Comments of North America Transmission on

Draft Western New York Public Policy Transmission Planning Report

July 24, 2017

Introduction

North America Transmission, LLC ("NAT") appreciates the significant efforts by the New York Independent System Operator ("NYISO") and its consultants in Phase II of the Western New York Public Policy Transmission Planning Process. NAT provides the following comments to the NYISO Draft Western New York Public Policy Transmission Planning Report to aid in NYISO's selection of the more efficient and cost effective project as required by the NYISO's Open Access Transmission Tariff ("Tariff").

As detailed in Attachment A, NAT's Proposal 1, T006, best meets the stated objectives of the process in accordance with the metrics identified in the NYISO Tariff. Proposal T006 has:

- The lowest initial capital cost and lowest life-cycle capital cost of any proposal;
- The lowest cost per MW of incremental Ontario import transfer capability;
- Equal or superior expandability, operability, performance and property rights;
- The shortest estimated schedule duration, which will result in earlier benefits and reduced costs relative to any other proposal; and
- The greatest system CO_2 emission reduction of any Tier 1 proposal, identified by the Public Service Commission as a key objective of the process.

NAT provides comments herein to detail additional support for the selection of Proposal T006. In summary, these include:

- The capital cost estimates for Proposal T006 are overstated by ~ $30 million relative to Proposal T014/T015 based on invalid assumptions for the cost of steel structures versus wood structures and inconsistent application of mob/demob, engineering, permitting, T&C, PM, and indirect costs;
- Life-cycle capital costs add significant additional capital costs to Proposal T014/T015 due to shorter life equipment including the PAR and wood transmission line structures;
- Increased production cost savings for Proposal T014/T015 are attributable to increased dispatch of the Somerset coal-fired generating facility, which is evident by the higher level of CO_2 emissions associated with Proposal T014/T015. This is counter to the goals of the State and, in any event, invalid as the Somerset coal-fired generating facility is likely to retire in the timeframe a selected proposal will enter service;
- The production cost modeling for the PAR may overstate savings as it may not consider the operational limitations of the PAR or other potential adverse congestion impacts; and
- Cost containment provisions should be considered in determination of the more efficient or cost effective project.

Project Cost Estimates

NAT has several questions and comments related the independent project cost estimate, including items which do not appear to be applied equally to all proposals.

As discussed below, the cost estimate for Proposal T006 appears to be overstated by ~ $30 million relative to Proposal T014/T015. Alternatively, the cost estimate for Proposal T014/T015 is understated by ~ $30 million. This is due in part to invalid assumptions related to the cost of steel structures versus wood structures (~ $20 million) and invalid application of mob/demob, engineering, permitting, T&C, PM and indirects (~ $7 million - $10 million).

In addition, NYISO does not appear to consider life-cycle capital costs, which further increases the costs of Proposal T014/T015.

Wood Structures versus Steel Structures

The cost estimates for the Tier 1 proposals do not appear consistently developed and mistakenly favor construction of structures using wood versus steel. Proposals T014/T015 are based on a wood H-frame structure configuration whereas every other proposal is based on steel monopole. The cost difference assumed by SECO between wood and steel is evidenced by a comparison of the transmission line foundation and structure costs for Proposal T014/T015 (wood) versus Proposal T014/T015 Alternative (steel).

	Description	Proposal T014/T015 (Wood)	Proposal T014/T015 Alternative (Steel)	Delta
2	Transmission Line Foundations	$3,200,398	$10,001,353	$6,800,955
3	Structures – Transmission Line	$4,688,312	$12,215,200	$7,526,888
	Contractor Markup (15%)	$1,183,307	$3,332,483	$2,149,176
	Subtotal	$9,072,017	$25,549,036	$16,477,019
	Contingency (20%)	$1,814,403	$5,109,807	$3,295,404
	Total	**$10,886,420**	**$30,658,843**	**$19,772,423**

Table 1 - SECO Wood versus Steel Cost Estimate

As shown in *Table 1*, SECO estimates wood pole construction to cost nearly $1 million less *per mile* than steel pole construction. This is clearly incorrect.

NAT and its affiliates have conducted several recent structure selection studies which included quotes from suppliers, including for New York projects, and concluded the initial capital cost for a wood H-frame transmission line to be comparable to steel. An example of a comparison calculation is included as Attachment B, which shows that wood pole construction may save up to $5,600 per structure, or $750,000 total for 133 structures. Note that this comparison is conservative in that it does not account for the wider right-of-way, additional clearing, or additional cost of 3 pole steel dead-ends required for the wood H-frame scenario, relative to single pole steel deadends for a steel monopole tangent.

Any limited upfront cost savings is more than outweighed by the much shorter useful life of wood compared to steel and the resulting higher life-cycle capital cost due to required wood structure replacement. In fact, Florida Power & Light Company (FP&L), an affiliate of the

sponsor of Proposal T014/T015, is conducting a program to replace all wood transmission structures in its system as discussed further below.

This conclusion is confirmed by the fact that the current use of wood H-frame transmission structures at 345 kV is very rare in the United States in the last several decades, as evidenced by Attachment C, which is a listing of all recently completed and under construction transmission projects reported by EEI members.[1] Wood H-frames tangents have been used in only 2 of 73 recent projects, representing less than 3% by mileage. All of the recently constructed 345 kV transmission lines with wood H-frame tangents have used steel poles for dead-end structures, which represent more expensive dead-end structures than a steel monopole.

If this is the origin of the difference in cost for the transmission line work among Proposal T014/T015 and Proposal T006, we request that SECO re-examine its estimates for this work. SECO may have an unreasonably high estimate for the cost of steel, which appears nearly twice the well supported estimate included in NAT's proposal. SECO's estimated value of ~ $12 million for "Structures-Transmission Line" is over $3 per pound[2] (pre-markup and contingency). An affiliate of NAT recently received binding proposals for steel monopoles for an approximately 70 mile 345 kV transmission line in the range of $1.20 to $1.40 per pound - less than half the amount assumed in the SECO estimate. This single incorrect assumption accounts for approximately $8 million of the cost difference between Proposal T006 and Proposal T014/T015.

Mob/Demob, Engineering, Permitting, T&C, PM & Indirects

SECO's cost estimates with respect to "Mob/Demob, Engineering, Permitting, T&C, PM & Indirects," do not appear to be consistently developed across the different proposals. *Table 2* identifies the value of this line item for each Tier 1 project and as a percent of the subtotal of the project scope. The SECO cost estimate for Proposal T006 is significantly higher than Proposal T014/T015 on both a dollar and a percentage basis, despite the fact that the scope of Proposal T014/T015 is greater than Proposal T006 given that:

- Proposal T014/T015 will have greater environmental impacts and field investigation and permitting costs due to a wider footprint (H-frame vs. monopole), wider right-of-way (150 feet vs. 125 feet), and a new East Stolle substation vs. expansion of the existing Stolle substation within the existing footprint; and
- SECO's estimated project duration for Proposal T014/T015 is six months longer than that for Proposal T006 and many of the costs in this category are directly impacted by length of schedule

[1]Complied from Transmission Projects: At a Glance, Edison Electric Institute, March 2013 found at http://www.eei.org/ourissues/ElectricityTransmission/Documents/Trans_Project_lowres.pdf, and Transmission Projects: At a Glance, Edison Electric Institute, December 2016, found at http://www.eei.org/issuesandpolicy/transmission/Documents/Trans_Project_lowres_bookmarked.pdf

[2] The total structure weight for Proposal T006 is 3,928,000 pounds.

Description	Proposal T006	Proposal T013	Proposal T014	Proposal T015
Mob/Demob, Engineering, Permitting, T&C, PM & Indirects	$33,255,007	$41,070,502	$28,037,173	$26,259,917
Contractor Markup (15%)	$4,988,251	$6,160,575	$4,205,576	$3,938,988
Contingency (20%)	$7,648,652	$9,446,215	$6,448,550	$6,039,781
Mob/Demob, et. al. Total Including Assumed Mark-Up and Contingency	$45,891,910	$56,677,292	$38,691,299	$36,238,686
Project Total	$140,509,574	$232,204,336	$148,098,379	$128,426,126
Mob/Demob, et. al. Percentage of Project Total	**33%**	**24%**	**26%**	**28%**

Table 2 - Mob/Demob, etal. costs for Tier 1 Proposals

Due to the smaller footprint and shorter schedule, the estimated Mob/Demob, etc. for Proposal T006 should be less than that of Proposal T015. The cost for this subcategory appears to be overstated by at least $7 million – $10 million for Proposal T006 relative to the other Tier 1 proposals.

