Appendix G

Exhibit No. NYT-37

EXHIBIT NO. NYT-37

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

New York Transco, LLC	**)**	
	)	
Central Hudson Gas & Electric Corp.	**)**	
Consolidated Edison Company of	**)**	
New York, Inc.	**)**	**Docket No. ER15-___-000**
Niagara Mohawk Power Corporation d/b/a	**)**	
National Grid	**)**	
New York State Electric & Gas Corp.	**)**	
Orange & Rockland Utilities, Inc.	**)**	
Rochester Gas and Electric Corp.	**)**	

PREPARED DIRECT TESTIMONY OF MARIE BERNINGER, RAYMOND KINNEY, AND BART FRANEY ON BEHALF OF NEW YORK TRANSCO, LLC

December 4, 2014

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QUALIFICATIONS

Q. MS. BERNINGER, PLEASE STATE YOUR NAME, TITLE, BUSINESS ADDRESS, EDUCATIONAL BACKGROUND AND WORK RESPONSIBILITIES.

A. My name is Marie Berninger. I am a Project Manager with the Energy Policy and Regulatory Affairs Group of Consolidated Edison Company of New York, Inc. ("Con Edison"). My business address is 4 Irving Place, New York, NY 10003.

I graduated from Lafayette College with a Bachelor of Science degree in Mechanical Engineering and earned a Master of Business Administration degree with a concentration in Finance from the Leonard N. Stern School of Business at New York University. I have worked for Con Edison since 2006. As a member of Con Edison's internal New York Transco, LLC ("NY Transco") development team, I have been actively involved in the establishment of the NY Transco business model, including the development of key aspects of the NY Transco cost allocation and cost recovery model. This work has

included performing analytical cost allocation and cost recovery analyses and preparing multiple state regulatory filings related to NY Transco project development. My responsibilities include representing Con Edison in the New York Independent System Operator, Inc. ("NYISO") stakeholder process, primarily in areas related to the Energy and Ancillary Service Markets. I have been in my current role since 2012. I have five years of experience in project management and electric distribution system engineering which include managing the implementation of a comprehensive smart grid system in New York City. During my five years in engineering, I also led Con Edison's participation in a collaborative international industry group to share best practices and new ideas among electric utilities in dense urban cities. Prior to my role in engineering, I completed Con Edison's management training program, which involved performing in roles including plant supervisor, engineer and analyst within multiple departments at Con Edison.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION ("FERC") OR IN ANY OTHER PROCEEDING?

A. No.

Q. MR. KINNEY, PLEASE STATE YOUR NAME, TITLE, BUSINESS ADDRESS, EDUCATIONAL BACKGROUND AND WORK RESPONSIBILITIES.

A. My name is Raymond P. Kinney. I am the Director of Transmission with New York State Electric & Gas Corp. ("NYSEG"). My business address is 18 Link Drive, PO Box 5224, Binghamton, NY 13902-5224. I graduated from Clarkson University with a Bachelor of Science degree in Chemical Engineering. I have also completed graduate level course work in economics, finance, and financial hedging. I am a Professional Engineer in the State of New York. My responsibilities include representation of

NYSEG and Rochester Gas and Electric Corporation ("RG&E") in the market participant committees at the NYISO, management of transmission and generation interconnection to the NYSEG and RG&E systems, and tie line and generation reporting to the NYISO, and transmission service contract administration. I have 31 years of experience with NYSEG covering areas including hazardous waste management, chemical safety and health, generation plant capital improvement, water and waste water treatment, industry deregulation, and representation of NYSEG in the development of the NYISO, with active involvement in market rule development from the NYISO's inception in 1999 through the present. Included in my history of involvement with the NYISO were extended terms as a working group chair and service as vice chair and chair of the Business Issues Committee and Management Committee.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE FERC OR IN ANY OTHER PROCEEDING?

A. Yes. I submitted affidavits in support of NYSEG in *New York State Electric & Gas Corp. v. New York Indep. Sys. Operator, Inc.*, Docket No. EL00-70-000 (filed Apr. 24, 2000), and *New York Indep. Sys. Operator, Inc.*, ER03-647-000 (filed Apr. 14, 2003). I have also testified in New York state legislative hearings on matters that relate to competitive wholesale market designs.

Q. **MR. FRANEY, PLEASE STATE YOUR NAME, TITLE, BUSINESS ADDRESS, EDUCATIONAL BACKGROUND AND WORK RESPONSIBILITIES.**

A. My name is Bart D. Franey. I am a Director of Regulations and Pricing with National Grid. My business address is 300 Erie Blvd. West, Syracuse, New York 13202. I am responsible for evaluating regulatory issues and energy policy initiatives that impact customers' electric commodity costs, system operations, and transmission system

planning. In addition, I have previously served as chairman of both the NYISO's Business Issues and Management Committees.

Prior to assuming my current position in January 2008, I served as a Principal Analyst for National Grid; functioning as the National Grid representative on both the NYISO and New York State Reliability Council committees since 2002. Prior to serving as a Principal Analyst for National Grid, I served as a Strategic Planner, a Supervisor of Transmission System Operations, and a Nuclear Fuel Engineer, all for Niagara Mohawk.

I received a Bachelor's degree in Physics from the State University of New York at Oswego and a Master's degree in Engineering Management from Syracuse University.

Since 1996, I have been involved in either performing or reviewing transmission system studies (*e.g.*, resource adequacy studies, system power flow studies and electric production cost studies). I have assisted the NYISO and National Grid in jointly complying with FERC orders. Specifically, I helped develop the NYISO's existing "Generator Deliverability Test," "Reliability Cost Allocation" formulas, "Economic Cost Allocation" formulas, and the installed capacity ("ICAP") cost saving metric.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE FERC OR IN ANY OTHER PROCEEDING?

A. Yes. I have testified in Docket No. ER04-449 (NYISO and New York Transmission Owners, Compliance Filing Proposing Criteria to Govern the Potential Creation of New Locational Capacity Zones) and in Docket No. ER11-2224 (New York Independent System Operator, Inc., Tariff Revisions to Implement Revised ICAP Demand Curves for Capability Years 2011/2012, 2012/2013 and 2013/2014). I have also testified in New York state legislative hearings on matters that relate to competitive wholesale market

designs and have presented on issues regarding transmission utilization and generator deliverability at several FERC and New York Public Service Commission ("NYPSC") technical conferences.

PURPOSE, PROJECTS AND COST ALLOCATION PROPOSAL

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of our testimony is to explain and demonstrate the reasonableness of NY Transco's proposed cost allocation for a portfolio of five transmission projects described in more detail by Messrs. Paul Haering and Richard Allen. Collectively, these five projects will require a capital investment of approximately $1.7 billion (in nominal dollars). The projects have been proposed in response to the New York *Energy Highway Blueprint* ("*Energy Blueprint*"). The Energy Blueprint recognizes that the State requires additional transmission investment for a number of State public policy needs including to address long-term reliability needs, longstanding transmission congestion, potential generation retirements or changes in generation resources, as well as other statewide public policy needs such statewide efforts to promote renewable energy and economic development. These are some of the very same public policies reflected in Section 219 of the Federal Power Act and the Commission's transmission rate incentive policy.

Q. WHAT ARE THE PROJECTS?

A. NY Transco's transmission projects fall into two categories as Messrs. Paul Haering and Richard Allen explain in more detail. The first category includes three projects that have been selected by the NYPSC through a statewide competitive planning and solicitation process developed in response to a directive issued by the NYPSC in November 2012 in Case 12-E-0503 (" Order Instituting Proceeding and Soliciting Indian Point Contingency

Plan"). These projects are collectively referred to as the "Transmission Owner Transmission Solutions," or "TOTS" projects. The TOTS projects were proposed in response to an NYPSC solicitation for solutions to the reliability concerns that could be caused by the potential retirement of the approximately 2,040 MW Indian Point Energy Center ("IPEC"), if it is unable to obtain a new nuclear operating license by the end of 2015.

