## STATE OF NEW YORK PUBLIC SERVICE COMMISSION

**Application of Champlain Hudson Power Express, Inc.** for a Certificate of Environmental Compatibility and

Public Need Pursuant to Article VII of the PSL for the Construction, Operation and Maintenance of a High

**Voltage Direct Current Circuit from the Canadian Border to New York City** 

Case 10-T-0139

## BRIEF OPPOSING EXCEPTIONS OF THE CITY OF NEW YORK

**February 1, 2013** 

COUCH WHITE, LLP 540 BROADWAY P.O. BOX 22222 ALBANY, NEW YORK 12201-2222 (518) 426-4600

### **TABLE OF CONTENTS**

|   | <u>Page</u> |
|---|-------------|
| PRELIMINARY STATEMENT   | 1           |
| ARGUMENT  | 3           |
| POINT I   |             |
| THE ALJS' RECOMMENDATIONS THAT THE FACILITY IS NEEDED AND WOULD SERVE THE PUBLIC INTEREST, CONVENIENCE AND NECESSITY ARE WELL-SUPPORTED IN THE RECORD AND SHOULD BE ADOPTED BY THE COMMISSION               | 3           |
| A. The Commission Should Adopt the ALJs' Finding that the Facility Is Needed to Provide Wholesale Energy Price and Production Cost Benefits   | 6           |
| B. The Commission Should Adopt the ALJs' Finding that the Facility Is Required to Address an Identified Reliability Need  | 9           |
| POINT II  |             |
| THE ALJS' DETERMINATIONS THAT THE FACILITY WOULD BE ECONOMIC AND DEVELOPED ON A MERCHANT BASIS ARE REASONABLE AND FULLY SUPPORTED BY THE RECORD   | 14          |
| A. The Facility Would Be Developed as a Merchant Project Subject to the Terms of the Joint Proposal   | 15          |
| B. The Commission Should Accept the ALJs' Recommendation that the Facility may be a Merchant Project Even if the Shipment of Certain Energy Via the Astoria-Rainey Cable May Be Subject to Cost-Based Rates | 20          |
| C. The Commission Should Deny Entergy's Exceptions Regarding Whether the Facility May Harm Competition  | 22          |
| POINT III   |             |
| THE EVIDENTIARY RECORD INCLUDES NO EVIDENCE THAT STURGEON OR STURGEON HABITAT MAY BE HARMED BY FACILITY CONSTRUCTION OR OPERATION   | 24          |
| A. The Commission Should Reject Entergy's Exception to the Recommended Finding that Potential Impacts on Sturgeon Habitat Have Been Minimized   | 24          |
| B. The Commission Should Reject Entergy's Exception to the Recommended Finding that Electromagnetic Fields May Harm Sturgeon  | 28          |
| CONCLUSION  | 32          |

### PRELIMINARY STATEMENT

Pursuant to the "Notice for Filing Exceptions," the City of New York ("City") hereby submits this Brief Opposing Exceptions. The City received Briefs on Exceptions from the following parties: Champlain Hudson Power Express, Inc. and CHPE Properties, Inc. (collectively, "CHPE"); Department of Public Service Staff ("Staff"); New York State Department of Environmental Conservation ("NYSDEC"); Consolidated Edison Company of New York, Inc. ("Con Edison"); Entergy Nuclear Power Marketing, LLC and Entergy Nuclear Fitzpatrick, LLC ("Entergy"); Independent Power Producers of New York, Inc. ("IPPNY"; and collectively with Entergy, the "Incumbent Generators"); Central Hudson Gas and Electric Corporation ("Central Hudson"); Business Council of the State of New York ("Business Council"); and the International Brotherhood of Electrical Workers – Local 97 ("IBEW").

In their Recommended Decision ("RD") issued on December 27, 2012, Administrative Law Judges ("ALJs") Kevin Casutto and Michelle Phillips presented a comprehensive and careful review of the evidentiary record and issues in dispute in this

<sup>&</sup>lt;sup>1</sup> Case 10-T-0139, <u>Application of Champlain Hudson Power Express</u>, <u>Inc. and CHPE Properties</u>, <u>Inc. for a Certificate of Environmental Compatibility and Public Need Pursuant to Article VII of the PSL for the Construction</u>, <u>Operation and Maintenance of a High Voltage Direct Current Circuit from the Canadian Border to New York City</u>, Notice for Filing Exceptions (issued December 27, 2012).

<sup>&</sup>lt;sup>2</sup> The City was not served with the Brief on Exceptions filed by the Business Council, but learned of that pleading shortly after it was filed with the Commission.

<sup>&</sup>lt;sup>3</sup> References herein to the Initial or Reply Statements, Initial or Reply Post-Hearing Briefs, and Briefs on Exceptions filed by any party will be preceded by the party's name (*e.g.*, "City Initial Statement at \_\_\_," "City Reply Statement at \_\_\_," "City Initial Brief at \_\_\_," "City Reply Brief at \_\_\_," "City Boe at \_\_\_," "City Brief at \_\_\_," "City Brief at \_\_\_," "City Brief at \_\_\_," "City Brief at \_\_\_," "City Boe at \_\_\_," "City Brief at \_\_\_," "City Brief at \_\_\_," "City Brief at \_\_\_," "City Boe at \_\_\_," "City Brief at \_\_\_," "City Brief at \_\_\_," "City Brief at \_\_\_," "City Brief at \_\_\_," "City Boe at \_\_\_," "City Brief at \_\_\_," "City

proceeding. The RD provides a fair summary of the positions set forth in the statements and briefs filed by all parties, and lays out conclusions and recommendations that are well-reasoned, fully supported by the evidentiary record, and consistent with the statutory findings and determinations that are the necessary predicates to issuing a Certificate of Compatibility and Public Need ("Certificate") for CHPE to construct, operate, and maintain a high-voltage direct current ("HVDC") transmission system (the "HVDC Transmission System") and a high-voltage alternating current ("HVAC") line (the "Astoria-Rainey Cable").<sup>4</sup>

The City's Brief Opposing Exceptions responds to the following exceptions to the RD advanced by the JP Opponents:

- 1. the Incumbent Generators' exceptions to the recommended findings that the Facility is needed to address reliability and economic needs (IPPNY BOE, *passim*; Entergy BOE at 5-24);
- 2. the Incumbent Generators' exceptions to the recommended findings that the Facility would be developed, constructed and operated on a merchant basis (IPPNY BOE at 7-18; Entergy BOE at 5-16); and

<sup>&</sup>lt;sup>4</sup> The HVDC Transmission system would extend from the Canadian border to a converter station located in the Astoria neighborhood of the borough of Queens in New York City. From there, the Astoria-Rainey Cable would extend from the Astoria Substation owned by the New York Power Authority ("NYPA") to the nearby Rainey Substation owned by Con Edison. The HVDC Transmission System, the converter station, and the Astoria-Rainey Cable and appurtenant facilities are referenced collectively herein as the "Facility." (*See generally*, Case 10-T-0139, *supra*, Joint Proposal [filed February 24, 2012]). As used herein, the term "Joint Proposal" includes all exhibits, appendices and other supporting materials filed by CHPE on February 24, 2012, as well as the following stipulations modifying the Joint Proposal that were filed after the execution of that agreement: Ex. 129, *Stipulation between Con Edison and Applicants regarding the Converter Station Location*; Ex. 130, Attachment 1 to Ex. 129; Ex. 150, *Stipulation between the Applicants and Con Edison regarding Revised Certificate Condition 15* (hereinafter, the "Merchant Facility Stipulation"); and Ex. 151, *Stipulation between the Applicants and Con Edison regarding Deliverability and Certificate Condition 15*.

