January 20, 2015

Hon. Kathleen H. Burgess
Secretary
State of New York
Public Service Commission
Empire State Plaza
Agency Building 3
Albany, New York 12223-1350

Re: Case 13-M-0457 -- 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—January 20, 2015 Filing in Response to the December 16, 2014 Order of the New York State Public Service Commission.

Dear Secretary Burgess:

Pursuant to Article VII of the New York State Public Service Law and the Order of the New York State Public Service Commission (the "Commission") issued and effective on December 16, 2014 establishing modified procedures for comparative evaluation, enclosed please find for filing on behalf of NY Transco LLC ("NY Transco"), Central Hudson Gas and Electric Corporation ("Central Hudson"), Niagara Mohawk Power Corporation d/b/a National Grid ("National Grid"), and New York State Electric & Gas Corporation ("NYSEG"), all entities hereinafter identified as "Indicated NYTOs" for ease of reference, five electronic copies (each electronic copy on a DVD) of the Indicated NYTOs' Part A materials as set forth in Appendix D to the above referenced Order as modified by your letter of December 30, 2014. All requested materials are provided for the alternative proposals offered for comparative evaluation by the Indicated NYTOs (the "Alternative Proposals").

The Alternative Proposals consist of changes to previously proposed segments or newly proposed projects which have been arranged as the following nine separate alternatives: (1) modifications to the 345kV Oakdale to Fraser Line proposed on October 1, 2013 including a slight revision to the proposed route and structure-type changes, and the elimination of the transmission line between New Scotland substation and Knickerbocker substation in the Edic to Pleasant Valley proposed project ("Enhanced October 2013 Project"); (2) the Knickerbocker to Pleasant Valley project; (3) the Leeds to Pleasant Valley reconductoring project; (4) the Hurley Avenue Phase Angle Regulators ("PARs") project (a proposal improving an existing substation and replacing two structures); (5) New Scotland to Leeds reconductoring and Leeds to Pleasant Valley new circuit project; (6) Edic to New Scotland and Knickerbocker to Pleasant Valley project; (7) Edic to New Scotland and New Scotland to Leeds to Pleasant Valley reconductoring

project; (8) Edic to New Scotland and the Hurley Avenue PARs project; and/or (9) Edic to New Scotland and New Scotland to Leeds reconductoring and Leeds to Pleasant Valley new circuit.

The Indicated NYTOs provide this information subject to the same reservations expressed in their letter of January 7, 2014 in this proceeding with respect to cost recovery, cost allocation and risk sharing, and continue to reserve the right to review all of the terms and conditions of the Commission's final order before committing to proceed with the Alternative Proposals.

Certain confidential information has been redacted from this submission. The information that was redacted is either trade secrets or confidential commercial information within the meaning of Public Officers Law Section 87(2)(d), or confidential critical infrastructure information within the meaning of Public Officers Law Section 86(5) which, if disclosed, could endanger the life or safety of persons within the meaning of Public Officers Law Section 87(2)(f). By separate letter to the Administrative Law Judges assigned to this proceeding, the Indicated NYTOs are requesting that the redacted trade secrets, confidential commercial information, and critical infrastructure information be granted confidential treatment.

As directed in the Commission's December 16, 2014 Order, this redacted submission is being filed with you in the application-specific docket to which the filing pertains - Case 13-M-0457, and being served on the active party list.

Respectfully submitted,

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cc: ALJ Prestemon
ALJ Phillips
Service List for Case 13-M-0457

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Submission

For Authority To Construct and Operate Electric Transmission Facilities In Multiple Counties In New York

(Visual simulation of a proposed cross section in Columbia County, "Churchtown to Pleasant Valley" segment.)

CASE 13-M-0457

SUBMITTED TO
Public Service Commission of the
State of New York
Submission of New York Transmission Owners for Authority to
Construct and Operate Electric Transmission Facilities in
Multiple Counties in New York

January 20, 2015

REDACTED

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BEFORE THE STATE OF NEW YORK

PUBLIC SERVICE COMMISSION

Submission of New York Transmission Owners	**)**	
For Authority to Construct and Operate Electric	**)**	**Case 13-M-0457**
Transmission Facilities in Multiple Counties in New York	**)**	

January 20, 2015

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PROPOSALS OFFERED
FOR COMPARATIVE EVALUATION
AT THE ORDER OF THE PSC
JANUARY 20, 2015

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PUBLIC NOTICE

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INTRODUCTION

The New York transmission system is the backbone of the State's energy infrastructure and vital to the economic well-being of the State. In 2012 Superstorm Sandy demonstrated the critical role of a reliable electric system when it hit New York causing billions of dollars in damage, knocking out electricity to millions, and disrupting the state economy. This weather event brought increased focus to the State's electric system and, in particular, to the weaknesses and problems it currently faces. Some of the larger problems include:

- Significant transmission congestion limiting access of cheaper, more environmentally friendly generation resources from reaching all loads within the State, particularly those loads in the Southeastern part of the State;
- Aging electric transmission infrastructure, which reduces resiliency to extreme weather events;
- Constraints on the transmission system limiting the ability of the system to respond to changes in generation portfolio oftentimes resulting in above market contracts to generators to maintain system reliability;
- Constraints leading to localized resource adequacy needs that have created the need for a new NYISO capacity zone;

These problems all have a cost to consumers and this cost is significant. Exhibit E-4 in this Application provides a more detailed look at the transmission system needs and some of the costs attributable to those needs.