The TOTS projects consist of: (1) installation of a second 345 kV Ramapo to Rock Tavern ("RRT") transmission line, (2) transmission upgrades to Con Edison's interconnection with Linden VFT and upgrades to the Con Edison Gowanus and Farragut substations to allow additional electricity to flow from Staten Island to the rest of the transmission grid (called the "Staten Island Un-Bottling"), and (3) a project to increase the import capability across the constrained Upstate New York/Southeast New York ("UPNY/SENY") interface by adding series compensation on the Marcy-to-Coopers Corners transmission path (specifically on the Fraser-to-Coopers Corners 345 kV line) and reconductoring approximately 21-miles of the Fraser-to-Coopers Corner transmission line.

The NY Transco's other two projects are pending before the NYPSC in a separate statewide competitive siting proceeding in NYPSC Case No. 12-T-0502. The NYPSC initiated this proceeding to examine the State's needs for new alternating current transmission upgrades in order to increase transmission transfer capability over the State's UPNY/SENY and Central East transmission interfaces. This proceeding is referred to as the "AC Proceeding." The NY Transco's two proposed projects in the AC Proceeding are the new Oakdale-to-Fraser 345 kV transmission line and the new Edic-to-

Pleasant Valley transmission line. These projects are referred to as the "AC Projects."

Q. PLEASE BRIEFLY SUMMARIZE NY TRANSCO'S COST ALLOCATION PROPOSAL.

A. NY Transco's cost allocation plan ("NY Transco Cost Allocation Method") is an adjusted load ratio share that takes into account the statewide public policy benefits including, but not limited to, the reliability and energy efficiency benefits to each transmitting utility's transmission district, which results in the following cost allocation percentages:

- Con Edison/O&R Transmission District - 41.7%
- New York Power Authority ("NYPA") - 16.9%
- Long Island Power Authority ("LIPA") Transmission District - 16.7%
- National Grid Transmission District - 10.4%
- NYSEG/RG&E Transmission District - 8.9%
- Central Hudson Transmission District - 5.4%

Although these transmitting utilities serve customers in NYISO's eleven "load zones," which are dispersed across the State, market participants often draw an upstate-downstate distinction because of differences in energy and capacity prices to the north and west of the UPNY/SENY transmission constraint below Albany, New York, compared to prices to the south and east of the UPNY/SENY interface. Viewed from this perspective, the proposed cost allocation method results in approximately 75% of the costs of NY Transco's five initial projects being allocated to energy withdrawals in downstate New York, and 25% of the costs being allocated to energy withdrawals in upstate New York. This cost allocation is a slight departure from the default load ratio share method provided for in the NYISO tariff for public policy projects under Order No. 1000. A

strict application of the default load ratio share method would allocate 60% of the costs of selected projects to downstate energy withdrawals and 40% allocated to energy withdrawals upstate. However, the NYISO tariff also allows for a different cost allocation method to be proposed by the transmission owner. Here, the slightly higher amount of cost being proposed to be allocated to downstate loads reflects the economic and reliability benefits that accrue more heavily to downstate loads, as we will explain.

CONTEXT FOR COST ALLOCATION PROPOSAL

Q. PLEASE DESCRIBE THE NEEDS THAT NY TRANSCO'S FIVE TRANSMISSION PROJECTS ARE INTENDED TO ADDRESS?

A. As Messrs. Haering and Allen explain, the five projects are critical transmission solutions to address the State's public policy needs and solve transmission congestion between upstate and downstate, including bottlenecks commonly referred to as the UPNY/SENY interface and the Central-East interface, as well as other congested lines in the area. The projects are also intended to support long-term reliability (including with respect to the potential closing of large generating plants or a shift in generation resources), replace aging infrastructure, support renewable energy, and promote economic growth. They also provide additional opportunity for upstate generation supplies to meet needs across the state, including in the downstate region, which results in benefits to communities where those resources are located such as jobs and tax revenues.

Q. WHAT EFFORTS HAS NEW YORK MADE TO RELIEVE THESE TRANSMISSION CONSTRAINTS?

A. Mr. Stuart Nachmias, and Messrs. Haering and Allen, describe these efforts in some detail. Briefly, New York's transmission owning utilities worked with the NYISO to perform a comprehensive assessment of the transmission grid that found a need for

billions of dollars of investment to replace aging transmission assets. Governor Cuomo built on that assessment in his *Energy Blueprint* which called for $1 billion in new transmission investments in the near term to provide a significant increase in transmission capability to support the transfer of power from upstate generation to downstate loads. In addition, the Energy Blueprint recommended up to $1.3 billion of new transmission investment to address reliability issues that may arise from generation retirements, and additional investments in transmission to meet the State's public policy goals to integrate renewable energy resources located in western and central New York so that the energy from these facilities is available to serve customers throughout the State.[1] The Governor tasked the NYPSC to examine these issues further and solicit proposals to address them.

Q. PLEASE DESCRIBE THE AC PROCEEDING.

A. As Mr. Stuart Nachmias explains, the NYPSC began a formal proceeding to evaluate proposals to construct alternating current transmission upgrades.[2] The NYPSC order solicited proposals to relieve the Central East and UPNY/SENY interfaces and, in a later proceeding, proposals to provide address reliability needs in the event that IPEC retires.[3]

Q. DID THE NYPSC FIND ANY BENEFITS FROM RELIEVING THESE CONSTRAINTS?

A. Yes. The NYPSC found that "[u]pgrading this section of the transmission system has the potential to bring a number of benefits to New York's ratepayers" including:

> [E]nhanced system reliability, flexibility, and efficiency, reduced environmental and health impacts, increased diversity in supply, and long-

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1 *Energy Highway Blueprint* at p. 13.

2 *Proceeding on Motion to Examine Alternating Current Transmission Upgrades*, New York Public Service Commission, Case 12-T-0502, Order Instituting Proceeding (issued Nov. 30, 2012) ("Reliability Contingency Plan Proceeding").

3 *Id*. at pp. 1-2.

term benefits of job growth, development of efficient new generating resources at lower cost in upstate areas, and mitigation of reliability problems that may arise with expected generator retirements.[4]

Q. WHAT WAS THE SECOND PROCEEDING?

A. The NYPSC's second proceeding focused specifically on reliability concerns that stem from the transmission bottleneck at UPNY/SENY combined with unanticipated loss of generation, including the 2,040 MW IPEC.[5] Building on the competitive solicitation in the AC Proceeding,[6] the NYPSC directed Con Edison to develop a reliability contingency plan in consultation with NYPA, NYSEG, NYPSC staff and other State agencies. Through this collaborative process, Con Edison, along with NYPA and NYSEG, proposed the three TOTS projects as the solution to the potential retirement of IPEC. The contingency plan stated that the three TOTS projects would be developed by NY Transco.

Q. DID THE NYPSC ACT ON THE RELIABILITY CONTINGENCY PLAN OFFERED BY CON EDISON, NYSEG AND NYPA?

A. Yes. The NYPSC approved the reliability contingency plan though an order issued on November 4, 2013.[7]

Q. DID THE NYPSC FIND ANY BENEFITS FROM THE TOTS PROJECT?

A. The NYPSC found that "implementing the three TOTS projects is expected to contribute at least 600 MW toward the reliability relief which may be necessary if IPEC is shut

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[4] *Id*. at p. 2.

[5] *Proceeding on Motion of the Commission to Review Generation Retirement Contingency Plans*, New York Public Service Commission, Case 12-E-0503, Order Instituting Proceeding and Soliciting Indian Point Contingency Plan (issued Nov. 30, 2012).

[6] *Id*. at p. 25.

