

make BTA determinations with respect to a point source thermal discharge associated with a cooling water intake structure that is subject to a SPDES permit. Section 704.5 reads as follows: "[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."

Certain owners of power plants located on or near the Hudson River commenced legal proceedings challenging the validity of 6 NYCRR 704.5. It was argued that 6 NYCRR 704.5 is constitutionally invalid because no public hearing was held prior to the regulation's being filed with the Secretary of State. Subsequent to the issuance of the March and May Rulings, this challenge to the validity of 6 NYCRR 704.5 was dismissed (Matter of Entergy Nuclear Indian Point 2 LLC et al. v NYSDEC, Decision & Judgment, Index Nos. 6747-03 & 6749-03, Kavanagh, J., Albany Co Sup Ct, August 18, 2004, reargument denied, Decision & Order, Index No. 6747-03, Kavanagh, J., Albany Co Sup Ct, January 4, 2005).

Dynergy contends that it has different or additional arguments challenging the validity of 6 NYCRR 704.5 (see Dynergy Reply, at 19 fn 15). For example, Dynergy indicates that it is reserving its right to argue that the Department exceeded its statutory authority in either adopting or interpreting 6 NYCRR 704.5 to impose a more stringent BTA requirement under state law than what would be required for compliance with the federal Clean Water Act.

Challenges to the constitutional validity of the adoption of a Department regulation are within the province of the judicial branch, and are not within the jurisdiction of a Part 624 administrative hearing (see Matter of Delford Industries, Inc., Hearing Report of the Administrative Law Judge, at 33, aff'd, Decision and Order of the Commissioner, April 13, 1989).

Furthermore, as discussed, the federal Clean Water Act provides that a State may adopt and enforce more stringent standards to ensure compliance with its laws (see CWA § 510; Riverkeeper v EPA, 358 F3d 174, 200-201 [2nd Cir 2004]; Department Staff Appeal Brief, at 33-34). To the extent that Dynergy contests the interpretation of 6 NYCRR 704.5 and its longstanding application in imposing BTA determinations that may be more stringent than those required under federal standards, the aforementioned legal authority and the arguments presented in Department staff's appeals brief fully support the rejection of

Dynegy's position.

- Second Legal Issue for Briefing: what are the appropriate legal standards to apply in making a 33 USC 1326(b) 'best technology available for minimizing adverse environmental impacts' determination.

The appropriate legal standards for BTA determinations are well-established. In addition to the discussions of the legal standards governing thermal discharges presented in Department staff's appeals brief, these standards have previously been well-articulated in Department proceedings (see, e.g., Matter of Athens Generating Company, LP, Interim Decision of the Commissioner, June 2, 2000, at 7-19); Matter of Mirant Bowline, LLC, Decision of the Commissioner, March 19, 2002). Accordingly, I see no benefit to the briefing of this issue.

Related to this issue, Dynegy contends that the EPA Phase II Rule should be considered in the BTA determination. The ALJ noted that the parties would have an opportunity to present legal argument about the applicability of the Phase II Rule (May Ruling, at 6-7).

During a January 26, 2005 conference call that the ALJ held with Department staff, Dynegy, and petitioners, the parties discussed the question of what constitutes the BTA standard for this proceeding. Department staff reiterated its position that the EPA Phase II Rule does not apply, and that the appropriate BTA standard for the pending application is the regulatory language of 6 NYCRR 704.5 together with applicable administrative decisions. Petitioners took a similar position. It was also noted that one of the petitioners (Riverkeeper, Inc.) has petitioned for judicial review of the EPA Phase II Rule. In contrast to Department staff and petitioners, Dynegy argued that the appropriate starting point in a BTA determination would be the federal Clean Water Act and EPA's Phase II Rule.

The ALJ prepared a memorandum dated February 1, 2005 summarizing the matters raised on the January 26, 2005 conference call, including the discussion of the BTA standard. Dynegy responded to the ALJ's memorandum by letter dated February 7, 2005, challenging the statement that petitioners' position on the applicable BTA standard is similar to that of Department staff. According to Dynegy, petitioners "apparently seek to foreclose all consideration of arguments *and evidence* that are related to, or apply, the [EPA's] Phase II BTA standards" (emphasis in original). Dynegy contended that the issue "is whether evidence may be adduced at the adjudicatory hearing that relates to the

Phase II rules and whether reference may be made to the Phase II rules at such hearing. . . ."