Life Cycle Capital Costs

NYISO's assessment of costs focuses on initial capital cost estimates for the projects, but ignores long-term life-cycle capital cost differences among the proposals. This approach does not capture the true capital cost of a proposal, and also encourages proposals that may have a low initial cost but a higher net life-cycle cost. Properly evaluating the life-cycle capital costs where differences in proposals exist ensures proper consideration of costs and that the more efficient or cost effective proposal will be selected, particularly given the similarities among Proposals T006, T014, and T015. As it stands, NYISO's draft report does not fully account for the cost of Proposal T014/T015.

For example, the PAR included in Proposal T014 will have a much higher life-cycle capital cost than identified in the analysis. A Phase Angle Regulator has an approximately 40 year life,[3] which is much shorter than the life of the other proposal elements such as steel transmission structures. Consideration of the capital replacement of this element results in a higher life-cycle capital cost on a net present value basis. Additionally, there is a significant risk with a PAR of pre-mature failure, as seen in several high profile examples in New York State and Michigan/Ontario, which have resulted in significant unexpected additional capital costs for ratepayers. This risk should be taken into account as a significant disadvantage for Proposal T014 with respect to the life-cycle cost of the proposal. Giving Proposal T014 credit for additional transfer capability due to the PAR, but not taking into account the true cost of the PAR in the dollar per MW of transfer analysis is not fair to other proposals.

[3] A 40 Year Useful Life for a PAR is widely cited including for example referring to the original Ramapo PARs, see http://www.pjm.com/~/media/committees-groups/committees/oc/20170207/20170207-item-17-ramapo-par-replacement-cost-allocation-discussion.ashx

As stated above, Proposal T014 / T015 is based on the use of wood transmission poles. Wood transmission poles have a higher life-cycle cost due to higher failure rates and the need for replacement. Wood transmission poles also have lower reliability due to ground-line rot, woodpecker damage, risk of fire from lightning and wildfires, outages for replacement, and poor protection against cascading. They have environmental impacts due to the need for chemical treatment, and higher maintenance costs. These many disadvantages of wood transmission poles are cited as reasons for the wood transmission pole replacement program currently underway by FP&L, an affiliate of NEETNY. Attachment D includes excerpts from FP&L's recent filing to the Florida Public Service Commission summarizing the status of its program to replace all wood poles on its system with steel due to deterioration and for storm hardening.[4] In 2015, FP&L reports a 27.7% inspection failure rate of transmission poles inspected during the year.[5] If NYISO were to approve a wood pole transmission line, ratepayers would be paying the capital cost twice – once today for wood poles and again in 30-40 years (with 30-40 years of inflation) when the wood poles are replaced (likely with steel).[6] This represents a much higher capital cost over the life of the project as compared to using steel structures up front and should be taken into consideration. Giving Proposals T014 / T015 credit in the evaluation for an assumed lower initial cost related to using wood structures with no accounting for the known shorter life span of is not fair to other proposals.

While NYISO's Tariff does not explicitly reference the life-cycle capital cost of a project as an evaluation metric, consideration of those costs within the capital cost metric would be consistent with the way in which other metrics have been evaluated. For example, Section 31.4.8.1.4 of the Tariff refers to the evaluation of "operability" including how the proposed project may affect the cost of operating the system. This is reflected in the draft report in Section 3.3.4, where proposals are rated according to "Controllability", "Impact to Grid Operations During Construction", "Substation Configuration Assessment", and "Dispatch Flexibility", none of which are characteristics identified in the Tariff. The Tariff makes reference to the need to identify the more efficient or cost effective proposal, and identifies the cost to be evaluated to be a proposal's capital cost, including evaluation of capital cost on a net present value basis. Given the specific parameters of Proposals T006, T014 and T015 as discussed above, we believe life cycle costs differences among these proposals can and should be considered to arrive at the more efficient or cost effective project. Indeed, where, as here, there are significant differences among various projects' known life-cycle costs, ignoring those known costs could result in the selection of a significantly "less cost effective" proposal, to the long-term detriment of NYISO ratepayers.

Production Cost Analysis – Modeling of Somerset

The production cost savings of Proposals T006, T014 and T015 have an inverse correlation to the System CO_2 Emission Reductions. In other words, the higher the production cost savings, the lower the System CO_2 Emission Reduction. This suggests that the increased production cost

[4] While Western New York does not experience hurricanes, there is significant ice and wind which presents a similar driver for system hardening.
[5] Attachment C, page 14
[6] A survey of expected useful life for Douglas Fir poles identifies a 30-40 year useful life, see *Wood Pole Purchasing, Inspection and Maintenance: A Survey of Utility Practice.* Mankowski, M., et. al. Forest Products Journal, found at http://woodpoles.org/portals/2/documents/MankowskiUtility.pdf

savings can be attributed to increased dispatch of fossil generation in Western New York. This makes sense as Proposal T014 / T015, which have higher CO_2 emissions and higher production cost savings according to NYISO's analysis, provide an additional connection of the Somerset coal plant into the Dysinger Substation providing a lower impedance path for this generator. NYISO's analysis also suggests that Proposal T014, through the PAR, forces additional flow from the Somerset coal plant to achieve its incremental benefits and transfer.

NYISO should discount production cost savings that are a result of fossil-fired generation, particularly the Somerset coal plant, for a number of reasons. Production cost savings that arise from coal-fired generation, which is counter to the goals of the state, should not be valued equally to production cost savings from Niagara, low-carbon Ontario imports, and renewables. Consideration should be given to the likelihood that all coal-fired generation facilities in New York State, including Somerset will retire in the timeframe that the selected project would enter service.[7] Therefore any production cost savings that result from dispatch of this facility are more of a modeling result and not a reflection of an expected future reality. Further, the July 20 Order from the New York Public Service Commission directs that the analysis consider fossil-fueled generation in Western New York in service as well as out of service.

If NYISO does not agree that the incremental production cost savings from Proposal T014 / T015 arises from increased dispatch of Somerset, then a scenario with Somerset removed from service should be analyzed. The situation for Western New York fossil generation is different than the influence of nuclear units that are electrically distant from Zones A-C, and a sensitivity analysis with these fossil units out of service could inform the decision.

Production Cost Analysis - Modeling of Proposal T014 PAR

The modeled benefits provided by the PAR on the Dysinger – East Stolle 345 kV circuit may be overstated in the production cost simulation performed with GE MAPS. NAT has the following questions related to the modeling of the PAR for Proposal T014:

1. Did NYISO monitor the PAR for potential congestion to ensure flows did not exceed its 700 MVA rating? For example, did NYISO monitor the PAR for base case flows? Did NYISO monitor the PAR for loss of a Dysinger – Rochester 345 kV circuit?
2. Did NYISO monitor downstream elements from the PAR for potential congestion to ensure flows do no exceed ratings? For example, did NYISO monitor one Stolle 345/115 kV transformer for loss of the other Stolle 345/115 kV transformer?
3. Did NYISO ensure the operation of the PAR in GE MAPS was being simulated within its physical design? Specifically, were the required angle adjustments to achieve the desired flows verified to be within the PAR specifications? Were the adjustments able to take place at the speed in which they would be required in actual operations?

[7] Governor Cuomo reiterated his call to retire all in-state coal plants by 2020 in March 2017. See https://www.governor.ny.gov/news/governor-cuomo-and-governor-brown-reaffirm-commitment-exceeding-targets-clean-power-plan

Enabling New Renewable Resources

Another benefit identified by the Public Service Commission in the initial order finding a Western New York need is "promoting renewables".[8] Given this objective, it is not appropriate to include transfer cases with local area wind dispatched at 0% (see Table 3-6). This local area wind is a proxy for additional wind and solar in the area, and promoting renewables is a goal of the public policy of the state. There is currently 3,236 MW MW of wind and solar in the interconnection queue in Zone A-C. This queued renewable generation represents over 10 times the capacity included in NYISO's analysis with existing wind at 100%. Therefore utilizing existing wind at 100% is a very conservative approach to represent future system conditions even during periods of low wind generation. While a Clean Energy Standard scenario may not be necessary to analyze at this time, the cases with existing Wind @ 100% are more reflective of a Clean Energy Standard future. NYISO should not include the Wind @ 0% cases when calculating the transfer limits for the purpose of calculating the cost per MW ratio. The table below provides the relative transfer in MW and cost per MW of each Tier 1 proposals based on NYISO's estimated cost of the proposals and excluding the existing wind at 0% cases. The difference becomes more pronounced after taking into account NAT's comments on project costs estimates above.