[7] *Proceeding on Motion of the Commission to Review Generation Retirement Contingency Plans*, New York Public Service Commission, Case 12-E-0503, Order Accepting IPEC Reliability Contingency Plans, Establishing Cost Allocation and Recovery, and Denying Requests for Rehearing (issued Nov. 4, 2013) at p. 32 ("Reliability Contingency Plan Order).

down."[8] The NYPSC went on to state that "even if IPEC is not retired, the benefits of each TOTS project would be greater than its costs individually, and that the benefits for all three projects together would exceed their combined costs."[9] The NYPSC further found that "even if IPEC does not retire, and the TOTS are not required to avoid reliability violations, the increased transfer capability from these projects would still provide economic benefits by supplying lower cost energy from upstate sources to downstate consumers."[10] Moreover, the NYPSC stated that the "benefits from resource adequacy solutions for the replacement of the IPEC, such as the TOTS, do not accrue solely to downstate consumers. Rather, we agree with the NYTOs that these solutions should also provide some reliability benefits statewide."[11] Thus, the NYPSC found that the TOTS projects will provide significant benefits to New Yorkers even if IPEC is not retired.[12]

Q. WERE THERE ANY OTHER ANALYSES OF BENEFITS FROM THE NY TRANSCO PROJECTS IN THE NYPSC PROCEEDINGS?

A. Yes. The Reliability Contingency Plan Order recites that the NYPSC asked The Brattle Group to perform an independent assessment of production cost savings that are expected to arise from the three TOTS projects in the event that IPEC remains in service. The Brattle Group used General Electric's Multi-Area Productions Simulation ("GE MAPS") software to examine expected production cost savings from each of the TOTS projects individually, as well as for all three projects combined.[13] The Brattle Group went a step

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8 *Id.* at p. 24.
9 *Id.*
10 *Id.*
11 *Id.* at p. 32.
12 *Id*. at pp. 23-25.
13 *Id*. at p. 23.

further by factoring in NYISO's then-proposed new capacity pricing zone for the lower Hudson Valley region beginning with the Summer 2014 capability period. According to the NYPSC, Brattle calculated net benefits as the difference between statewide production cost savings and the total assumed revenue requirement for the TOTS projects.

Q. WHAT DID THE BRATTLE GROUP'S ANALYSIS SHOW?

A. The NYPSC found that Brattle's analysis showed net benefits from the TOTS projects of $260 million on a net present value basis during the first 15 years after the projects go into service and a total net present value of net benefits over the expected 40 year life of the TOTS projects of $670 million. Brattle concluded that consumer benefits would be substantially greater if IPEC is retired from service than if it remained in service. On the basis of this analysis—which was not disputed in the case—the NYPSC found that

> …even if [Indian Point] does not retire, and the TOTS are not required to avoid reliability violations, the increased transfer capability from these projects would still provide economic benefits by supplying lower cost energy from upstate sources to downstate consumers. The Staten Island Unbottling project responds to Con Edison's in-city contingency planning needs, by decreasing the amount of in-city capacity Con Edison needs to operate its system securely. This will also allow certain generators to run more, saving system resources costs."[14]

The NYPSC also found that the reliability benefits would be statewide benefits, and would not flow solely to customers to the south and east of the constraints.[15]

Q. HAVE THERE BEEN ANY OTHER EVALUATIONS OF THE BENEFITS THAT NY TRANSCO'S PROJECTS WILL PROVIDE TO THE NYISO GRID?

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[14] *Id*. at pp. 24-25.
[15] *Id*. at p. 32.

A. Yes. Messrs. Haering and Allen explain the various statewide benefits of the AC Projects.[16] They also point out that NYISO's 2014 Reliability Needs Assessment ("2014 RNA")[17] determined that the UPNY/SENY and Central East interfaces contribute to both reliability and transmission congestion. NYISO's analysis assumed that the TOTS projects will be built, and thus provide congestion relief and reliability support for southeastern New York. Based on the inclusion of the TOTS, certain units returning to service at least temporarily, and beneficial system improvements, NYISO later issued a letter on November 14, 2014, rescinding a request for reliability solutions**,** as Messrs. Haering and Allen explain. The NYISO estimates that the addition of the TOTS projects will increase UPNY/SENY transfer capability by approximately 450 MW (independent from the impact of IPEC retirement) and that the impact of increased transmission transfer capability will address long-term needs of the state:

> [A]nalysis . . . showed that UPNY-SENY remains among the most constraining interfaces, consistent with the conclusion from the previous RNAs. This indicates that increasing the total resources downstream of UPNY-SENY or increasing the UPNY-SENY transfer limit will be among the most effective options to resolve the LOLE violations. . . . Increasing the limit on UPNY-SENY by 1,000 MW showed the most movement in [Statewide] LOLE and the individual Load Zone LOLE. Zonal LOLE went down for all Zones G-K.[18]

The NYISO resource adequacy and regional reliability studies demonstrate that (1) the TOTS projects will provide significant reliability benefits by increasing transfer limits across UPNY/SENY, (2) the TOTS projects will improve the transfer capability across

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[16] Exhibit No. NYT-4 at 29-30.

[17] New York Independent System Operator, 2014 Reliability Needs Assessment, Final Report (Sept. 16, 2014) (available at www.nyiso.com/public/webdocs/markets_operations/services/planning/Planning_Studies/Reliability_Planning_Studies/Reliability_Assessment_Documents/2014%20RNA_final_09162014.pdf) ("NYISO 2014 RNA").

[18] *Id.* at p. 31.

UPNY/SENY, which will improve both Zonal and statewide reliability by reducing the loss of load expectation ("LOLE"), and (3) if the TOTS project were not included in the NYISO planning study it is unlikely that all reliability needs would have been met.

Q. DO LOLE REDUCTIONS TO ZONE G-K RESULT IN ECONOMIC BENEFITS?

A. Yes. As stated above, increasing UPNY-SENY transfer capability provides the same relative LOLE benefits as adding generation below the constraint. In its "Locational Minimum Installed Capacity Requirements Study" for the 2013 -2014 capability year, the NYISO discussed the impact of the announced retirement of the approximately 500 MW Danskammer generating station in the lower Hudson Valley to explain why the event "significantly influences the reliability situation of [New York City] and [Long Island] due to reduced support to the load center."[19] The NYISO concluded that "[t]o compensate for this retirement both the [New York City locational capacity requirement] and the [Long Island locational capacity requirement] need to be increased."[20]

Given the incremental increase in UPNY-SENY transfer has the same relative impact on locational capacity requirements as generation; and "the retirement of the Danskammer units is the primary factor increasing the LCR values… because the Danskammer units are located in Zone G, which provides assistance to both NYC (Zone J) and LI (Zone K)",[21] clearly there are significant economic benefits attributable to the TOTS in the form lower capacity obligations to locational capacity Zones J, K, and Lower Hudson Valley. Based on the size of the increase in transfer attributed to the TOTS and using the impact Danskammer had as a gauge, one would expect locational

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19 http://www.nyiso.com/public/markets_operations/services/planning/documents/index.jsp

20 *Id.*

21 *Id.*

capacity obligations for Zone K and J to change by as much as 3% in planning cases with the TOTS assumed in-service relative to the cases without the TOTS in service.

Q. ARE THERE ANY OTHER STATEWIDE OR REGIONAL BENEFITS FROM THE TOTS AND NY TRANSCO AC PROJECTS?

A. Yes. Beyond the benefits to system reliability discussed above, the TOTS and NY Transco AC projects will help to relieve transmission congestion and lower energy and capacity costs to consumers, as illustrated by the NYISO's 2013 Congestion Assessment and Resources Integration Studies Report ("CARIS"), which performed analyses of potential transmission solutions to relieve the UPNY/SENY and Central East constraints.[22] This study is attached as an exhibit to the testimony of Messrs. Haering and Allen. The NYISO estimated the impact that relieving these constraints would have on the congestion component of locational energy prices. According to the CARIS report, increasing transmission capability across UPNY/SENY and Central East by approximately 1,200 MW and 550 MW respectively would reduce congestion costs $1,411 million (ten-year present value in 2013 dollars). The CARIS report forecasted $316 million in cost savings due to the elimination of losses, $739 to $4,221 million in customer ICAP savings, as well as other benefits such as reduced emissions through the dispatch of more efficient generation, and facilitating the development of renewable resources that will be able to locate upstate and deliver energy to customers across the State including the downstate region.