Dynegy maintained that the evidence and arguments that petitioners "seek to preclude" are relevant to the Department's position with regard to BTA determinations, and cited a letter dated January 24, 2005 from Department Deputy Commissioner Lynette M. Stark to EPA Assistant Administrator Benjamin Grumbles ("Stark Letter") as support. Furthermore, Dynegy contended that the language in Clean Water Act § 316(b) and 6 NYCRR 704.5 "is substantially similar and the Department's interpretation of the general mandate contained in § 704.5 should, at a minimum, be informed by the substantive regulatory standards that [EPA] has established under [CWA] § 316(b)."

Department staff, by letter dated February 9, 2005, stated that the Stark Letter represents Department staff's "general framework for gathering relevant information, conducting BTA determinations and formulating appropriate SPDES permit requirements for cooling water intake structures at existing large power plants in the future" (emphasis added). According to Department staff, the Stark Letter "is not dispositive of any issues" in this proceeding involving a SPDES permit for an existing power plant that Department staff drafted prior to the effective date of the EPA Phase II Rule.

Petitioners, by letter dated February 14, 2005, reiterated their position that the EPA Phase II Rule does not apply to this proceeding "because the Danskammer application and draft permit predated [the EPA Phase II Rule]." Petitioners argued that nothing in the Stark Letter "implies or even addresses" the applicability of the Phase II Rule to [the facility]." According to petitioners, the cost-benefit analyses contained in the EPA Phase II Rule would not apply to the proceeding and would not be "competent evidence."

Petitioners also contended that the textual similarities in New York's BTA standard at 6 NYCRR 704.5 and the BTA language in CWA § 316(b) did not "enable [EPA's] Phase II Rule to obviate the Department's BTA standards." However, petitioners argued that not all references to the EPA Phase II Rule should be foreclosed. They indicated that "applicable data and analysis" on cooling water intakes and their impacts that were published in conjunction with the Phase II rule could be considered in this proceeding.

Pursuant to my review, I determine that the EPA Phase II Rule is not applicable to this proceeding and no briefing will

be required. Department staff have presented several arguments as to why the rule is not applicable (see, e.g., Department Staff Appeals Brief, at 43-50; Department Staff Reply, at 6-15). Moreover, the prepublication version of the EPA Phase II Rule provides that "[p]ermit applications submitted after the effective date of the rule must fulfill rule requirements" (see EPA Phase II Rule, prepublication version at 74; see also EPA's 316(b) Phase II Implementation Question and Answer Document, August 19, 2004, at 2-3 (question and answer referenced as "Q2" and "A2" [addressing situation where draft permit is proposed before the Phase II Rule takes effect, but the final permit is issued after the effective date])).

In this matter, the notice of the modification and renewal of the SPDES permit for the facility appeared in the Environmental Notice Bulletin on June 25, 2003. The issuance of the draft SPDES permit preceded by more than one year the effective date (September 7, 2004) of the EPA Phase II Rule.

I concur with Department staff that the appropriate BTA standard for this proceeding is based on 6 NYCRR 704.5 and applicable state administrative decision precedent. This includes the four-step analysis employed to determine whether "best technology available" is being utilized by a particular facility (see Matter of Athens Generating Company, LP, Interim Decision of the Commissioner, June 2, 2000, at 9).

Even if the Phase II Rule applied, it would not restrict or otherwise limit the Department's ability to apply state policies and standards restricting withdrawals of cooling water from the Hudson River.¹⁶ Department staff correctly notes

¹⁶ The ALJ indicated that the parties would have an opportunity to identify the cost analyses outlined in the draft EPA Phase II Rule that may apply to the facility, and that these might be different from the "wholly disproportionate" standard that was identified in previous decisions of the Commissioner. However, in light of my determination that the EPA Phase II Rule does not apply to this proceeding, the "wholly disproportionate" standard (and not the cost analyses from the EPA Phase II Rule) will apply to this proceeding.

Petitioners have argued that not all references to the EPA Phase II Rule should be foreclosed, and indicated that "applicable data and analysis" on cooling water intakes and their impacts that were published in conjunction with the Phase II rule should not be precluded from consideration in this proceeding. I

that CWA § 510 expressly provides that States may set standards more stringent than those established by EPA. The EPA Phase II Rule reiterates this principle (see section 125.90(d) of title 40 of the Code of Federal Regulations, as set forth in the EPA Phase II Rule [69 Fed Reg 41683 [July 9, 2004]; see also id. at 41582 [EPA interprets CWA § 510 to reserve for the states "authority to implement requirements that are more stringent than the Federal requirements under state law"]).