	Proposal T006	Proposal T013	Proposal T014	Proposal T015
NYISO Estimated Cost ($ Million)	158	232	177	158
Scenario Average MW, 100% Wind	1572.5	1564.5	1637	1544
Cost per MW	0.100	0.148	0.108	0.102
Corrected NYISO Estimated Cost for T006	128	232	177	158
Cost per MW	0.081	0.148	0.108	0.102

Table 3 – Cost per MW @ 100% Wind

Other Comments

1. The proposed East Stolle substation included in Proposal T014 / T015 is not accurately described in Table 3-13. Constructing a new East Stolle substation rather than tying into the existing Stolle substation violates the principles of integration identified in the Substation Configuration Assessment in Section 3.3.4.3.
2. Section 4.9.11.4 of Appendix E does not appear to be accurately calculated for Proposal T006 compared to Proposal T014 / T015. NAT's 95 acres of cleared area was calculated off of a detailed take-off identifying all cleared area for the design of its project. Proposal T014 / T015 has a wider right-of-way, as well as additional disturbance for the area required for the East Stolle station, and should have a resulting significantly higher amount of clearing required in the table on Page 61.[9] Likewise, the second table on page 61 identifies 39 acres of wetlands impacts for Proposal T006 (compared to 4.5 acres identified in our detailed analysis) compared to 35 acres for Proposal T014 / T015. It is not possible for Proposal

[8] Ibid

[9] Likewise the scope for T013 is greater than T006 due to the 230 kV reconductoring and other work and therefore T013 should have a larger quantity of mowing and clearing.

T014 / T015, with a larger structure footprint (H-frame), a wider right-of-way, and more disturbances, to have a lower wetlands impact than Proposal T006.

3. Section 2.1 of Appendix E identifies minimum and estimated durations of 40 and 43 months for Proposal T006 and 40 and 49 months for Proposal T014 / T015. It is not clear why Proposal T014 / T015 should have the same minimum duration while they have such a longer estimated duration. Also, as noted above, a longer estimated duration should result in higher project management and indirect costs due to longer deployment of field staff.
4. Section 4.3.2.1 of Appendix E identifies having the Stolle Road transformers in parallel as a reliability risk, as it exposes all three transformers to outages for a single contingency. First, NAT notes that this is how the system is currently configured and therefore does not introduce any new reliability risk to the system. More importantly, the reliability analysis conducted by NYISO does not identify any system performance benefit for adding additional breakers, protective relays, and associated equipment. From a planning perspective, there is not a reliability issue for the proposed configuration, so this statement is not correct. In addition, the analysis confirms that any additional expense of reconfiguring the system is not justified.

Cost Containment

NAT understands that NYISO staff believes that it is prohibited from considering cost containment under the Tariff. As further described in Attachment E, a letter to NYISO management, the NYISO Tariff provides that all information associated with a proposal, including NAT's binding cost containment provisions, be taken into account in the project evaluation process. A binding cost containment proposal is clearly a form of credible cost estimate under the NYISO Tariff, and solutions with the tightest projected cost range provided with binding cost containment proposals should rank higher because they provide less risk to ratepayers. NAT is concerned that, if cost containment proposals are ignored in this process, that could prevent NYISO from selecting the more efficient or cost effective project, as required by the Tariff.

NYISO staff has acknowledged that cost containment should be considered in analysis in the case of a "tie" between similar proposals. As described above, Proposal T006 is clearly superior to the other Tier 1 proposals. However, NYISO identified four Tier 1 proposals in the draft report as being under consideration and, by NYISO's own analysis, the three lowest cost proposals have nearly identical cost per MW of incremental transfer. This suggests that, even if NYISO were for some reason to reject the corrections to SECO's estimate of Proposals T006's capital costs as described above, the results of the analysis would be very close and a tie situation would exist. As such, it is unquestionable that all binding cost containment proposals should be evaluated before a final selection is made. NAT is willing to publicly disclose its cost containment proposal if necessary to ensure transparency of the process.

In conclusion, errors in the SECO cost estimate should be remedied to reflect that Proposal T006 should cost approximately $30 million less than the value assigned to it by NYISO in the draft report, making it clearly the more cost efficient or cost effective project among the Tier 1 proposals. But even before taking those comments into account, NAT's binding cost containment proposal provides an independent basis for such a downward adjustment to the cost assigned in the draft report for Proposal T006.

Attachment A - Ranking According to Tariff Criteria

Metrics for Evaluating More Efficient or Cost Effective Regulated PPTP to Satisfy Public Policy Transmission Need			Proposal			
			T006	T013	T014	T015
		Overall Ranking	★★★★★	★★★	★★★★	★★★★
Tariff Section	Metric Description	*Sub-Metric*				
31.4.8.1.1	Capital Cost Including Accuracy of Proposed Estimates	Category Ranking	★★★★★	★★★	★★★	★★★★
		Initial Capital Costs (SECO $M)	158	232	177	158
		Ongoing Capital Costs	Low	Medium (PAR)	High (Wood Poles, PAR)	Medium (Wood Poles)
		Accuracy of Cost Estimate	Cost Cap	?	?	?
31.4.8.1.2	Cost per MW of Increased Transfer	Category Ranking	★★★★★	★	★★★★★	★★★★
		2016 RPP Cost Per MW (Average)	$109,761	$156,683	$110,443	$112,243
		2016 RPP Cost Per MW (Wind @ 100%)	$100,495	$148,421	$108,233	$102,011
		2016 RPP Cost Per MW (Wind @ 0%)	$120,909	$165,919	$112,744	$124,757
31.4.8.1.3	Expandability	Category Ranking	★★★★★	★★★★★	★★★★★	★★★★★
		Physical Expandability	345, 230E	345, 230E	345	345
		Electrical Expandability	345, 230S	345, 230S	345, 230S, 230E	345, 230S
		Dysinger Station	Yes	Yes	Yes	Yes
31.4.8.1.4	Operability	Category Ranking	★★★★★	★★★★★	★★★★	★★★
		Controllability	None	PAR on 115 kV	PAR on 345 kV	None
		Impact During Construction	Low	High	Low	Low
		Dysinger Substation	New, Breaker-and-a-half	New, Breaker-and-a-half	New, Breaker-and-a-half	New, Breaker-and-a-half
		Stolle Road Substation	Existing, Ring bus	Existing, breaker-and-a-half	New, Ring bus	New, Ring bus
		Dispatch Flexibility (2016 RPP MW Standard Deviation)	261	251	210	275
		Maintenance requirements	Low (Steel Poles)	Low (Steel Poles)	High (Wood Poles, PAR)	Medium (Wood Poles)
31.4.8.1.5	Performance	Category Ranking	★★★★★	★★★★★	★★★★	★★★★★
		Niagara Gen + Niagara Ties flow in 2025	24,165	24,198	24,309	24,251
		Dysinger-Stolle Road Path Rating (Norm/LTE/STE MVA)	1276/1471/1555	1301/1500/1685	700/700/700	1356/1410/1410
31.4.8.1.6	Property Rights	Category Ranking	★★★★★	★★★★★	★★★★★	★★★★★
		Property Rights	Existing ROW	Existing ROW	Existing ROW	Existing ROW
31.4.8.1.7	Schedule	Category Ranking	★★★★★	★★	★★★★	★★★★
		Estimated Duration (months)	43	55	49	49
		Minimum Duration (months)	40	44	40	40
31.4.8.1.8	PPTN or NYPSC Critera	Category Ranking	★★★★★	★★★★★	★★★★★	★★★★★
		Non-BPTF Upgrades Addressed by National Grid	No Impact	No Impact	No Impact	No Impact
		Interaction with Local Transmission Owner Plans	No Impact	No Impact	No Impact	No Impact
31.4.8.1.9	Other Metrics	Category Ranking	★★★★★	★★★★★	★★★	★★★★
		Change in Production Costs (2017 SR on 77/78 In-Service)	209	229	274	225
		Change in CO2 Emissions (2017 SR on 77/78 In-Service)	11,390,000	11,305,000	7,362,000	10,681,000

As shown on the table on the prior page, Proposal T006 provides equal or superior performance in all of the tariff metrics for evaluating the more efficient or cost effective project. Specific explanation of each ranking is provided below.