NY TRANSCO'S COST ALLOCATION METHOD

Q. WHAT CRITERIA DID NY TRANSCO USE TO GUIDE ITS COST

[22] New York Independent System Operator, 2013 Congestion Assessment and Resource Integration Study (Nov. 19, 2013). Exhibit No. NYT-6.

ALLOCATION PROPOSAL?

A. The proposed cost allocation method meets the well-settled standard that costs should be allocated in a manner that is "roughly commensurate" with the benefits received by those who will pay the resulting rates. Because all five of the NY Transco projects are designed to collectively address the upstate to downstate power flow constraints and associated statewide public policy needs, the NY Transco's proposed cost allocation methodology is appropriate for this group of projects. As mentioned earlier, the NY Transco cost allocation proposal reflects an adjustment to the default load ratio share method to reflect that while the projects are built for statewide needs the downstate region will experience significant reliability and congestion benefits. While the default load ratio share approach would have allocated 40% of the costs of NY Transco's portfolio of projects to upstate customers and 60% of the costs to downstate customers, the proposed methodology would allocate only 25% to upstate load and 75% to downstate load. Although some parties in the NYPSC's TOTS proceeding claimed that allocating even 25% of the costs to upstate customers was too much, those objections failed to refute the fact that the reliability benefits of NY Transco's projects flow throughout the state and include statewide reliability benefits, as the NYPSC found in approving the TOTS projects.[23] The Projects will provide other statewide benefits, such as economic development, job creation, local tax revenues, renewable energy and environmental benefits as we explain later in our testimony. As discussed below, the NYPSC endorsed the proposed cost allocation methodology for the TOTS projects based on these benefits.

[23] Reliability Contingency Plan Order at p. 32.

Q. DOES NY TRANSCO'S COST ALLOCATION PLAN COMPLY WITH FERC'S COST ALLOCATION POLICY IN ORDER NO. 1000?

A. Yes. NY Transco's proposed cost allocation method is consistent with cost allocation Principle 2 as set forth in the NYISO Open Access Transmission Tariff ("OATT") which prohibits the involuntary allocation of costs to customers who do not benefit from transmission projects.

The NY Transco cost allocation will apply to an initial portfolio of projects that will be fully integrated with the existing transmission network and that will produce numerous important benefits across New York State. FERC recognized in Order No. 1000 that uncertainty about cost allocation leads to uncertainty about cost recovery, which creates barriers to constructing new transmission lines, particularly projects that are intended to relieve constraints and achieve other public policy goals, like the projects that NY Transco intends to build. The Commission, therefore, permitted transmission providers to address this uncertainty by proposing cost allocation plans that will apply to entire groups or categories of projects without requiring precise cost-benefit assessments for each project:

> . . . we reiterate that the public utility transmission providers in a transmission planning region may propose a cost allocation method or methods that consider the benefits and costs of a group of new transmission facilities, although they are not required to do so. To the extent they propose a cost allocation method or methods that considers the benefits and costs of a group of new transmission facilities, and adequately support their proposal, Cost Allocation Principle 2 would not require a showing that every individual transmission facility in the group of transmission facilities provides benefits to every beneficiary allocated a share of costs of that group of transmission facilities. However, it is

required that the aggregate cost of these transmission facilities be allocated roughly commensurate with aggregate benefits.[24]

NY Transco's initial group of five transmission projects fits this aggregate cost allocation approach.

Q. HOW WAS THE NY TRANSCO'S PROPOSED COST ALLOCATION DETERMINED?

A. The NYTOs are very much aware from prior experience that disputes about cost allocation can impede transmission development, but also recognize that New York needs to upgrade the transmission system to meet the State's pressing transmission needs. The NY Transco owners are affiliated with the investor-owned utilities in New York, which provide delivery service to more than 85% of the customers in the State. The NY Transco and its owners each have a vested interest in ensuring that the costs of any bulk power system project are allocated reasonably in proportion to the benefits received by the customers of the load serving entities in New York State.

The NY Transco owners set out to determine an equitable cost allocation method for the initial group of five projects that is roughly commensurate with benefits and would provide the necessary certainty to move forward with them. The NY Transco owners took into consideration their load requirements and the nature and distribution of benefits expected to arise from the portfolio of transmission projects that NY Transco intends to pursue. Thus, the NY Transco Cost Allocation Method derived cost allocation percentages that consider all relevant benefits that the projects in aggregate are expected to provide statewide.

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[24] *Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities*, Order No. 1000, 136 FERC ¶ 61,051 (2011) at P 641.

Q. DID THE NYPSC MAKE ANY FINDINGS ABOUT NY TRANSCO'S COST ALLOCATION PROPOSAL?

A. Yes. The NYPSC found that "based upon the IPEC Reliability Contingency Plan analysis, the three proposed TOTS projects were found to provide net benefits both with and without IPEC in service. We also recognize that the benefits from resource adequacy solutions for the replacement of the IPEC, such as the TOTS, do not accrue solely to downstate consumers. Rather, we agree with the NYTOs that these solutions should also provide some reliability benefits statewide."[25]

Q. HAS FERC RECOGNIZED THAT IT IS REASONABLE TO TAKE INTO ACCOUNT A WIDE ARRAY OF BENEFITS OF TRANSMISSION UPGRADES FOR COST ALLOCATION PURPOSES?

A. Yes. The Commission recognized in its ruling on NYISO's Order No. 1000 compliance filing that, in allocating costs to transmission districts for projects that address reliability needs like the TOTS projects and the AC Projects, it is appropriate to take into consideration all of the various benefits that these projects can provide[26] Accordingly, while the TOTS projects clearly provide localized as well as statewide reliability benefits to downstate customers, the NYPSC has also found that these projects will provide a variety of other direct and indirect economic benefits to varying degrees throughout the State. The AC Projects will provide similar benefits because NY Transco has proposed these projects to address the same types of issues and needs as those sought to be addressed by the TOTS projects.

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[25] *Proceeding on Motion of the Commission to Review Generation Retirement Contingency Plans*, New York Public Service Commission, Case 12-E-0503, Order Accepting IPEC Reliability Contingency Plans, Establishing Cost Allocation and Recovery, and Denying Requests for Rehearing (issued Nov. 4, 2013) at p. 32.

[26] *New York Independent System Operator, Inc.*, 143 FERC ¶ 61,059 at P 312 (2013). It should be recognized that at the time that the NY Transco Cost Allocation Method was presented to the NYPSC, NYPA and LIPA were participating in the NY Transco development effort.

Q. DO YOU HAVE ANY EXAMPLES TO SHOW WHY UPSTATE CUSTOMERS SHOULD BEAR SOME OF THE COST OF THE TRANSMISSION UPGRADES THAT RELIEVE CONGESTION FROM UPSTATE TO DOWNSTATE AND ACHIEVE MARKET SAVINGS FOR DOWNSTATE CUSTOMERS?