3. Entergy's exceptions to the recommended findings that construction and operation of the Facility will not harm sturgeon or sturgeon habitat. (Entergy BOE at 24-27.)

For the reasons set forth herein, the exceptions of the JP opponents should be rejected and the findings and recommendations set forth in the RD should be adopted by the Commission.

### **ARGUMENT**

#### **POINT I**

THE ALJS' RECOMMENDATIONS THAT THE FACILITY IS NEEDED AND WOULD SERVE THE PUBLIC INTEREST, CONVENIENCE AND NECESSITY ARE WELL-SUPPORTED IN THE RECORD AND SHOULD BE ADOPTED BY THE COMMISSION

In determining the basis of the need for an electric transmission line proposed in a Certificate application pursuant to Article VII of the Public Service Law, the Commission has explained that:

...the need for a transmission facility is not simply determined with reference to the NYISO's most recent Reliability Needs Assessment and its base case assumptions. For our purposes pursuant to PSL Article VII, need is determined by examining numerous factors, including system reliability benefits, economic benefits for customers and the State, and the achievement of public policy goals.<sup>5</sup>

<sup>&</sup>lt;sup>5</sup> Case 08-T-0034, <u>Application of Hudson Transmission Partners</u>, <u>LLC for a Certificate of Environmental Compatibility and Public Need for a 345 kV Submarine/Underground Electric Transmission Link Between Manhattan and New Jersey</u>, Order Granting Certificate of Environmental Compatibility and Public Need (issued September 15, 2010) at 42 (hereinafter, "HTP Order") (citing Case 08-T-1245, <u>Bayonne Energy Center</u>, <u>LLC</u>, Order Adopting the Terms of a Joint Proposal and Granting Certificate of Environmental Compatibility and Public Need, with Conditions, and Clean Water Act § 401 Water Quality Certifications [issued November 12, 2009] at 13 [hereinafter, "Bayonne Order"]).

The ALJs acknowledged this precedent, and concluded that "[e]ach of these bases of need has been demonstrated on this record." (RD at 72.) Specifically, the ALJs concluded that:

The record in this proceeding demonstrates the [F]acility's expected and uncontested emissions benefits, likely fuel diversity attributes, ability to provide an additional transmission interface into the New York City Control area, and likely, albeit short-term, reductions in the prices of wholesale energy prices. These benefits and attributes support both the need and the public interest findings that are required in this proceeding. In addition, the record contains evidence that numerous public policy objectives would be achieved including, inter alia,... promoting competition in wholesale markets and supporting reliance on competitive markets and private investments in such markets. These reliability. economic and public policy benefits justified the need findings in the HTP and Bayonne Orders. We recommend that these factors support a similar finding in this case.

(*Id.* at 72-73.)

The City agrees that the voluminous evidentiary record developed in this proceeding provides ample support for the Commission to make the requisite findings under Public Service Law § 126.1, and to issue a Certificate for construction and operation of the Facility. Significantly, the ALJs noted that many of the proffered bases of need are uncontested. In fact, the Incumbent Generators do not contest recommended findings that the Facility would (i) support State and City energy policies, (ii) enhance system reliability, and (iii) provide environmental benefits, as advocated by the City. (*See*, *e.g.*, City Initial Brief at 4-14.) For example, Entergy concedes that the basis of need for a merchant transmission facility is not limited to whether the facility would address a reliability need identified by the New York State Independent System Operator, Inc. ("NYISO"), and that a combination of other factors may

<sup>&</sup>lt;sup>6</sup> In its Statement in Support of the Joint Proposal and Initial and Reply Briefs, the City explained how the record evidence supports the statutory findings and how that evidence substantiates the conclusions and findings advocated by the Signatory Parties (*see*, *e.g.*, City Statement at 11-19; *see generally* City Initial Brief) and, ultimately, recommended by the ALJs.

support a need determination. (Entergy BOE at 6-7 [citing the Bayonne Order].) The Commission has recognized each of these factors as supporting the statutory "need" determination. (HTP Order at 42-47; Bayonne Order at 13.) In its Brief on Exceptions, IPPNY pointedly ignores the precedent established by the HTP and Bayonne Orders, and fails to explain why that precedent should not be applied in this proceeding.

With respect to the exceptions actually advanced by the Incumbent Generators, the ALJs properly concluded that the Facility is needed to address important reliability, economic and public policy needs, and that it will serve the public interest, convenience and necessity. In their Briefs on Exceptions, the Incumbent Generators failed to advance evidence or arguments sufficient to rebut these conclusions. For example, although the Incumbent Generators disagree with the Signatory Parties with respect to the projected amount of wholesale energy price and production cost savings that the Facility may generate, they do not dispute that the Facility would create savings. Similarly, although the Incumbent Generators continue to argue that the Facility is not needed to address an anticipated reliability deficiency based on NYISO forecasts, there are many additional possible foundations for a need determination under the precedent established in the Bayonne Order and, therefore, that argument is not dispositive of whether the Facility should be certificated. Accordingly, the Commission should affirm the ALJs' recommendations, and adopt the findings proposed in the RD that support the statutory requirements of PSL § 126.1.

# A. The Commission Should Adopt the ALJs' Finding that the Facility Is Needed to Provide Wholesale Energy Price and Production Cost Benefits

After a careful and comprehensive review of the economic analyses proffered by CHPE, Staff, and IPPNY, and the arguments advanced in support of and opposition to those analyses and associated conclusions, the ALJs concluded that "the most meaningful economic analysis of this project is one that focuses on the long-term and gauges whether the proposal will provide net benefits to society as a whole." (RD at 47.) The ALJs determined that the updated long-term analysis developed by Staff witness Dr. Thomas Paynter represents the most appropriate measure of the Facility's "expected long-term benefits" because the "updated analysis was performed in such a way that it reasonably balanced the competing assumptions and views advocated by the projects' opponents, on the one hand, and Applicants, on the other." (Id.) In recommending that Dr. Paynter's analysis be adopted, the ALJs rejected the production cost savings, cash flow, and wholesale energy price savings analyses conducted by IPPNY's witness, Mark Younger.

The Incumbent Generators except to these recommendations. IPPNY argues that, despite the fact that the analyses conducted by Mr. Younger purportedly relied on "conservative" inputs, estimates and methodologies that would tend to favor the Facility, he concluded that the Facility would not be economic and would not yield societal benefits. (IPPNY BOE at 5-17.) Moreover, IPPNY claims that the ALJs erred by not providing a more detailed explanation as to why they declined to accept the Incumbent Generators' criticisms of the CHPE and Staff economic analyses.