Tariff Section	31.4.8.1.1
Metric Description	Capital Cost Including Accuracy of Proposed Estimates
Top-Ranked Proposal	**Proposal T006**
Discussion	
Proposal T006 is the top ranked proposal for this metric. Proposal T006 provides the lowest initial capital cost, lowest ongoing capital cost, and is supported by robust cost containment provisions. The cost advantage for Proposal T006 will be compounded once NYISO normalizes the SECO cost estimates, which will cause Proposal T006 to be $25 million - $30 million lower than any competing Tier 1 proposal.	

Tariff Section	31.4.8.1.2
Metric Description	Cost per MW of Increased Transfer
Top-Ranked Proposal	**Proposal T006**
Discussion	
Proposal T006 is the top ranked proposal for this metric. Proposal T006 provides the lowest cost per MW of increased Ontario import transfer capability of any proposal. Proposal T006 is even more dominant when considering wind dispatched at 100%, which is more representative of future system conditions considering the Clean Energy Standard. This is also consistent with the benefit identified by the Public Service Commission to promote renewables.	

Tariff Section	31.4.8.1.3
Metric Description	Expandability
Top-Ranked Proposal	**No distinguishing factors**
Discussion	
All of the Tier 1 proposals exhibit similar characteristics in terms of both physical expandability and electrical expandability. All Tier 1 proposals include the Dysinger station, which provides significant expandability.	

Tariff Section	31.4.8.1.4
Metric Description	Operability
Top-Ranked Proposal	**Proposal T006 and Proposal T013**
Discussion	
Each Tier 1 proposal has certain advantages related to operability. Proposals T006, T014 and T015 will require limited work and outages of the existing system during construction. In contrast, Proposal T013 will necessitate extensive outages related to a 230 kV line rebuild and significant expansion of the Stolle Road substation.	

All of the proposals include construction of a new Dysinger substation in a breaker-and-a-half configuration.

Proposal T006 and Proposal T013 expand the existing Stolle Road substation, while Proposal T014 and Proposal T015 propose construction of a new "East Stolle" substation. The construction of a new substation adjacent to the existing substation violate the principles of integration identified by NYISO in Section 3.3.4.3. Proposal T013 further expands Stolle Road to include a breaker and a half configuration.

Proposal T014 appears to provide greater dispatch flexibility; however, this is due to dispatch without wind generation. With wind generation, all of the proposals exhibit similar dispatch flexibility.

Proposal T014 offers a level of controllability through the use of a PAR on the new Dysinger – East Stolle 345 kV transmission line. Proposal T013 offers more limited controllability through the use of a PAR on the 115 kV system. Consideration is not given to operating cost or the risk of premature failure.

Proposal T006 will have the lowest cost of operations and least maintenance requirements. Proposal T013 and Proposal T014 both use a PAR, which will significantly increase the cost of operations. Proposal T014 and Proposal T015 both use wood structures, which will necessitate additional maintenance outages and lead to increased costs of operations.

Tariff Section	31.4.8.1.5
Metric Description	Performance
Top-Ranked Proposal	**Proposals T006, T013 and T015**
Discussion	
The primary objection of the Western New York Public Policy Transmission Process is to "ensure the full output from NYPA's Niagara hydroelectric generating facility (i.e., 2,700 MW including Lewiston Pumped Storage), as well as certain levels of simultaneous imports from Ontario across the Niagara tie lines."[1] The ability for each Tier 1 proposal to enable Niagara generation with simultaneous Ontario imports is essentially equivalent. The difference in performance among the Tier 1 projects is less than 1%, which is not meaningful. The tariff also identifies consideration for utilization of the system, including the percent loading of facilities. Proposal T014 includes a limitation on the new Dysinger – Stolle 345 kV path of 700 MVA. This is approximately half of the path rating as compared to the other Tier 1 proposals and may provide a significant limitation to future operations.	

Tariff Section	31.4.8.1.6
Metric Description	Property Rights
Top-Ranked Proposal	**No distinguishing factors**
Discussion	
All of the Tier 1 proposals suggest use of the same existing right-of-way and will require similar levels of	

[1] 5 PSC Case No. 14-E-0454, *In the Matter of New York Independent System Operator, Inc.'s Proposed Public Policy Transmission Needs for Consideration*, Order Addressing Public Policy Requirements for Transmission Planning Purposes (July 20, 2015) ("July 2015 Order") at 27

new right-of-way.

Tariff Section	31.4.8.1.7
Metric Description	Schedule
Top-Ranked Proposal	**Proposal T006**
Discussion	
Proposal T006 includes the least amount of necessary work and, as a result, is estimated to be placed in-service on a schedule that is 6 months earlier than Proposal T014 and Proposal T015, and more than a year earlier than Proposal T013. The earlier in-service date will allow benefits to occur earlier, reduce overall project costs and provide additional flexibility to accommodate potential delays.	

Tariff Section	31.4.8.1.8
Metric Description	PPTN or NYPSC Criteria
Top-Ranked Proposal	**Not distinguishing factors**
Discussion	
All of the Tier 1 proposals have no impact to the non-BPTF upgrades addressed by National Grid and no impact to interaction with local transmission owner plans.	

Tariff Section	31.4.8.1.9
Metric Description	Other Criteria
Top-Ranked Proposal	**Proposal T006 and Proposal T013**
Discussion	
The other criteria distinguishable among the Tier 1 proposals is related to production cost savings and system CO2 emissions. Proposal T006 and Proposal T013 provide the highest level of reduction in CO2 system emissions. Proposal T014 provides the highest level of production cost benefits, but is significantly worse at reducing CO2 emissions. As described further in the comments, Proposal T014, and to a lesser extent Proposal T015, rely more heavily on the Somerset coal-fired generator in the model to achieve higher production cost savings. This reliance is evident by the increased CO2 emissions. Proposal T006 and Proposal T013 best meet one of the stated goals of the Western New York PPTN by providing significant environmental benefits.	

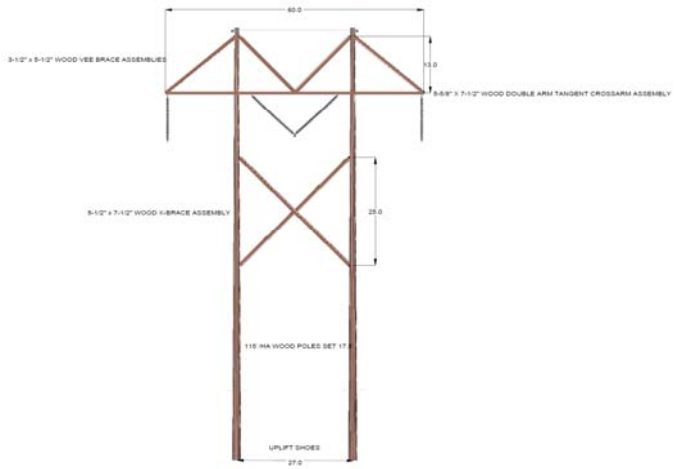
Attachment B
Wood H-Frame Horizontal and Steel Monopole Delta Unit Cost Comparison

Wood H-Frame							Steel Monopole Delta					
Description	Vendor Quote, Delivered to New York	Vendor Quote Arm & Braces	Misc Attachment Hardware Costs	Structure Cost	Installation Cost (Detail Below)	Total Installed Cost	Description	Weight (lbs)	Vendor Quote, Structure Cost	Installation Cost (Detail Below)	Total Installed Cost	Per Structure Cost Difference
100'/H4 (set 16')	Detail Redacted Due to Confidentiality			23,064	42,628	65,692	100' AG TAN	17,450	21,813	48,165	69,978	(4,286)
115'/H4 (set 17.5')				26,536	42,628	69,164	115' AG TAN	21,320	26,650	48,165	74,815	(5,651)
125'/H4 (set 18.5')				30,646	42,628	73,274	130' AG TAN	24,530	30,663	48,165	78,828	(5,554)

Notes:
Assumes same tower locations and span lengths to avoid blow-out issues with adjacent transmission lines. Assumes same clearance to ground.
Does not account for difference in easement costs or clearing requirements.
Does not include insulator framing.
Does not include tangents and dead-ends, assumed to be steel 3-poles on drilled piers.

