



SAVING THE LAND THAT MATTERS MOST

Scenic Hudson, Inc.
One Civic Center Plaza
Suite 200
Poughkeepsie, NY 12601-3157
Tel: 845 473 4440
Fax: 845 473 2648
info@scenichudson.org
www.scenichudson.org

November 6, 2015

Via Electronic Mail

Hon. Kathleen H. Burgess, Secretary
Public Service Commission
3 Empire State Plaza
Albany, New York 12223-1350
Secretary@dps.ny.gov

Re: Case 13-E-0488 - In the Matter of Alternating Current Transmission Upgrades – Comparative Proceeding and Cases 12-T-0502 et al. Initial Comments on the Trial Staff Report and Motion Comments on Proposed Public Policy Transmission Needs/Public Policy Requirements SAPA Notice I.D. No. PSC-40-15-00011-P

Comments of the Towns of Claverack, Clinton, Livingston, Milan and Pleasant Valley; Clinton Concerned Citizens; Columbia Land Conservancy; Dutchess Land Conservancy; Farmers and Families for Claverack; Farmers and Families for Livingston; The Olana Partnership; Omega Institute for Holistic Studies; Pleasant Valley Concerned Citizens; Scenic Hudson, Inc; and Walnut Grove Farm.

INTRODUCTION

Pursuant to the New York State Public Service Commission’s (“the Commission”, “PSC”) September 23, 2015 Notice Extending Deadlines in Case 13-E-0488 et al. and the October 7, 2015 State Register Notice I.D. No. PSC-40-15-00011-P, the parties to Case 13-E-0488 listed below (“Joint Commenters”) offer comments on the Department of Public Service Trial Staff Report and Motion as well as whether the Commission “should adopt, modify, or reject, in whole or in part, certain proposals to relieve congestion between Upstate and

Downstate New York to be transmission needs driven by Public Policy Requirements.”¹ The Joint Commenters are all members of the Hudson Valley Smart Energy Coalition (“HVSEC”).²

Joint Commenters are: the Towns of Claverack, Clinton, Livingston, Milan and Pleasant Valley; Clinton Concerned Citizens; Columbia Land Conservancy; Dutchess Land Conservancy; Farmers and Families for Claverack; Farmers and Families for Livingston; The Olana Partnership; Omega Institute for Holistic Studies; Pleasant Valley Concerned Citizens; Scenic Hudson, Inc; and Walnut Grove Farm.

THE HUDSON VALLEY SMART ENERGY COALITION

The Hudson Valley Smart Energy Coalition is a group of municipalities, environmental, historic and land preservation organizations, citizen groups and businesses that are committed to preserving and restoring the scenic, agricultural, cultural, health, environmental and economic assets of the Hudson Valley Region. In submitting these comments, the Joint Commenters seek to minimize the cost burdens and community impacts on residents, farms, businesses and municipalities; protect the special and scenic, historic, agricultural, economic, tourist, and natural resources crucial to the Hudson Valley’s ongoing success and viability; and promote sustainable energy solutions in the Hudson Valley that don’t damage priceless natural assets.

Our participation in this Proceeding is directed at ensuring a balanced, complete and fully vetted record on the issues presented in order to achieve a 21st century energy system that meets energy needs while protecting the resources and quality of life in the Hudson Valley. Our view, as stated at numerous points in the proceeding, is that new transmission lines through the Hudson Valley are not needed. If the Commission decides this Proceeding should move forward,

¹ See Oct. 7, 2015 N.Y. State Reg. PSC 40-15-00011-P, Proposed Public Policy Transmission Needs/Public Policy Requirements, As Defined Under the NYISO Tariff.

preference must be given to low-impact alternatives that do not require eminent domain, and that protect, beautify and create a sustainable energy future as envisioned in Case 14-M-0101, Reforming the Energy Vision (“REV”).

BACKGROUND

The 2012 Energy Highway Blueprint, citing traditionally high congestion prices in the wholesale electric markets south of the Central East (“CE”) and the Upstate New York/Southeast New York (“UPNY/SENY”) interfaces, recommended transmission projects with a cost of \$1 billion to increase alternating current (“AC”) transmission capacity south of these constraints by 1,000 MW. On November 30, 2012, the Commission commenced Case 12-T-0502 to solicit Statements of Intent from developers and transmission owners that will increase transfer capability through the congested AC transmission corridor to meet the objectives of the Energy Highway Blueprint.³

In April, 2013, the Commission issued an order establishing procedures for a comparative evaluation pursuant to Public Service Law (“PSL”) Article VII, establishing a two-part review process.⁴ Part A consisted of scoping or preliminary conceptual plans, only. Submission of complete applications fully meeting the requirements of PSL Article VII, including the information necessary for the Commission to meet its statutory obligation to make findings on the basis of the need for the facility before it can grant a certificate for construction, was left until Part B.⁵

² www.hvsec.org

³ Case 12-T-0502, Proceeding on Motion to Examine Alternating Current Transmission Upgrades, Order Instituting Proceeding, Issued and Effective November 30, 2012.

⁴ Case 12-T-0502, Proceeding on Motion of the Commission to Examine Alternating Current Transmission Upgrades, Order Establishing Procedure for Joint Review Under Article VII of the Public Service Law and Approving Rule Changes, Issued and Effective April 22, 2013.

⁵ *Id.*

Part A submissions that met the criteria for consideration were made by four developers and assigned individual case numbers.⁶

On October 25, 2013, the Commission established a new, global comparative proceeding under Case number 13-E-0488 entitled “In the Matter of Alternating Current Transmission Upgrades – Comparative Proceeding” (the “Comparative Proceeding”, “this Proceeding”). In February, 2014, in response to a statement by Governor Cuomo in his State of the State address stating a preference for major transmission facilities to be located within existing rights-of way, the Commission issued an Order to modify the process in this Comparative Proceeding to allow for consideration of alternative proposals in keeping with this policy (the “February Order”).

After issuance of a straw proposal by Department of Public Service Staff (“Staff”) recommending a procedure for considering such alternative proposals⁷, and in response to public comment regarding the lack of any demonstration that new transmission projects are in fact necessary, the Commission issued an Order on December 16, 2014 (the “December Order”), which set forth new requirements for the submission of revised Part A applications by the

⁶ Case 13-T-0454 – Application of North America Transmission Corporation and North America Transmission, LLC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article VII of the Public Service Law for an Alternating Current Transmission Upgrade Project Consisting of an Edic to Fraser 345 kV Transmission Line and a New Scotland to Leeds to Pleasant Valley 345 kV Line; Case 13-T-0455 – Part A Application of NextEra Transmission New York, Inc. for a Certificate of Environmental Compatibility and Public Need Pursuant to Article VII of the Public Service Law for the Marcy to Pleasant Valley Project; Case 13-Tp0456 – The Part A Application of NextEra Transmission New York, Inc. for a Certificate of Environmental Compatibility and Public Need Pursuant to Article VII of the Public Service Law for the Oakdale to Fraser Project; Case 13-M-1457 – Application of New York Transmission Owners Pursuant to Article VII for Authority to Construct and Operate Electric Transmission Facilities in Multiple Counties in New York State; Case 13-T-0461 – Application of Boundless Energy NE, LLC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article VII for Leeds Path West Project.

⁷ See Cases 12-T-0502; 13-E-0488; 13-T-0454; 13-T-0455; 13-T-0456; 13-T-1457; 13-T-0461, Notice Seeking Comment on Advisory Staff Recommendations, Issued August 13, 2014; Cases 12-T-0502; 13-E-0488; 13-T-0454; 13-T-0455; 13-T-0456; 13-T-1457; 13-T-0461, Advisory Staff Recommendations, Issued August 13, 2014 (“Straw Proposal”).

applicants.⁸ The applicants submitted revised proposals, with new alternatives, in three parts on January 7 and 20, and March 2, 2015.

The December Order also directed Department of Service Trial Staff (“Staff”) to address the question of need for the new AC transmission projects, as well as the application of six evaluation criteria to the proposals. The results of the comparative evaluation and need analysis would be submitted by Staff in the form of a report and motion, upon which all parties would have a chance to comment (the “Staff Report” and “Motion”, respectively). The Commission also scheduled a Technical Conference to be held in mid-June, 2015, open to the parties, “so that there can be a full airing and discussion among the stakeholders of the basis of the need for transmission facilities and the viability of potential alternatives.”⁹

On March 9, 2015, Scenic Hudson, on behalf of numerous HVSEC members, was awarded a total of \$270,010.00 of intervenor funding for five expert consultants as follows:

- London Economics International, LLC (“LEI”) - \$85,000.00
- Dr. Gidon Eshel - \$42,000.00
- Dr. Richard Smardon - \$9,010.00
- Asbestos and Environmental Consulting Group, LLC (“AECC”) - \$99,000.00
- R.P. Hubbell & Company, Inc. - \$35,000.00¹⁰

With such funding, HVSEC was able to submit into the record of proceedings an expert report on the potential environmental impacts of the proposed transmission by AECC; an assessment of the visual impacts by Dr. Smardon; an analysis of the lack of need for the project to meet projected downstate peak energy demand by Dr. Eshel; and an Outlook for the New

⁸ December Order at Appendix A.

⁹ December Order p. 3.

¹⁰ Case 13-E-0488 et al – In the Matter of Alternating Current Transmission Upgrades – Comparative Proceeding, Ruling on February 2015 Intervenor Funding Applications, issued March 9, 2015.

York Wholesale Power Market and Analysis of the Drivers of Transmission Congestion within the New York Markets prepared by LEI.¹¹

Pursuant to extensions to a schedule originally set forth in the December Order, comments on the revised Part A applications were submitted on April 22, 2015 and replies on May 6, 2015.¹² On May 18, Staff requested an extension of time to submit the expected Report and Motion and to push back the technical conference from expected dates in June.¹³ A ruling was issued on May 20, setting a deadline of July 6 for the Staff Report and Motion, scheduling the technical conference of July 20 and 21, and setting comment and reply deadlines on the Staff Report and Motion of August 21 and September 4, respectively.¹⁴ On the same date, a Notice of the Technical conference set for July 20 and 21 was issued.¹⁵

On July 6, Staff Filed an Interim Report, addressing only the environmental impacts and beneficial electric system impacts on the CE and UPNY/SENY interfaces.¹⁶ The report was only preliminary because a recent announcement of financing for the proposed CPV Valley power plant in Orange County required additional study.¹⁷ On July 6, HVSEC also filed an Interim Environmental Report by AECC and the Landscape Analysis by Dr. Smardon. Staff and HVSEC experts made presentations and had discussion with the parties at the July 20 and 21 technical conference.

¹¹ The funding award for R.P. Hubbell and Company, which was to be for a property value assessment, was not used. A portion of this funding was used for pay for additional work by LEI in responding to an Information Request by the NYTOs. See Case 13-E-0488 et al, Letter Ruling Re: Scenic Hudson's Third Funding Award, October 22, 2015.

¹² See December Order.

¹³ Cases 12-T-0502 et al, May 18, 2015 Letter Request from Staff to Secretary Burgess for Extension of Time.

¹⁴ Cases 12-T-0502 et al., May 18, 2015 Letter Ruling.

¹⁵ Cases 12-T-0502 et al., Notice of Technical Conference, Issued May 20, 2015.

¹⁶ Cases 12-T-0502 et al., Comparative Evaluation of Alternating Current Transmission Upgrade Alternatives, New York State Department of Public Service Trial Staff Interim Report, July 6, 2015.

¹⁷ See id.

On August 4, 2015, Staff requested changes to the existing deadlines for the Staff Report and Motion and comments in light of the report's interim status and lack of any motion, and the fact that comments should be made on the final Staff Report and Motion.¹⁸ Staff's request was granted on August 19, and on September 15, a Notice of Technical Conference was issued setting dates of October 8 and 9, 2015.¹⁹

On September 22, Staff submitted the Final Report ("Staff Report") and Motion.²⁰ Staff's Motion recommended that the Commission find a need for a specific transmission project portfolio – the New York Transmission Owners' ("NYTOs") P11 – based on Public Policy Requirements ("PPR"). The recommended project portfolio includes: construction of a new 345 kV line from Edic or Marcy to New Scotland on existing right of way; construction of two new 345 kV lines or two new 230 kV lines from Princeton to Rotterdam on existing Edic to Rotterdam right-of-way; construction of a new double circuit 345 kV/115 kV line from Knickerbocker to Churchtown on existing Greenbush to Pleasant Valley right-of-way; construction of a new double circuit 345 kV/115kV line or triple circuit 345 kV/115 kV/115 kV line from Churchtown to Pleasant Valley on existing Greenbush to Pleasant Valley right-of way; upgrades to the Rock Tavern Substation; construction of a new double circuit 138 kV line from Shoemaker to Sugarloaf on existing Shoemaker to Sugarloaf right-of-way; and associated decommissioning of lines and switching or substation work.²¹

HVSEC also submitted the expert reports prepared by LEI and Dr. Eshel. On September 23, the Commission issued a Notice Extending Deadlines for comments and reply comments on

¹⁸ Cases 12-T-0502 et al., August 4, 2015 Letter Request from Staff to Secretary Burgess for Extension of Time.