A. Yes. It is clear from the NYPSC Order instituting the AC Proceeding that the projects that will be selected will provide benefits statewide. Relieving historic constraints across the UPNY/SENY and Central East corridors will mean that more generating capacity in western and northern New York will be able to sell to load centers in the eastern (*e.g.* Albany area) and southeastern parts of the State. This will provide the opportunity for additional market revenues for struggling generation owners in the surplus areas upstream of the constraints, and opportunities for new generation to be developed in upstate regions, which will lead to job security and increased employment, greater economic development opportunities, and stable or increased tax revenues for those regions.[27] Relieving existing constraints will allow for greater utilization of existing resources by allowing generating capacity to be more easily delivered across the State's transmission districts while also replacing aging infrastructure. These kinds of reliability and energy-related economic benefits are exactly the kinds of widely-shared benefits that New York's Governor is promoting through the *Energy Blueprint*. In addition, NY Transco's projects will allow for meeting statewide renewable energy goals and prepare the State to better meet proposed EPA regulations, all of which will apply statewide. Therefore, the NY Transco's adjusted load ratio share cost allocation proposal is reasonable because it appropriately adjusts costs to the upstate and downstate areas in a way that recognizes varying degrees of reliability, economic, and other public policy

[27] These benefits are highlighted in a letter from New York State Senator Maziarz to the NYPSC attached as Exhibit No. NYT-38.

benefits.

Q. WHAT CONCLUSIONS DO YOU DRAW FROM THIS DISTRIBUTION OF BENEFITS IN VIEW OF THE NY TRANSCO COST ALLOCATION PROPOSAL?

A. We conclude that this cost allocation method reasonably allocates the costs of the NY Transco projects in a manner that is roughly commensurate with the benefits to the upstate and downstate customers. In the case of the TOTS projects, the statewide benefits were independently verified and the NY Transco's cost allocation methodology has been specifically endorsed by the NYPSC in approving the TOTS projects. Accordingly, the Commission should accept NY Transco's cost allocation plan.

Q. HOW DOES NY TRANSCO'S COST ALLOCATION RELATE TO THE NYISO PUBLIC POLICY PLANNING PROCESS?

A. The process in New York that led to the five proposed projects began in advance of the NYISO's implementation of the Order No. 1000 public policy planning process and, in the case of the TOTS projects was completed in advance of the effective date of the NYISO's Order No. 1000 planning process. However, in developing the proposed cost allocation, the NYTOs were mindful of the Commission's Order No. 1000 policies including with respect to cost allocation and were able to align the proposed cost allocation methodology with the Commission's policy. Therefore, it is not surprising that the NY Transco's cost allocation is consistent with the cost allocation options approved by the Commission for projects selected by the NYISO public policy planning process. That process allows for developers to propose a cost allocation method and provides for the NYPSC to review and support that cost allocation. If a developer does not propose a cost allocation, the default cost allocation applied is load ratio share. As shown in Exhibit No. NYT-39, using the default load ratio share cost allocation method under the

NYISO OATT would result in downstate loads paying approximately 60% of the costs of new transmission projects while upstate loads would pay approximately 40% of the costs. As noted, this compares to NY Transco's proposed 75%/25% downstate/upstate cost allocation. As these figures show, the NY Transco's cost allocation proposal is a modest departure from the load ratio share method (and is supported by distribution of benefits expected from these projects) and will result in a slightly more favorable rate treatment for upstate customers than they would receive under the default method.

Q. ARE THERE ANY OTHER REASONS WHY YOU BELIEVE THE NY TRANSCO COST ALLOCATION METHOD IS REASONABLE?

A. Yes, as mentioned above, the NY Transco cost allocation proposal is supported by its owners and all five NY Transco projects address upstate to downstate power flow restrictions and other public policy benefits. In the AC Proceeding, NYPSC Staff demonstrated that the benefits of the projects are statewide. Indeed, as stated with respect to the NYPSC's original cost allocation "Straw Proposal":

> Staff proposes that the Commission employ two established NYISO methodologies to allocate the costs of the projects that are approved as a result of the Commission's AC transmission initiative. Fifty percent of project costs will be allocated to the economic beneficiaries of reduced congestion consistent with the methodology embodied in the NYISO CARIS process. The other fifty percent of the costs will be allocated to all customers on a load-ratio share. Given that the loads in the southeastern portion of the state receive most of the economic benefit of the reduced congestion, the majority of the costs will be allocated to those loads. For the load-ratio share portion of the calculation, the majority of load in the state is in the southeastern portion of the state, so that while some costs will be allocated upstate, the bulk of the costs will be allocated downstate.[28]

The Straw Proposal provided an example whereby it allocated 80% of the costs of

[28] *Proceeding on Motion of the Commission to Examine Alternating Current Transmission Upgrades*, New York Public Service Commission, Case 12-T-0502, Energy Highway AC Transmission Initiative Straw Proposal (issued July 10, 2013) at pp. 5-6.

transmission upgrades to the downstate region and 20% to the upstate region, which is close to the NY Transco Cost Allocation Method. To fully evaluate the NYPSC cost allocation proposal, the economic beneficiaries were calculated using the GE MAPS software to project energy market savings. This method predicted the energy prices in each zone in 2021 if the proposed projects are completed. The model used predicted loads from the 2012 NYISO Gold Book. The resulting cost allocation with energy market benefits is 4.59% for Central Hudson Gas & Electric Corporation, 45.14% for Con Edison and Orange & Rockland Utilities, 8.53% for NYSEG and RG&E, 10.52% for Niagara Mohawk d/b/a National Grid, 12.92% for NYPA, and 18.30% for LIPA. The resulting statewide split was 20% upstate and 80% downstate.

We conclude that the NYPSC Staff's original straw proposal supports the NY Transco Cost Allocation Method.

COST RECOVERY

Q. **HOW DOES THE NY TRANSCO PROPOSE TO RECOVER ITS COSTS UNDER THE PROPOSED COST ALLOCATION METHOD?**

A. Operational control of the NY Transco projects will be turned over to the NYISO and service over the facilities will be provided under the terms and conditions of the NYISO tariff. The NYISO will also bill and collect the NY Transco revenue requirement under the terms of its tariff. Accordingly, the NY Transco proposes to recover its revenue requirement from *all* load serving entities ("LSEs") in the NYISO's region through the NYISO tariff. LSEs include energy supply companies ("ESCOs"), the NYTOs with respect to their full-service customers, and public power and municipal/cooperative entities. The NY Transco's revenue requirement will be calculated under the formula

rate approved in this proceeding. Specifically, this filing proposes to establish a new Attachment DD to the NYISO OATT, which will incorporate the NY Transco's proposed formula rate and associated cost allocation methodology. The formula rate in Attachment DD is explained in detail by Mr. Alan Heintz and Attachment DD is included as an exhibit to his testimony as Exhibit No. NYT-43.

NY Transco is also requesting approval of a new Rate Schedule 13 attached to this testimony as Exhibit No. NYT-40, the Transco Facilities Charge, which will govern the billing and collection of the NY Transco revenue requirement established under Attachment DD. The proposed Rate Schedule 13 provides a detailed explanation of how the Transco Facilities Charge will be calculated. As shown, the Transco Facilities Charge in Schedule 13 will be recovered from retail ratepayers in a way that resembles the current way investor-owned NYTOs recover other NYISO charges, such as NYISO Rate Schedule 1 and the NYPA Transmission Adjustment Charge.

ABANDONMENT INCENTIVE

Q. WHAT IS THE ABANDONMENT INCENTIVE BEING REQUESTED?

A. The NY Transco is seeking approval to recover all prudently incurred project costs in the event that any of the projects must be abandoned for reasons outside the control of the NY Transco.