Characteristics:

Wood H-Frame

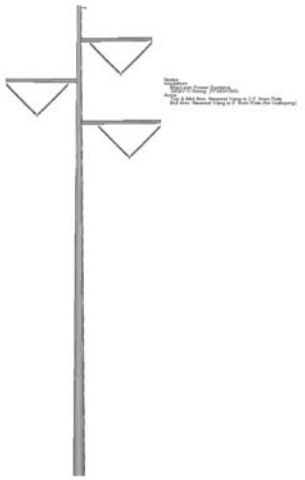


115'/H4 wood poles, 17.5' embedment (25.1" butt diameter)
Direct embedded foundations, 48" dia. x 17.5' excavation, 6 CY crushed rock backfill per pole

Weight of structure (lbs)	
Weight of Braces	1,578
Weight of Cables	14
Weight of X-Arms	1,371
Weight of Wood Poles	25,902
Weight of Suspensions	375
Weight of 2-Parts	360
Total	29,600

2 grounding assemblies
OPGW and dditional 3/8" EHS steel shield wire

Steel Delta Monopole



115' above ground/23' embedment tubular steel pole (37" butt diameter)
Direct embedded foundations, 60" dia. x 23' excavation, 11.5 CY crushed rock backfill

Weight of structure (lbs)	
Weight of Tubular Davit Arms	5,909
Weight of Steel Poles	15,411
Weight of Suspensions	20
Weight of 2-Parts	1,080
Total	22,420

1 grounding assembly
OPGW only

Installation cost estimate:

Wood H-Frame

Installation Costs	
Pole & Material receipt	$2,338
Spot at location	$4,701
Excavate	$21,434
Backfill	$306
Rock excavation adder	$5,699
Set structure	$3,400
Frame structure	$2,700
Grounding	$1,450
Wire adder	$600
Total/str	**$42,628**

Steel Delta Monopole

Installation Costs	
Material receipt	$2,913
Spot at location	$4,773
Excavate	$22,008
Backfill & set base	$2,413
Rock excavation adder	$8,192
Set structure	$4,876
Frame structure	$2,205
Grounding	$785
Wire adder	NA
Total/str	**$48,165**

Attachment C

U.S. 345 kV Transmission Under Construction or In-Service Reported by Edison Electric Institute

Project	State(s)	Utility	Miles	Predominant Structure Type	ISD
Mark Twain	MO	Ameren	100	Monopole	2019
Bay Lake	MI	ATC	45	Monopole	2019
Big Stone South - Ellendale	SD/ND	OTPC & MDUC	165	Monopole	2019
Illinois Rivers	IL/MO	Ameren	330	Monopole	2018
Spoon River (MVP 16)	IL	Ameren	46	Monopole	2018
Chisholm to Gracemont	OK	AEP	60	Monopole	2018
Badger Coulee	WI	ATC/Xcel	180	Monopole	2018
MVP 7	IA	MidAmerican	29	Monopole	2018
Brazos Valley Connection	TX	CenterPoint	59	Monopole	2018
Ottumwa-Iowa/Missouri Border (MVP7)	IA	ITC	14	Monopole	2018
Elk City - Gracemont	OK	OGE/AEP	93	Monopole	2018
Hobbs - Kiowa	NM	SPS	47	Steel H-Frame	2018
MVP 16	IA	MidAmerican	32	Monopole	2017
Grand Prairie Gateway	IL	ComEd	60	Monopole	2017
Killdeer - Hampton Tap	IA	ITC	29	Monopole	2017
Big Stone South - Brookings County	SD	Capx2020	70	Monopole	2017
Jeffrey - Manhattan	KS	Westar	25	Monopole	2017
Merrimack Valley Reliability Project	MA/NH	NationalGrid & Eversource	24	Steel H-Frame	2017
Fargo - Maple Ridge	IL	Ameren	16	Monopole	2016
Roanoke to Robison Park	IN	AEP	22	Monopole	2016
Rio Grande Valley (Lobo-Rio Bravo)	TX	ETT	26	Monopole	2016
Rio Grande Valley (Rio Bravo-North Edinburg)	TX	ETT	130	Monopole	2016
Cross Valley (North Edinburg-Loma Alta)	TX	ETT & Sharyland	96	Monopole	2016
Sibley – Nebraska City	MO/NE	Transource/OPPD	181	Monopole	2016
MVP 3	IA	MidAmerican	120	Monopole	2016
MVP 4	IA	MidAmerican	71	Monopole	2016
Elm Creek - Summit	KS	ITC/Westar	60	Monopole	2016
Hampton-Rochester-La Crosse	MN	Capx2020	128	Monopole	2016
Elm Creek - Summit	KS	ITC/Westar	60	Monopole	2016
Connecticut River Valley Upgrades	VT	VELCO	15	Steel H-Frame	2016
Lutesville - Heritage	MO	Ameren	12.5	Wood H-Frames	2016
Brokaw - South Bloomington	IL	Ameren	6	Monopole	2015
Black Hawk - Hazleton	IA	ITC	12	Monopole	2015
Border-Ledyard/Colby	IA	ITC	78	Monopole	2015
Colby - Killdeer	IA	ITC	12	Monopole	2015
Michigan Thumb Loop	MI	ITC	140	Monopole	2015
Brookings County - Hampton	SD/MN	Capx2020	250	Monopole	2015
Fargo-St. Cloud-Monticello	ND/MN	Capx2020	240	Monopole	2015
Kansas V-Plan	KS	ITC	122	Monopole	2015
Iatan – Nashua	MO	Transource	30	Steel H-Frame	2015
Sigurd to Red Butte	UT	PacifiCorp	160	Steel H-Frame	2015
Interstate Reliability Project	CT/RI/MA	NationalGrid & Eversource	75	Steel H-Frame	2015
Potash Junction-Roadrunner	NM	SPS	42	Steel H-Frame	2015
NW Texarkana to Valliant	OK/TX	AEP	76	Monopole	2014
Prairie Wind Transmission	KS	Westar/AEP/BHE	108	Monopole	2014
Bruce Mansfield - Glenwillow	OH/PA	FirstEnergy	35	Monopole	2014
Hitchland - Woodward	OK/TX	OGE & SPS	130	Monopole	2014
Woodward - Thistle	OK/KS	OGE/ITC	110	Monopole	2014
Woodward - TUCO	OK/TX	OGE/SPS	265	Steel H-Frame	2014
CREZ - Oncor	TX	Oncor	764	Lattice	2013
Mona to Oquirrh	UT	PacifiCorp	32	Monopole	2013
CREZ - ETT Portion	TX	ETT	458	Monopole	2013
Latham - Oreana	IL	Ameren	9	Monopole	2013
Pleasant Prarie - Zion Energy Center	IL	ATC	5	Monopole	2013
Rockdale - Cardinal	WI	ATC	32	Monopole	2013
Salem - Hazleton	IA	ITC	81	Monopole	2013
Greater Springfield Reliability Project	MA/CT	Northeast Utilities	35	Monopole	2013
Rhode Island Reliability Project	RI	National Grid	21	Monopole	2013
Lower SEMA	MA	Northeast Utilities	18	Monopole	2013
Pawnee - Smoky Hill	CO	PSCO	95	Monopole	2013
Seminole - Muskogee	OK	OGE	125	Steel H-Frame	2013
Sooner - Cleveland	OK	OGE	38	Steel H-Frame	2013
Maine Power Reliability Program	ME	CMP	184	Wood H-Frames	2013
Spearville - Post Rock	KS	ITC	89	Monopole	2012
Post Rock - Neb Border	KS	ITC	85	Monopole	2012
Axtell to Kansas	NE	NPPD	53	Monopole	2012
Hugo - Valliant	OK	ITC	18	Monopole	2012
Sooner - Rose Hill	OK	Westar	12	Monopole	2012
Sooner - Rose Hill	OK	OGE	43	Steel H-Frame	2012
Sooner - Rose Hill	OK	Westar	38	Steel H-Frame	2012
Sunnyside - Hugo	OK	OGE	120	Steel H-Frame	2012