Entergy advances similar arguments in its exceptions to the ALJs' recommended findings on the economic analyses. (Entergy BOE at 19-24.) Entergy also notes that the

Signatory Parties did not agree on how to measure wholesale energy price savings, thereby leading to separate estimates prepared by Dr. Paynter and CHPE witness Julia Frayer. (*Id.* at 20-21.) Moreover, Entergy claims that wholesale price savings constitute a transfer payment from suppliers to customers and, therefore, do not represent a benefit or provide support for the requisite public interest findings that the Commission must make. (*Id.* at 21-22.)

The recommendations set forth in the RD are based on a thorough evaluation of the evidence adduced and arguments advanced in this proceeding. In recommending that the Commission decline to accept or rely on IPPNY's economic analyses, the ALJs determined that Dr. Paynter, and the long-term analysis he conducted for Staff, is more persuasive than the results of Mr. Younger's economic analyses because it embodies the preferred analytical framework for evaluating a proposed merchant transmission facility. This evaluation of the strengths and weaknesses of conflicting expert witness testimony and highly-technical analyses is one of the ALJs' fundamental roles as fact finders in this proceeding and, therefore, their recommendations should be accorded substantial weight.

In any event, contrary to IPPNY's claims, the ALJs provide a full explanation of their decision not to recommend Mr. Younger's analyses. With respect to the parties' production cost savings analyses, the ALJs recognized that the various arguments advanced by the parties highlighted a threshold issue in dispute: what analysis provides the best estimate of benefits arising from the operation of this Facility? The Incumbent Generators proposed to answer this question with an analytical framework heavily influenced by older precedent used by the NYISO to proposed transmission projects that would receive cost-based rates. Staff, CHPE and the City, on the other hand, advocated that the HTP and Bayonne Orders established a new framework

that requires an identification of savings, but neither establishes a threshold that must be surpassed nor specifies the analysis that must be undertaken to estimate such savings.

The Incumbent Generators' unduly narrow view of how to measure the benefits of the Facility should be rejected. As the City explained, the Bayonne Order includes no reference to production cost savings or, for that matter, any estimate of the cost savings that customers might realize from operation of the certificated facility. (City Initial Brief at 6.) Instead, the Commission stated in its Bayonne Order that the facility "will provide economic benefits" via reduced energy prices, promoting competitive wholesale markets, reducing the market power of incumbent generators, and also may provide capacity price benefits.<sup>7</sup> The City further explained that the Facility would provide economic benefits, as well as other non-reliability-based benefits previously specified by the Commission as supporting a determination of need for certification under Article VII of the Public Service Law. (*See id.*at 4-18, 32.)

In addition to recommending that the Commission adopt Dr. Paynter's analysis, the ALJs embraced the Commission's more comprehensive view of how benefits should be measured, noting that the analyses proffered by Staff, CHPE, and IPPNY are in agreement that operation of the Facility would yield "sizable benefits in the form of" wholesale energy price savings, even if such savings resist precise estimation (RD at 54), a finding that is consistent with the Bayonne Order.

The Incumbent Generators' complaint that the ALJs provided an inadequate explanation for their decision not to adopt Mr. Younger's analyses should be dismissed. After an extended summary of all of the testimony addressing the Facility's economics (RD at 38-47), including Mr. Younger's testimony, the ALJs concluded that:

<sup>&</sup>lt;sup>7</sup> Bayonne Order at 13.

Mr. Younger inappropriately incorporated and relied on the CARIS model, which is geared toward determining whether regulated solutions should be approved and thus sets a very high bar; the analysis timeframe was limited to a 10-year period, instead of a time period commensurate with the facility's expected service life; and IPPNY's overarching views on need for additional energy and capacity were informed by the now-outdated 2010 RNA's need finding, and by assumptions that the generation would not be needed until 2026.

(RD at 48.) The RD clearly establishes that the ALJs considered, and rejected, Mr. Younger's analyses – the ALJs are not required to provide a line-by-line rebuttal of Mr. Younger's testimony and the Incumbent Generators' pleadings.

The ALJs' recommendations regarding the treatment of economic analyses are well-supported by the evidentiary record developed in this proceeding, and the ALJs took into consideration the many and varied criticisms that the Incumbent Generators advanced. Accordingly, for the foregoing reasons, the City respectfully urges the Commission to accept these recommendations, and to decline to adopt the analyses and conclusions urged by the Incumbent Generators.

### B. The Commission Should Adopt the ALJs' Finding that the Facility Is Required to Address an Identified Reliability Need

Commission precedent is clear that its determination of whether there is a need for a proposed transmission line may be based on considerations other than the presence or absence of a forecast supply deficit.<sup>8</sup> The ALJs acknowledged this precedent, and noted that the NYISO's 2012 Reliability Needs Assessment ("RNA") identified a potential need for additional installed capacity in New York City and surrounding areas as early as 2020. (RD at 30.) The ALJs concluded that this finding "buttresses" arguments supporting certification of the Facility

<sup>&</sup>lt;sup>8</sup> HTP Order at 42; Bayonne Order at 12-13, 16.

(*id.*), given that resolving an identified reliability need would provide further support for the Commission's need determination. In reaching this conclusion, the ALJs agreed with Dr. Paynter that the entry of merchant supply projects before a reliability need actually develops is "an integral part of the NYISO's market-based planning process." (*Id.* at 30 [citing Tr. 195].) According to the ALJs, this proceeding "presents a viable opportunity to authorize such an investment ...." (*Id.*)

The Incumbent Generators except to the ALJs' reliance on the 2012 RNA. IPPNY asserts that the RNA is simply the first step in a multi-stage planning process, and relies upon conservative assumptions that may be modified as the planning process advances. (IPPNY BOE at 31-32.) IPPNY argues that the ALJs were premature in accepting the reliability need identified by the 2012 RNA because the ultimate result of that planning process may indicate that the need has diminished, or been eliminated altogether. (*Id.* at 33.) Entergy excepts on similar grounds, and asserts that it is error for the ALJs or the Commission to conclude that the 2010 RNA and 2012 RNA "examined similar scenarios," as stated in the RD. (Entergy BOE at 19.)

The Incumbent Generators' exceptions are unpersuasive and their reliance on forecasts to attack the finding of a reliability need is misplaced.

The ALJs set forth the proper review standard in the RD:

PSL Article VII need is determined by examining numerous factors, including system reliability benefits, economic benefits for customers and the State, and the achievement of public policy goals. As a result, PSL Article VII certificates have been granted to merchant facilities even though the then-most recent Reliability Needs Assessment (RNA) showed no reliability need during the applicable 10-year planning horizon. In such cases, need was based on a demonstration of a merchant facility's ability to provide a useful bulk transmission connection to another region, alleviate existing transmission constraints, protect the security of the

transmission network, and enhance system reliability. Need also has been based on demonstration of a merchant facility's ability to provide economic and environmental benefits and an additional supply source in the event that one or more of the types of risk factors cited in the RNA materialized.