Q. DO NY TRANSCO'S PROJECTS FACE RISKS THAT COULD RESULT IN ABANDONMENT?

A. Yes. As explained by Messrs. Haering and Allen, completion of the projects depends on NY Transco's ability to secure numerous regulatory permits and compliance with the conditions imposed in them. Failure to obtain necessary permits or the inability to

comply with the conditions imposed in them could lead to cancelation of the affected project. One or more of the projects may be abandoned and ongoing development costs may be at risk. Also, electrical facts may change that affect the need for the projects. As Messrs. Haering and Allen explain, NYISO's 2014 Reliability Needs Assessment identified the need for transmission projects to address anticipated reliability criteria violations arising from the UPNY/SENY, Central East and other constraints. Just six weeks after soliciting transmission projects to address those constraints, NYISO issued a notice rescinding the solicitation for solutions to identified needs. It did so in part because the TOTS projects will provide some relief to the transmission grid, and in part because the owners of aging generating plants that had announced retirement plans have decided to keep the plants in service, at least for the short term. It is possible that changed circumstances such as these may impact whether the AC Projects, once selected, will get permitted, constructed and place in service. As discussed my Messrs. Haering and Allen, there are significant permitting and construction risks for all five of the projects.

Q. WHAT IS THE BENEFIT OF GRANTING NY TRANSCO PRE-AUTHORIZATION TO RECOVER PRUDENTLY INCURRED COSTS FOR ITS PROJECTS?

A. Granting the incentive signals that the Commission is predisposed to allowing NY Transco to recover 100% of its prudently incurred out-of-pocket costs on a canceled project. While there remains some risk that the Commission may disallow a portion of the costs in a future proceeding, preapproval gives lenders comfort that the Commission will allow recovery and, therefore, the loans will be repaid. Such assurance, together with the Commission's long history of approving the recovery of prudently incurred

costs, is very important to the market's perception of risk associated with transmission projects.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

Q. THANK YOU.

STATE OF NEW YORK)

) **ss**

COUNTY OF NEW YORK)

I, MARIE BERNINGER, being first duly sworn on oath depose and say as follows:

The foregoing "Prepared Direct Testimony of Marie Berninger, Raymond Kinney, and Bart Franey on Behalf of New York Transco, LLC" was prepared by me and the other witnesses listed therein, or under the supervision of one or more of such witnesses, and the factual statements contained in such testimony are true and correct to the best of my knowledge, information and belief.

Further affiant saith not.

Marie Berninger

On this 7th day of November, 2014, before me, the undersigned notary public, personally appeared Marie Berninger and acknowledged to me that he/she signed the forgoing document voluntarily for its stated purposes. I identified Marie Berninger to be the person whose name is signed on the forgoing document by means of the following satisfactory evidence of identity (check one):

✓ Identification based on my personal knowledge of his/her identity, or

___ Current government-issued identification bearing his/her photographic image and signature.

Notary Public
My commission expires: 3/22/2015
(SEAL)

NEIL H. BUTTERKLEE
Notary Public, State of New York
Qualified in Suffolk County
No. 02BU5009938
Commission Expires 3/22/2015

STATE OF NEW YORK)
)
) **ss**
)
COUNTY OF BROOME)

I, RAYMOND KINNEY, being first duly sworn on oath depose and say as follows:

The foregoing "Prepared Direct Testimony of Marie Berninger, Raymond Kinney, and Bart Franey on Behalf of New York Transco, LLC" was prepared by me and the other witnesses listed therein, or under the supervision of one or more of such witnesses, and the factual statements contained in such testimony are true and correct to the best of my knowledge, information and belief.

Further affiant saith not.

Raymond Kinney

On this 2nd day of December, 2014, before me, the undersigned notary public, personally appeared Raymond Kinney and acknowledged to me that he/she signed the forgoing document voluntarily for its stated purposes. I identified Raymond Kinney to be the person whose name is signed on the forgoing document by means of the following satisfactory evidence of identity (check one):

✓ Identification based on my personal knowledge of his/her identity, or

___ Current government-issued identification bearing his/her photographic image and signature.

Maria R. Gelnett

Notary Public

My commission expires:

(SEAL)

MARIA R. GELNETT
Notary Public, State of New York
No. 4748888
Residing in Broome Co.
My Commission Expires Dec. 31, 2017

STATE OF NEW YORK)
)
) **ss**
)
COUNTY OF ONONDAGA)

I, BART D. FRANEY, being first duly sworn on oath depose and say as follows:

The foregoing "Prepared Direct Testimony of Marie Berninger, Raymond Kinney, and Bart Franey on Behalf of New York Transco, LLC" was prepared by me and the other witnesses listed therein, or under the supervision of one or more of such witnesses, and the factual statements contained in such testimony are true and correct to the best of my knowledge, information and belief.

Further affiant saith not.

Bart D. Franey

On this 1st day of December, 2014, before me, the undersigned notary public, personally appeared Bart D. Franey and acknowledged to me that he/she signed the forgoing document voluntarily for its stated purposes. I identified Bart D. Franey to be the person whose name is signed on the forgoing document by means of the following satisfactory evidence of identity (check one):

✓ Identification based on my personal knowledge of his/her identity, or

___ Current government-issued identification bearing his/her photographic image and signature.

Gayl Franssen

Notary Public

My commission expires: 4/12/2018

(SEAL)

GAYL ~~LYNN~~ FRANSSEN
Notary Public, State of New York
No. 01FR6220451
Qualified in Onondaga County
Commission Expires Apr. 12, 2018

Exhibit No. NYT-38

VICE PRESIDENT PRO TEMPORE
CHAIRMAN
ENERGY & TELECOMMUNICATIONS
COMMITTEE MEMBER
CONSUMER PROTECTION
CRIME VICTIMS, CRIME & CORRECTION
EDUCATION
ENVIRONMENTAL CONSERVATION
HIGHER EDUCATION
RULES
TRANSPORTATION

THE SENATE
STATE OF NEW YORK

GEORGE D. MAZIARZ
Senator, 62nd District

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August 14, 2013

Garry Brown, Chairman
New York State Public Service Commission
Three Empire Plaza, 14th Floor
Albany NY 12223-1350

Re: Case # 12-T-0502

Dear Chairman Brown:

I write today in my capacity as Chairman of the Senate Energy and Telecommunications Committee to strongly urge the Commission to abide by the October 1st filing deadline for scoping proposals in this case. Information coming out of the August 1st technical conference indicated that staff at the Department intimated that this date may need to be pushed back, which I think would be a mistake.

As the Commission is aware, congestion on the Central-East system and through Pleasant Valley accounted for 72% of the total system congestion, leading to significant additional costs for New York ratepayers. The U.S. Department of Energy and the Eastern Interconnection Planning Council Cooperative have both identified these upgrades as necessary to relieve congestion, backing up the conclusions reached in the New York State Transmission Assessment and Reliability Study (STARS) report produced by the New York Independent System Operator (NYISO). As such, the completion of the totality of these projects in an expeditious manner is needed to support critical public policy goals of the state of New York and to produce a more efficient transmission system for ratepayers.

The economic benefits of action on these projects are substantial and numerous. Combined the projects contemplated represent $1.3 billion in investment, they will create 9,000 good paying jobs, many of them union jobs and increase local tax revenues by $25-40 million. In addition, these projects will provide a vitally important life-line to struggling upstate power generators by allowing power to flow freely to the New York City market. This will save hundreds of jobs upstate and create thousands more, as the streamlined siting process provided by Article X of the public service law will encourage more power generators to build in upstate New York.

Furthermore, the benefits to New York City ratepayers are also clear from these projects, since increased competition from the free-flow of power will depress prices and help consumers and businesses alike.

As my colleagues from the Senate Energy and Telecommunications Committee wrote in our letter to you in June, these projects can be fully completed by 2019, but only if we get this process moving immediately. Now is not the time for bureaucratic delays, now is the time to act decisively for the betterment of our State's electric grid.

I fully realize that there are several more steps that need to take place before successful projects can be selected, but, that is why the need to avoid pushing back deadlines is so acute. All too often, I have seen important issues in the energy field face endless delays and then end up never coming to fruition. These delays have cost us jobs, economic investment and credibility and we simply cannot allow those sorts of delays in this case.