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March 1, 2016

Ms. Carlotta S. Stauffer, Commission Clerk
Office of Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Re: **Docket No. 160000**
Florida Power & Light Company's 2016 Status/Update report on Storm Hardening/Preparedness and Distribution Reliability

Dear Ms. Stauffer:

Pursuant to Order No. PSC-06-0781-PAA-EI, I am enclosing for filing in the above docket Florida Power & Light Company's ("FPL's") status report and update of its *Storm Preparedness Initiatives,* which was filed in Docket No. 060198-EI on June 1, 2006. Consistent with Staff's request at its October 30, 2006 workshop, FPL has consolidated into the enclosed document the following additional information:

(1) Wood Pole Inspection Report required by Order No. PSC-06-0144-PAAEI, issued in Docket No. 060078-EI on February 27, 2006;

(2) Distribution Reliability Report required by rule 25-6.0455, F.A.C.; and,

(3) A discussion of FPL's 2015 results for storm hardening facilities;

If there are any questions regarding this transmittal, please contact me at 561-304-5633.

Sincerely,

/s/ Scott A. Goorland

Scott A. Goorland

Enclosures

cc:
Thomas Ballinger, Director, Division of Engineering
Gregory Shafer, Director, Division of Economic Regulation

Florida Power & Light Company
Annual Reliability Filing to the Florida Public Service Commission
March 1, 2016

Table of Contents

EXECUTIVE SUMMARY – FPL's MARCH 1, 2016 FILING

In 2015, FPL achieved best-ever Transmission and Distribution ("T&D") System performance results for the System Average Interruption Duration Index ("SAIDI") and the Momentary Average Interruption Event Frequency Index ("MAIFIe").

Additionally, FPL continued to invest in and take significant steps to strengthen its electrical infrastructure and enhance its emergency response capabilities. Included in this ongoing work were pole inspections, system infrastructure hardening, vegetation management, as well as other storm preparedness initiatives.

In 2016, FPL plans to continue its efforts to strengthen its electric infrastructure against severe weather and improve its excellent everyday reliability for customers.

This filing provides details about these efforts and is organized into two major sections: (1) Storm Preparedness/Infrastructure Hardening; and (2) Reliability. The first section concentrates on FPL's efforts to strengthen its distribution and transmission systems and enhance storm response capabilities. Initiatives addressed in this section include: Pole Inspections; System Hardening; 10 Storm Preparedness Initiatives; and 2016 Storm Season Readiness. The second section of this report includes information about FPL's service reliability, including 2015 results and 2016 plans for the T&D systems.

The following are brief overviews of each of these two sections:

Section 1: STORM PREPAREDNESS/INFRASTRUCTURE HARDENING

Pole Inspections

Distribution – In 2015, consistent with its Florida Public Service Commission (FPSC) -approved plan, FPL continued with the execution of its second eight-year pole inspection cycle.

- In 2015, FPL inspected approximately 1/8 of its pole population and completed all remaining follow-up work resulting from the 2014 pole inspections.
- In 2016, FPL plans to complete inspections on approximately 1/8 of its pole population, as well as complete all remaining follow-up work resulting from the 2015 pole inspections.

Transmission – In 2015, FPL completed all transmission pole/structure inspections consistent with its FPSC-approved plan.

- In 2015, FPL performed: ground level visual inspections on 100% of its transmission poles/structures; climbing or bucket truck inspections on

approximately 1/6 of its wood poles/structures, 1/6 of all 500kV structures and 1/10 of its concrete and steel poles/structures; and conducted storm and pre-construction mitigation patrols on all concrete and steel poles/structures. FPL also completed all follow-up work resulting from the 2014 inspections.

- In 2016, FPL plans to conduct ground level visual inspections on 100% of its transmission poles/structures; perform climbing or bucket truck inspections on approximately 1/6 of its wood poles/structures, 1/6 of all 500kV structures and 1/10 of its concrete and steel poles/structures; and complete all follow-up work identified from the 2015 inspections.

System Hardening

Distribution

Consistent with FPL's FPSC-approved 2013–2015 Electric Infrastructure Storm Hardening Plan (see Order PSC-13-0639-PAA-EI in Docket No. 130132-EI), FPL continued to implement its three-prong approach in 2015 by applying: (1) extreme wind loading criteria ("EWL") to critical infrastructure facilities ("CIF"); (2) incremental hardening, up to and including EWL, to "Community Project" feeders; and (3) construction design guidelines that require EWL for the design and construction of all new overhead facilities, major planned work and relocation projects.

- In 2015, FPL applied EWL on 59 feeder projects serving various CIF, e.g., police/fire stations and water treatment plants, one highway crossing and 16 "01" switches. FPL also applied incremental hardening to 37 "Community Projects", i.e., feeders that serve essential community needs such as grocery stores, gas stations and pharmacies. Additionally, FPL's Design Guidelines were applied to all new construction and other construction activities described above. Finally, in 2015, FPL completed the installation of submersible equipment to mitigate the impact of significant water intrusion in the six remaining vaults in the Miami downtown electric network that are located just at or within the Federal Emergency Management Agency ("FEMA") 100-year flood elevation levels.

- FPL also continued to promote overhead-to-underground conversions in 2015. Two municipalities signed agreements under FPL's Governmental Adjustment Factor ("GAF") tariff and moved forward with their projects.

- FPL's hardening plans for 2016 – 2018 are currently being finalized and will be filed with the FPSC no later than May 2, 2016 as required by Rule 25-6.0342 Florida Administrative Code.

Transmission

Storm hardening details for Transmission are provided in Storm Preparedness Initiative No. 4

Storm Preparedness Initiatives

(1) Vegetation Trim Cycles – In 2015, FPL continued its three-year average cycle and mid-cycle programs for feeders and its six-year average trim cycle for laterals.

(2) Joint Use Audits – Approximately 20 percent of FPL's jointly used poles are audited annually through its joint use surveys. Additionally, joint use poles are inspected through FPL's pole inspection program. Survey and inspection results continue to show that through FPL's joint use processes and procedures, along with cooperation from joint pole owners and third-party attachers, FPL has properly identified and accounted for the joint use facilities on its system.

(3) Six-year Transmission Structure Inspection Cycle – In 2015, FPL performed ground level visual inspections on 100% of its transmission poles/structures. Additionally, FPL performed climbing or bucket truck inspections on approximately 1/6 of its wood transmission system poles/structures, 1/6 of its 500 kV structures, 1/10 of its other concrete and steel poles/structures and conducted storm and pre-construction mitigation patrols on all concrete and steel poles/structures.

(4) Hardening the Transmission System – In 2015, FPL continued executing its plan to replace all wood transmission structures in its system.

(5) Distribution Geographic Information System ("GIS") – FPL completed its five originally approved key Distribution GIS improvement initiatives in 2011. These initiatives included developing a post-hurricane forensic analysis tool and the addition of poles, streetlights, joint use survey and hardening level data to the GIS. Updates to the GIS continue as data is collected through inspection cycles and other normal daily work activities.

(6) Post-Storm Forensic Collection/Analysis – FPL has post-storm forensic data collection and analysis plans, systems and processes in place and available for use. No major storms affected FPL's service territory in 2015; therefore, no forensic collection or analysis was required.

(7) Overhead ("OH") and Underground ("UG") Storm Performance – FPL has plans, systems and processes in place to capture OH and UG storm performance. No major storms affected FPL's service territory in 2015; therefore, no data collection or analysis was required.

(8) Increased Coordination with Local Governments – In 2015, FPL continued its efforts to improve local government coordination. Activities included: (1) meetings with county emergency operations managers to discuss critical infrastructure locations in each jurisdiction; (2) inviting federal and state emergency management personnel to participate in FPL's annual company-wide storm preparedness dry run

POLE INSPECTIONS

Summary – Pole Inspections

Distribution

In 2015, consistent with its FPSC-approved plan, FPL completed the second year of its second eight-year pole inspection cycle.

- In 2015, FPL inspected approximately 1/8 of its pole population, or 151,679 poles, including 133,243 wood poles, and completed all remaining follow-up work identified during the 2014 pole inspections.

