

DEC'S RESPONSE TO COMMENTS ON NOTICE OF COMPLETE APPLICATIONS AND SFEIS FOR ENTERGY INDIAN POINT UNITS 2 AND 3

On February 1, 2017, the Department of Environmental Conservation (“Department” or “DEC”) publicly noticed in its Environmental Notice Bulletin (“ENB”) a Combined Notice of Complete Applications of a final renewed State Pollutant Discharge Elimination System (“SPDES”) permit and final federal Clean Water Act (“CWA”) §401 Water Quality Certificate (“WQC”), as well as a Supplemental Final Environmental Impact Statement (“SFEIS”), for the continued operation of Entergy Nuclear Indian Point Units 2 and 3 located in Buchanan, New York. The Department did not receive any requests to extend the length of the original 45-day public comment period and, consequently, the public comment period ended on March 20, 2017. The Department received four separate written comments on the SFEIS from: (1) New York Affordable Reliable Electricity Alliance (“AREA”); (2) Safe, Healthy, Affordable, Reliable Electricity (“SHARE-NY”); (3) Entergy Nuclear Indian Point 2, LLC, Entergy Nuclear Indian Point 3, LLC and Entergy Nuclear Operations, Inc. (collectively, “Entergy”); and (4) the County of Westchester.

By way of background, the SFEIS here had its genesis in the 1990s in connection with DEC’s initial decision to undertake a State Environmental Quality Review Act (“SEQRA”) review on a consolidated basis of the then-pending SPDES permit renewal requests for multiple units of three Hudson River power plant owners, *i.e.*, the then-owners of Indian Point (Consolidated Edison Corp. of New York and the New York Power Authority), Bowline Point Steam Electric Generating Station Units 1 and 2, and Roseton Steam Electric Generating Station (collectively, the “Owners”). The SEQRA “action” before DEC was the decision whether to renew SPDES permits to continue to allow the three facilities to discharge waste heat, a pollutant, to the Hudson River as a result of the withdrawal of surface water via their respective cooling water intake structures. In 1992, DEC issued a positive declaration pursuant to SEQRA, precipitating the EIS process.¹ In June 1993, the Owners submitted a preliminary Draft Environmental Impact Statement (“DEIS”), which DEC staff concluded required additional analysis. That additional analysis was conducted from 1993 to 1999, in an extensive series of “workshops” that were open to the public.

A revised DEIS, reflecting these years of ongoing workshops, was issued for public comment in March 2000. In addition, in May 2000, DEC also held two public legislative hearings on the DEIS where written comments and public statements were received. The DEIS assessed the aquatic resources potentially impacted by continued operation of the three facilities, evaluated alternative technologies and management strategies to mitigate those impacts, and proposed a preferred action intended to minimize those respective impacts consistent with

¹ See Final Environmental Impact Statement by the New York State Department of Environmental Conservation as Lead Agency Concerning the Applications to Renew New York State Pollutant Discharge Elimination System (SPDES) Permits For the Roseton 1 & 2, Bowline 1 & 2 and Indian Point 2 & 3 Steam Electric Generating Stations, Orange, Rockland and Westchester Counties, Accepted: June 25, 2003 (the “2003 FEIS”), at 10.

federal and state law.² On June 25, 2003, DEC issued the Final Environmental Impact Statement (“2003 FEIS”) for the Hudson River facilities.³ Like the 2000 revised DEIS, multiple parties filed comments on the 2003 FEIS.⁴

On November 12, 2003, DEC staff released for public review and comment a Draft SPDES permit for Indian Point Units 2 and 3.⁵ In the Draft SPDES permit, DEC staff proposed modifications to the existing SPDES permit for Indian Point. Among other conditions, the 2003 Draft SPDES permit required the facility to take generation outages, reduce intake flows, and install a closed-cycle cooling (“CCC”) system as best technology available (“BTA”) to reduce significant adverse impacts to aquatic resources, all of which would affect Indian Point’s ability to operate (including lengthy Unit shut-downs to construct cooling towers). The proposed new condition to implement CCC was contingent upon the event that Indian Point obtained a 20-year renewed license from the federal Nuclear Regulatory Commission (“NRC”) and the CCC retrofit was demonstrated to be technically feasible, among other factors.