### (RD at 22-23 [citations omitted].)

In light of this standard of review, the Facility may be certificated even if it is assumed that the planning process initiated with the 2012 RNA culminates in a determination that there is no anticipated reliability need during the 10-year study horizon. Thus, although the City agrees with the ALJs' conclusion that the initial finding of the 2012 RNA "buttresses" their finding of need for the Facility, the Incumbent Generators' extensive criticism of that conclusion does not affect the finding of a reliability need. (RD at 30.)

IPPNY's single-minded focus on the NYISO's 2012 RNA ignores two other recent developments that tend to also "buttress" the ALJ's recommendation. First, on December 7, 2012, the Executive Committee ("EC") of the New York State Reliability Council ("NYSRC") voted to adopt an Installed Reserve Margin ("IRM") for the New York Control Area ("NYCA") of 17.0% for the 2013-2014 Capability Year, effective May 1, 2013. This represents an increase from the 16.0% IRM approved by the NYSRC EC for the 2012-2013 Capability Year. The Province of the 2012-2013 Capability Year.

According to the NYSRC's filing at the FERC, its decision to increase the IRM was based on the results of a highly-technical probabilistic analysis of the installed capacity that

<sup>&</sup>lt;sup>9</sup> Docket No. ER13-572, <u>New York State Reliability Council, Filing</u> (dated December 17, 2012) at 2-3.

<sup>&</sup>lt;sup>10</sup> *Id.* at 3. The NYISO relies on the IRM to establish State and local capacity requirements, and the IRM also impacts the parameters and the prices established by the NYISO's Installed Capacity Demand Curves.

would be necessary to satisfy all relevant reliability criteria within the NYCA during the upcoming Capability Year. This study considered the net impact of multiple parameters that would tend to increase or decrease the IRM, including a load forecast uncertainty model updated to reflect increased uncertainties in NYISO Zone J (*i.e.*, New York City). The study indicated that an IRM of 17.1% would be appropriate under "base case" assumptions, and the NYSRC EC voted to increase the IRM for the upcoming Capability Year. 12

Second, IPPNY criticizes reliance on potential reliability needs that reflect, in part, notices of intent to mothball or retire generation units that ultimately may remain operational. (IPPNY BOE at 32-35.) Although it is true that a generating unit that files such notice subsequently may rescind the request and maintain commercial operations, it also is true that unexpected retirements may occur that have an impact on system reliability. For instance, on January 17, 2013, the NYISO's Operating Committee ("OC") voted to increase the locational capacity requirement ("LCR") for New York City, from 83 percent to 86 percent. The LCR establishes the percentage of capacity to meet the needs of customers within the New York City capacity market that must be purchased from supply resources located within the New York City market. The primary reason cited for this decision was the "retirement of the Danskammer" Generating Station. The NYSRC action and Danskammer retirement demonstrate that the determination of "need" is a fluid one, and the ALJs properly accounted for that fluidity by analyzing all of the factors identified in the RD.

<sup>&</sup>lt;sup>11</sup> *Id.* at 9-11.

<sup>&</sup>lt;sup>12</sup> *Id.* at 9, Table 0-1. This vote constitutes a final action by the NYSRC EC on this issue.

<sup>&</sup>lt;sup>13</sup> NYISO Operating Committee, Locational Minimum Installed Capacity Requirements Study (dated January 17, 2013) at 3. This vote constitutes a final action and determination by the NYISO on this issue.

Finally, IPPNY also contends that State policy initiatives such as the Renewable Portfolio Standard ("RPS") and Energy Efficiency Portfolio Standard ("EEPS") may eliminate any potential reliability need, if one assumes that those policies achieve their stated goals. (IPPNY BOE at 35-36.) This assertion is not persuasive. Setting aside the recognized implementation challenges and other circumstances that complicate the achievement of those policy goals, it is self-evident that increased supply and/or decreased demand would diminish any potential reliability need. However, it is equally true that the development of a reliability need may be accelerated, or the magnitude of that need increased, as a result of a variety of other circumstances. Demand could well rebound with the strengthening economy, or additional generators may mothball or retire their facilities in response to electric prices moderated by recent trends in the cost of natural gas, environmental regulatory mandates, or other factors. The determination of need for the Facility should not hinge on the myriad of potential outcomes from changing policies and unpredictable markets.

For the foregoing reasons, the City respectfully urges the Commission to adopt the ALJs' finding that the record in this proceeding adequately establishes a reliability need for the Facility.

### **POINT II**

# THE ALJS' DETERMINATIONS THAT THE FACILITY WOULD BE ECONOMIC AND DEVELOPED ON A MERCHANT BASIS ARE REASONABLE AND FULLY SUPPORTED BY THE RECORD

After a careful review of the evidentiary record and the positions advanced by opponents and proponents of the Joint Proposal, the ALJs concluded that the Facility would be developed and operated on a merchant basis because:

the obligations accepted by Applicants and reflected in proposed certificate condition 15, along with the express support for this provision by a large number of parties with diverse interests, sufficiently demonstrate that the risks associated with the financing and recovery of project costs will be borne, in large part, by private investors and that project revenues will be recovered from wholesale power transactions.

(RD at 72.)

On a closely related issue, the ALJs also found that, as a merchant project, the Facility would improve, rather than harm, the competitive wholesale energy market, and is consistent with relevant policies encouraging the development of competitive markets. (RD at 67.) Accordingly, the ALJs declined to find that the Facility would be an uneconomic and harmful entrant to the competitive wholesale market, or that the Facility cannot be developed on a merchant basis, as urged by the Incumbent Generators. (*Id.*)

As described below, the record supporting these conclusions is extensive and compelling, and the City respectfully urges the Commission to accept the findings recommended by the ALJs.

## A. The Facility Would Be Developed as a Merchant Project Subject to the Terms of the Joint Proposal

The ALJs noted that CHPE repeatedly has stated its intention to finance, construct and operate the Facility on a merchant basis and, as evidence of this commitment, agreed to Certificate Conditions that would make the continued validity of the Certificate contingent on the Facility remaining a merchant project. (RD at 67; see also City Initial Brief at 32-39.) The ALJs acknowledged that there may be no "iron-clad" guarantee that would preclude CHPE from changing its business model under all conceivable circumstances, but concluded that "the goal should be to adopt certificate conditions that will provide reasonable assurances that the statutory obligations will be satisfied, expected benefits of the [F]acility will be realized, conditions precedent will be met, and commitments will be honored." (RD at 67-68.) In light of the obligations accepted by CHPE under the Joint Proposal, and the multiple Conditions that would invalidate the Certificate if not satisfied by CHPE (including maintenance of the Facility as a merchant project), the ALJs rejected the Incumbent Generators' persistent presumption that CHPE will not comply with the terms and conditions of a Commission order that adopts the Joint Proposal and its requirement that the Facility be developed and operated as a merchant project. (*Id.* at 68.)