- In 2016, FPL plans to complete inspections on approximately 1/8 of its pole population, as well as complete all remaining follow-up work identified during the 2015 pole inspections.

Transmission

In 2015, FPL completed all transmission pole/structure inspections consistent with its FPSC-approved plan.

- In 2015, FPL performed ground level visual inspections on 100% of its transmission poles/structures. Additionally, FPL performed climbing or bucket truck inspections on approximately 1/6 of its wood transmission system poles/structures, 1/6 of its 500 kV structures, 1/10 of its other concrete and steel poles/structures and conducted storm and pre-construction mitigation patrols on all concrete and steel poles/structures. Also, FPL completed all follow-up work identified from the 2014 inspections.
- In 2016, FPL plans to conduct ground level visual inspections on 100% of its transmission poles/structures. Additionally, FPL plans to perform climbing or bucket truck inspections on 1/6 of its wood poles/structures, 1/6 of its 500kV structures and 1/10 of its other concrete and steel poles/structures and complete all follow-up work identified from the 2015 inspections.

18. The cause(s) of each pole failure for poles failing inspections, to the extent that such cause(s) can be discerned in the inspection. Also, the specific actions the company has taken or will take to correct each pole failure.

The table below provides a summary of the wood pole inspection findings for the poles identified as poles requiring remediation.

Inspection Type	Remediation Type	NESC Min. (Grade C)	FPL Requirement (Grade B - Higher Standard)	Total Wood Remediation	Primary Cause(s)	Remediation Options
Visual	Restorable	3	n/a	3	N/A	Pole to be strengthened by installing C-Truss
	Non-Restorable	50	n/a	50	Decayed/Split Top, Cracks/Checks	Pole to be replaced with new pole.
Strength	Restorable	341	3,654	3,995	Shell Rot	Pole to be strengthened by installing C-Truss
	Non-Restorable	493	4,095	4,588	Decayed/Split Top, Woodpecker Holes	Pole to be replaced with new pole.
Loading	Restorable	0	1,235	1,235	Overloaded	Pole to be strengthened by installing ET Truss
	Non-Restorable	24	1,437	1,461	Overloaded	Pole will be evaluated to determine the most cost effective method to address the overloading. Options are: 1. Install intermediate pole(s). 2. Replace pole with a stronger class pole.

Transmission

7. Description of Pole Inspection Program

FPL performs annual ground level visual inspections on 100% of its transmission poles/structures – wood, concrete and steel. FPL also performs climbing or bucket truck inspections on all of its transmission poles/structures on a cyclical basis. In addition to the poles/structures being inspected, the condition of various transmission pole/structure components are assessed, including attachments, insulators, cross-arms, cross-braces, foundations, bolts, conductors, overhead ground wires ("OHGW"), guy wires, anchors, and bonding. These inspections are performed in accordance with Commission Order PSC-06-0144-PAA-EI in Docket No. 060078-EI, issued on February 27, 2006. An overview of these inspection procedures are outlined below:

Wood Poles/Structures

Annually, FPL performs ground level visual inspections on 100% of its wood transmission poles/structures, inspecting from the ground-line to the pole top. The visual inspection includes a review of the pole's/structure's condition as well as pole attachment conditions. If a wood transmission pole/structure does not pass visual inspection, it is not tested any further and it is designated for replacement.

FPL also performs a climbing or bucket truck inspection on all wood transmission poles/structures on a six-year cycle. If a wood pole/structure passes this visual inspection, a sounding test is then performed. If the result of a sounding test

warrants further investigation, the wood pole/structure is bored to determine the internal condition of the pole. All bored poles, not designated for replacement, are treated with an appropriate preservative treatment.

Concrete and Steel Poles/Structures

Annually, FPL performs ground level visual inspections on 100% of its concrete and steel transmission poles/structures. The inspection incorporates an overall assessment of the pole/structure condition (e.g., cracks, chips, exposed rebar, and rust) as well as other pole/structure components including the foundation, all attachments, insulators, guys, cross-braces, cross-arms, and bolts. If a concrete or steel pole/structure fails the inspection, the pole/structure is designated for repair or replacement.

From 2006-2013, FPL performed a climbing or bucket truck inspection on all concrete and steel transmission poles/structures on a six-year cycle. In 2014, FPL continued to perform a climbing or bucket truck inspection on all 500 kV structures on a six-year cycle. Climbing or bucket truck inspections for all other steel and concrete poles/structures are now conducted on a 10-year cycle.

8. 2015 Accomplishments

In 2015, 100% of FPL's transmission poles/structures were visually inspected and approximately 1/6 of its wood, 1/6 of its 500kV structures and 1/10 of its other concrete and steel transmission poles/structures were inspected by climbing or from a bucket truck. Additionally, storm and pre-construction mitigation patrols were conducted on all concrete and steel poles/structures. In 2015, FPL incurred $1.6 million of inspection costs and $34.0 million of costs associated with follow-up work identified from the 2014 inspections.

9. Proposed 2016 Plan

In 2016, FPL is estimating to incur approximately $1.4 million of expenses to complete its transmission pole/structure inspections and approximately $30.2 million of costs associated with follow-up work identified from the 2015 inspections.

10. NESC compliance for strength and structural integrity

The following methods are used during pole/structure inspections for determining NESC strength and structural integrity compliance:

Strength Assessment

For wood transmission poles/structures, the strength assessment is based upon a comparison of measured circumference versus the original circumference of the pole. If the effective circumference is measured and the actual condition of the pole does not meet NESC requirements as outlined in Table 261-1A Section 26 of the NESC, the pole is designated for reinforcement or replacement.

Loading Assessment

FPL performs a loading assessment on wood transmission poles/structures with 3rd party attachments. This assessment is based on a combination of pole/structure length, framing configuration, span length, attachment heights (including 3rd party attachments) and conductor size. If the loading does not meet NESC requirements, the pole is designated for reinforcement, replacement or relocation of the third-party attachments.

11. Explanation of the inspected pole selection criteria

FPL prioritizes its transmission pole/structure inspections based on factors such as framing configuration (structural loading), transmission components, system importance, customer count, and inspection history for a transmission line section. Other economic efficiencies, such as multiple transmission line sections within the same corridor, are also considered.

12. Inspection Summary Data for the Previous Year

Summarized in the following sections are the 2015 inspection results and causes by transmission pole/structure materials:

Wood Transmission Poles/Structures

FPL's 2015 results from its six-year cyclical wood transmission pole/structure inspections are in the table, below. In addition, FPL performed its annual ground level visual inspections on 100% of its wood poles/structures.

Florida Power & Light Company
Annual Wood Pole Inspection Report
(Reporting Year 2015)

a	b	c	d	e	f	g	h	i	j	k	l	m
Total # of Wooden Poles in the Company Inventory as of 01-2015	# of Wood Pole Inspection Planned this Annual Inspection	# of Wood Poles Inspected this Annual Inspection	# of Poles Failing Inspection this Annual Inspection	Pole Failure Rate (%) this Annual Inspection	# of Wood Poles Designated for Replacement this Annual Inspection	Total # of Wood Poles Replaced this Annual Inspection	# of Poles requiring Minor Follow-up this Annual Inspection	# of Poles Overloaded this Annual Inspection	Method(s) V=Visual E=Excavation P=Prod S=Sound B=Bore R= Resistograph	# of Wood Pole Inspections Planned for Next Annual Inspection Cycle	Total # of Wood Poles Inspected (Cumulative) in the 6-Year Cycle to Date	% of Wood Poles Inspeted (Cumulative) in the 6-Year Cycle to Date
11,550	2,273	2,294	636	27.7%	426	1,888	n/a	0	V / P / S / B	2,035	10,294	89.1%
If b - c > 0, provide explanation												
If d - g > 0, provide explanation												
Description of selection criteria for inspections	FPL prioritizes its inspections based on factors such as: framing configuration (structural loading), transmission components, system importance, customer count, and inspection history for a transmission line section. Other economic efficiencies, such as multiple transmission line sections within the same corridor, are also considered.											

* Column G represents the total number of transmission poles/structures replaced not only through its inspection program, but also from relocations, proactive rebuilds and system expansion.