Entergy challenged DEC staff’s proposed Draft SPDES permit, which precipitated an administrative proceeding before the Department. Entergy and DEC staff were mandatory parties. A Riverkeeper, Inc. consortium (consisting of Riverkeeper, Inc., NRDC, and Scenic Hudson, collectively, “Riverkeeper”), then-Legislator Richard Brodsky, in his personal capacity, and the African American Environmentalist Association (“AAEA”) also sought and were granted full party status in the SPDES permit proceeding. In February 2006, the DEC Administrative Law Judges (“ALJs”) issued a ruling setting certain issues for adjudication. In August 2008, the Assistant Commissioner issued an Interim Decision narrowing the issues for adjudication; the primary issue was whether CCC was BTA at Indian Point.⁶

On April 30, 2007, as contemplated by the 2003 draft SPDES permit, Entergy filed 20-year federal license renewal applications (“LRAs”) for Indian Point with NRC. In connection with these LRAs, Entergy also filed with DEC a joint application for a §401 WQC. On April 2, 2010, DEC issued a Notice of Denial of the WQC application, precipitating another DEC administrative proceeding with various parties and amici (or observing parties with no formal party status or rights). Again, DEC staff and Entergy were mandatory parties. Riverkeeper, Mr. Brodsky, the County of Westchester, and the Town of Cortlandt also filed for party status. In December 2010, the ALJs in the §401 WQC proceeding issued a ruling setting out the separate

² Entergy acquired Indian Point Units 2 and 3 from Consolidated Edison and the New York Power Authority in 2001 and 2002, thus, the pending SPDES permit renewal application for the facilities was transferred to Entergy.

³ The 2003 FEIS was issued as a result, and in settlement of, litigation. *See* Order in *Brodsky, et. al. v. DEC and Entergy* (Albany County Sup. Ct. – Index No. 7136-02) (T. Keegan, J.S.C., May 14, 2003); *see also* Decision and Order in *Entergy Nuclear Indian Point v. DEC* (Albany County Sup. Ct. – Index No. 6747-03) (T. Keegan, J.S.C., March 3, 2004).

⁴ *See* 2003 FEIS at 47.

⁵ The 2003 Draft SPDES permit was also issued as a result, and in settlement of, litigation. *See* Order in *Brodsky, et. al. v. DEC and Entergy* (Albany County Sup. Ct. – Index No. 7136-02) (T. Keegan, J.S.C., May 14, 2003).

⁶ *See In the Matter of Entergy Nuclear Indian Point Units 2 & 3*, DEC Nos. 3-5522-00011/00004, 3-5522-00011/00030, and 3-5522-00011/00031, Interim Decision of the Assistant Commissioner (Aug. 13, 2008).

WQC-related issues for adjudication. The primary issue was whether Indian Point's continued operation would be consistent with New York State water quality standards and criteria designed to preserve and protect the "best usages" of the surface waters of the Hudson River.⁷

Contemporaneously with DEC's consolidated SPDES permit/§401 WQC proceedings, NRC undertook a parallel assessment of license renewal for Indian Point, including a "no action alternative" or premature retirement scenario, under the National Environmental Policy Act ("NEPA").⁸ NRC's final supplemental environmental impact statement (the "2010 FSEIS") was subject to public comment, finally issued in 2010 and has been subsequently supplemented with additional public process. Notably, the 2010 SFEIS has been incorporated by DEC into the SEQRA record for Indian Point consistent with applicable regulations. *See* 6 NYCRR §617.15(c).

In January 2017, DEC staff, Entergy, Riverkeeper, and other parties entered into a settlement agreement that resolved all disputed issues in the SPDES and WQC proceedings.⁹ As part of that agreement, DEC staff withdrew its proposed modifications to the 2003 Draft SPDES permit requiring the installation of CCC and issued a final SPDES permit on substantially the same terms as the prior SPDES permit. As discussed further in these responses to comments, once DEC staff withdrew its proposed modification, the "action" in question became a standard renewal of Indian Point's previous SPDES permit and, therefore, a Type II action under DEC's SEQRA regulations. Nonetheless, the SFEIS was completed to ensure that the public was advised of the resolution, particularly given the length of the previous SEQRA process and magnitude of the administrative record supporting that process. Indeed, one expert environmental analyst acknowledged that DEC's comprehensive review of the draft SPDES permit and administrative record developed in connection with Indian Point was the largest he had ever seen in his professional career.¹⁰

Comments of NY AREA: support DEC's issuance of a renewed SPDES permit and §401 WQC for the continued operation of Indian Point Units 2 and 3.