I urge you to direct staff to keep the October 1st deadline for the submission of project scoping statements, and work with the applicants to answer their questions and streamline any red tape that may make it harder for them to comply. Certainly, you and the other commissioners and your staff must perform your due diligence in this and every case, but, with those requirements in mind, please know that it is extremely important to me, to my constituents, the energy future of our state and the entirety of the people of the State of New York, that this be brought to an on-time conclusion so that work can begin on these much needed improvements.

Sincerely,

George D. Maziarz

George D. Maziarz
Senator, 62nd District
Chairman, Senate Energy and
Telecommunications Committee

CC: Acting Secretary Jeffrey C. Cohen
Commissioner Patricia L. Acampora
Commissioner Gregg C. Sayre
Commissioner Audrey Zibelman
Commissioner Diane X. Burman

Exhibit No. NYT-39

EXHIBIT NO. NYT-39

Table 1: Cost Allocation Comparison By Transmission District

Cost Allocation: by Transmission District	**NY Transco Cost Allocation (%)**	**Straight Load Ratio Share (%)**
National Grid	10.4	21
NYSEG/RGE	8.9	14.9
Central Hudson	5.4	3.4
Con Ed/O&R	41.7	33.8
NYPA	16.9	13.1
LIPA	16.7	13.7
Total	**100.0**	**100.0**

Table 2: Cost Allocation Comparison of Upstate Versus Downstate

Cost Allocation: Downstate/Upstate	**NY Transco Cost Allocation (%)**	**Straight Load Ratio Share (%)**
Downstate (CH + Con Ed/O&R + LIPA+ part of NYPA + part of NYSEG)	75.0	60.0
Upstate (part of NYSEG + Grid + part of NYPA)	25.0	40.0
Total	**100.0**	**100.0**

Exhibit No. NYT-40

6.13 Schedule 13 – Rate Mechanism for the Recovery of the Transco Facilities Charge ("TFC")

6.13.1 Applicability

This Schedule establishes the Transco Facilities Charge ("TFC") for the recovery of costs related to the following NY Transco LLC ("NY Transco") projects, each of which is hereinafter referred to as an "Approved NYTP": (1) the Second Ramapo-to-Rock Tavern 345-kV Line Project, the March South Series Compensation and Fraser-to-Coopers Corner Reconductoring Project, and the Staten Island Unbottling Project, each of which have been approved by the New York Public Service Commission ("NYPSC") on November 4, 2013, in Case No. 12-E-0503 (the "Transmission Owner Transmission Solutions" or "TOTS" projects); (2) the Second Oakdale-to-Fraser 345-kV Line Project and the new Edic-to-Pleasant Valley 345-kV Line Project (the "AC" projects) upon approval by the NYPSC in Case Number 12-T-502 and subject to inclusion by the ISO in the ISO transmission plan for purposes of cost allocation; and (3) any regulated public policy transmission project that has been approved by the ISO pursuant to Section 31.4.8 of Attachment Y of the ISO OATT and determined to be eligible to recover such costs pursuant to Sections 31.5.5.3 and 31.5.5.4 of Attachment Y of the ISO OATT.[1] NY Transco may undertake an Approved NYTP and seek cost recovery through a TFC under this Schedule.

The TFC shall be separate from the Transmission Service Charge ("TSC") and the NYPA Transmission Adjustment Charge ("NTAC") determined in accordance with Section 14 of Attachment H of the ISO OATT, and any Reliability Facilities Charge ("RFC") determined pursuant to Section 6.10 of the ISO OATT.

[1] Capitalized terms used in this Schedule that are not defined in this Schedule shall have the same meaning set forth in Section 31.1.1 of Attachment Y of the ISO OATT.

In addition, NY Transco shall receive the outage charges described herein and shall not be charged O/R-t-S Congestion Rent Shortfall Charges, U/D Congestion Rent Shortfall Charges, O/R-t-S Auction Revenue Shortfall Charges or U/D Auction Revenue Shortfall Charges or be paid O/R-t-S Congestion Rent Surplus Payments, U/D Congestion Rent Surplus Payments, O/R-t-S Auction Revenue Surplus Payments or U/D Auction Revenue Surplus Payments under Section 20.2.4 and Section 20.3.6 of the ISO OATT; and NY Transco shall receive Incremental TCCs as described in Section 19.2.4 of the ISO OATT, but NY Transco shall not be a "Transmission Owner" for purposes of Section 20.2.5 or Section 20.3.7 of the ISO OATT and accordingly shall not receive an allocation of Net Congestion Rents under Section 20.2.5 of the ISO OATT or Net Auction Revenues under Section 20.3.7 of the ISO OATT.

6.13.2 Revenue Requirement for TFC

The TFC shall be calculated in accordance with the formula set forth in Section 6.13.3 using the revenue requirement of NY Transco necessary to recover the costs of an Approved NYTP. The revenue requirement to be used in the calculation of the TFC is described in Section 6.13.4. The costs that may be included in the revenue requirement include all reasonably incurred costs related to the preparation of proposals for, and the development, financing, construction, operation, and maintenance of, an Approved NYTP, including, but not limited to, a reasonable return on investment and any incentives for the construction of transmission projects approved under Section 205 or Section 219 of the Federal Power Act and the Commission's regulations implementing those sections, as determined by the Commission.

6.13.3 Calculation and Recovery of TFC and Payment of Recovered Revenue

The ISO will calculate and bill the TFC for each Approved NYTP in accordance with this Section 6.13.3. The ISO shall collect the TFC from the LSEs. The LSEs, including Transmission Owners, competitive LSEs, and municipal systems, serving Load located in

Transmission Districts to which the costs of the Approved NYTP have been allocated (each a "Responsible LSE" or a "NYPA Responsible LSE") shall pay the TFC. The costs of each Approved NYTP shall be allocated as set forth in the appropriate allocation table in Section 36.2 of Attachment 1 to Attachment DD.

6.13.3.1 The revenue requirement filed pursuant to this Schedule by NY Transco will be the basis for the TFC Rate ($/MWh) for the Billing Period that shall be charged by the ISO to each Responsible LSE based on its Actual Energy Withdrawals as set forth in Section 6.13.3.4. The revenue requirement of the NY Transco will be calculated according to the formula rate set forth in Section 36.3.1. of Attachment DD of the ISO OATT.

6.13.3.2 NY Transco shall in relation to any Approved NYTP reasonably exercise its right to obtain and maintain in effect all Incremental TCCs, including temporary Incremental TCCs, to which it has rights under Section 19.2.4 of the ISO OATT and shall take the actions required to do so in accordance with the procedures specified therein. Notwithstanding Section 19.2.4.7 and 19.2.4.8 of the ISO OATT, Incremental TCCs created and awarded to NY Transco as a result of implementation of an Approved NYTP shall not be eligible for sale in Secondary Markets. Incremental TCCs that may be created and awarded to NY Transco as a result of the implementation of an Approved NYTP, shall be offered by the ISO in all rounds of the six month Sub-Auction of each Centralized TCC Auction conducted by the ISO. The ISO shall disburse the associated auction revenues to NY Transco. The total amount of the auction revenues disbursed to the NY Transco pursuant to this Section 6.13.3.2 shall be used in the calculation of the TFC Rate, as set forth in Section 6.13.3.4. Incremental TCCs associated with an Approved NYTP shall continue to be offered for the duration of the Incremental TCCs, established pursuant to the terms of Attachment M.

The revenue offset discussed in this Section 6.13.3.2 shall commence upon the first payment of revenues related to Incremental TCCs associated with the implementation of an Approved NYTP on or after the date the TFC is implemented. The TFC and the revenue offset related to Incremental TCCs associated with the implementation of an Approved NYTP shall not require and shall not be dependent upon a reopening or review of NY Transco's revenue requirements for an RFC pursuant to Section 6.10 of the ISO OATT.