¹⁹ Cases 12-T-0502 et al., August 19, 2015 Letter Ruling; Notice of Technical Conference, Issued September 15, 2015.

²⁰ Cases 12-T-0502 et al., Comparative Evaluation of Alternating Current Transmission Upgrade Alternatives, New York State Department of Public Service Trial Staff Final Report, September 22, 2015; Motion of DPS Trial Staff for Commission to Declare a Public Policy Need & Take Further Action Regarding Alternating Current Transmission Proposals, September 22, 2015.

the Staff Report and Motion to November 6, and November 23, 2015, respectively.²² In addition, a notice pursuant to the State Administrative Procedure Act seeking comments on “Proposed Public Policy Transmission Needs/Public Policy Requirements, As Defined under the NYISO Tariff, was issued on October 7, 2015.²³ Staff and HVSEC experts made presentations and had discussion with the parties at the October 8 and 9 technical conference.

COMMENTS

I. Procedural Objections

A. The Administrative Record is Incomplete Regarding Issues Raised For the First Time in Staff’s Final Report

In the September 22, 2015 Staff Report, Staff for the first time declared that “the Commission should find and determine that there is a need for the identified portfolio of projects driven by Public Policy Requirements...”²⁴ Staff had never before relied on Public Policy Requirements to justify the need for new transmission lines. Staff selected one of the NYTO’s proposals (Project P11) on the basis that this project would best meet Public Policy Requirements.

Additionally, Staff for the first time, evaluated non-transmission alternatives including the Commission’s REV initiative. While their analysis of the REV can be described as anemic at best, Staff nonetheless concluded that, despite identifying numerous benefits arising from the REV, a transmission solution is the preferred one.

Also for the first time in this proceeding, Staff’s Report included a new power flow analysis of the impact of the CPV Valley generating facility, which was a substantial factor in

²¹ Id.

²² Cases 12-T-0502 et al., Notice Extending Deadlines, Issued September 23, 2015.

²³ Oct. 7, 2015 N.Y. State Reg. PSC 40-15-00011-P, Proposed Public Policy Transmission Needs/Public Policy Requirements, As Defined Under the NYISO Tariff.

²⁴ September 22, 2015 Final Report at x.

Staff's selection of the P11 corridor as the preferred transmission project. Similarly, Staff declared, again for the first time, that as part of the build out of the Knickerbocker-Pleasant Valley section of the P11 corridor, the Rock Tavern Substation and the Shoemaker to Sugarloaf line both needed to be upgraded.

However, by presenting the above issues for the first time in its Final Report, Staff places intervenor parties, such as the HVSEC, at a great disadvantage. Staff has effectively deprived HVSEC and other intervenor parties an opportunity to meaningfully contribute to the record by obtaining intervenor funds to hire experts to evaluate and critique these new positions.

Subsequent to the December 16, 2014 Order of the Commission, Scenic Hudson, on behalf of HVSEC, applied for and obtained intervenor funding to hire experts to evaluate issues such as need (demand), congestion costs, as well environmental and visual impacts of the various transmission proposals.

Significantly, at the time it applied for intervenor funds in January 2015, HVSEC and other intervenor parties did not believe it was necessary to and did not seek intervenor funding to examine the details and implications of the numerous Public Policy Requirement "benefits" raised in Staff's Report. Indeed, in its December 16, 2014 Order, the Commission expressly declared that the Public Policy Requirement justification *was not part of the present proceeding* but, instead, was part of a completely separate one, stating: "The Commission also notes that the question of whether any projects should be evaluated under the NYISO's tariff is presently before the Commission in Case 14-E-0454, where the Commission will consider whether Central East and UPNY/SENY congestion relief should be designated as a Public Policy Requirement driving a need for transmission within the meaning of the NYISO's public policy planning

process.”²⁵ ²⁶ As a further indication that the Commission did not intend for Staff to rely upon Public Policy Requirements to justify its conclusion, the Order also noted that at “the time of considering the [Staff] report and motion, the Commission would also consider whether it should request one or more of the applicants to propose their projects to the NYISO as potential transmission solutions under the NYISO’s public policy planning process.”²⁷ Similarly, there was no indication in the Order that comparative evaluation of the REV with the transmission solutions would be part of Staff’s analysis.

In short, there was no expectation by HVSEC (or any other party, for that matter) at the time intervenor funding applications were submitted that numerous PPR “benefits” would be used by Staff as the primary justification for the transmission solution. Similarly, HSVEC did not believe that intervenor funds would be needed to evaluate the REV’s benefits in relation to the transmission proposals. Nor did HSVEC have any inkling that impacts of CPV Valley and upgrades to Rock Tavern substation and the Shoemaker to Sugarloaf line would be a fundamental part of Staff’s conclusions. Thus, no intervenor funding was sought by HVSEC to evaluate, critique, or refute these issues.

As a direct result, HVSEC must now try to evaluate – without the benefit of experts – the new and vast array of PPR “benefits” that simply were not anticipated to be a part of this proceeding prior to the release of the Final Report. Thus, for example, without any specific

²⁵ Commission’s December 16, 2014 Order, p. 32

²⁶ We note that in its December 2014 Order, the Commission states that its determination in Case 14-E-0454 on the issue of whether Public Policy Requirements drives the need for a transmission solution “should be informed by the analyses being conducted in the comparative evaluation phase of the AC Transmission proceedings, and conversely analyses made in the AC Transmission proceedings should inform the decision in the Public Policy Requirements process.” *Id.* However, nowhere in the Commission’s Order does the Commission direct or authorize Staff to use Public Policy Requirements to justify its conclusion that there is a need for the selected transmission project. Further, numerous times throughout the December Order, the Commission reiterates that the goal of this Proceeding is *congestion relief*, and that the Public Policy Requirement that would be considered in Case 14-E-0454 was solely congestion relief - there is never any mention of the other 16 public policy “benefits” proffered by Trial Staff as justification for the transmission projects.

technical expertise, HVSEC must now address PPRs such as reduced costs of meeting renewable resource standards, enhanced reliability, enhanced incentives to develop new efficient upstate generation, reduced environmental emissions and improved health impacts, avoidance of refurbishment costs of aging transmission, promotion of job growth, increased tax receipts, enhanced resiliency and storm hardening, enhanced planning and operational flexibility along with other potential benefits including synergies with other future transmission projects, relief of gas transportation constraints, among others.

Likewise, HVSEC must now attempt to counter Staff's dismissal of the REV alternative without the benefit of experts who can provide an in-depth, detailed analysis of the REV alternative and a technical review of Staff's assessment of the cost-benefit and other aspects of the REV. While HVSEC can argue why we believe Staff erred in its evaluation of the REV (see Section III, *infra*), HVSEC lacks the specific technical expertise needed to do the kind of evaluation which will create a complete record on this issue. HVSEC also needs to engage an expert to confirm or refute Staff's power flow analysis of the new CPV Valley generation station and how and whether it should have impacted Staff's evaluation of the 22 proposals and its selection of the P11 corridor. Finally, there has been no opportunity for HVSEC's environmental and visual experts to examine the potential negative environmental impacts of the newly required Rock Tavern Substation upgrade and the construction of a new double circuit 138 kV line in the Shoemaker to Sugarloaf right-of-way.

As a result of the lack of expert analysis of these new issues, the record in this proceeding will be substantially incomplete. Without the opportunity for experts to carefully examine and report on these issues there will not be a full, fair and complete record before the Commission before it decides on Staff's motion.

²⁷ Commission's December 16, 2014 Order, p. 8.

In this light, it is critical that HVSEC and other intervenor parties be given a full opportunity to apply for and be awarded sufficient intervenor funding to hire qualified and appropriate experts to examine each of the newly introduced Public Policy Requirements, the REV and the other issues noted above. Simultaneous with the submission of these comments, HVSEC is submitting a request to ALJ Phillips seeking leave to apply for additional intervenor funds to engage experts to conduct these evaluations and create a full and fair record.

Accordingly, HVSEC hereby respectfully requests that the Commission withhold any decision on Staff's motion, until HVSEC (through Scenic Hudson) has an opportunity to seek intervenor funding, engage qualified experts and file expert reports on these critical issues.

B. Staff's Motion Is Inconsistent with the Public Policy Requirements Process

When the Commission commenced this Comparative Proceeding in November, 2012, the stated driving purpose of soliciting new AC transmission proposals was to address historic congestion in the Central East and UPNY/SENY interfaces, and the resulting higher energy costs and reliability concerns.²⁸ Numerous times throughout this Proceeding, the Commission has reiterated that the purpose of the transmission projects is to relieve congestion over these transmission interfaces, and that congestion relief is the metric by which "need" will be determined. In the December Order alone, the Commission stated that, "The Commission initiated these proceedings to consider whether to address the persistent transmission congestion that exists at the Central East and Upstate New York/Southeast New York (UPNY/SENY) electrical interfaces,"²⁹ and that the goal of this Proceeding was to "obtain congestion relief at the least cost to ratepayers."³⁰ However, the Brattle Report explicitly admits that congestion

²⁸ Case 12-T-0502 - Proceeding on Motion to Examine Alternating Current Transmission Upgrades, Order Instituting Proceeding (Issued and Effective Nov. 30, 2012) p. 1.

²⁹ December Order at 2.

³⁰ December Order at 6.

relief in the form of Production Cost Savings (“PCS”) alone will not justify any of the proposed transmission projects on a benefit-cost basis “due to its limited scope of benefits considered.”³¹ The only way for any of the transmission projects to achieve a benefit-cost ratio greater than one is by considering a wide range of “benefits”, well beyond congestion relief.³²

Now, as discussed in Section II, *infra*, congestion costs are predicted to decrease and reliability is no longer a concern.³³ Nor is new transmission needed to address peak demand.³⁴ Thus, new transmission capacity is not necessary for those reasons.

Instead, in an apparent effort to raise the benefit-cost ratios for at least some of the proposed transmission projects to greater than 1.0, the Staff Report for the first time attempts to justify the construction of new transmission under a recently-established planning process that considers transmission needs driven by “Public Policy Requirements.” In its December 2014 Order in the Comparative Proceeding, the Commission introduced, for the first time, a parallel but separate process under the Public Policy Transmission Planning Process in the proposed schedule for decision making in the comparative process.³⁵ As discussed above, Staff’s Motion now seeks to completely convert the Comparative Proceeding into a Public Policy Requirements proceeding and urges the Commission to grant an order as follows:

“The Commission should find and determine that there is a transmission need driven by Public Policy Requirements for the portfolio of [transmission] projects identified [in the Staff Motion.]³⁶

³¹ Brattle Report at 2.

³² See Brattle Report at 13: Bar graph shows that production cost savings alone, or even production cost savings plus capacity resource cost savings, cannot come close to justifying any of the transmission projects on a benefit-cost basis.

³³ See Section II, *infra* at 20-21.

³⁴ See *Id.*

³⁵ December Order at 32.

³⁶ Case 12-T-0502 *et al*, Motion of DPS Trial Staff for Commission to Declare a Public Policy Need & Take Further Action Regarding Current Transmission Proposals, September 22, 2015.

The October 7, 2015 SAPA Notice describes the proposed action before the Commission as “whether to adopt, modify or reject in whole or in part, certain proposals to relieve congestion between Upstate and Downstate New York to be transmission needs driven by Public Policy Requirements.”³⁷ The SAPA Notice further states that the Commission is considering “proposed Public Policy Transmission Needs/Public Policy Requirements, as defined in the [NYISO] Open Access Transmission Tariff [(“OATT”)] (Attachment Y)” which were submitted by the NYISO on October 3, 2014, and included “proposals that the persistent transmission congestion that exists at the Central East and [UPNY/SENY] electrical interfaces being considered in the Commission’s AC Transmission proceedings ... be designated a transmission need driven by Public Policy Requirements.”³⁸

The action suggested in Staff’s Motion does not meet the requirements of the NYISO OATT, the Commission’s own public policy planning process, or the intent of the underlying Federal Energy Regulatory Commission (FERC) Order that requires the consideration of transmission needs driven by Public Policy Requirements. Moreover, overriding and relevant New York State public policies – Reforming the Energy Vision (“REV”) and the promotion of offshore wind development - *do not* drive a need for new transmission over the CE and UPNY/SENY interface, so new transmission is not needed under the PPR process even if it were applicable to this proceeding.

i. FERC Order 1000

In 2011, FERC Order No. 1000 (“FERC Order 1000” or “Order 1000”) introduced a new transmission planning requirement for public utility transmission providers, in addition to

³⁷ New York State Register Volume VVVVII, Issue 40, October 7, 2015, I.D. No. PSC-40-15-00011-P.

