Additional Comments of the New York Power Authority and North America Transmission to the ESPWG on AC Transmission: Preliminary Results May 14, 2018

The New York Power Authority ("NYPA") and North America Transmission, LLC ("NAT") submit the following comments in response to the comments raised in the May 10, 2018 ESPWG meeting and in the comments submitted by competing developers on May 3, 2018.

Section 31.4 of Attachment Y of the New York Independent System Operator's ("NYISO") tariff requires NYISO to select the more efficient or cost effective Public Policy Transmission Need proposal based on an evaluation of many metrics that require analysis of proposal's costs and risks, and impacts on system performance and operations. NYISO's presentation of its analysis and findings to date has been clear and rational. NYISO has identified specific areas of risk that it considered to be material in the analysis and where it considered such risks to outweigh other benefits of a proposal. NYISO has provided appropriate responses to the comments received to date, as discussed below.

Rotterdam Gas Pipeline Interference

Competing developers commented that Proposals T025, T026, T027, and T028 should be disqualified because SECO noted the proposed location of the new Rotterdam 345kV substation over gas pipelines has a certain level of risk. In fact, as the NYISO correctly noted, the submitted site plans are preliminary.¹ The proposals also identified alternatives for the siting and design of the Rotterdam 345 kV substation that would not require relocation of the pipelines. NAT and NYPA offered these alternatives which demonstrate the flexibility available in the siting and design of this substation.

NYISO has correctly evaluated these proposals, particularly regarding the Rotterdam substation's viability. NYISO and SECO noted the risks and reflected them in their evaluation. They did not re-design the proposal.² It would be prejudicial to dismiss these proposals on the basis of one aspect of the preliminary design that may be easily remedied, particularly when alternatives were presented as part of the proposal.

Segment B Structure Heights

NYISO correctly identifies a proposal in the Hudson Valley that has taller structures as having more risk. A proposal with more structures at the same height or lower than existing structures will have fewer permitting issues to mitigate. It is better to have mitigated the risk upfront than have to remedy an issue in the permitting process.

¹ The Rotterdam substation property is congested, with several existing 115 kV and 230 kV yards, elevation changes, and many existing transmission lines. Without access to the Rotterdam property to identify other constraints such as wetlands, NAT and NYPA made many assumptions in identifying a preliminary 345 kV yard location, with alternatives.

² This is consistent with the Western NY PPTN process, in which NYISO and SECO considered electrically equivalent alternatives included within proposals to mitigate identified issues with proposals. Specifically, an alternative of steel poles in new right-of-way was considered as potential mitigation in response to questions related to the risk of the use of wood poles.

National Grid and New York Transco claim that their public outreach provides them an advantage.³ However all of the participants in the AC Transmission proceeding have had public outreach efforts. The experience of this past public outreach confirms the fact that structure heights is an important issue to the communities in the Hudson Valley. For example, the New York Times story cited in the National Grid/New York Transco comments identifies continuing concerns about structure heights, even after National Grid and New York Transco had modified their proposal:

"[Ned Sullivan of Scenic Hudson] and others met with representatives from National Grid, who gave them a preview of the company's reworked proposal. 'The good news is they stayed within the corridor, and eminent domain is off the table,' Mr. Sullivan said, 'but they were still looking at towers that were going to be 40 feet higher than the existing ones.' "⁴

The same New York Times story quotes other members of the public in the Hudson Valley objecting to the increases in tower heights: "At 130 feet, that's 50 feet taller than the tallest tree, said Greg Quinn, a horticulturist and author with a 145-acre black currant farm in Clinton..."

NYISO's use of increases of structure heights as an indication of permitting risks for Segment B is consistent with many of the more than 3,000 public comments in the AC Transmission Proceedings.⁶ Participants in the AC Transmission Proceeding will recall the slogan included in many public comments of "NO MONSTER POWER LINES", objecting primarily to significant increases in structure heights relative to the heights of existing structures.

NYISO's use of increases of structure heights as an indication of permitting risks for Segment B is well supported.

Clean Energy Standard Scenario

The Public Service Commission ("PSC") acknowledged in its Order dated January 24, 2017 that the Clean Energy Standard ("CES") strengthens the need for new transmission to remove limitations on accessibility of upstate renewable generation to downstate customers. Specifically, the Order reads

"As discussed by several commenters, the recently adopted Clean Energy Standard (CES), ..., further heightens the public policy need for transmission constraint relief and cross-state power flows."⁷

Any suggestion that the NYISO should disregard the CES in its evaluation would run counter to the intent and direction of the PSC. In fact, *all* developers that submitted comments to the PSC in

³ Comments of Niagara Mohawk Power Corporation d/b/a National Grid and New York Transco LLC Regarding Substation Engineering Company's AC Transmission New York Public Policy Transmission Need Technical Review Report ("National Grid/New York Transco Comments"), May 3, 2018, p. 14-15.

⁴ Penelope Green, *With Power Comes Ambivalence*, NY TIMES (May 14, 2014).

⁵ Ibid.

⁶National Grid/New York Transco Comments, p. 14

⁷ Case 12-T-0502, et al., Order Addressing Public Policy Transmission Need for AC Transmission Upgrades, Jan 24, 2017, p. 18-19.

response to the filing and notice of the Viability and Sufficiency Assessment identified the recently adopted CES as support for the need for new AC transmission upgrades. Accordingly, the NYISO has appropriately considered the objectives of the CES in its evaluation of the project proposals.

Series Compensation

The NYISO correctly recognizes the risk associated with the series compensation element included in Proposal T019. Series compensation added to the AC transmission system has the potential to introduce sub-synchronous resonance ("SSR") which may damage electric generating station rotors. This is especially true when compensating transmission lines at high levels such as the proposed 50%. The developers proposing T019 have introduced a topology screening study and allege that this study demonstrates that SSR is not a risk. A topology study is not definitive, and does not eliminate the need for further study. A number of detailed SSR studies are required to definitively eliminate the risk and until that study is performed and no risk is identified, the NYISO is correct in noting the SSR risk in T019. The studies and the identified risk mitigations may entail considerable costs.