The ALJs evaluated whether the Joint Proposal sufficiently ensures that the costs and risks of Facility development and operation would be borne by investors, and not by customers. They concluded that the Joint Proposal accomplishes this allocation of cost and risk, and identified the numerous terms and conditions of the Joint Proposal that support this finding. (RD at 68-72.) For instance, the ALJs concluded that, because Condition 15(b) obligates CHPE to demonstrate that 75 percent of the capacity of the Facility line is under binding contract for a

period of at least 25 years before it may commence Facility construction (the "pre-subscription requirement"), "the HVDC 'cost risk' has been limited substantially." (*Id.* at 70.)

The ALJs also highlighted that Condition 15(b), which imposes the merchant status obligation on CHPE, was revised, and strengthened, via the Merchant Facility Stipulation executed by and between CHPE, Con Edison, and Staff. The Merchant Facility Stipulation clarifies CHPE's obligations by explicitly describing the potential cost recovery mechanisms that it may not pursue. Condition 15(b) would render the Certificate invalid if CHPE seeks to recover any costs of the HVDC Transmission System, or any costs associated with the use of the Astoria-Rainey Cable to deliver electric energy and capacity from the HVDC Transmission system, via cost-based rates, and CHPE waived its right to seek such recovery.

The ALJs also concluded that the "cost risk" associated with the Astoria-Rainey Cable similarly has been limited, given that CHPE is restricted to a specific estimate for this portion of the line, and that its ability to seek cost-based rates for use of the Astoria-Rainey Cable is limited narrowly to customers that use this line, but not the HVDC Transmission System. (RD at 70; see also City Initial Brief at 32-38.) This conclusion is consistent with the Signatory Parties' collective determination that Condition 15, as modified by subsequent stipulations, establishes a reasonable balancing of customer and commercial interests underlying the merchant facility provisions of the Joint Proposal, and that this limited exception should not impact a determination that the Facility is a merchant project, despite efforts by Incumbent

<sup>&</sup>lt;sup>14</sup> See Merchant Facility Stipulation.

<sup>&</sup>lt;sup>15</sup> *Id*.

<sup>&</sup>lt;sup>16</sup> The Merchant Facility Stipulation defines "rates" for this purpose as including "any charges established by NYPA or a utility operating under cost-based regulation, including without limitation base rates, surcharges, adjustments, or any other recovery mechanism." (*Id.*)

Generators to blur key economic and legal distinctions between the CHPE project at large, and the Astoria-Rainey Cable.

Importantly, consistent with the RD and positions advanced by the City and other proponents of the Joint Proposal, IPPNY and Entergy now concede in their Briefs on Exceptions that Condition 15 is adequate to safeguard against a "direct" subsidization of the Facility. According to IPPNY, "[n]o party has suggested that the existing conditions will be violated or that other conditions are necessary to guard against the Applicants directly securing subsidization." (IPPNY BOE at 28.) Entergy asserts that it "has never disputed that the now substantially revised proposed Certificate Condition 15 precludes the Certificate Holders themselves from seeking a direct subsidy." (Entergy BOE at 14.)

Both IPPNY and Entergy continue to theorize, however, that CHPE will evade the merchant facility conditions via an out-of-market contract between a shipper and a third party, with a portion of the above-market revenues derived therefrom funneled back to CHPE to subsidize the operation of its Facility. (IPPNY BOE at 28; Entergy BOE at 13.) At base, this unsupported speculation by Incumbent Generators is supported by reliance on: (a) analyses conducted by Mr. Younger that were thoroughly debunked by Staff and CHPE and rejected by the ALJs; (b) a strained reinterpretation of the pre-subscription requirement; and (c) certain sentence fragments selectively drawn from a response to the New York Energy Highway's Request for Information ("RFI") submitted by Hydro Québec ("HQ"). For the reasons set forth below, the Incumbent Generators' exceptions should be denied.

The Incumbent Generators claim that that the results of Mr. Younger's analyses demonstrate that the Facility would be so uneconomic as to be incapable of development and operation unless subsidized by an out-of-market contract or other subsidy. As described in Point

I, however, this foundation for the Incumbent Generators' exception has been rejected by the ALJs based on the extensive record in this proceeding. Staff and CHPE provided an exhaustive discussion of the flaws and biases embedded in Mr. Younger's analyses, in their submission of expert testimony and contrary analyses, which are summarized in the post-hearing briefs of Staff and CHPE. (*See*, *e.g.*, Staff Initial Brief at 10-18, 43-47, 49-50; Staff Reply Brief at 16-18, 29-37; CHPE Initial Brief at 12-17, 30-41, 77-98, 102-104; CHPE Reply Brief at 11-15, 37-45.) Those submissions have created a robust record supporting the conclusions that the Facility would be an economic project developed on a merchant basis. Given the Incumbent Generators' inability to demonstrate that the Facility would be unable to operate without above-market subsidies, there is no reason to consider or impose additional conditions.

The record similarly supports the ALJs' decision to reject the Incumbent Generators' argument that the "pre-subscription requirement" of Condition 15(b) would *compel*, not prevent, the payment of an indirect subsidy to the Facility. The Incumbent Generators claim that Mr. Younger's estimate of the minimum charge that CHPE would have to impose on shippers is disproportionate to the energy price spread between the Canadian border and New York City. (IPPNY BOE at 4; Entergy BOE at 13.) Consequently, they contend that no "rational shipper" would enter into a long-term contract for 75 percent of the Facility's capacity unless an out-of-market payment is available to subsidize the transaction. (IPPNY BOE at 4; Entergy BOE at 13).

Initially, the foundation of this theory also is Mr. Younger's analyses which, as noted earlier, were discredited by Staff and CHPE and rejected by the ALJs. Moreover, the Incumbent Generators have not presented any rationale to explain why a State agency or authority would elect to enter into a 25-year contract for 750 MW of transmission capacity at an

above-market rate. In any event, Condition 15(b) provides that CHPE "shall file a report documenting that they have" satisfied the "pre-subscription requirement," and that CHPE "may not commence construction of the Facility unless and until the Commission has accepted the report." The Joint Proposal does not, and cannot, limit the Commission's authority to review the subject contract before accepting CHPE's report, if it elects to do so. This critical detail is conveniently omitted from the Incumbent Generators' theory.

Finally, the Incumbent Generators claim that HQ's RFI provides "evidence" that this potential anchor tenant intends to procure a State-funded subsidy or other out-of-market payment. This claim is based on the following "evidence": (a) Donald G. Jessome testified that CHPE and HQ are "working hard towards" a transmission service agreement with HQ; and (b) HQ stated in its RFI that New York State would need to "work creatively" with HQ to recognize the "significant value" of HQ's energy. (*Id.* at 14 [citations omitted].) IPPNY cites additional language from HQ's RFI in which HQ suggests that New York explore "innovative ways" to "prioritize and promote incremental hydropower deliveries." (*Id.* at 29 [citation omitted].) The Incumbent Generators complain that the ALJs declined to accept this "evidence" and find that the Facility would be subsidized indirectly. (*Id.* at 28-29; Entergy BOE at 13-14.)

The ALJs reasonably declined to recommend that the Commission accept this theory and such purported "evidence" as was proffered by IPPNY and Entergy. There is no basis to conclude from mischaracterized testimony or fragmented quotes cherry-picked from an RFI that HQ is soliciting an indirect subsidy for the Facility. Given the terms of the Joint Proposal, and particularly the strict limitations on how the Facility may be financed, the

<sup>&</sup>lt;sup>17</sup> Ex. 127, ¶ 15(b) (emphasis added).