- Third Legal Issue for Briefing: whether articles 3, 8 or 15 of ECL require the Department to consider the benefits of its proposed modification, and to balance the social and economic value of the facility to the State, regional, and local economies, and the welfare of the people of New York.

Upon review of the arguments submitted with respect to the third legal issue for briefing, I concur with Department staff's position that no further briefing is necessary. Department staff's analysis on this issue is well-reasoned and persuasive (see Department Staff Appeal Brief, at 8-15). According to Department staff, as the SEQRA process is completed, no need exists to address ECL article 8. As for ECL articles 3 and 15, Department staff contended that neither article requires any evaluation of benefits and balancing of interests.

The State Environmental Quality Review Act ("SEQRA") provides that environmental concerns should be given appropriate weight with social and economic considerations in public policy (see ECL 8-0103[7]). In this matter, the Department reviewed the action (that is, the modification and renewal of the SPDES permit) and issued a negative declaration. This completed the process pursuant to article 8 of the ECL (which codifies SEQRA).

The negative declaration that Department staff issued with respect to the draft SPDES permit has been separately challenged pursuant to article 78 of the Civil Practice Law and Rules ("CPLR"). On April 30, 2004, this challenge to the negative declaration was dismissed (Matter of Dynegy Northeast Generation Inc. v NYSDEC, Index No. 6738-03, Albany Co Supreme Ct, Kavanagh, J., April 30, 2004). Accordingly, there is no need to brief the requirements of ECL article 8.

agree that, to the extent that the ALJ determines that such data and analysis about the impacts of cooling water intakes are relevant to the issues to be adjudicated, such data and analysis may be taken into account in this proceeding.

It appears that Dynegy now concedes that briefing of ECL article 8 is not necessary. As Dynegy indicates in its reply brief, at the time that the issue of briefing ECL article 8 was identified for adjudication, Dynegy was challenging Department staff's issuance of a negative declaration. Dynegy acknowledges that, because it subsequently withdrew that challenge, "it may no longer be appropriate to brief the applicability of [ECL article 8] to this proceeding" (Dynegy Reply Brief, at 15 fn10).

However, in its reply brief Dynegy maintains that briefing of articles 3 and 15 would be appropriate. It notes, in support of this position, that various provisions of articles 3 and 15 are cited in the record (see Fact Sheet, IC Exh 3-D, at 4 [referencing ECL § 3-0301[1][b],[c],[i],[s] & [t]). In addition, ECL § 15-0313 is referenced in 6 NYCRR Part 704 as one of the statutory authorities for that part.

Based on my review, however, I conclude that it is unnecessary to brief either article 3 or article 15 of the ECL with respect to the third legal issue. Article 3 consists of two titles, one which relates to the establishment and organization of the Department and one which sets forth the general provisions, duties, powers and jurisdiction of the Department. Although Article 3 includes, as a general function of the Department, the promotion and coordination of "balanced" utilization and the taking into account of cumulative impacts (see ECL § 3-0301[1][b]), among other general functions, the balancing requirements are specifically contained in article 8. As noted, the environmental review requirements established by article 8 have been met.

As for ECL article 15, ECL § 15-0313, which sets forth the powers and responsibilities of the Department on water pollution control, does include several subsections which reference specific sections in ECL article 17. However, it is ECL article 17 which specifically governs SPDES permits, not article 15. Dynegy's effort to read in its "balancing of costs and balances" argument into articles 3 and 15 is not persuasive in this context. Accordingly, I see no reason to brief the third legal issue in this proceeding.

CONCLUSION

Based upon my review of the record, I determine that the following two issues are to be adjudicated:

- whether a closed cycle cooling system can be located

on the site and, if so, whether the facility must be retrofitted with such a system to satisfy the "best technology available" requirement contained in section 316(b) of the federal Clean Water Act and section 704.5 of title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York ("6 NYCRR"). With respect to the adjudication of this issue, the use of properties other than the site or the use of piers or barges in the Hudson River shall not be considered; and

- whether certain assumptions in the Danskammer Alternative Technology Evaluation Model ("DATEM"), which is to be used with respect to the flow reduction and outage program, are reliable.

None of the other matters raised in the appeals meet the standard for an adjudicable issue. With respect to the three legal issues that the ALJ identified for briefing in the parties' closing and reply briefs, I determine that such briefing will not be necessary for purposes of this proceeding.

For the New York State Department
of Environmental Conservation

By: _____/s/_____
Carl Johnson, Deputy Commissioner

Albany, New York
May 13, 2005