Response: DEC agrees.

⁷ *See In the Matter of Entergy Nuclear Indian Point Units 2 & 3*, DEC Nos. 3-5522-00011/00004, 3-5522-00011/00030, and 3-5522-00011/00031, Ruling on Proposed Issues for Adjudication and Petitions for Party Status (Dec. 13, 2010) [2010 N.Y. Env. LEXIS 86] (the "2010 WQC Issues Ruling"). Although the SPDES and WQC proceedings were advanced on a consolidated, joint-record basis, no change in party status resulted.

⁸ NRC, Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 38, regarding Indian Point Nuclear Generating Unit Nos. 2 and 3 (Dec. 2010).

⁹ "... administrative efficiency warrants using the adjudicatory proceeding to develop the draft SEIS" [SFEIS]. *In the Matter of Entergy Nuclear Indian Point Units 2 & 3*, DEC Nos. 3-5522-00011/00004, 3-5522-00011/00030, and 3-5522-00011/00031, Interim Decision of the Assistant Commissioner (Aug. 13, 2008) at 40.

¹⁰ *See, In the Matter of Entergy Nuclear Indian Point Units 2 & 3*, DEC Nos. 3-5522-00011/00004, 3-5522-00011/00030, and 3-5522-00011/00031, Cross-Examination Testimony of Marc J. Lawlor (Senior Project Manager, TRC Environmental Corp.) at 11743:1 – 11744:17 (Apr. 25, 2014).

Comments of SHARE-NY: strongly support DEC’s renewal of Indian Point’s SPDES permit and §401 WQC to keep the Units operating until they are shut down at the agreed upon time.

Response: DEC agrees.

Comments of Entergy: the comprehensive scope and level of detailed information contained in the administrative record developed in DEC’s combined SPDES permit and §401 WQC adjudicatory proceedings, and used to produce the SFEIS overwhelmingly supports DEC’s issuance of a final SPDES permit and final §401WQC for Indian Point’s continued operation.

Response: DEC agrees.

Comments of Westchester County: the County of Westchester’s comments primarily addressed four topics, noted in greater detail, below.

Comment: “The Department’s SEQRA process for Entergy’s SPDES permit renewal and WQC application is predicated on the determination that it is a Type I action with a potential for adverse environmental impact. ... Even if the Department somehow construes the early retirement and closure of IPEC as a separate, Type II action, it must still show that the action must ‘in no case have significant adverse effect on the environment based on the criteria contained in’ [6 NYCRR §617.7].”

Response: The issuance of any renewed permit on substantially the same terms as the prior permit is a Type II action under the Department’s SEQRA regulations. *See* 6 NYCRR §617.5(c)(26). Actions or classes of actions classified as Type II are not subject to further review under SEQRA. *See* 6 NYCRR §617.5(a). Here, DEC is issuing a final SPDES permit with no material change in the terms of the previous SPDES permit for Indian Point. The following table summarizes the material terms of the final SPDES permit and notes its antecedent in the prior SPDES permit:

Summary of Condition	Previous SPDES Permit Reference	Current SPDES Permit Reference
Discharges through Outfall 001 shall occur through subsurface ports	Page 8, footnote a	Special Condition 1
Maximum thermal discharge limitations	Page 2, Conditions 1 and 2	Special Conditions 3 and 4
Maintaining head differential under certain thermal conditions or electrical output conditions	Page 8, footnote b	Special Condition 5
Cooling water flow maintained at minimum necessary for efficient operations	Page 11, Additional Requirement 7 (incorporating Hudson River Settlement Agreement (“HRSA”), which included flow minimization requirement)	Special Condition 6