<sup>&</sup>lt;sup>18</sup> The City assumes that the Commission may desire to review the contract underlying the report before it decides whether to "accept" the report.

Commission should find that the Facility would be a merchant project and affirm the ALJs' recommendation that the Incumbent Generators' indirect subsidy theory be rejected as entirely unfounded.

B. The Commission Should Accept the ALJs' Recommendation that the Facility May be a Merchant Project Even if the Shipment of Certain Energy Via the Astoria-Rainey Cable May Be Subject to Cost-Based Rates

CHPE has reserved a limited right to seek alternative financing methods for certain energy shipped via the Astoria-Rainey Cable. Given that the NYISO likely will have operational control of this HVAC cable, and that it represents a small part of the overall project scope and cost, the Signatory Parties concluded that allowing CHPE to retain this limited option would not be unreasonable, and would not undermine the general conclusion that the Facility may be developed on a merchant basis. This consensus is reflected in Condition 15, which is adequate to ensure that CHPE would not implement cost-based rate recovery for either the HVDC Transmission System or use of the Astoria-Rainey Cable to deliver electric energy and capacity transmitted over the HVDC Transmission System. Condition 15, as modified by the Merchant Facility Stipulation, presents a reasonable balancing of customer and commercial interests underlying the merchant facility provisions of the Joint Proposal.

The ALJs agreed. They noted that the Astoria-Rainey Cable will be under the operational control of the NYISO, not CHPE. (RD at 7, n.11.) The ALJs concluded that the potential exposure of customers to cost-of-service rates for use of the Astoria-Rainey Cable has been limited to an overall cost estimate of \$214 million. (*Id.* at 70.) If an updated cost estimate exceeds this estimate by 10 percent or more, then CHPE must file with the Commission a Request for Reconsideration of its determination of public interest, convenience and necessity

made with respect to the Facility.<sup>19</sup> The "cost risk" associated with the Astoria-Rainey Cable is further limited to customers that use the HVAC line without also using the HVDC Transmission System. (*Id.*) Accordingly, the ALJs agreed that "the risks associated with the financing and recovery of project costs will be borne" largely by private investors, and project costs would be recovered from wholesale power transactions, not from captive ratepayers. (*Id.* at 72.)

Entergy excepts to this recommended finding, arguing that the Facility would be some sort of "hybrid" merchant/non-merchant project. (Entergy BOE at 9.) Entergy argues that the inclusion of this limited right to seek cost-of-service rates for certain users of the Astoria-Rainey Cable should preclude application of the precedent regarding the evaluation of merchant facilities that was established by the Commission in its Bayonne Order. (*Id.* at 9.)

Entergy's exception should be denied. As explained above, the ALJs reasonably concluded that the "cost risk" arising from the Astoria-Rainey Cable would be limited to a fraction of the total project cost and would apply to a very modest segment of the Facility. (RD at 70.) Moreover, this treatment of the Astoria-Rainey Cable is subject to a cost estimate that may trigger re-evaluation of the Commission's public interest, convenience and necessity findings with respect to the Facility. Finally, this ruling would impact only a sub-group of the customers that may use the Astoria-Rainey Cable, at least some of whom may have no necessary connection to the CHPE line from Canada to Astoria, Queens. These factors moderate the potential exposure of customers to financial risk associated with the Astoria-Rainey Cable.

Thus, notwithstanding the possibility that CHPE may seek an alternative financing arrangement for a limited portion of the Facility, the foregoing considerations provided the ALJs with an adequate basis to recommend a finding that virtually all financial risk

<sup>&</sup>lt;sup>19</sup> Ex. 127, ¶ 15(c).

associated with the project will be shifted from captive utility ratepayers to private investors, and that the Facility would be constructed, financed and operated on a merchant basis, as set forth in the Joint Proposal. The exceptions to this recommendation should be rejected.

## C. The Commission Should Deny Entergy's Exceptions Regarding Whether the Facility May Harm Competition

The ALJs considered all arguments regarding potential impacts of the Facility on the competitive wholesale market, and found that: (a) any price suppression caused by the Facility entering the competitive market will be short-term, and short-term price reductions "should not cause harm to existing generators who are able to adapt to an evolving competitive market"; (b) the entry of new capacity and energy to a load pocket may benefit customers; and (c) there is "persuasive evidence rebutting the claim that the project will be an uneconomic entrant." (RD at 66-67.) Moreover, if part or all of the Facility turns out to be uneconomic, the Joint Proposal includes adequate safeguards to protect ratepayers including, potentially, by invalidating the Certificate. Accordingly, the ALJs concluded that the Facility should "improve" competition in the New York City market, and would be consistent with State, Commission and City policies encouraging competitive markets. (*Id.* at 67.) The ALJs also concluded that entry of the Facility to the wholesale market would not induce generator retirements. (*Id.* at 66.)

The Incumbent Generators except to these recommended findings and conclusions. They contend that the Facility is uneconomic and, therefore, would harm, not promote, market competition, induce generator retirements, and chill investment in new resources. (IPPNY BOE at 23-26; Entergy BOE at 22-24.)

It should be noted that both proponents and opponents of the Joint Proposal apparently are in general agreement as to the Commission's policies regarding competitive

markets. However, the Incumbent Generators and Signatory Parties diverge with respect to whether or not the project is economic, and whether the Facility can be developed on a merchant basis, as set forth in the Joint Proposal. The Incumbent Generators contend that: (a) uneconomic supply resources harm competitive markets; (b) the Facility would not be economic and would be subsidized by out-of-market payments; and (c) therefore, the Facility would harm the wholesale energy market in New York State. In contrast, the City, Staff and CHPE contend—and the ALJs agree—that the Facility would be an economic, merchant project and, therefore, would promote competition and be consistent with all relevant policies regarding the cultivation and operation of competitive markets.

There is no basis on which to disturb the ALJs' findings that the Facility would be an economic project developed on a merchant basis, and that the Joint Proposal includes safeguards adequate to protect captive ratepayers if expectations are disappointed and the Facility should turn out to be uneconomic. The Incumbent Generators' exceptions to these findings essentially are another manifestation of their disagreement with the ALJs' factual determinations that the Facility would be an economic, merchant project.

New market entry, and the competitive rivalry that it engenders, is rarely welcomed by incumbent providers. That fact, however, should not lend any credence to strained rationales or to unwarranted claims concerning "artificial anti-competitive price suppression," or references to a "grossly uneconomic new entrant." (IPPNY BOE at 20, 23.)

As described in detail above, however, the ALJs provided a thorough review of all facts and arguments relative to the economics and merchant status of the Facility and set forth a thoughtful explanation as to why they concluded that the weight of the evidence supports their

recommended findings.<sup>20</sup> Inasmuch as there is ample record support for the ALJs' findings, the exceptions should be rejected.