³⁸ Id.

existing economic and reliability considerations.³⁹ The reforms required by FERC Order 1000 “will support the development of those transmission facilities identified by each transmission planning region as necessary to satisfy reliability standards, reduce congestion, *and allow for consideration of transmission needs driven by public policy requirements established by state or federal laws or regulations* (Public Policy Requirements).”⁴⁰ By “state or federal regulations,” FERC meant “enacted statutes (i.e. passed by the legislature and signed by the executive) and regulations promulgated by a relevant jurisdiction, whether within a state or at the federal level.”⁴¹

Order 1000 “requires that each public utility transmission provider amend its OATT [Open Access Transmission Tariff] to describe procedures that provide for the consideration of transmission needs driven by public policy requirements in the local and regional transmission planning process.”⁴² FERC Order 1000 also required “comparable consideration” during the planning process of transmission and non-transmission alternatives for meeting any identified needs.⁴³

PPRs are “facts that may affect the need for transmission services and these facts must be considered for that reason.”⁴⁴ FERC specifically noted that under Order 1000, public utility transmission providers were not to become policymakers, so only transmission needs driven by

³⁹ Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, Order No. 1000, 76 Fed. Reg. 49842 (August 11, 2011), 136 FERC Stats. & Regs. ¶ 61,051 (2011)(“FERC Order 1000”); *see also* Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, Order No. 1000-A, 139 FERC Stats. & Regs. ¶ 61,132 (2012)(“FERC Order 100-A”).

⁴⁰ FERC Order 1000 ¶2 (emphasis added.)

⁴¹ FERC Order 100 ¶ 2.

⁴² FERC Order 1000 p. 1.

⁴³ FERC Order 1000 ¶ 155.

⁴⁴ FERC Order 1000-A ¶ 2015.

Public Policy Requirements, and not the Public Policy Requirements themselves, are to be considered.⁴⁵

With regard to the role of state regulators in the process, FERC leaves it to them and the public utility transmission providers to determine their appropriate role, but notes that regulators may have unique insights as to how transmission needs driven by state-level Public Policy Requirements may be satisfied.⁴⁶ In other words, “Public Policy Requirements” as defined by FERC, are pre-existing state or federal statutes or regulations that are relevant to transmission, and thus may drive the need for either new transmission *or an alternative solution* to meet the goals of the public policy. While state regulators may be invaluable in the consideration of transmission needs, neither the regulators nor the public utility transmission providers are to develop *new* public policies in the process.

ii. The NYISO OATT

In accordance with Order 1000, NYISO adopted a two-year Public Policy Transmission Planning Process (“PPTPP”) in OATT Attachment Y, Section 31.4.⁴⁷ According to Section 31.4 of Attachment Y to the NYISO OATT, the Public Policy Transmission Planning Process consists of three main steps:

- (1) Identification of Public Policy Transmission Needs that should be evaluated by NYISO;
- (2) Requests for specific proposed solutions to address those Public Policy Transmission Needs; and
- (3) Selection of the most efficient or cost-effective transmission solution, if any, to satisfy the Public Policy Transmission Need to be eligible for cost allocation.

⁴⁵ FERC Order 1000-A ¶ 317.

⁴⁶ FERC Order 1000-A ¶ 338.

⁴⁷ NYISO OATT Attachment Y, Section 31.4.1. This two-year planning process is in addition to NYISO’s two-year planning cycles for congestion (Congestion and Assessment and Resource Integration Study, or “CARIS”) and reliability (Reliability Needs Analysis, or “RNA”) that together with a Local Transmission Planning Process make up the Comprehensive System Planning Process.

Step 1 is carried out by the PSC, while NYISO conducts steps 2 and 3.⁴⁸

The NYISO OATT defines a “Public Policy Requirement” as “a federal or New York State statute or regulation, including a NYPSC order adopting a rule or regulation subject to and in accordance with the State Administrative Procedure Act, any successor statute, or any duly enacted law or regulation passed by a local governmental entity in New York State, that may relate to transmission planning on the [Bulk Power Transmission Facilities].”⁴⁹ The OATT defines a “Public Policy Transmission Need” as “a transmission need identified by the NYPSC/NYDPS that is driven by a Public Policy Requirement pursuant to Section 31.4.2.1 [Identification and Determination of Transmission Needs Driven by Public Policy Requirements.]”⁵⁰ Section 31.4 and its accompanying definitions became effective January 1, 2014, over a year after the AC Comparative Proceeding commenced.⁵¹

The NYISO OATT required the Commission to develop procedures to govern the process by which it will review proposed transmission needs driven by Public Policy Requirements.⁵² The Commission’s decision-making must be an “open and transparent” process that offers a “meaningful opportunity” for interested parties to provide input on such decision.⁵³ On March 28, 2014, well after the commencement of this Comparative Proceeding, the Commission

⁴⁸ NYISO OATT Attachment Y, Section 31.4.1.

⁴⁹ NYISO OATT Attachment Y, Section 31.1. While FERC Order 1000 does not preclude any public utility transmission provider from considering needs driven by public policy objectives not specifically required by state or federal laws, NYISO chose to define the term more narrowly. *See* FERC Order 1000-A ¶ 303.

⁵⁰ NYISO OATT Attachment Y, Section 31.1.

⁵¹ NYISO OATT Attachment Y, Section 31.4.1. The current version of Section 31.4 is subject to further revision per Order on Rehearing and Compliance, Docket Nos. ER13-102-0005 and ER13-1-2-006, 151 FERC ¶ 61,040, issued April 16, 2015. NYISO made a compliance filing on June 29, 2015 with additional revisions to Section 31.4. On August 28, 2015, FERC issued a deficiency letter requiring response to several questions within 60 days. On October 27, 2015, NYISO submitted a deficiency filing responding to the FERC questions and requesting approval of its June 29, 2015 filing as submitted, to be effective December 26, 2015. *See* FERC Docket Nos. ER15-2059-0000 and -0001.

⁵² NYISO OATT Attachment Y, § 31.4.2.1.

⁵³ NYISO OATT Attachment Y, § 31.4.2.1.

instituted a proceeding to develop its procedures.⁵⁴ Rather than identifying transmission needs, however, the Commission described its responsibility as identifying “Public Policy Requirements that may drive the need for transmission facilities” because the NYISO evaluation process “involves an evaluation of other resources besides transmission, such as generation and demand response.”⁵⁵ While the Commission is correct that alternative solutions to an identified transmission need must be evaluated by NYISO, pursuant to Order 1000 and the definition of “Public Policy Requirement,” the PPTPP is not an opportunity for the Commission to make up new policy; rather, it is an opportunity to respond to existing federal and state policy and determine whether new transmission or an alternative solution is the best, most efficient and cost effective way to achieve the goals of that public policy.

The full PPTPP, as intended by NYISO, is as follows:⁵⁶

- 1) NYISO provides a 60-day period to allow any stakeholder or interested party to submit, or for NYISO on its own initiative to identify, a proposed transmission need that it believes is being driven by a Public Policy Requirement and for which transmission solutions should be requested and evaluated. Each submittal must identify the Public Policy Requirement believed to be driving the need for transmission.
- 2) NYISO posts all submittals on its website and submits them to PSC.

⁵⁴ Case 14-E-0068 – Proceeding on Motion of the Commission to Establish Policies and Procedures Regarding Transmission Planning for Public Policy Purposes.

⁵⁵ Case 14-E-0068 – Proceeding on Motion of the Commission to Establish Policies and Procedures Regarding Transmission Planning for Public Policy Purposes, Policy Statement on Transmission Planning for Public Policy Purposes (Issued and Effective August 15, 2014), p. 7.

⁵⁶ See NYISO OATT Attachment Y § 31.4; Case 14-E-0068 – Proceeding on Motion of the Commission to Establish Policies and Procedures Regarding Transmission Planning for Public Policy Purposes, Policy Statement on Transmission Planning for Public Policy Purposes (Issued and Effective August 15, 2014); NYISO Draft Public Policy Transmission Planning Process Manual, July 2015; NYISO Proposed Tariff Revisions Regarding Public Policy Transmission Planning Process, FERC Docket Nos. ER15-2059-0000 and -0001.

- 3) PSC posts the proposals on its website and issues a SAPA notice within 45 days inviting comments on the proposals to identify the transmission needs, if any, for which specific transmission and non-transmission solutions should be requested and evaluated. PSC may, on its own, identify a transmission need driven by a Public Policy Requirement.
- 4) PSC issues a written order identifying the relevant Public Policy Requirements driving transmission needs, if any, and why it has identified the Public Policy Transmission Needs for which transmission and non-transmission solutions for will be requested by NYISO.
- 5) NYISO posts the PSC order on its website, and requests specific proposed transmission projects and non-transmission projects as solutions to the Public Policy Transmission Need. There is a 60-day period for submission of solutions, whether transmission or non-transmission, to address the Public Policy Transmission Needs with required information and application and study fees.
- 6) NYISO studies the viability and sufficiency of each proposed solution – transmission, generation, demand response, or a combination of these resource types - using the most recent RNA base case. Solutions are evaluated based on (1) developer qualification; (2) technical practicability; (3) feasibility in terms of right of way acquisition and facilities; and (4) time frame for completion. NYISO will also confirm whether the proposed solution satisfies the Public Policy Transmission Need.
- 7) NYISO reports the results of its viability and sufficiency analysis of transmission and non-transmission solutions to stakeholders, interested parties, and the PSC for comment.

- 8) PSC reviews the NYISO evaluation and issues a SAPA notice and then an order explaining whether to proceed with evaluation of transmission solutions to a Public Policy Transmission Need or whether non-transmission solutions should be pursued. If it concludes the latter, PSC will indicate that there is no longer a transmission need driven by a Public Policy Requirements, and NYISO will not proceed with further evaluation.⁵⁷
- 9) If PSC determines that transmission solutions should proceed, only these projects are eligible for cost allocation under the NYIOS tariffs. NYISO conducts an efficiency/cost effectiveness evaluation to identify the more efficient or cost effective solution to satisfy the Public Policy Transmission Need.⁵⁸ Metrics applied by NYISO in this analysis include: capital costs; cost per MW ratio; expandability; operability; performance; property rights needed; and potential delay issues. NYISO then issues a draft Public Policy Transmission Planning Report, selecting, for cost allocation purposes, the more efficient or cost effective transmission solution proposed in the public policy planning cycle, if any, to satisfy a Public Policy Transmission Need.
- 10) The NYISO board then evaluates the draft Public Policy Transmission Planning Report and may approve it as submitted or propose modifications, including a determination not to select a transmission project to satisfy the Public Policy Transmission Need.
- 11) If selected, NYISO informs the developer of a transmission project that it should commence the Article VII approval process to site, construct and operate the project.

⁵⁷ This step is not in the OATT Attachment Y effective January 1, 2014. It is included in the NYISO filing before FERC currently pending approval in FERC Docket Nos. ER15-2059-0000 and -0001.

⁵⁸ NYISO must also study whether a regional transmission solution would be more efficient/cost effective. *See* NYISO OATT Attachment Y § 31.4.7.

iii. Staff's Motion Violates the Public Policy Requirements Process

The Commission should not adopt Staff's motion, and should determine that there is not a Public Policy Transmission Need. It should not adopt the proposed transmission portfolio as a transmission need driven by Public Policy Requirements for several reasons.

Staff's motion urges an action that does not comply with the PPTPP as outlined above. Neither Staff's motion, nor the SAPA notice, reference a relevant "Public Policy Requirement" as defined in the NYISO OATT which drives the alleged transmission needs. Instead, according to Staff, the identified portfolio of projects will have several beneficial impacts which justify the requested Commission determination finding a transmission need.⁵⁹ Rather than citing a relevant Public Policy Requirement that may result in an identified transmission need, Staff's motion and the SAPA Notice suggest that persistent congestion on the UPNY/SENY interface can be designated a Public Policy Requirement by the Commission, and further, that the Commission can already deem the selected transmission project portfolio as needed to address it. This process clearly does not meet the requirements of the NYISO OATT, the Commission's own public policy planning process, or the intent of the underlying Federal Energy Regulatory Commission (FERC) Order that requires the consideration of transmission needs driven by Public Policy Requirements.

As discussed above, the Commission's role is to identify a potential transmission need driven by existing, relevant Public Policy Requirements as set forth in federal or State statutes or regulations. What Staff urges, however, is that the Commission establish a *new* Public Policy Requirement, which was specifically rejected by FERC in its discussion of new public policy transmission planning required by Order 1000, when it warned that only transmission needs

⁵⁹ Id.

driven by Public Policy Requirements, and not the Public Policy Requirements themselves, are to be considered.

Moreover, Staff's Motion and the SAPA Notice suggest that potential transmission benefits, and specifically the relief of persistent congestion, may be a Public Policy Requirement driving the need for transmission. However, this does not comply with the definition of a Public Policy Requirements under FERC 1000 and the NYISO OATT, which defines it as a federal or State statute or regulation.

In addition, the PPTPP process requires solicitation of specific transmission proposals for evaluation by NYISO of viability and sufficiency *after* the Commission identifies a Public Policy Transmission need. Staff's motion suggests that the Commission may preemptively determine that the proposed transmission project portfolio is the specific one that is needed. The Commission may not make this determination at this stage of the PPTPP process. Under the PPTPP process it is NYISO that is charged with evaluating whether a project is viable and sufficient, if any, and if transmission is chosen as the solution, which is the most efficient or cost effective transmission project.