Compliance with 6 NYCRR Part 704 for thermal discharges	Page 11, Additional Requirement 7 (incorporating HRSA in satisfaction of New York State Criteria Governing Thermal Discharges (6 NYCRR Part 704))	Special Condition 7
Monitoring of condenser cooling water discharge flow	Page 9, footnote o	Special Condition 8
Continuous chlorination of service water system and chlorination of condenser cooling system	Page 8, footnote c	Special Condition 9
Continuous monitoring of Total Residual Chlorine (TRC)	Page 9, footnote q	Special Condition 10
Grab samples for TRC monitoring	Page 9, footnote r	Special Condition 11
Conditions Related to Sub-Outfalls	Pages 3 through 6	Special Conditions 12 through 18
Reporting Requirements	Page 10, Additional Requirement 3 and 9	Special Conditions 19 and 20
Compliance with Interstate Sanitation Commission Water Quality Regulations	Page 11, Additional Requirement 5	Special Condition 21
Force majeure	Page 11, Additional Requirement 6	Special Condition 22
Approval of use of designated chemicals	Page 11, Additional Condition 8	Special Condition 23
No discharge (<i>i.e.</i> , net addition) of PCBs to the Hudson River	Page 10, Additional Requirement 1	Special Condition 24
Hudson River Biological Monitoring Program	Page 10, Additional Requirement 4	Special Condition 25
Annual outages	Page 11, Additional Requirement 7 (incorporating Hudson River Settlement Agreement (“HRSA”), which included annual outage requirement)	Special Condition 26
Operation of modified Ristroph traveling screens and fish handling and return systems for impingement	Page 11, Additional Requirement 7 (incorporating Agreement for Installation of Modified Ristroph Screens at Indian Point Units 2 & 3 implementing Section 2.F of the HRSA)	Special Condition 27
Best Management Practices	Page 12A through 12C	Page 18 through 20

As the table above demonstrates, the final SPDES permit falls within the definition of a Type II action listed in 6 NYCRR §617.5(c)(26) and, therefore, is not subject to review under SEQRA. However, in light of the unique circumstances of the Indian Point facility – including the many decades of DEC oversight and lengthy adjudicatory proceedings administered by DEC, as well as the public interest and history surrounding this facility – the Department prepared and publicly noticed an SFEIS to advise the public of the actions described in that document.

Lastly, the comment that each individual Type II action must “in no case have significant adverse effect on the environment based on the criteria contained in [6 NYCRR §617.7]” relates to the formulation of lists of Type II actions by agencies and the standards that a particular class of actions must meet before being added to an agency’s Type II list. *See* 6 NYCRR §617.5(b). Permit renewals of the type involved here have already been determined by DEC to have no potentially significant adverse impact on the environment based on the criteria of 6 NYCRR §617.7(c) and, accordingly, have long appeared on DEC’s list of Type II actions, which are not subject to SEQRA review. *Village of Hudson Falls v. NYSDEC*, 158 A.D.2d 24 (3d Dept. 1990), *aff’d* 77 N.Y.2d 983 (1991). Once DEC concludes, as it has here, that the final SPDES permit represents a renewal of the prior SPDES permit “where there will be no material change in permit conditions or the scope of permitted activities,” no additional review under SEQRA is required. *Id.*, and 6 NYCRR §617.5(c)(26).

Comment: The Department failed to provide any rationale or basis for its conclusion that Indian Point’s early retirement is BTA. The Department’s decisions to condition the SPDES permit and WQC upon early retirement were, therefore, arbitrary and capricious and not supported by substantial evidence.

Response: This comment reflects both a misunderstanding of the proper scope of comments on the SFEIS, and conflates the BTA and SEQRA processes in an inappropriate manner. First, comment opportunities on the SFEIS arose out of one of the most extensive SEQRA processes in New York history. As discussed above, between 1992 and 2003, DEC provided extensive opportunities for public involvement in the SEQRA ramifications of renewing Indian Point’s SPDES permit, focused on the BTA determination in a draft permit. These public opportunities involved public workshops, a DEIS, and an FEIS. DEC ALJs also oversaw public legislative hearings which allowed members of the public to provide comments on the DEIS without having to make written filings. The NRC conducted a parallel NEPA review with its separate public comment opportunities, all of which were incorporated into the SEQRA record. The NRC specifically analyzed the significant adverse impacts of Indian Point’s retirement in the 2010 FSEIS which demonstrated that early retirement will result in significant reductions in impingement and entrainment mortality as compared with other alternatives.