6.13.3.2.1 Outage Charges related to Incremental TCCs. Outage charges developed pursuant to the provisions of OATT Section 19 applicable to Expanders (as that term is defined in OATT Section 19) not subject to OATT Section 20.2.5, shall be payable to the ISO for any hour in the Day-Ahead Market during which an Expansion, associated with an Approved NYTP, is modeled to be wholly or partially out of service.

6.13.3.3 The billing units for the TFC Rate for the Billing Period shall be based on the Actual Energy Withdrawals available for the prior Billing Period for those Transmission Districts allocated the costs of the Approved NYTP in accordance with Attachment DD of the ISO OATT.

6.13.3.4 Cost Recovery Methodology

6.13.3.4.1 Cost Recovery Methodology for All Responsible LSEs Except NYPA

The ISO shall calculate the TFC for each responsible LSE except NYPA as follows:

Step 1: Calculate the $ assigned to each Transmssion District

$$\mathrm{TFC}_{t,B} = \sum_{p \in P} \Big(\big(\mathrm{AnnualRR}_{p,B} - \text{Incremental TCC Revenue}_{p,B} + \text{Outage Cost Adjustment}_{p,B} \big) \times \big(\mathrm{TransmissionDistrictCostAllocation}_{t,p} \big) \Big)$$

Step 2: Calculate a per-MWh Rate for each Transmission District

$$\mathrm{TFCRate}_{t,B} = \mathrm{TFC}_{t,B} / \mathrm{MWh}_{t,B}$$

Step 3: Calculate charge for each Billing Period for each Responsible LSE in each Transmission District

$$\text{Charge}_{B,l,t} = \text{TFCRate}_{t,B} \times \text{MWh}_{l,t,B}$$

Step 4: Calculate charge for each Billing Period for each Responsible LSE across all Transmission Districts

$$\text{Charge}_{B,l} = \sum_{t \in T} \left(\text{Charge}_{B,l,t}\right)$$

Where,

l = the relevant Responsible LSE;

P = set of projects;

T = set of ISO Transmission Districts;

t = an individual Transmission District

B = the relevant Billing Period;

$MWh_{t, B}$ = Actual Energy Withdrawals in Transmission District t excluding NYPA Responsible LSEs aggregated across all hours in Billing Period B;

$MWh_{l,t,B}$= Actual Energy Withdrawals for Responsible LSE l in Transmission District t aggregated across all hours in Billing Period B;

Annual $RR_{p,B}$ = the pro rata share of the annual revenue requirement for each project p as discussed in Section 6.13.2 above allocated for Billing Period B;

Incremental TCC $Revenue_{p,B}$ = the auction revenue derived from the sale of Incremental TCCs plus Incremental TCC payments received by NY Transco pursuant to Section 20.2.3 of the ISO OATT for each project p as discussed in Section 6.13.3.2 above allocated for Billing Period B. The revenues from the sale of Incremental TCCs in the ISO's six month Sub-Auctions of each Centralized TCC Auction shall be allocated uniformly across all hours of the Billing Period;

Outage Cost $Adjustment_{p,B}$ = the Outage Charges determined pursuant to OATT Section 6.13.3.2.1 for any hour in the Day-Ahead Market during which the project p is modeled to be wholly or partially out of service aggregated across all hours in Billing Period B;

Transmission District Cost $Allocation_{t,p}$ = the proportion of the cost of project p allocated to Transmission District t, as set forth in Section 36.2 of Attachment 1 to Attachment DD.

6.13.3.4.2 Cost Recovery Methodology for NYPA Responsible LSEs

The ISO shall calculate the TFC for each NYPA responsible LSE as follows:

Step 1: Calculate the $ assigned to NYPA Responsible LSEs

$$\mathrm{TFC}_{\mathrm{N,B}} = \sum_{\mathrm{p}\in\mathrm{P}} \Big(\big(\mathrm{AnnualRR}_{\mathrm{p,B}} - \text{Incremental TCC Revenue}_{\mathrm{p,B}} + \text{Outage Costs Adjustment}_{\mathrm{p,B}} \big) \times \big(\mathrm{NYPACostAllocation}_{\mathrm{N,p}} \big) \Big)$$

Step 2: Calculate a per-MWh Rate for NYPA Responsible LSEs

$$\mathrm{TFCRate}_{\mathrm{N,B}} = \mathrm{TFC}_{\mathrm{N,B}} / \mathrm{MWh}_{\mathrm{N,B}}$$

Step 3: Calculate charge for each Billing Period for each NYPA Responsible LSE

$$\mathrm{Charge}_{\mathrm{B,,n}} = \mathrm{TFCRate}_{\mathrm{N,B}} \times \mathrm{MWh}_{\mathrm{n,B}}$$

Where,

n = the relevant NYPA Responsible LSE;

N= the set of NYPA Responsible LSEs;

P = set of projects;

B = the relevant Billing Period;

$\mathrm{MWh}_{\mathbf{n},\mathrm{B}}$ = Actual Energy Withdrawals for each NYPA Responsible LSE n aggregated across all hours in Billing Period B ;

$\mathrm{MWh}_{\mathrm{N,B}}$= Actual Energy Withdrawals for all NYPA Responsible LSEs N aggregated across all hours in Billing Period B;

Annual $\mathrm{RR}_{\mathrm{p,B}}$ = the annual revenue requirement for each project p as discussed in Section 6.13.2 above allocated for Billing Period B;

Incremental TCC $\mathrm{Revenue}_{\mathrm{p,B}}$ = the auction revenue derived from the sale of Incremental TCCs plus Incremental TCC payments received by NY Transco pursuant to Section 20.2.3 of the ISO OATT for each project p as discussed in Section 6.13.3.2 above allocated for Billing Period B. The revenues from the sale of Incremental TCCs in the ISO's six month Sub-Auctions of each Centralized TCC Auction shall be allocated uniformly across all hours of the Billing Period;

Outage Cost Adjustment$_{p,B}$ = the Outage Charges determined pursuant to OATT Section 6.13.3.2.1 for any hour in the Day-Ahead Market during which the project p is modeled to be wholly or partially out of service aggregated across all hours in Billing Period B;

NYPA Cost Allocation$_{N,p}$ = the proportion of the cost of project p allocated to all NYPA Responsible LSEs N, as set forth in Section 36.2 of Attachment 1 to Attachment DD.

6.13.3.5 For the initial Rate Year 2016, the ISO may begin billing and collecting NY Transco's projected TFC subsequent to January 1, 2016; however, once billing commences in 2016, the ISO shall bill and collect NY Transco's projected TFC in equal installments for each Billing Period over the balance of 2016.

6.13.3.6 The ISO will collect the appropriate TFC revenues each Billing Period and remit those revenues to NY Transco in accordance with the ISO's billing and settlement procedures.

6.13.4 Recovery of Costs Incurred by NY Transco

6.13.4.1 The TFC shall be used as the cost recovery mechanism for the recovery of the costs of an Approved NYTP that is proposed, developed, or constructed by NY Transco under applicable federal, state and local law and authorized by the Commission to recover costs under this rate mechanism; *provided, however*, nothing in this cost recovery mechanism shall be deemed to create any additional rights for NY Transco to proceed with a regulated transmission project that NY Transco does not otherwise have at law.

6.13.4.2 The period for cost recovery will be determined by the Commission and will begin if and when the Approved NYTP is completed, or as otherwise determined by the Commission. NY Transco and/or the ISO, as applicable, will make a filing with the Commission to provide for its review and approval or acceptance, as appropriate, of the final project cost and resulting revenue requirement to be recovered through the TFC, which shall be reproduced in Section 36.3 of Attachment 2 to Attachment DD of the ISO OATT. The filing may include all

reasonably incurred costs related to NY Transco's undertaking an Approved NYTP as specified in Section 6.13.2 of this Schedule. NY Transco shall bear the burden of resolving all concerns about the contents of the filing that might be raised in such proceeding.