Finally, the October 7, 2015 SAPA Notice does not comply with the Commission's own procedures, which require issuance of the notice within 45 days of the posting of public policy transmission needs on its website. The SAPA Notice indicates that the posting occurred on October 3, 2014, over a year before the Notice.

C. Trial Staff's Inclusion of Public Policy Requirements Is Contrary to Originally Intended Process for this Proceeding.

As Staff states in its September 22, 2015 Motion, adoption by the Commission of its position on need for the projects driven by PPR, "will trigger a solicitation and review of

transmission solutions by the NYISO....”⁶⁰ Staff further recommends that when evaluating applications it receives in response to its solicitation, NYISO should consider the following factors: cost, technology to be used, right-of-way acquisition costs by non-NYTO applicants, reliability and operational considerations and differences in power flows.⁶¹

As discussed in Section I.B.ii, *infra*, Staff’s recommendations regarding the Public Policy Requirement process are not consistent with NYISO’s OATT and therefore the Commission should not adopt them. However, if the Commission issues an order which adopts Staff’s PPR recommendation, the process will then shift to the NYISO. Upon such referral from the Commission, NYISO will issue a Request for Proposals (“RFP”) with respect to the selected P11 transmission corridor and conduct needed reviews and analysis of proposals received using the factors recommended by Staff. As clarified by Staff at the October 9, 2015 Technical Conference, by issuing this RFP, NYISO would be allowing **any** developer, not just the four developers presently in this comparative proceeding, to submit a response to the RFP, thus opening up this process to developers who have not been heretofore involved in this Proceeding.

Staff’s recommendations, if adopted by the Commission, create an entirely new process not contemplated when this comparative proceeding was originally commenced. Moreover, we believe such process will be fraught with confusion and delays. Indeed, NYISO’s Assistant General Counsel stated at the September 2015 Technical Conference that the NYISO solicitation and review process can take at least six months, likely more. Presumably, the NYISO’s selection would then be referred back to the Commission for review under PSL Article VII. Precisely when that will happen and when Part B will be commenced is an open question, but this certainly would not occur before the end of 2016. Such delays and uncertainty as to the exact process

⁶⁰ Trial Staff Motion, p. 3.

⁶¹ *Id.*

harms all parties to this proceeding. Thus, the Commission should reject Staff's proposal that there is a need for the projects driven by Public Policy Requirements.

II. New High-Voltage AC Transmission is Not Needed

The New York Independent System Operator ("NYISO") must abide by a Federal Energy Regulatory Commission ("FERC") -approved Open Access Transmission Tariff ("OATT").

Under the OATT there are three ways to justify a transmission project:

1. Reliability, i.e., if new transmission is needed to address resource or transmission system adequacy;
2. Economics, i.e., if new transmission is needed to address congestion on the New York bulk power system; or
3. Public Policy Requirements; i.e. if a relevant state or federal statute or regulation, or a PSC rulemaking order, drives the need for new transmission.⁶²

A. New Transmission is Not Needed to Address Reliability Concerns or Congestion, which were Cited as the Justifications for the Comparative Proceeding

Part of the rationale stated in the November 30, 2012 Order commencing Case 12-T-0502, Proceeding on Motion to Examine Alternating Current Transmission Upgrades ("2012 Order") was the perception that:

"Constraints on the State's electric transmission system can lead to significant congestion and contribute to higher energy costs and reliability concerns. Various studies, including those performed by the New York Independent System Operator ("NYISO") and the New York Transmission Owners ("NYTOs"), have identified the alternating current ("AC") electric transmission corridor that traverses the Mohawk Valley Region, the Capital Region, and the Lower Hudson Valley as a source of persistent congestion. The corridor includes facilities connected to Marcy, New Scotland, Leeds, and Pleasant Valley substations, and two major electrical interfaces (i.e., groups of circuits) that are often referred to as "Central East" and "UPNY/SENY."⁶³

The good news is that the New York energy markets are working.

⁶² See NYISO OATT Attachment Y.

In the Final Report on the 2014 Comprehensive Reliability Plan, dated July 21, 2015

(“CRP”), the NYISO found as follows:

“This 2014 CRP has determined that the New York bulk power system will meet all applicable reliability criteria over the 2015 through 2024 study period, and confirms that the initially identified Reliability Needs in the 2014 RNA are resolved. The NYISO has concluded that there are sufficient resources such that the New York Control Area (NYCA) will be in compliance with the resource adequacy criterion for the ten-year study period. With the inclusion of the TOs’ local transmission plan updates and the returning generation capacities, the previously-identified transmission security violations will be resolved from 2018 through 2024. Between 2015 through 2017, certain TOs plan to utilize local operating procedures, if necessary, to resolve potential transmission security violations.”⁶⁴

Earlier, NYISO had taken action to withdraw its prior request for the submission of solutions to address Reliability Needs formerly found in the 2014 Reliability Needs Assessment because the identified resource adequacy and transmission security needs would be fully mitigated.⁶⁵ So there is no reliability concern over the next ten years, and, therefore, there is no reliability justification for additional high-voltage transmission lines in the Hudson Valley.

Congestion has been coming down, except for the last two winters when New York found itself in the grip of a polar vortex that revealed constraints in the gas supply system.⁶⁶ It was this winter congestion that was not adequately identified in the Staff Report. While

⁶³ Case 12-T-0502, Proceeding on Motion to Examine Alternating Current Transmission Upgrades, Order Instituting Proceeding, Issued and Effective November 12, 2012, pp. 1 – 2 (emphasis added).

⁶⁴ NYISO 2014 Comprehensive Reliability Plan, Final Report, July 21, 2015, p. 1, available at: http://www.nyiso.com/public/webdocs/markets_operations/services/planning/Planning_Studies/Reliability_Planning_Studies/Reliability_Assessment_Documents/2014CRP_Final_20150721.pdf.

⁶⁵ November 14, 2014 Letter from NYISO to Developers, New York Transmission Owners, Market Participants, and Interested Parties, withdrawing October 1, 2014 request for submissions, available at: http://www.nyiso.com/public/webdocs/markets_operations/services/planning/Planning_Studies/Reliability_Planning_Studies/Reliability_Notices/NYISO%20Letter%20Withdrawing%20Solicitation%20of%20Solutions%20November%202014%202014.pdf.

⁶⁶ See Outlook for the New York wholesale power market and analysis of the drivers of transmission congestion within the New York markets, July 1, 2015, prepared by London Economics International, LLC, (“LEI Report”), Figure 3 and “Historical C/E and UPNY/SENY congestion by quarters”.

additional AC transfer capability would mitigate somewhat the winter problem, that is, at best, a weak and indirect solution.

As HVSEC expert London Economics International, LLC (“LEI”) has revealed, under three different gas supply scenarios, congestion will be an issue with little or no significant economic impact on downstate wholesale electricity prices. LEI prepared a forward-looking market study of the energy and capacity prices based on its current base-case outlook over the 2016-2034 horizon for the New York wholesale electricity market, based on three different natural gas pricing scenarios. LEI’s Report “Outlook for the New York wholesale power market and analysis of the drivers of transmission congestion within the New York markets” (“LEI Report”), submitted into the record of this proceeding concludes that “several factors will combine to significantly reduce congestion in the energy market between western and eastern NY over the next 20 years: (1) the decline in locational natural gas price difference between western and eastern NY; (2) gradual retirements of baseload generation in western NY together with the entry of new CCGT resources in eastern NY; and (3) NYISO’s flat energy demand forecast for the state over the next 10 years.⁶⁷ LEI predicts that annual congestion value on the C/E and UPNY/SENY interfaces, which drive the price separation between the western and eastern NY regions, will decline by between 70% and 85 % (depending on gas price outlook) by 2030 as compared with the 2016-2017 levels in LEI’s base case.⁶⁸

Even under the highest gas price scenario, LEI demonstrates that combined CE and UPNY/SENY congestion is below \$80 million per year for the majority of the time frame between 2016 and 2034⁶⁹ which is 1/3 of the \$240 million revenue requirement of the Staff-

⁶⁷ LEI Report p. 7.

⁶⁸ LEI Report p. 43.

⁶⁹ LEI Report Figure 28, p. 44.

recommended P11 Project, which is estimated to cost nearly \$1.2 billion.⁷⁰ This is the equivalent of paying \$1.00 to solve a \$0.33 problem under the worst-case gas supply scenario. Better to live with the “problem” that will continue to send price signals to induce more energy efficiency and conservation efforts.⁷¹

The congestion analysis in the Benefit Cost Analysis of Proposed New York AC Transmission Upgrades prepared by The Brattle Group (“Brattle”) in support of the Staff Report and Motion (the “Brattle Report”) merely relies on forward prices from March 2015, and mistakenly assumes no increase in the gas supply network, leading to predicted congestion rents in 2019 and 2024 along the Central East and New Scotland-Pleasant Valley constrained paths of over \$300 million.⁷² This is twice as high as the historical average.⁷³ With all of the gas coming from the Marcellus play and other gas rich areas of the country is it reasonable to assume that the gas supply network will not expand?

However, even the Brattle Report concludes that there will be lower congestion today and going forward relative to historical congestion for several reasons: (1) downstate’s efficient CCs capacity grew from about 1,000MW 10 years ago to nearly 4,000 MW today, and SENY no longer relies as heavily on old, inefficient steam turbines and combustion turbines, and SENY is not short on capacity; and (2) upstate no longer has as much baseload coal generation.⁷⁴

In addition, both the 2013 Congestion Assessment and Resource Integration Study (“2013 CARIS”) and draft 2015 CARIS (“DRAFT 2015 CARIS”)⁷⁵ Reports forecast declining

⁷⁰ For illustrative purposes, we calculate the annual revenue requirement including a return on and of (depreciation) the capital investment plus taxes and O&M as 20% of the capital investment.

⁷¹ See Figure 4 of the LEI Report.

⁷² Brattle Report p. 60.

⁷³ Id.

⁷⁴ Brattle Report p. 60.

⁷⁵ DRAFT 2015 Congestion Assessment and Resource Integration Study, November XX, 2015, available at: http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_espwg/meeting_materials/2015-09-24/2015_CARIS_Report_DRAFT_CLEAN_091815.pdf

congestion. The 2013 CARIS found that nearly all of the estimated benefit-cost ratios for possible solutions to congestion in New York fall below one, meaning that, in the words of the U.S. Department of Energy, “it would cost less for New Yorkers to bear the continuing congestion costs than to spend the money to mitigate it through the transmission, generation and demand response solutions evaluated.”⁷⁶ Moreover, the 2013 CARIS report indicates that the cost of congestion is declining, and is predicted to continue to be less than historic levels.⁷⁷

None of the AC transmission “solutions” qualify for regulated cost recovery. The DRAFT 2015 CARIS continues to show that generic transmission solutions for congestion in the Central-East and the Central East – New Scotland – Pleasant Valley corridors have benefit/cost ratios that fall well below 1.0.⁷⁸ It is clear from the generic CARIS analyses that transmission and generation solutions do not come close to a benefit/cost of greater than 1.0, and so are ineligible for regulated cost recovery. The Brattle Report agrees since it takes four additional benefit categories to reach an anemic 1.2 Benefit/Cost ratio to “justify” the Staff recommended AC transmission project, and even then, it seeks to bolster that finding based on Public Policy Requirements grounds. This argument fails as well. The Public Policy Requirements issue is discussed below.

B. Energy and Demand Trends in New York State

As the Commission evaluates the Staff Report and recommendations, it should be keenly aware of the historic trends in peak demand and energy usage. According to the 2015 Gold

⁷⁶2013 Congestion Assessment and Resource Integration Study, November 19, 2013, available at: [http://www.nyiso.com/public/webdocs/markets_operations/services/planning/Planning_Studies/Economic_Planning_Studies_\(CARIS\)/CARIS_Final_Reports/2013_CARIS_Final_Report.pdf](http://www.nyiso.com/public/webdocs/markets_operations/services/planning/Planning_Studies/Economic_Planning_Studies_(CARIS)/CARIS_Final_Reports/2013_CARIS_Final_Report.pdf) p. 6; *See also* USDOE National Electric Transmission Congestion Study, August 2014, at 69.

⁷⁷ *Id.*

⁷⁸ See DRAFT 2015 CARIS Figure 1, p. 6.

Book, the downstate region—Zones G to K—show a persistent decline in energy usage.⁷⁹ Peak load growth is also declining.

“By all accounts, the economic health of the state continues to be robust with growth and strength reported broadly across all sectors. However, as has been noted by load forecasters nationwide, we no longer observe a close linkage between the economy and energy usage. The lower forecasted growth in energy usage can largely be attributed to the projected impact of existing statewide heat and power (CHP), anaerobic digester gas (ADG), fuel cells, and energy storage. Such resources are expected to continue to affect forecasted energy usage, as programs authorized under New York State’s NY-SUN Initiative, Clean Energy Fund and Green Bank programs are implemented. Moreover, the overall growth of distributed energy resources (DERs) at the local distribution level is expected to be facilitated by New York State’s Reforming Energy Vision (REV) initiative.”⁸⁰

This perspective is confirmed by Con Edison’s SEC first and second quarter reports showing that weather adjusted sales declined by 0.4% in the first quarter of 2015 compared to the first quarter of 2014. The decline was more pronounced in the second quarter that showed a 1.2% decline on a weather adjusted basis.