Further, the Department held 58 days of administrative hearings on the 2003 Draft SPDES permit (and §401 WQC), during which those who elected to be parties, were given the opportunity to present BTA proposals and/or evidence supporting or opposing other parties’ BTA proposals.¹¹ The resulting robust record, upon which DEC made its BTA determination and which has been incorporated into the SEQRA record underpinning the SFEIS, is correspondingly extensive and voluminous, and contains substantial evidence regarding the efficacy and potential impacts of alternative BTA proposals, including cessation of electricity generation at Indian Point. Parties that actively participated in the adjudicatory proceeding are well aware of the vast evidentiary record supporting DEC’s BTA decision and the SFEIS. The 58 hearing days involved written and oral testimony of 55 witnesses, many experts in their respective fields of aquatic ecosystems, engineering, air quality, and electric-system considerations. The transcript of those hearings is more than 16,400 pages long and rely on

¹¹ SFEIS at 2.

1,500 exhibits admitted into evidence. All of this marshalled evidence informs the SEQRA record and underpins the SFEIS.

Second, the SFEIS adequately summarizes DEC's SEQRA review of the SPDES permit (which includes the BTA determination). An SFEIS is neither intended, nor required, to contain all of the detail supporting DEC's BTA determination; to the contrary the SFEIS is to accessibly summarize DEC's determination in a manner that allows the public to readily understand what has transpired. Specifically, the SEQRA regulations provide that the level of detail in an EIS (or SFEIS) should not be too great, so that the document is accessible to the public. "Highly technical material should be summarized" (6 NYCRR §617.9[b][2]), which is the case here. "EISs must be analytical and not encyclopedic." 6 NYCRR §617.9(b)(1).

Likewise, the comment is incorrect when it asserts that DEC did not explain its conclusion that Entergy's commitment to an early retirement of Indian Point could be considered by DEC in its BTA determination, *e.g.*, as a flow reduction mechanism. That explanation is provided in detail at pages 19-23 of the SFEIS, which further directs the public to the SPDES permit Fact Sheet, which discusses the BTA determination at pages 10-14, for additional detail. In short, the SFEIS and the SPDES permit Fact Sheet draw from numerous sources identified at pages 20-21 and 27-28 in the SFEIS, and at page 15 in the Fact Sheet, for the conclusion that Entergy's commitment to early retirement is BTA. The SFEIS and Fact Sheet were based on information obtained by DEC staff's active participation in 58 days of adjudicatory hearings and 1,500 exhibits admitted into evidence. The transcript of those hearings was more than 16,400 pages long, and active parties to the proceedings addressed all of the evidence related to BTA selection in hundreds of pages of post-hearing briefs.¹²

Obviously, that entire body of information could not readily be set forth in the SFEIS and there is no requirement that it be. *See* 6 NYCRR §617.9(b)(1) and (2). Furthermore, the BTA determination in this case is not the same as the SEQRA determination. BTA is focused on the general and site-specific availability of a proposed technology and its efficacy in minimizing impingement and entrainment mortality from a cooling water intake structure ("CWIS"), as well as a comparison of its costs to its benefits (the "wholly disproportionate test").¹³ While SEQRA considerations, including mitigation, may cause DEC to set aside a BTA determination and select a different technology as BTA, SEQRA considerations do not enter into the BTA calculus itself.¹⁴ Thus, the Department's actual BTA determination involves consideration of far fewer factors than the County of Westchester has presumed in its written comment.

The SFEIS and SPDES permit Fact Sheet present more than enough information to explain DEC's acknowledgement of the early retirement of Indian Point as BTA, on a site-specific basis, as well as DEC's decision that this BTA selection survives SEQRA review. As described in the SFEIS, DEC considered a range of technologies as BTA, including CCC, fish

¹² SFEIS at 6.

¹³ CP-52: *Best Technology Available (BTA) for Cooling Water Intake Structures* (July 10, 2011).