### POINT III

THE EVIDENTIARY RECORD INCLUDES NO EVIDENCE THAT STURGEON OR STURGEON HABITAT MAY BE HARMED BY FACILITY CONSTRUCTION OR OPERATION

Entergy excepts to the ALJs' conclusions that the evidentiary record supports a finding that potential impacts to sturgeon and their habitat have been identified and minimized. (Entergy BOE at 24.) According to Entergy, the record is inadequate to support recommended findings that shortnose sturgeon and Atlantic sturgeon will not be harmed by: (a) potential habitat displacement caused by the installation of concrete mats where the HVDC Transmission System will lay on the bed of the Hudson River in certain discrete locations; or (b) exposure to electromagnetic fields ("EMFs") generated by the HVDC Transmission System. (*Id.* at 24-30.) Entergy's claims that such harm and habitat displacement may occur are without merit and should be rejected.

A. The Commission Should Reject Entergy's Exception to the Recommended Finding that Potential Impacts on Sturgeon Habitat Have Been Minimized

Entergy excepts to the ALJs' conclusion that the evidentiary record supports a finding that the potential impacts of Facility construction and operation on sturgeon habitat have been minimized. (Entergy BOE at 24.) Specifically, Entergy excepts to the RD's findings that

<sup>&</sup>lt;sup>20</sup> This is evident from the terms and conditions of the Joint Proposal, which obligate CHPE to develop its Facility on a merchant basis, and that Condition 15 (*i.e.*, the key Condition for the proposed Certificate regarding this issue) repeatedly was revised and strengthened *after* the Joint Proposal was filed. (*See*, *e.g.*, Ex. 127, ¶ 15; Merchant Facility Stipulation.)

the Facility is unlikely to impact sturgeon habitat because: (a) the proposed route of the Facility would largely avoid Exclusion Areas and Significant Coastal Fish and Wildlife Habitats ("SCFWHs"); (b) seasonal construction windows would be used to avoid construction during periods when sturgeon are likely to be present within Exclusion Areas and SCFWHs; and (c) the Environmental Management and Construction Planning ("EM&CP") phase of project development would provide an opportunity for further moderation of potential impacts, given that CHPE would be required to develop a final Facility design that minimizes potential impacts along its entire route, including the SCFWHs and Exclusion Areas. (*Id.*)

CHPE plans to lay concrete mats or other protective systems on top of the HVDC Transmission System for protection in the limited locations where the cable will not be buried underneath the riverbed. In excepting to the foregoing findings, Entergy asserts that the ALJs ignored the fundamental issue of whether the installation of concrete mats will impair sturgeon habitat, thereby effectively assuming that there would be no impact. (Entergy BOE at 24-25.) According to Entergy, the ALJs then used this assumption to find that the Facility otherwise would not impact sturgeon habitat.

Entergy claims that CHPE has not determined the potential extent to which construction and installation of the concrete mats may degrade or destroy sturgeon habitat. (Entergy BOE at 25.) That assertion, however, is demonstrably incorrect. CHPE's Environmental Impact Assessment ("EIA") addressed this specific issue, concluding that:

The mats will alter local hydraulic conditions such that some sediment deposition or scouring may occur around the irregularity the bottom formed by the mats. However, the overall change in bottom topography will be insignificant because the mats will extend only a short height above the bottom and functional benthic habitat will develop. The volume of the cable is extremely small relative to the sediment layer and bottom hydrography of the water bodies involved, and the effect of the cable on

# bathymetry will be insignificant relative to natural levels of fluctuation due to currents, storms, navigational traffic, and other pre-existing factors.<sup>21</sup>

The EIA further concludes that: "After the cable is energized, the benthic community is expected to be similar to that from adjacent benthic area." That is, the benthic zone is anticipated to redevelop on or around the concrete mats, and installation of the cable would impact only a small section of the riverbed. Clearly, there is adequate record support for the conclusion that concrete mats would not impair water quality or present a barrier to sturgeon mobility or migration. In addition, CHPE also would be obligated to conduct a study of sturgeon movement patterns before and after the HVDC Transmission System is energized.<sup>23</sup>

Entergy also complains that the ALJs' conclusion that routing the Facility to avoid Exclusion Areas and SCFWHs, thereby moderating potential impacts to those areas, "does not address" whether the Facility may impact sturgeon. As described above, however, the record provides sufficient support for the ALJs reasonably to conclude that there would be no significant adverse impact to sturgeon and their habitat. Given the lack of evidence suggesting that there may be such an impact, there was no compelling reason to investigate the effect of the concrete mats on a remote area. Thus, the ALJs' recommended finding is not in error.

<sup>&</sup>lt;sup>21</sup> Ex. 121, p. 168 (emphasis added). The "benthic" zone is the ecological region at the riverbed or lakebed, and "bathymetry" describes the contours of a riverbed or lakebed.

<sup>&</sup>lt;sup>22</sup> *Id.*, p. 206.

<sup>&</sup>lt;sup>23</sup> Ex. 127, ¶ 163, Att. 4. Significantly, NYSDEC, Scenic Hudson, Inc., and Riverkeeper, Inc. each executed the Joint Proposal and advocated that it be approved by the Commission without modification. For instance, NYSDEC, the State's administrative body charged with protecting and preserving the State's natural environment, entered the Joint Proposal and submitted pleadings asserting that the "installation of the underwater cables is not expected to have any significant impacts on short nose and Atlantic sturgeon." (NYSDEC Initial Brief at 10.)

Entergy similarly complains that the ALJs' reliance on construction windows as a mechanism to reduce potential impacts is misplaced because the concrete mats installed along a small portion of the Hudson River would be present after construction is complete and pose potential chronic effects arising from their continued existence on the riverbed. Contrary to this assertion, however, the EIA did address this specific issue. As noted above, the EIA concluded that "the overall change in bottom topography will be insignificant because the mats will extend only a short height above the bottom and functional benthic habitat will develop" again after the mats are installed. In fact, the benthic community ultimately is anticipated to be similar to that of adjacent benthic areas after the Facility commences commercial operations. If the ALJs' treatment of this issue was not as extensive as Entergy would prefer it to be, it is only because there was little to say other than that the issue has been examined and a well-supported determination made that sturgeon habitat would not be impaired by Facility construction or operation.

Finally, Entergy complains that deferring final Facility design to the EM&CP stage presupposes that the Facility will not have an impact on sturgeon and their habitat, and improperly delays the obligation to address potential impacts on that species. This argument is inapposite. The ALJs reasonably concluded, on the basis of ample record evidence, that the placement of the concrete mats would not degrade sturgeon habitat or harm sturgeon. By noting that the Facility design would be finalized during the EM&CP phase, when all final construction details are determined, the ALJs merely recognized that there would be a further opportunity for

<sup>&</sup>lt;sup>24</sup> Ex. 121, p. 168.

<sup>&</sup>lt;sup>25</sup> *Id.*, p. 206.

CHPE to ensure that any potential risk to sturgeon and their habitat is moderated to the greatest extent practicable.

For the foregoing reasons, the ALJs reasonably concluded that "the record is sufficient to support a finding of minimization of ESA sturgeon habitat impacts." (RD at 94.) The City respectfully urges the Commission to adopt this finding.