In November 2012, the Commission initiated a proceeding to begin addressing these problems. The Commission is seeking to increase the upstate to downstate ("UPNY/SENY") interface's transmission transfer capacity by 1000 MW and to increase the Central East interface's transfer capacity. The alternative proposals, which were described in the Indicated NYTO's submission of January 7, 2015 and are further described herein will meet the Commission's objectives in part or in whole and will mitigate many of the transmission problems described above. These Alternative Proposals consist of changes to the Second Oakdale to Fraser and Edic to Pleasant Valley project proposed in the Part A filing submitted on October 1, 2013, as well as eight newly proposed projects. These Alternatives were conceived and developed taking into consideration the extensive public input from residents and property owners

throughout New York and they substantially improve upon the October 2013 submittal. All of the Alternatives would be constructed within the existing rights-of-way of the Indicated NYTOs.

The nine Alternative Proposals can be categorized into two groupings: those Alternative Proposals that increase the transfer capacity across the Central East interface and the UPNY/SENY interface, and those Alternative Proposals that provide an increase only across the UPNY/SENY interface.

UPNY/SENY and Central East Composite Alternatives

The most robust of the solutions are the five Alternatives that combine an UPNY/SENY component with the Edic to New Scotland (ED-NS) Central East component. These five Alternative Proposals are:

1. **Oakdale to Fraser 345kV Line and a new Edic to Pleasant Valley 345kV Line (O-F/ED-PV)** (this is a modification to the October 2013 proposal)
2. **A new Edic to New Scotland 345kV Line and a new Knickerbocker to Pleasant Valley 345kV Line (ED-NS/KB-PV)**
3. **A new Edic to New Scotland 345kV Line and the reconductoring of the existing 345kV transmission lines from New Scotland substation to Leeds substation to Pleasant Valley substation (ED-NS/NS-LD-PV(R))**
4. **A new Edic to New Scotland 345kV Line and the addition of PARs to the Hurley Avenue substation (ED-NS/HA)**
5. **A new Edic to New Scotland 345kV Line, the reconductoring of the existing 345kV transmission lines between New Scotland substation and Leeds substation, and the addition of a third Leeds to Pleasant Valley 345 kV Line (ED-NS/NS-LD(R)/LD-PV)**

Increasing the transfer capability for the Central East interface will allow the upgrade on the UPNY/SENY interface to be more fully utilized and increase the benefits of reduced congestion across the State. Adding the Central East component provides a more robust overall system solution, and creates benefits such as adding multiple 345 kV paths on the bulk power systems, thereby significantly increasing system operational flexibility. These five combined (or "composite") projects also provide a more complete upgrade to relieve constraints from the Mohawk Valley down to the Hudson Valley. Further, system resiliency is increased by the replacement of a significant number of aging transmission facilities, particularly with the addition of the Central East component. Moreover, many existing obstructions to approved agricultural uses will be removed by the ED-NS project, since a significant portion of that project replaces two existing transmission lines with a single transmission line.

UPNY/SENY Alternatives

The four projects with only an UPNY/SENY component are generally the lower cost proposals, since they are primarily designed to address only transfer improvements on the UPNY/SENY interface. As such, they do not provide the many additional benefits to the New York transmission system that are provided with the addition of a new Central East 345 kV transmission line and a 345kV hub.

These four Alternative Proposals are:

1. **A new Knickerbocker to Pleasant Valley 345kV Line (KB-PV)**
2. **Reconductoring of the existing Leeds to Pleasant Valley 345kV Lines (LD-PV(R))**
3. **Addition of Phase Angle Regulators to the Hurley Avenue Substation (HA)**
4. **Reconductoring of the existing New Scotland to Leeds 345 kV Lines and the addition of a third Leeds to Pleasant Valley 345kV Line (NS-LD(R)/LD-PV)**

The Commission has identified six criteria to comparatively evaluate all developer proposals. While all nine Alternative Proposals do not perform equally in all criteria, each provides a unique range of strengths and capabilities to provide numerous benefits to the residents across New York. A visual representation of a comparison of the benefits between each of the proposed alternative projects is provided in Figure 1, where: a green cell represents a higher benefit or a lower cost; a yellow cell represents a moderate benefit or a median cost; and a red cell represents a neutral/or negative impact or a higher cost.

This filing supplements the information submitted on January 7, 2015 by providing additional engineering and environmental information. This information demonstrates how the Alternative Proposals will be constructed within existing rights-of-way and how they will keep structure heights at a comparable height to existing structures in the Hudson Valley (Exhibit 5). It also demonstrates how the reduction of the total number of structures and the reduced footprint of the new structures lend themselves to reducing the permanent impacts to agricultural land and sensitive environmental and cultural resources.

Figure 1: Alternative Comparison Chart

	Transfer Capacity UPNY/ SENY	Transfer Capacity Central East	Cost	Electric System Benefits*	Resiliency	Within Existing ROW	Agricultural /Visual /Wetland Impacts
O-F/ED-PV							
ED-NS/ KB-PV							
ED-NS/ NS-LD-PV(R)							
ED-NS/ HA							
ED-NS/ NS-LD(R)/ LD-PV							
KB-PV							
LD-PV(R)							
HA							
NS-LD(R)/ LD-PV							

* Electric System Benefits – The electric system benefits are comprised of two different categories; expandability and operability. Expandability refers to the proposed electric system additions' capability to serve system load increases and interconnect new generating facilities in the long-term. Operability refers to how the design of the proposed electric system addition will improve the ability of the system operator to take maintenance outages and have greater flexibility to dispatch generation with less transmission constraints.