¹⁴ *In the Matter of Entergy Nuclear Indian Point Units 2 & 3*, DEC Nos. 3-5522-00011/00004, 3-5522-00011/00030, and 3-5522-00011/00031, Interim Decision of the Assistant Commissioner at 20 (Aug. 13, 2008) ("Once the BTA determination is made, the proposed BTA technology must then be reviewed in accordance with SEQRA.").

protection outages (“FPOs”) and cylindrical wedgewire screens (“CWWS”).¹⁵ The SFEIS explains why DEC determined that, upon consideration of the record and in light of Entergy’s decision and commitment to retire early, early retirement is BTA. In short, and as the SFEIS makes clear, each of the other BTA alternatives possessed relevant feasibility, efficacy, cost, and SEQRA concerns that are not presented by early retirement, or that are academic in light of Entergy’s decision to proceed with early retirement.

While early retirement *per se* was not formally considered during the adjudicatory proceedings because it was not proposed at that time, the administrative record contains ample evidence (*e.g.*, concerning the implication of year-long CCC construction outages) by which DEC’s BTA test was applied to early retirement. Entergy, in its comments on the SFEIS, also included a comparative analysis of early retirement and other BTA options that the Department previously considered.¹⁶ That analysis concludes that early retirement will result in greater reductions in impingement and entrainment mortality (extrapolating from reductions in water usage) than other BTA alternatives. Because Entergy selected early retirement – a corporate business decision – its cost to Entergy in comparison to the other alternatives is not a consideration under the wholly disproportionate test. Nor does early retirement present the feasibility challenges of other BTA alternatives – there is no doubt that Entergy can voluntarily retire Indian Point, as it retired Vermont Yankee and plans to retire its Pilgrim and Palisades facilities, and as it gave consideration to retiring James A. FitzPatrick.¹⁷

Indeed, because Entergy is seeking a shortened federal operating license from the NRC, Entergy must retire Indian Point on the early retirement dates (including as they are subject to extension to 2024 and 2025 for electric system purposes) set forth in the SPDES permit and §401 WQC. For BTA purposes, and in DEC’s judgment, these factors make the selection of early retirement as BTA, as part of a universal settlement of disputes with Entergy, an inherently reasonable proposition. With respect to the SEQRA impacts of early retirement, early retirement will avoid the mixed signals to the electric generation market that caused expert witnesses in the adjudicatory hearings to be concerned that replacement generation, including new renewable resources, would not enter the market in response to a CCC construction outage or FPOs.¹⁸ The NRC previously analyzed the NEPA impacts of Indian Point retirement in its 2010 FSEIS, which DEC’s SFEIS has incorporated by reference, in relevant part, as appropriate. *See* 6 NYCRR §617.15(c).

In summary, and as reflected in the SFEIS and SPDES permit Fact Sheet, the SFEIS appropriately represents a sufficient summary to an extensive SEQRA record, one in which DEC

¹⁵ SFEIS at 19-23. In the SFEIS, DEC did not discuss in detail alternatives that it had previously determined were infeasible at Indian Point. Those infeasible alternatives included relocation of the intake structure, fish handling and return systems, Ristroph modified traveling screens, variable- or multi-speed pumps, flow reductions, and aquatic microfiltration barriers. DEC addressed those alternatives in the permit Fact Sheet. *See* Fact Sheet at 10-14.

¹⁶ Entergy Comments on SFEIS at 29.

¹⁷ Aaron Larson, *Entergy Announces Closure of FitzPatrick Nuclear Power Plant*, PowerMag (Nov. 2, 2015), available at <http://www.powermag.com/entergy-announces-closure-of-fitzpatrick-nuclear-power-plant/>.

¹⁸ NRC, *Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 38, Regarding Indian Nuclear Generating Unit Nos. 2 and 3* at 8-23 to 8-24 (Dec. 2010).

properly determined that Entergy's commitment to early retirement, together with the other conditions set forth in the final SPDES permit, is BTA.¹⁹

Comment: The SFEIS does not consider the economic and social impacts of Indian Point's early retirement, and it contains virtually no analysis on how early retirement will affect local communities.