HVSEC retained the services of Gidon Eshel, Ph.D. who did an independent forecast of electric demand in the downstate region.⁸¹ Here is the Executive Summary of his Report entitled Hudson Valley Transmission Line Plan: Updated Analysis of Need & Alternatives, submitted in this Comparative Proceeding on September 22, 2015:

The main findings of this report are: (1) No additional transmission capacity into the downstate region is needed. In fact, an updated model built, presented and tested below, shows even lower likelihood of peak loads exceeding capacity than previously estimated. (2) NYISO’s critiques of the Eshel (2014) report fall into two categories. The first comprises points that are emphatically wrong on technical, conceptual or—most often—

⁷⁹ 2015 Load & Capacity Data “Gold Book”, available at: http://www.nyiso.com/public/webdocs/markets_operations/services/planning/Documents_and_Resources/Planning_Data_and_Reference_Docs/Data_and_Reference_Docs/2015%20Load%20and%20Capacity%20Data%20Report.pdf, p. 1.

⁸⁰ 2015 Gold Book at page 2.

⁸¹ Dr. Gidon Eshel, Hudson Valley Transmission Line Plan: Updated Analysis of Need & Alternatives.

technical and conceptual grounds, as shown in detail below. The second class comprises points that may be true, but make no difference when included in the calculation at face value. (3) NYISO projections systematically overestimate future downstate peak load, for three independent reasons. First, NYISO's reliance on questionable GDP projections is unwarranted. Second, NYISO failure to distinguish the role of trends and varying fluctuations about them in evaluating their model skill at fitting past observations is erroneous. Third, NY-ISO's treating that skill as indicative of the model skill to forecast future peak loads is incorrect. Each of these errors is individually serious. When serialized, they dis-credit the forecasted peak loads. Comparison with a carefully constructed, tested and validated model shows that these forecasts are skewed consistently up.⁸²

Dr. Eshel also reviews the NYISO Interconnection Queue and finds that there are more than sufficient transmission and generation projects available, even assuming Indian Point retires, to serve in the unlikely event demand increases.⁸³ Dr. Eshel's original research and modeling confirm what this Commission now knows: that the electric industry in downstate New York has hit an inflection point. Sales are declining and it will not be long before peak demand starts to decline. Building unnecessary infrastructure under the circumstances makes absolutely no sense. And when a project makes no sense, it should not be artificially justified by a so-called Public Policy Requirement, particularly when there are far superior alternatives, i.e., the REV solution, as discussed below.

C. The Brattle Report Must Rely on Spurious Additional “Benefits” of New Transmission in Order to Achieve a Positive Benefit/Cost Ratio.

As described above, using the production cost savings metric for quantifying benefit/cost in the CARIS results in ratios of less than one, making the construction cost of new transmission on the CE and UPNY/SENY interface more than its worth. Recognizing this, in order to achieve a Benefit/Cost ratio of 1.2 for the P11 Project, The Brattle Group had to significantly expand the

⁸² Id. at 1.

universe of the “benefits” of transmission beyond what is typically considered in evaluating transmission projects.⁸⁴ Thus, in addition to production cost savings, the Brattle Report includes “benefits” of: additional production cost related benefits (represented as a multiplier of calculated production cost savings of 1.56 for transmission); capacity resource cost savings; avoided future transmission costs; reduced cost of meeting future Renewable Portfolio Standard goals; tax receipts (which are really just a transfer between entities within New York); increased employment (during construction only); and non-quantified benefits, such as expected and insurance value of avoiding the impacts of extreme conditions, market benefits, future capacity options, resiliency⁸⁵

These added “benefits” are the only way that The Brattle Report can calculate a benefit/cost ratio of over 1.0 for the P11 Project. The capital costs of P11 are \$1189 million and its Present Value Revenue Requirement is \$1617 million, while the present value of its production cost savings is \$516 million.⁸⁶ As described in Staff’s Motion, it was charged with reviewing applications filed in the AC transmission proceedings seeking to build transmission projects designed to *alleviate congestion* at the UPNY/SENY interface of the bulk electric system, and also providing recommendations regarding whether transmission facilities are needed to address *the identified congestion* as compared to other non-transmission solutions that might be available as an alternative.⁸⁷ Clearly, based on the traditional metric for determining the cost-effectiveness of a congestion solution, construction of a transmission project like P11 is not an economically viable choice, since its PVRR is over three times its benefit. The only way The Brattle Report is able to eke out a benefit/cost ratio of 1.2 is by adding a number of additional

⁸³ Id. pp. 32-4.

⁸⁴ See Brattle Report p. 2.

⁸⁵ See Brattle Report, *generally*.

⁸⁶ Brattle Report p. 37.

“benefits” to the equation. However, as demonstrated below, the REV Alternative provides far more value in production cost (and capacity cost) savings, and results in nearly all of the other benefits studied in the Brattle Report.

The only alleged “benefit” relied upon by the Brattle Report that the REV alternative does not provide is avoided refurbishment costs. In The Brattle Report’s expanded cost-benefit analysis, the largest, in many cases, and least logical benefit category is delayed transmission refurbishment costs. The apparent theory proffered by the Brattle Report is that new AC transmission will enable the existing transmission system that is in need of repair or replacement to be further deferred. The present value of the deferred refurbishment costs is calculated and this is then determined to be a “benefit.” The key to this benefit is to stretch out the refurbishment period found in the STARS report⁸⁸ to the end of the refurbishment window.

Here is how the Brattle Report explains its primary assumption in the benefit/cost

Sensitivity Analysis of Benefit Assumptions:

Projects that *refurbish* aging facilities get a “credit” based on the latest date indicated in STARS; projects that facilitate future refurbishments NOT credited for reducing future construction costs.⁸⁹

The refurbishment benefit or avoided transmission costs is, on average, the largest benefit conjured – reaching almost \$1 billion (\$998 million) for P11, or almost twice the traditional benefit metric, production cost savings (\$516 million).⁹⁰

⁸⁷ See Staff Motion pp. 2, 3.

⁸⁸ The STARS Report was started in 2008 and Phase II was concluded in 2012. For that 20 year transmission planning study a load level of 37,130 MW was used for the intermediate year, roughly half way through the planning horizon.

⁸⁹ Brattle Report p. 18.

⁹⁰ Brattle Report p 15.

The Brattle Report identifies four ways the proposed AC transmission projects avoid future transmission costs:

1. Upgrading Existing Lines – “...old costs associated with existing facilities go away.”
2. Early Refurbishment of Aging Lines – avoided future costs.
3. Parallel Facilities Could Reduce Congestion Cost During Refurbishment.
4. Parallel Facilities Reduce Refurbishment Costs.

The old costs do not magically “go away.” When an existing line is refurbished, assuming all expenditures are classified as capital, the original cost less depreciation remains on the company’s books and continues to earn a return together with the new capital costs that are added to the continuing property records.

The early refurbishment of aging lines increases the revenue requirement for rate payers. How can this be a benefit? Delaying refurbishment as long as it can be done so prudently is what saves ratepayers money.

Congestion is no longer a meaningful issue so this “benefit” is of no value.

Parallel facilities reduce refurbishment costs category appears to be used only as a sensitivity case. In any event, it is hard to understand how working near proximate high-voltage transmission facilities reduces costs.

P11 has two components for avoided refurbishing costs: (1) the retirement of 140 miles of Porter – Rotterdam 230 kV (2 lines) (“P – R”), which otherwise would have been refurbished in 2020, with an avoided PVRR (mid-2015 \$m) of \$739 million; and (2) the replacement of 108 miles of Knickerbocker – Pleasant Valley 115 kV (2 lines) (“K – PV”), which otherwise would have been refurbished in 2030, with an avoided PVRR (mid 2015 \$m) of \$195 million.⁹¹ What is interesting is that the cost of the retirement of P – R is \$4 million per mile in 2020 and the cost

⁹¹ The Brattle Report p. 118.

of replacing K – PV is \$2.6 million per mile in 2030.⁹² There is no explanation in the Brattle Report or work papers for what appears to be an illogical result. First, if by retirement, the Brattle Report means that the line is de-energized and physically taken down and removed, \$4 million per mile seem to be an excessive cost that is not explained or otherwise justified. By replacement of K – PV, it is assumed that the existing K – PV is taken down and replaced with new towers and conductors at a cost that is significantly less, \$2.6 million per mile, then the P – R retirement. This is a counter-intuitive outcome and shows how shaky this non-traditional benefit metric really is, just in terms of how it is calculated.⁹³

Since this is the largest benefit metric for the recommended project, it makes sense to review this benefit closely from a conceptual perspective. Unlike production cost savings that result in lower wholesale power costs immediately, deferred refurbishment expenditures do not lower wholesale power costs immediately. The deferral of a capital expenditure or O&M associated with refurbishment project has a much more attenuated impact on wholesale rates that are subject to FERC’s ratemaking authority. By assuming all refurbishment costs are capital costs, The Brattle Report overstates this benefit category. O&M expenditures for refurbishment do not earn a return. Furthermore, by arbitrarily assuming that all refurbishment projects can be extended or delayed until the end of the refurbishment window is an arbitrary and subjective assumption that has no real world basis. If one makes a middle of the road assumption that P11 can delay refurbishment by half the time, the “benefit” would be cut in half to \$449 million (assuming all expenditures are classified as capital). Therefore, the Total Benefit would drop to \$1,551 million (\$2,050 - \$499) making the Benefit/Cost ratio 0.92, hardly a sensible project even with non-traditional “benefits” such as capacity resource savings, net RPS costs and tax

⁹² See id.

⁹³ The excessive cost/mile was also questioned by Applicants at the October 8 and 9, 2015 technical conference.

benefits⁹⁴ included. If part of the refurbishment costs are classified as O&M, the Benefit/Cost ratio is further reduced.

However, The Brattle Report does not make any case that new AC transmission can enable any deferral of refurbishment. There is no engineering feasibility study to support the proposition. It is simply assumed, the arithmetic is performed and the benefit is suddenly manifest. The Commission should require more than this slenderest of reeds to support the claimed benefit.

What The Brattle Report also ignores is the fact that delayed refurbishment carries with it higher costs beyond the effects of inflation. A homeowner can delay replacing his or her roof thereby achieving a “benefit”, but the resulting water damage can have disastrous consequences on the structure itself. So assuming all transmission candidates for refurbishment can be delayed to the maximum extent without adding significant costs is not a realistic assumption. Said another way the “refurbishment benefit” should not be given anywhere near equal weight as production cost savings in the Benefit/Cost analysis. Production cost savings can be looked on as “hard” benefits, delayed refurbishment costs are at best, soft benefits, if the case can be made that the delays are even feasible.

The benefit/cost superiority to the REV solution is manifest in the shorter measure lives from 10 to 25 years compared to the 45-year analysis for the AC transmission solutions. Thus, the net present values of the transmission solutions are significantly higher due to the almost four-times longer project life.⁹⁵ No reason is given for the significant project/measure life disparity. To place the REV alternative on an even playing field with the AC projects, one should

⁹⁴ The Brattle Report ignores reduced property tax revenues that result from the adverse impact a new transmission line imposes on the community. So the so-called property tax benefit is simply a replacement of property tax revenues lost due to lower assessments. This fact further lowers the Benefit/Cost ratio driving it further below 1.0.

⁹⁵ The vast majority (95%) of REV benefits arise from energy efficiency, with a 12 year measure life.

multiply REV benefits by four or reduce AC benefits by 1/4. If that were done, then the enormous economic and environmental appeal of REV is so overwhelming as to leave all transmission projects in the dust. No amount of fancy consultants' conjuring can bridge that divide.

D. There is No Transmission Need Driven by a Public Policy Requirement

As demonstrated above, the Motion urging the Commission to find and determine that there is a transmission need for the identified portfolio of projects based on P11 driven by Public Policy Requirements does not comport with the definition of "Public Policy Requirement" as set forth in the NYISO OATT or with the Public Policy Transmission Planning Process. Instead, Staff's Motion relies on a list of "benefits" which is largely based on the additional benefits included in The Brattle Report to achieve a positive benefit/cost ratio for P11, and suggests that they are the "Public Policy Requirements" driving the need for new transmission. This is backwards reasoning. The PPTPP is meant to take a relevant Public Policy Requirement, determine whether it drives a need for new transmission, and then determine whether transmission (or a non-transmission alternative) is the best for such need, and only if transmission is the best solution, select the most efficient and cost effective transmission project. Instead, the Staff Report and Motion first choose P11 as the project that best meets "public policy objectives" and "Public Policy Benefits," and ask the Commission to make a determination that there is a transmission need on that basis.⁹⁶ This approach fails on its face.