# B. The Commission Should Reject Entergy's Exception to the Recommended Finding that Electromagnetic Fields May Harm Sturgeon

Entergy excepts to the ALJs' recommended finding that EMFs induced by the HVDC Transmission System "will have minimal impact, if any, on migratory species, including ESA sturgeon, in the Hudson River." (Entergy BOE at 27-28 [quoting RD at 99].) First, Entergy excepts to the ALJs' conclusions that: (a) the sheathing around the HVDC cables will eliminate or sharply reduce direct electric fields; and (b) the Joint Proposal's requirement that the cables be buried in a single trench will result in the EMFs from each cable essentially cancelling each other out. (*Id.* at 28.) Entergy claims that these conclusions are contradicted by the EIA, which indicates that the HVDC Transmission System will induce EMFs within a "zone of influence" around the cables.

There is no record evidence to support Entergy's suggestion that sturgeon can and do respond to weak deviations from the background geomagnetic field on the order of what the HVDC Transmission System is anticipated to induce, or that sturgeon habitat or behavior may be impacted outside of the "zone of influence" of the HVDC Transmissions System. Given that the strength of EMFs decline rapidly in inverse proportion to the square of distance from the field source, <sup>26</sup> and that the EMFs would be aligned with the HVDC Transmission System in a narrow

<sup>&</sup>lt;sup>26</sup> Ex. 121 at 301.

corridor parallel to the river, EMFs induced by operation of the HVDC Transmission System would be *de minimis* or non-existent throughout most of the Hudson River. Thus, the ALJs' conclusion that EMFs induced by the HVDC Transmission System "will have minimal impact, if any, on migratory species, including ESA sturgeon, in the Hudson River" (RD at 99) is reasonable, and fully-justified by the evidentiary record.

Second, Entergy excepts to the ALJs' conclusion that EMFs induced by the HVDC Transmission System will not have a significant impact on migratory aquatic species, including sturgeon. (Entergy BOE at 29.) Entergy claims that this conclusion is not supported by the record because CHPE did not study the possible effects of EMFs on sturgeon navigation and migration, specifically. (*Id.*)

Entergy's position is undermined by the evidentiary record. The record identifies the "zone of influence" in which EMFs induced by the HVDC Transmission System may be detected at levels modestly above the geomagnetic background in a narrow corridor focused above the Facility centerline.<sup>27</sup> This "zone of influence" would be relatively small in comparison to the width of the Hudson River. Given that EMFs weaken rapidly with increasing distance from their source, the induced EMFs would be strongest only within a small portion of the "zone of influence," and burial of the cable as proposed would yield "the least change in the background geomagnetic field." As a result, mobile aquatic species such as sturgeon would be able to avoid the Facility construction area, and "[s]turgeon ... are expected to distribute themselves throughout the Hudson Estuary as they did prior to cable installation and have only

<sup>&</sup>lt;sup>27</sup> Ex. 121, pp. 203-04.

<sup>&</sup>lt;sup>28</sup> Ex. 92, p. 8.

incidental contact with the zone of influence of the cables."<sup>29</sup> Further, the EIA also concluded that:

The Hudson River is a highly developed estuary which contains many stimuli that could potentially impact fish migration. In their study of the Cape Wind project, the USACE (2004b) concluded that there would be no negative effects to fish species or the marine environment as a result of the 60 Hz B fields because the magnitude of the B fields proximal to the transmission cable would be limited to an extremely small space and decrease rapidly within a few feet of the cable.

In addition, a second important consideration is that, by and large, migrating fish species will not travel in the part of the water column closest to the buried cable. The strength of the field is greatest closest to the cable and diminishes quickly with distance. As migrating fish species tend to be in the upper part of the water column ... and the cables will only be installed in an area where the depth is greater than 20 feet, the additional distance above the buried cables brings them into a region where the magnetic field characteristics will be closer to that of the earth's background geomagnetic field than at the river bottom. This separation distance diminishes the potential for impacts on fish migration. Therefore, there is no evidence that fish migrations in the Hudson River have been or would be impacted by magnetic fields. <sup>30</sup>

The analyses underlying the EIA considered the impact of EMFs on the migration, spawning, feeding, and development of aquatic species. In all instances, the EIA concluded that EMFs would have no significant impact:<sup>31</sup>

The available information on the effects of ... changes in the magnetic field on aquatic life shows that potential impacts to fish species, if any, are expected to be insignificant for individual organisms and for various biological functions including migration, spawning, feeding and life stage development. The technical literature is not specific to species in the Hudson, but it

<sup>&</sup>lt;sup>29</sup> Ex. 121, p. 206.

<sup>&</sup>lt;sup>30</sup> *Id.*, pp. 215-216.

<sup>&</sup>lt;sup>31</sup> *Id.*, pp. 203-07.

does cover a range of related organisms. Both species-specific studies as well as reviews of literature reveal only insignificant impacts from the operation of submarine electric cables. Given this lack of evidence of impacts, the low level of induced changes by the proposed cables and the small spatial extent of these changes, the HVDC Transmission System is anticipated to have an insignificant impact on any fish species present during its operation.<sup>32</sup>

As an extra measure of caution, CHPE also would be obligated to conduct a study of sturgeon movement patterns before and after the HVDC Transmission System is energized.<sup>33</sup>

Based on the record evidence, the ALJs reasonably (i) rejected Entergy's arguments regarding the adequacy of the record on potential impacts to sturgeon and their habitat, and (ii) concluded that EMFs induced by the HVDC Transmission System "will have minimal impact, if any, on" sturgeon or sturgeon habitat. (RD at 99.) Accordingly, Entergy's exceptions on these issues should be rejected.

<sup>&</sup>lt;sup>32</sup> Ex. 121, p. 207.

<sup>&</sup>lt;sup>33</sup> Ex. 127, ¶ 163, Att. 4.

### **CONCLUSION**

For the foregoing reasons, the City requests that the Commission accept the recommendations set forth in the RD by the ALJs, and find that the terms and conditions of the Joint Proposal, as recommended by the ALJs, provide the Commission with a rational basis to make the findings and determinations required by Article VII of the Public Service Law for issuance of a Certificate, and are in the public interest. Accordingly, the Joint Proposal should be approved.

Dated:

February 1, 2013 Albany, New York

### Is Michael Delaney

Michael Delaney, Esq.
Director, Energy Regulatory Affairs
Office of Long Term Planning and Sustainability
City of New York
253 Broadway
New York, New York 10007
(212) 676-0756

### |s| Jay Goodman

S. Jay Goodman, Esq. Robert M. Loughney, Esq. Couch White, LLP Attorneys for the City of New York 540 Broadway, P.O. Box 22222 Albany, New York 12201-2222 (518) 426-4600 Respectfully submitted,

MICHAEL A. CARDOZO
Corporation Counsel of the
City of New York
Attorney for the City of New York
100 Church Street, Room 6-142
New York, New York 10007
(212) 788-1579

By: *Solution Goodrich*Devon Goodrich, Esq.

Assistant Corporation Counsel