Response: This comment does not correctly characterize the SEQRA process or the scope of the SFEIS. First, SEQRA evaluates reasonably foreseeable potential significant adverse environmental, including socio-economic, impacts of proposed projects or actions for which an applicant has applied for necessary authorizations or permits. Here, Entergy's project or action with respect to its renewed SPDES permit must include its election to pursue early retirement of Indian Point, including shortening the term of 20-year NRC-issued operating licenses that were the premise of the 2003 Draft SPDES permit. This decision by Entergy, which as mentioned also has retired or sold off, or announced plans to retire, its other merchant nuclear generating facilities is a matter entirely outside the control of DEC. Under these circumstances, where an applicant voluntarily decides to limit the scope of its own project – *i.e.*, the operation of Indian Point – there is no basis for comparing the environmental, economic and social factors resulting from early retirement to those that hypothetically would exist if Entergy had not limited its own project. Moreover, the Department is without authority to allow Entergy to operate past the term of any NRC-issued renewed operating licenses. Thus, such alternative is not reasonable under the circumstances here.

Second, the shutdown of an operating nuclear power plant (or indeed the closure of any facility) is not a circumstance that the CWA or the SPDES permitting and WQC programs administered by the Department, even address. The New York State Environmental Conservation Law ("ECL") authorizes DEC to administer the SPDES permit program, which governs the *discharge* of pollutants into the waters of the State by a given facility.²⁰ In accordance with CWA §401, applicants for a Federal license or permit for activities are required to apply for and obtain a WQC from the Department indicating that the proposed activity will not violate water quality standards. Under this program, the Department has only the authority to grant, or not, a WQC (with or without relevant conditions) for a particular facility. *See* 6 NYCRR §608.9.

Thus, the objective of the SPDES permitting and WQC programs, and the jurisdictional limits of the Department under these programs, are to regulate the discharge of pollutants proposed by an applicant by establishing pollutant-specific limits and other requirements intended to assure that water quality standards in the receiving water body are achieved. The SPDES permitting and WQC programs do not give DEC the authority to compel Entergy to continue to operate if it has made a decision to cease operating, even if that decision is memorialized in a settlement agreement with DEC and other parties.

¹⁹ SFEIS at 23; SPDES permit Fact Sheet at 14.

²⁰ *See* ECL §17-0801. The discharge must also meet all applicable requirements of the ECL and the implementing regulations at 6 NYCRR Parts 700, *et seq.* and 750, *et seq.*

Third, Entergy has throughout the adjudicatory proceedings challenged the authority of DEC to impose any actual operational conditions on Indian Point given the Atomic Energy Act (“AEA”),²¹ where Congress gave the NRC exclusive jurisdiction over the “operation” of nuclear power plants.²² Without conceding the point, just as Entergy argued that DEC cannot force Indian Point *not* to operate (*e.g.*, to take FPOs), it is likely that Entergy would argue that DEC cannot force Indian Point to operate. Bearing in mind the risk that a court of competent jurisdiction could rule that any State order requiring Entergy to operate is preempted by the AEA, DEC rationally concluded there is no reasonable basis to perform a SEQRA analysis comparing the impacts of Indian Point operating past the early retirement dates selected by Entergy versus not operating.

Nevertheless, DEC did analyze and weigh the economic and social effects of Indian Point’s early retirement in its SEQRA analysis. Consistent with 6 NYCRR §617.15, and as reflected in the SFEIS and SPDES permit Fact Sheet, DEC considered evidence in the 2010 NRC FSEIS, including as summarized in Section 8, specifically Volume I, Tables 8-1 at p. 8-19 and 8-2 at p. 8-21. The 2010 NRC FSEIS summarizes, at the requisite level of detail, analyses of the potential significant adverse impacts of the early retirement of Indian Point Units 2 and 3, including with respect to potential impacts on electric-system reliability, reactive power, and electricity affordability, as well as community character considerations as a result of employment, taxation, payment in lieu of taxation (“PILOT”), traffic and property valuation considerations. Increased property values after early retirement are expected to offset, in part, taxation and PILOT payment reductions from early retirement. Employment reductions after early retirement will occur, but are phased and spread throughout the region. Also, Entergy’s commitments in connection with early retirement include transition planning for the cessation of electric-generating operations and retention of employees within the Entergy system, further mitigating these potential impacts. Finally, as discussed in a related context above, Entergy could always elect to shut down Indian Point at any time, subject to relevant electric-system reliability considerations, with the result that closure of the facilities is outside the scope of SEQR analysis. Thus, operation of Indian Point through the anticipated retirement dates does not implicate any significant impacts that have not been explored and is included in DEC’s administrative record and, ultimately, by reference into the SFEIS.