Moreover, there is no transmission need driven by a Public Policy Requirement or the type of public policy objectives that FERC required the PPTPP for in the first place. In upholding FERC Order 1000 in 2014, the D.C. Circuit noted FERC's reasons for requiring the creation of procedures that address public policies in planning:

According to [FERC], this mandate responds to a recent proliferation of laws and regulations affecting the power grid. For example, [FERC] expects that many states will require construction of new infrastructure to integrate sources of renewable energy, such as wind farms, into the grid and that new federal environmental regulations will shape utilities' decisions about when to retire old coal-based generators. Plans that fail to account for such laws and regulations, [FERC] reasoned, would not adequately reflect future needs.⁹⁷

Thus, the central purpose behind FERC Order 1000's public policy planning requirement was to better address such federal and state policies and allow for clean energy resources like demand response, energy efficiency, and increased penetration of renewables by taking into account state policies (i.e., Public Policy Requirements) like renewable portfolio standards.⁹⁸ However, in terms of new transmission's ability to increase penetration of wind energy in the interest of New York's renewable portfolio goals, increased UPNY/SENY transmission will not necessarily have the intended effect.

FERC Order 1000 recognized that areas with the best renewable resources are typically not the areas of highest demand, so new transmission may be needed. However, this is not the case in New York. The 2010 NYISO Wind Generation Study, *Growing Wind*, demonstrates that wind energy is not currently constrained by UPNY/SENY congestion any more than other upstate generators.⁹⁹ The addition of new upstate wind capacity into the grid is actually constrained by local transmission constraints, not the UPNY/SENY interface.¹⁰⁰ Therefore, new

⁹⁶ See Staff Report p.xxii, xxiii.

⁹⁷ *South Carolina Public Service Authority v. Federal Energy Regulatory Commission*, No. 12-1232 (D.C. Cir. Aug. 15, 2014).

⁹⁸ Upholding FERC Order 1000 Unlocks Efficiency and Spurs Clean Energy Solutions, EDF Energy Exchange, August 21, 2014, available at: <http://blogs.edf.org/energyexchange/2014/08/21/upholding-ferc-order-1000-unlocks-efficiency-and-spurs-clean-energy-solutions/>.

⁹⁹ *Growing Wind: Final Report of the NYISO 2010 Wind Generation Study*.

¹⁰⁰ *Id.*

transmission in UPNY/SENY will not significantly help to increase penetration of existing or proposed upstate, land-based wind resources.

In addition, in New York, the greatest demand (i.e. in southeast, New York City and Long Island) is actually close to the area with the greatest capacity for wind power: offshore areas in the North Atlantic Bight. In recognition of this, the 2015 New York Energy Plan includes an Offshore Wind Initiative.¹⁰¹ In addition, the federal government has now expressed development of New York's potential for offshore wind farms as a priority. The U.S. Bureau of Ocean Energy Management has identified an area off Long Island as an area for helping to increase the amount of renewable energy in the next decade.¹⁰² Therefore, new transmission is not needed to meet the State's renewable energy goals. And in terms of demand response and energy efficiency goals, these are measures that tend to eliminate the need of new transmission, not drive them. Therefore, there is no need for new transmission on the UPNY/SENY interface driven by a relevant Public Policy Requirement.

III. The REV Alternative is the Better Option for New York

A. The REV alternative has an equal benefit-cost ratio to Staff's recommended transmission project (P11).

As discussed in Section I, *supra*, for the first time since commencement of this Proceeding, DPS Staff in its September 22, 2015 Report analyzed how a "REV alternative", consisting of a suite of measures proposed in the REV Proceeding, compared to the twenty-two transmission proposals in this Proceeding and a to generation alternative. This analysis of non-transmission alternatives has been requested by HVSEC at various points in this proceeding¹⁰³,

¹⁰¹ 2015 New York State Energy Plan pp. 74-75; <http://energyplan.ny.gov/Plans/2015>.

¹⁰² Obama official says offshore wind in NY is "No. 1 priority", October 29, 2015, available at: <http://blog.timesunion.com/business/obama-official-says-offshore-wind-in-ny-is-no-1-priority/70107/>

¹⁰³ See Case 13-E-0488, HVSEC Letter to Secretary Burgess, February 14, 2014, at 3-4; HVSEC Comments, April 22, 2015, at 37-38.

but has only now occurred at this Proceeding's eleventh hour. The Brattle Group's comparative analysis of the REV alternative demonstrates that it is superior to the transmission projects under consideration in nearly every metric.

The "REV alternative" was developed by Staff, with input from NYISO and Brattle.¹⁰⁴ The REV scenario evaluated by Staff uses the "Lower" scenario as described in the Generic Environmental Impact Statement ("GEIS") in the REV proceeding.¹⁰⁵ The "Lower" scenario is a "lower bound estimate" of the potential effects of REV, in contrast to the "Upper" scenario in the GEIS.¹⁰⁶ As a lower bound estimate of REV's benefits, it is reasonable to consider the REV assumptions used in the Staff and Brattle Reports conservative. REV resources included in the REV alternative scenario include: energy efficiency (by far the most significant); customer sited renewables; demand response; combined heat and power; rate structures; grid integrated vehicles; and energy storage.¹⁰⁷

The Brattle Report shows that the REV alternative has an identical benefit-cost ratio - 1.2 – to the project recommended by Staff, P11.¹⁰⁸ Further, the "benefits" measured in the analysis of the REV alternative consist only of PCS and capacity cost savings, the traditional metrics used in identifying quantifiable benefits of transmission projects.¹⁰⁹ The transmission projects, however, are evaluated with at a much wider universe of "benefits" than are typically measured – including avoided refurbishment costs, tax receipts, and reduced net cost of meeting Renewable

¹⁰⁴ Staff Report at 73.

¹⁰⁵ Id.

¹⁰⁶ Case 14-M-0101, GEIS, Feb. 6, 2015, at ES-4.

¹⁰⁷ Staff Report at 74.

¹⁰⁸ Brattle Report at 13.

¹⁰⁹ See Brattle Report at 2: "The existing approach for identifying economic projects through the NYISO Congestion Assessment and Resource Integration Study (CARIS) has not identified projects to be built due to its limited scope of benefits considered."

Portfolio Standard goals.¹¹⁰ If the quantified benefits for all alternatives were limited to PCS alone, or to PCS and capacity savings, REV would outperform all transmission solutions handily.

Brattle’s ratepayer impacts analysis indicates that the 2019 net positive ratepayer impact of REV is greater than *any* of the transmission solutions by more than two times.¹¹¹ In 2024, the difference is even more striking between REV and transmission, with REV reducing ratepayer costs more than the recommended P11 by a factor of 10.¹¹² Brattle’s levelized rate impacts analysis reflects a fixed rate (in real dollars) that if paid/saved annually over 45 years would have the same present value as the annual rate calculated for each project.¹¹³ Here, REV substantially outperforms all transmission alternatives, again resulting in ratepayer benefits approximately ten times more than that of P11.¹¹⁴ Brattle dismisses the importance of ratepayer impacts because they are not lasting, but this is a much more meaningful metric to consumers than the “societal benefits” of PCS – especially when it is ratepayers who will be shouldering the costs of this project.

B. REV results in many of the same non-quantified benefits of transmission cited by Trial Staff.

REV also performs comparably to, if not better than, the transmission projects in the category of non-quantified benefits. For example, Brattle claims P11 would create approximately 7800 full-time equivalent jobs – 60% of those direct and 40% induced.¹¹⁵ REV would result in similar or greater job creation: Brattle predicts a range of between 2000 to 16,000 full-time equivalent positions.¹¹⁶

¹¹⁰ Brattle Report at 13.

¹¹¹ Brattle Report at 23.

¹¹² Id.

¹¹³ Brattle Report at 27.

¹¹⁴ Id.

¹¹⁵ Brattle Report at 37.

¹¹⁶ Id. at 43.

In terms of system reliability and offsetting potential retirements in SENY, P11 would ensure the system could accommodate 1210MW of SENY retirements without falling below locational capacity requirements (“LCR”) in 2019¹¹⁷; REV would ensure accommodation of a nearly identical 1200 MW of SENY retirements.¹¹⁸

In addition, Brattle states that REV is expected to provide additional local resources or reduce demand that may mitigate the loss of transmission and generation facilities; that REV may reduce the need for future transmission projects, and that reduced demand to REV resources will help if downstate gas becomes constrained.¹¹⁹ REV would also have market benefits and improve storm resiliency.¹²⁰ The only additional or different non-quantified benefits attributed to P11 and the other transmission projects are “synergies with other future transmission projects” and “maximizing future capacity options on existing ROW”, which are tenuous at best in terms of providing an actual benefit, and assume continued buildout of the AC transmission system will be in the public interest.¹²¹

C. REV has far greater emissions reductions and environmental benefits than the recommended transmission project (P11).

It is beyond debate that REV has significantly more environmental benefits (and far fewer environmental impacts) than any of the transmission projects.

The Staff Report discusses that one of the primary goals of this proceeding is to reduce emissions.¹²² Yet, the REV alternative reduces emissions more than *ten times more* than the highest-reducing transmission project. P11 actually results in emissions increases for most

¹¹⁷ Id. at 37.

¹¹⁸ Id. at 43.

¹¹⁹ Id. at 135

¹²⁰ Id. at 43.

¹²¹ Id. at 37.

¹²² Staff Report at ix.

pollutants, and according to Brattle, will increase the amount of emissions coming from upstate coal-burning plants.¹²³ Staff’s recommendation to pursue P11 despite this is in direct contrast to the goals of the proceeding, particularly when the REV alternative - dismissed by Staff – reduces all emissions substantially and therefore furthers this important goal of the proceeding in a way none of the transmission projects do.

We focus our discussion of the specifics of the annual emissions impacts on REV and P11, because this is the project recommended by Staff for selection by the Commission. The table below reproduces Brattle’s findings as to the changes in emissions from the base case that would result from P11 and REV¹²⁴:

Change in Emissions from Base Case (in 1,000 tons for CO₂; in tons for SO_x and NO_x)

	<u>P11</u>		<u>REV</u>	
	<u>2019</u>	<u>2024</u>	<u>2019</u>	<u>2024</u>
CO₂	-184	-79	-1,231	-1,538
SO_x	+109	+14	-1,725	-2,157
NO_x	+32	-183	-1,438	-1,797

It is therefore clear that REV will do a far better job at reducing emissions, including reducing New York’s carbon footprint, than any of the transmission projects and in particular, P11. Further, on page 77, the Brattle Report states that: “Upstate SO₂ intensity mostly follows changes in emissions from two coal plants (Huntley and AES Somerset).”¹²⁵ The graphs below this statement show that NYTO P11 is expected to cause SO₂ emissions from coal to increase from the Base Case by approximately 110 tons in 2019 and by approximately 25 tons in 2024. Similarly, page 78 of the Report states that, “Upstate NO_x intensity mostly follows changes in

¹²³ See Brattle Report at 77-78.

¹²⁴ Brattle Report at 43.

emissions from two upstate coal plants – Huntley and AES Somerset.” The graph on page 79 shows that P11 is expected to cause NO_x emissions from coal to increase from the base case by approximately 118 tons in 2019 and by approximately 52 tons in 2024. These statements and graphics support the conclusion that P11 – the project recommended by Staff for selection – would actually *cause an increase in generation from antiquated coal plants over the Base Case*. This is in complete conflict with New York’s energy goals and policies.

The 2015 New York State Energy Plan announced the State’s goal to reduce greenhouse gas emissions by 40 percent while generating 50 percent of its electricity from renewable energy sources by 2030.¹²⁶ The State has undertaken initiatives such as NY-Sun, NY Green Bank, NY Prize, K-Solar and a commitment to improve energy affordability for low-income communities.¹²⁷ The Governor also announced recently that the State University of New York (SUNY), the nation’s largest statewide public university system, will install renewable energy, including solar and other technologies, at each of its 64 campuses by 2020.¹²⁸ This commitment builds on SUNY’s existing goals of improving its energy efficiency performance by 20 percent and reducing its greenhouse gas emissions by 30 percent by 2020.

In 2013 Governor Cuomo dedicated \$1 billion to the New York solar industry through the NY SUN Initiative. Since then, the State has committed \$270 million and supported the deployment of solar across 30,000 homes and businesses.¹²⁹ The Governor also recently announced a commitment to bring solar to 150,000 more homes and businesses by 2020.

¹²⁵ Brattle Report at 78.

¹²⁶ 2015 New York State Energy Plan pp. 74-75; <http://energyplan.ny.gov/Plans/2015>.

¹²⁷ See generally, www.nyserda.ny.gov

¹²⁸ Press Release, NYS Governor’s Office, October 8, 2015. Available at: <https://www.governor.ny.gov/news/governor-cuomo-joined-vice-president-gore-announces-new-actions-reduce-greenhouse-gas-emissions>

¹²⁹ Id.

Commercial projects will be able to share the power they generate on their properties with surrounding community members through the Governor’s Shared Renewables program.

New York City has set the most aggressive target in the nation to reduce emissions 40 percent by 2030 and 80 percent below 1990 levels by 2050 (80 by 50).¹³⁰ Yet, rather than focus on REV and the policies that are part of it, Staff instead recommends moving ahead with a transmission project that would actually increase emissions.