Comment: The SFEIS does not discuss the effects of Indian Point’s early retirement on criteria air pollutants and greenhouse gas emissions.

Response: This comment is mistaken, as DEC’s administrative record contains extensive information on, and analysis of, electricity system and air quality implications of replacement of Indian Point. The comment does not correctly consider the fact that, as noted above with respect to social and economic impacts, the SFEIS incorporated by reference the NRC’s 2010 FSEIS, which analyzed the potential air quality impacts of a full retirement (“no action alternative”) scenario. Extensive expert testimony in DEC’s administrative adjudicatory proceedings analyzed the implications of various Indian Point outage periods both to the electric system, and in criteria air pollutant and carbon dioxide (CO₂) emissions. Specifically, various experts

²¹ 42 U.S.C. §§ 2011 *et seq.*

²² *See, e.g., Pac. Gas & Elec. Co. v. State Energy Res. Conserv. & Dev. Commn.*, 461 U.S. 190, 212 (1983).

provided and evaluated different possible scenarios, offering reasonable bounding analytics on what replacement power sources and emissions offset ranges may be for annual CCC construction outages and annual FPOs.

Electricity sector modeling under various Indian Point outage scenarios was specifically performed. This modeling provided, among other things, projections of air emissions from potential replacement sources of energy. The evidence demonstrated that the current, proposed power generation projects in New York include many renewables (primarily wind),²³ which generally have fewer criteria and CO₂ emissions as compared with existing fossil fuel facilities. In addition, there is no foreseeable expectation that air emissions sources that may be brought on line to provide power following early retirement will not comply with all applicable federal and State legal emissions standards, criteria and requirements.

For criteria pollutants, this includes federal National Ambient Air Quality Standards (“NAAQS”), which are designed to be protective of human health, as well as compliance with New York State’s Title V permit program and other applicable regulatory and permitting requirements. For CO₂ emissions, New York’s commitment to reducing CO₂ emissions is ensured by compliance with the ongoing Regional Greenhouse Gas Initiative (“RGGI”) CO₂ emissions cap, which is established in New York through DEC regulations at 6 NYCRR Part 242. As noted in the administrative record, DEC previously assumed and analyzed the retirement of Indian Point facilities by 2015 as part of its rulemaking in 2013 to change 6 NYCRR Part 242.²⁴ Therefore, any CO₂ emissions from replacement sources of energy following Indian Point’s early retirement were already accounted for by DEC in promulgating changes to 6 NYCRR Part 242 to set the current RGGI CO₂ emissions cap. Finally, due to the nature of the RGGI program, any CO₂ emissions from affected, replacement power plants would have to be offset by other facilities for the region to remain in compliance with the RGGI CO₂ emissions cap.

In sum, this administrative record is more than sufficient to inform DEC’s assessment of Indian Point’s early retirement for SEQRA purposes, particularly given the range of replacement scenarios evaluated which directly impacts electricity system and air emissions calculations. This is all the more the case since the specific quantity of emissions, if any, directly caused by electric generation replacing Indian Point following early retirement remains speculative at this juncture because, as the comment acknowledged, “[w]e do not yet know what resource mix will replace Indian Point’s 2,000 MW of baseload generation capacity.”²⁵ SEQRA requires a reviewing agency only to analyze reasonably foreseeable impacts, and DEC has done so.²⁶

²³ See NYISO, 2015 Load and Capacity Data “Gold Book” at Table IV-1 (Apr. 2015).

²⁴ ICF International, *RGGI Reference Case Assumptions* at 21 (Sept. 12, 2011), available at https://www.rggi.org/docs/RGGI_Reference_Case_Assumptions_091211.pdf.

²⁵ County of Westchester Comments on SFEIS at 9.

²⁶ DEC SEQRA Handbook at 5, 82 and 83.