Brattle also did not evaluate any siting impacts of the proposed transmission projects (i.e., environmental, visual, agricultural). However, it is self-evident that construction of new, likely taller, transmission towers – even if within existing ROW – will be more impactful than energy efficiency measures, customer sited renewables, and other measures focused on in REV. These external costs, which will be disproportionately borne by the communities in the Hudson Valley through which the transmission routes run, must be considered by the Commission in its decision.

D. The three metrics cited by the Trial Staff Report as to why REV was rejected in favor of transmission are insufficient.

Despite the fact that a serious examination of the Brattle Report and a comparison of its quantified and non-quantified benefits analysis between transmission and REV shows that REV outperforms transmission on the whole in meeting the goals of this Proceeding, Staff dismisses the REV alternative in a few sentences on page 74 of its report:

“The upgrades to the AC transmission system, however, will provide benefits not readily achievable by REV and better addressed through the transmission investments recommended by Staff. Among these is enabling renewable resources (wind, incremental hydro) location in upstate New York that will be needed to drive down air emissions and assist in achieving the State Energy Plan goals. Reduced transmission constraints and

¹³⁰ New York State Energy Plan at 112.

congestion allow for access to upstate generation that is currently bottled and improved system efficiencies. Further, access to this generation helps to mitigate the loss of existing, aging generation resources downstate that might result from retirements or equipment failures. Last, while REV can provide operational flexibility at the distribution system level, the upgraded AC transmission system will increase operational flexibility to respond to unforeseen outages resulting from storms, from the need to make emergency repairs or rebuild other portions of the AC transmission system, and from the ability to better withstand unexpected increased peak demands resulting from unusually warm or cold weather conditions.”¹³¹

This rationale from Staff is not supported by the findings in the Brattle Report. First, the Brattle Report states that the transmission projects will not increase penetration of renewables including wind, and, as discussed above, will actually *increase* emissions and increase generation from coal-burning power plants. The Brattle Report states that, “Neither of the alternative [transmission] solutions are expected to provide benefits to future renewable capacity development.”¹³² That is, the transmission projects will not facilitate additional renewable resources to come online in upstate New York. Rather than furthering this articulated goal of the instant Proceeding, P11 would actually contravene it. In contrast, REV would substantially increase penetration of renewables and would significantly decrease emissions. Therefore, REV is far more effective than transmission at reaching this goal articulated by Staff - not the other way around – and Staff’s justification for rejecting REV on this basis does not hold water.

Second, mitigation of the loss of existing, aging generation resources downstate that resulting from retirements or equipment failures would be accomplished equally well by REV and P11, according to the Brattle Report. REV will ensure accommodation of 1200 MW of

¹³¹ Staff Report at 74.

¹³² Brattle Report at 24.

additional SENY retirements, whereas recommended project P11 could accommodate just 10 MW more (1210 MW).¹³³

Finally, the Brattle Report states that both P11 and REV will help with storm resiliency and handling peak demands, and both will help to relieve gas transport constraints.¹³⁴ Therefore, there is no basis for Staff's conclusion that the REV alternative should be rejected on these bases.

E. With regard to public policy, the REV alternative is in keeping with what is now the overriding state public policy for energy supply in New York.

REV is far more consistent with the 2015 New York State Energy Plan and all of the energy policies and initiatives discussed in Section III.C, *supra*, than the proposed transmission projects. The Staff Report's discussion of its justification of a public policy need for the transmission projects points to Commission statements that upgrades to the Central East and UPNY/SENY electrical interfaces could produce particular benefits. One of the benefits highlighted is "reducing environmental and health impacts through reductions in less efficient electric generation"¹³⁵ and "reduced environmental emissions and improved health impacts".¹³⁶ As discussed in Section III.C., none of the proposed transmission projects – and not P11 in particular – actually achieve these goals. In fact, P11 – by Brattle's own analysis – actually *increases* generation from antiquated coal-fired power plants and *increases* emissions and therefore creates negative health impacts.¹³⁷ Given this was one of the primary benefits cited by Staff, the Commission should not allow a project that would increase emissions and increase generation from dirty coal plants to move forward.

¹³³ Brattle Report at pages 43, 37.

¹³⁴ *Id.*

¹³⁵ Staff Report at 76.

¹³⁶ *Id.* at 82.

As discussed in Section II.D., *supra*, constraints in delivering existing wind resources to downstate New York are unrelated to any transmission constraints on the UPNY/SENY or Central East interfaces at issue in this proceeding, but are instead the result of unrelated constraints on the local, 115 kV transmission system in western New York.¹³⁸ Therefore, new transmission in UPNY/SENY will not help to increase penetration of existing or proposed upstate wind resources.

Based on statements made within the Brattle Report, it is clear that, while some of the transmission projects may reduce the cost of meeting RPS goals, they will not actually result in any increased capacity of wind or other renewables upstate.¹³⁹ Further, the 2015 New York State Energy Plan focuses on off-shore wind – not wind in upstate and western New York – as the major potential source of renewable power for New York.¹⁴⁰ The Special Initiative on Offshore Wind (SIOW), an independent project at the University of Delaware, found that development of off-shore wind is necessary for New York to meet its renewable goal of 50%.¹⁴¹ Based on a NYISO baseline, SIOW calculated that New York would need to add 26,932 GWh/year in renewable generation to reach the 50% by 2030 goal.¹⁴² While finding that there is insufficient land area for land-based wind to meet this level, offshore wind in the New York Bight could meet the 2030 target of 26,932 gWh/year; in fact it could meet it *six times over*.¹⁴³ Off-shore wind is abundant, close to load, and well-matched to peak demand, and for these good reasons is the focus of New York’s renewable energy efforts.¹⁴⁴

¹³⁷ Brattle Report at 77-78.

¹³⁸ *Id.*

¹³⁹ *Id.* at 124.

¹⁴⁰ New York State Energy Plan at 74-75.

¹⁴¹ August 14, 2015 Comments of the Special Initiative on Offshore Wind in Case 14-M-0094 – Proceeding on Motion of the Commission to Consider a Clean Energy Fund, Clean Energy Fund Supplement.

¹⁴² *Id.* p. 2.

¹⁴³ *Id.* p. 3.

¹⁴⁴ *Id.*

Further, there has been no study done of what impact implementation of REV would have on the relative benefits of the transmission projects, despite Staff's articulation that this is one of the factors that the Commission directed it to examine.¹⁴⁵ REV is not truly an "alternative" to transmission; the Commission is pursuing REV whether or not any of the transmission projects move forward. It is important to analyze what the benefit-cost picture for the transmission projects will look like when REV comes to fruition and we achieve the PCS and capacity savings reductions associated therewith. It is likely that REV will obviate – or at the very least significantly reduce - any benefit of the transmission projects. In fact, the Brattle Report says that "REV may reduce the need for future transmission projects."¹⁴⁶ It stands to reason that REV could reduce or eliminate the "need", to the extent one is established, for the instant projects. This is one of the areas where the HVSEC will require expert assistance to fully develop the record on this issue, as discussed in Section I, *supra*.

To summarize, simply using the analysis by Brattle, we can find the following: REV has an identical benefit-cost ratio to P11, even though P11 and the other transmission projects have a much longer list of quantified "benefits" included, whereas REV benefits are limited to PCS and capacity cost savings. In terms of actual congestion relief, REV has four times the PCS as P11. REV has far greater environmental benefits – and far fewer environmental impacts – than P11. REV results in the same or very similar non-quantified benefits as P11. REV is far more consistent with New York's energy goals than P11; REV will increase penetration of renewables in upstate New York, and P11 will not increase penetration of renewables in upstate New York and will not assist in unbotTLing of existing renewable generation. Staff's justification for selecting P11 over REV is completely unsupported by the Brattle Report.

¹⁴⁵ See Staff Report at 14: "How Will Non-Transmission Alternatives, including REV, affect the proposed designs?"

It is important to note that we understand that long-distance AC transmission will not go away once REV is implemented; it will continue to play an important role in the state's energy system. However, the discussion surrounding this Proceeding is not one of getting rid of existing transmission but about substantially increasing existing transmission capacity at a very high cost – both economically and environmentally. It is anticipated that REV will lessen the need for future transmission projects¹⁴⁷, and despite this Staff recommends charging ahead with P11 just as REV is nearing implementation.

Based on the foregoing, the Commission should reject Staff's recommendation to proceed with P11 in favor of focusing on REV.

IV. Trial Staff's Selected Project (P11) Will Result in Negative Environmental Impacts.

Both the Hudson River and its valley have nationally important historical, cultural, ecological and aesthetic values. Because of these unique characteristics, special consideration should be given to ensuring that no project negatively impacts these important values.

The Hudson River Valley was designated as a National Heritage Area by Congress in 1996 to recognize the national importance of the Hudson Valley's history and resources, and to preserve, to protect, and to interpret the nationally significant history and resources of the valley for the benefit of the nation.¹⁴⁸ Congress deemed the Hudson River Valley to be nationally significant because it has provided the setting and inspiration for new currents of American thought, art, and history and was the "fountainhead of a truly American identity."¹⁴⁹ Great Houses, the American Revolutionary War, the Hudson River painters, the Knickerbocker writers,

¹⁴⁶ Brattle Report at 135.

¹⁴⁷ Id.

¹⁴⁸ The Hudson River Valley Institute, <http://www.hudsonrivervalley.org/about/what.html>.

¹⁴⁹ Id.

and the scenic beauty of the region are all distinctive.¹⁵⁰ The Hudson River itself is an irreplaceable national treasure and a vital resource for residents and visitors, and is a major driver of the Hudson Valley region's over \$4 billion tourism and recreation industry.

Despite the pressures of development, the area remains ecologically vital, with high plant and wildlife diversity across many types of landscapes. Within the Hudson Valley, between the Capital District in Albany County and Pleasant Valley in Dutchess County, there are five level III ecoregions as defined by the Environmental Protection Agency, which are further divided into 15 level IV ecoregions. This wide variety of ecoregions demonstrates the ecological importance of the region, because such areas tend to support diverse natural communities and varied wildlife, attract tourism and economic activity, and preserve important natural and cultural heritage features. This area is located in the Upper Hudson Basin, and includes major water bodies and many smaller lakes, ponds, creeks and streams.¹⁵¹

The range in elevation, soil diversity, and gradients of fresh to salt water result in diverse habitats, including forested, wetland and other aquatic habitats, grassland and shrubland, and many areas designated with protective status by State agencies.¹⁵² For example, many areas in the estuarine portion of the river – that is, the portion of the River that is subject to tidal influence and upriver flow of salty ocean water that stretches for 153 miles from north of Albany to New York Harbor - contain Significant Coastal Fish and Wildlife Habitat. Additionally, the waters of the Hudson are home to two federally listed endangered species, the Atlantic and shortnose sturgeon. The Hudson is a seasonal home for the largest remaining stock of the endangered

¹⁵⁰ [Id.](#)

¹⁵¹ Comprehensive Wildlife Conservation Strategy for New York, http://www.dec.ny.gov/docs/wildlife_pdf/upperhudsontxt.pdf.

¹⁵² [Id.](#)

Atlantic sturgeon. The diverse habitat of the Hudson Valley is important to many Species of Greatest Conservation Need.¹⁵³

The historical and cultural value of the Hudson River Valley cannot be overstated. “The Hudson River Valley has been described as the ‘Landscape that Defined America,’ due not only to its natural history, but to the people, places, and the events that have shaped our region's heritage.”¹⁵⁴ The Hudson River School of Painting was inspired by the Valley, and the importance of its scenic vistas continues to be one of the Hudson Valley’s greatest assets. There is now broad recognition of the inherent connection between the Hudson Valley’s economy and its environment. Tourism remains a primary beneficiary of our healthy environment with the region contributing \$4.75 billion in economic activity in the Hudson Valley region annually.¹⁵⁵ Clean water, scenic views, natural habitat, public waterfronts and a healthy environment are the foundation of regional economic development. These resources must be preserved and protected. All of the proposed transmission projects, to varying extents, will negatively impact these vital resources.¹⁵⁶

Turning to a specific evaluation of Staff’s recommended project (P11), it will likely result in a range of negative environmental and visual impacts in the Hudson Valley, which would otherwise be avoided if the Commission rejects Staff’s proposal. Moreover, HVSEC’s environmental assessment report and Staff’s own Report identify several proposed projects which have relatively fewer environmental impacts than the P11 route. Finally, P11 will result in increased visual impacts in the P11 corridor.

¹⁵³ Id.

¹⁵⁴ The Hudson River Valley Institute, <http://www.hudsonrivervalley.org/themes/>.

¹⁵⁵ Hudson Valley Tourism, report prepared by Tourism Economics for Empire State Development, 2012.

¹⁵⁶ See Case 13-E-0488, April 22, 2015 Comments of HVSEC and Supplemental Comments of Scenic Hudson; See also “Environmental Review of Transmission Route Alternatives”, CC Environment & Planning, filed in Case 13-E-0488 on November 5, 2015.

First, as noted in Section III above regarding the benefits of the REV, the Brattle report indicates that P11 will actually cause an increase in generation from antiquated coal plants over the Base Case. This will result in an overall increase in emissions in most metrics cited in the report. And, in comparison to the REV, P11 will result in substantially greater environmental impacts.

Second, HVSEC's environmental consultant, CC Environment and Planning (CC), which conducted an in-depth review of the possible and likely impacts of proposed transmission projects, has identified an array of potential negative impacts to environmental resources within a seven county Area of Interest (AOI) covering Albany, Greene, Ulster, Orange, Rensselaer, Columbia, and Dutchess Counties. The P11 transmission project, which will run through Albany, Rensselaer, Columbia, and Dutchess Counties, includes approximately 11.5 miles of the Edic to New Scotland corridor and the entire approximately 54.2 miles of the Knickerbocker to Pleasant Valley segment located within the AOI.

CC examined the wide range of potential negative environmental impacts associated with the proposed development in the P11 corridor. Though there is not contemplated to be construction of a new ROW or widening of existing ROW, CC notes that anticipated construction activities have the potential to produce an array of negative impacts to environmental features along the proposed route. Transmission line construction activities, such as creation of staging areas, access roads equipment pads, and other features, could cause both temporary or permanent environmental impacts.

Significantly, even *temporary disturbances can cause long-term alterations* in the function of the habitats found along the NYTO P11 route. For example, compaction of soils, alterations in hydrology, and direct harm to ecological communities can persist long after these

temporary construction activities have been completed. In addition, these types of disturbance can create the opportunity for invasion of invasive species and it is known that increased concentrations of invasive species can alter habitat value.

In its Final Environmental Review of Proposed Transmission Route Alternatives, dated September 2015 (CC Final Report) and filed in this Proceeding on November 5, 2015, CC identified forty-nine (49) Priority Sites based on intersections of the proposed transmission routes with Class 1 wetlands, Significant Natural Communities, Significant Coastal Habitats, threatened and endangered species, protected areas, conservation easement and stream crossings. Priority Sites include potentially vulnerable environmental features such as streams; rivers; New York State Department of Environmental Conservation (NYSDEC) wetlands; New York Natural Heritage Program (NYNHP) mapped threatened and endangered species occurrences, Significant Natural Communities and New York Department of State-mapped Significant Coastal Fish & Wildlife Habitats, along with federal, state, local, and privately-managed protected areas. Of the 49 total Priority Sites, 10 are located along the P11 corridor. These are designated in the report as Priority Sites 9, 10, 11, 12, 13, 16, 32, 37, 45, and 47. A figure depicting the location of Priority Sites in the vicinity of the P11 corridor is attached hereto as Attachment A.

Priority Sites 9, 10, 11, 12, and 13 are located adjacent to privately-owned conservation easements managed by Scenic Hudson. These easements provide a number of services, including preservation of land for hunting, fostering of existing forest habitat, and preservation of buffers alongside waterways. Disturbance adjacent to or within these protected areas as a result of transmission line construction activities potentially will decrease their environmental and cultural value.

Similarly, Priority Site 16, situated along the P11 corridor is located in the Black Creek Marsh State Wildlife Management Area, a large wetland complex which can be used for recreational activities such as hunting, hiking, and birdwatching. According to NYSDEC, development of surrounding lands and human disturbance of wetland areas present the largest threats to this wetland complex. Disturbance associated with transmission upgrade construction activities in and around these wetlands has the potential to alter hydrology and habitat, and could decrease the suitability of the habitat to sensitive birds.

Priority Sites 16 and 37 are both located at or near mapped occurrences of threatened and endangered species. Site 16 is near mapped occurrences of the state-threatened sedge wren, pied-billed grebe, king rail, and least bittern. Disturbances associated with transmission upgrade construction activities in and around these wetlands has the potential to alter hydrology and habitat, and could decrease the suitability of the habitat to these threatened birds, American bittern, and green heron.

Priority Site 37 is near a mapped occurrence of the state-threatened Blanding's turtle. According to NYNHP, Blanding's turtles are vulnerable to wetland disturbance, including the introduction of barriers to dispersal, habitat fragmentation, altered hydrology, and loss of habitat. In addition, construction activities near this site have the potential to impact hydrology, habitat connectivity and water quality.

Priority site 32 is located where a NYSDEC Class 1 wetland intersects with the P11 route. Class 1 wetlands provide many ecosystem services, including filtration, flood control, and wildlife habitat. The wetlands at this site likely provide these same ecosystem services to the area surrounding them. Disturbances in the vicinity of site 32 such as that created by the proposed

transmission construction activities in P11 have the potential to increase cover of existing invasive species.

Priority sites 45 and 47 are located where P11 crosses two relatively large Hudson River tributaries, Roeliff Jansen Kill and Little Wappinger Creek. It is known that construction activities around waterways such as these can increase the amount of sediment introduced into the water by tributaries, stormwater runoff, and other methods of sediment transport. Disturbance in the vicinity of these sites have the potential to increase cover of existing invasive species.

Finally, Staff's recommended P11 route has a higher relative environmental impact ranking than several other proposed projects. Both CC and Staff determined that the relative environmental impact ranking of P11 is "medium."¹⁵⁷ The CC Report identified five proposed projects which have a low relative rank of environmental impacts.¹⁵⁸ Similarly, Staff's Report identified six proposed projects as having a "low" relative rank of environmental impacts.¹⁵⁹ Thus, P11 has the potential to result in greater environmental impacts, such as those described above, than five to six other proposals which were rejected by Staff.

In addition to the environmental impacts noted above, HVSEC's visual expert, Dr. Richard Smardon, in his Landscape Analysis Report identified potential negative visual impacts resulting from the P11 project. The northern part of the Knickerbocker to Pleasant Valley segment of the P11 corridor, from Knickerbocker to Churchtown, is situated in wide-open agricultural areas. Specifically, P11 will impact the CGH- 14 Stuyvesant Farms Subunit of the Columbia North Scenic Areas of Statewide Significance (SASS), as well as State Route 9J, a

¹⁵⁷ CC Final Report, Table 1, p. 11 and Staff Final Report, Figure 1, p. xv.

¹⁵⁸ Id.

¹⁵⁹ Id.

New York State Scenic Road. In addition, the entire P11 route will also impact a number of historic properties and districts.

Dr. Smardon's concern with this corridor involved the potential visual impacts of the proposed new structures to be constructed within the ROW, as well as visual impacts arising from stream and road crossings. The proposed monopole structures will be higher than existing structures. As such, they could, particularly in the Knickerbocker to Churchtown corridor, result in increased impacts, where there are large open field landscapes where they will be highly visible. Moreover, additional tree clearing needed to replace certain structures may bring additional negative visual impacts as a result of the removal of existing screening vegetation.

Finally, undergrounding of a portion or the entire transmission route has never been seriously evaluated. None of the developers have developed a true underground alternative. Particularly through an area such as the Hudson Valley, with such a critical mass of sensitive visual, historic and environmental resources, the relative costs, benefits and impacts of undergrounding should be fully evaluated before any transmission projects move forward.

V. Conclusion

Based on the foregoing, we respectfully request that the Commission withhold any decision on Staff's motion until Joint Commenters and other parties have an opportunity to develop a complete record in this Proceeding. If the Commission decides to proceed with its Part A decision on the incomplete record before it, we respectfully request that the Commission find that there is no need for the proposed transmission projects and that the Comparative Proceeding should be terminated in favor of the REV alternative, for all of the reasons discussed herein.

Respectfully submitted,



Hayley Carlock, Esq.
Scenic Hudson, Inc.

/s/Daniel P. Duthie/
Daniel P. Duthie, Esq.
for Town of Claverack
Town of Livingston
Town of Milan
Town of Pleasant Valley
Farmers and Families for Claverack
Farmers and Families for Livingston
Walnut Grove Farm

/s/Gary Bowitch/
Gary Bowitch, Esq.
for Town of Clinton
Clinton Concerned Citizens
Pleasant Valley Concerned Citizens

/s/Peter Paden
Peter Paden
Columbia Land Conservancy

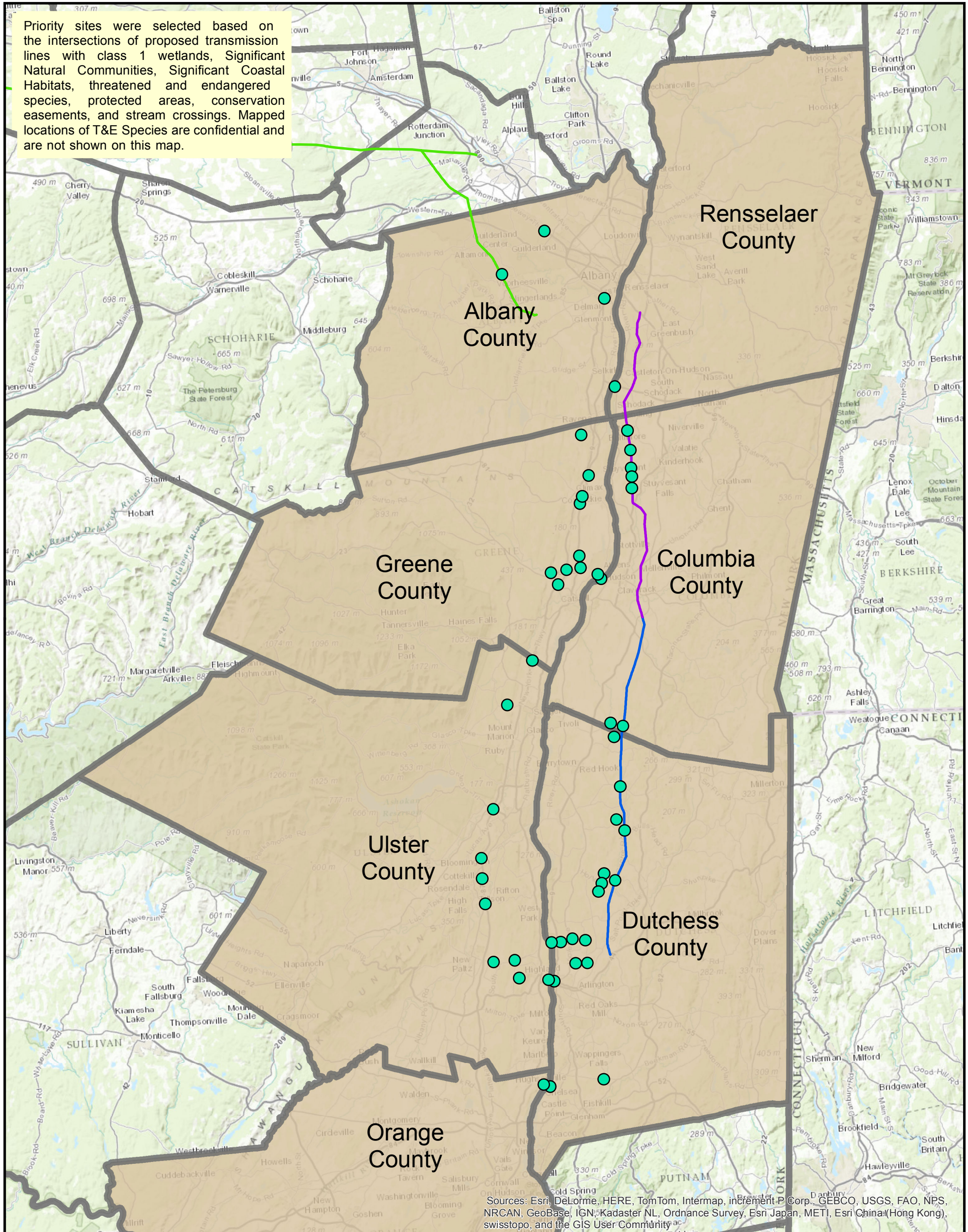
/s/Art Collings/
Art Collings
Dutchess Land Conservancy

/s/Mark Prezorski/
Mark Prezorski
The Olana Partnership

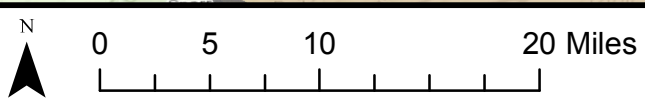
/s/Robert Backus/
Robert Backus
The Omega Institute for Holistic Studies

ATTACHMENT A

Priority sites were selected based on the intersections of proposed transmission lines with class 1 wetlands, Significant Natural Communities, Significant Coastal Habitats, threatened and endangered species, protected areas, conservation easements, and stream crossings. Mapped locations of T&E Species are confidential and are not shown on this map.



Sources: Esri, DeLorme, HERE, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, and the GIS User Community



Data Sources: NYS GIS Program Office, TRANSCO, Scenic Hudson.

Potential Transmission Lines - NYTO P11
 Hudson Valley Transmission Upgrades – Possible Environmental Impacts
 New York State

CC Environment & Planning
 23 Jackson St.
 Batavia, NY 14020
 (585)219-4030

- Edic to New Scotland
- Knickerbocker to Churchtown
- Churchtown to Pleasant Valley
- Priority Sites
- County Boundaries
- Area of Interest

Figure 1