Concrete and Steel Transmission Structures

FPL performed visual ground level inspections on 100% of its concrete and steel poles/structures and bucket inspections on 1/6 of its 500kV structures and 1/10 of all other concrete and steel poles/structures in 2015. The table below provides FPL's 2014 concrete and steel transmission pole/structure inspection results.

POLE INSPECTION REPORT Company: Florida Power & Light Summary of Concrete & Steel Transmission Pole Inspections Period: January 2015 thru December 2015				
Type of Inspection:		Concrete & Steel Transmission Structures Visual / Bucket		
Type of Pole:				
	Average Class:	Varies		
	Materials	Concrete & Steel		
	Average Vintage	2000		
	Installed Population as of 1/1/2015	53,005		
			% Planned	% Completed
Percent Inspections Planned & Percent Completed:			100%	100%
Reason for Variance/Plan to Address Backlog:				
No. of inspected poles addressing a prior backlog			0	0
			No. of Structures	% of Inspection
No. of structures identified for reinforcement:			0	0.0%
No. of poles identified for replacement:			21	0.04%
No. of structures identified for a change inspection cycle::			n/a	n/a
No. of structures that required no change in inspection cycle or remediation			52,984	99.6%
No. of structures identified as overloaded			0	0.0%

13. Identified Inspection Items (by Cause)

Summarized below are the cause(s) of the identified transmission pole/structure inspection failures along with specific actions that have or will be taken for each level of priority:

Wood Transmission Structures

Wood Transmission Structures					
Inspection Item	**Level 1**	**Level 2**	**Non-Priority**	**Primary Cause(s)**	**Remediation**
Ground-Line	34	132	20	Decay, Rot, Insects, Voids	Level 1 - Reinforce, Remediate, or Replace in year found Level 2 - Reinforce, Remediate, or Replace the following year Non-Priority – No action required
Above Ground-Line	122	348	114	Wood-Pecker Holes, Decay, Insects	
Overload (3rd Party)	0	0	0	3rd Party Attachments	
Total	156	480	134	Refer to the Above	

To help prioritize and to better plan for future years, FPL has established the following priority levels of inspection reporting:

Level 1 Priority - Identified as approaching the minimum NESC requirements for Grade B construction with the potential to fall below the minimum before the end of the current year. These poles/structures are incorporated into current year work plans for reinforcement, remediation, or replacement. The timeframe for completion is typically driven by customer provided access to the facilities and the coordination of a scheduled outage with other facility clearances scheduled on the grid.

Level 2 Priority - Identified as approaching the minimum NESC requirements for Grade B construction and will not fall below the minimum prior to the end of the following year. These poles/structures are identified for reinforcement, remediation, or replacement as planned work by the end of the calendar year following inspection.

Non-priority – Identified as having reduction in capacity, but still above the minimum NESC requirements. When reported, these structures are documented but do not require specific action until the next inspection.

Concrete & Steel Transmission Structures

Concrete & Steel Transmission Structures					
Inspection Item	**Level 1**	**Level 2**	**Non-Priority**	**Primary Cause(s)**	**Remediation**
Base of Pole (Identified for Replacement)	0	21	318	Corrosion / Cracks	Level 1 - Reinforce, Remediate, or Replace in year found
Base of Pole (Identified for Repair)	0	0	0	Cracks	Level 2 - Reinforce, Remediate, or Replace the following year
Total	0	21	318	Refer to the Above	Non-Priority – No action required

To help prioritize and to better plan for future years, FPL has established the following priority levels of inspection reporting:

Level 1 Priority - Identified as approaching the minimum NESC requirements for Grade B construction with the potential to fall below the minimum before the end of the current year. These poles/structures are incorporated into current year work plans for reinforcement, remediation, or replacement. The timeframe for completion is typically driven by customer provided access to the facilities and the coordination of a scheduled outage with other facility clearances scheduled on the grid.

Level 2 Priority - Identified as approaching the minimum NESC requirements for Grade B construction and will not fall below the minimum prior to the end of the following year. These poles/structures are identified for reinforcement, remediation, or replacement as planned work by the end of the calendar year following inspection.

Non-priority – Identified as having structural deterioration, but still meets all of the NESC strength requirements. When reported, these structures are documented but do not require specific action until the next inspection.

STORM PREPAREDNESS INITIATIVE No. 4

Initiative 4 – Hardening of Existing Transmission Structures

1. Description of Transmission Hardening Programs

Wood Structure Replacement Program

In 2006, FPL began its Transmission hardening initiative by targeting replacement of single pole un-guyed wood structures. In 2008, FPL enhanced its hardening initiative to include replacement of all wood transmission structures over the next 25 to 30 years. FPL's approved 2013-2015 hardening plan accelerates the replacement of wood transmission pole/structures to within the next 10 to 15 years. Replacements are performed as part of maintenance, hardening, relocations and system expansion programs.

Ceramic Post ("CPOC") Transmission Line Insulators

In 2006, FPL implemented a comprehensive plan for replacing existing ceramic post insulators with polymer post insulators on concrete poles. In 2014, FPL completed this initiative.

Storm Surge/Flood

FPL's approved 2013-2015 hardening plan included several storm surge/flood initiatives to better protect certain transmission facilities and expedite restoration of service to customers. This included water intrusion mitigation, the installation of real-time water level monitoring systems and communication equipment in 223 substations and the purchase of additional mobile fleet equipment. In 2014, FPL completed this initiative.

2. Method of Selection

FPL's method for selecting its wood pole replacements is based on performance during the 2004-05 storm seasons.

3. Prioritizing Programs with the Community

Being a network transmission system, FPL's first priority must be the overall system reliability and stability for the State of Florida. Prioritization factors also include proximity to high wind areas, system importance, customer counts, and coordination with other business unit storm initiatives. Other economic efficiencies, such as opportunities to perform work on multiple transmission line sections within the same corridor, are also considered. The transmission plan also incorporates the distribution hardening plans for communities into its prioritization.

4. 2015 Accomplishments

Wood Structure Replacement Program

In 2015, FPL replaced 1,888 wood transmission structures. These structures were replaced with FPL's current design standards of round spun concrete poles.

Total 2015 wood transmission structure replacement costs were approximately $49 million. At year-end 2015, 9,662 wood structures remain to be replaced.

5. Proposed 2016 Plans

FPL's hardening plans for 2016 – 2018 are currently being finalized and will be filed with the FPSC no later than May 2, 2016, as required by Rule 25-6.0342 Florida Administrative Code.

Attachment E

July 25, 2017

VIA E-MAIL TO bjones@nyiso.com

Bradley C. Jones
President and Chief Executive Officer
New York Independent System Operator
10 Krey Boulevard
Rensselaer, NY 12144

Re: Western New York Public Policy Transmission Need

Dear Mr. Jones

North America Transmission, LLC ("NAT") appreciates the opportunity to participate in the NYISO's Public Policy Transmission Planning Process. We are working through the stakeholder process with several comments on the draft Western New York Public Policy Transmission Planning Report ("Planning Report") and the Technical Review Report attached thereto, but write to highlight one concern related to an issue that NYISO staff has made clear is not open to discussion. Specifically, we are writing regarding the failure of the process to evaluate the beneficial ratepayer impact of cost containment commitments included in developer proposals. As discussed below, NAT believes the failure to evaluate the benefits provided by cost containment commitments is inconsistent with the broad evaluation criteria in the NYISO Tariff, and NYISO's refusal to address the beneficial impact of cost containment commitments leaves NYISO's process susceptible to claims that it was legally deficient.

NAT raises its concerns now so that you can appropriately address this issue with NYISO staff before a recommended solution is presented to the NYISO Board for final approval. Indeed, NAT remains mystified as to why the NYISO staff has been reticent to include cost containment commitments in its evaluative process, particularly in light of the fact that the New York Public Service Commission ("NYPSC") included cost containment as a key evaluative criterion for the Western New York Public Policy need (as further described below). There can be no debate that cost containment commitments provide benefits to ratepayers, shifting to project developers the development and other risks that traditionally have been exclusively borne by ratepayers. For these benefits to be realized by New York ratepayers, they need to be addressed now, as part of the comprehensive evaluation of submitted proposals so that ratepayers can fully understand the attributes of each submitted proposal. While cost containment commitments need not be the only factor reviewed, such commitments also should not be ignored.

Background

As I am sure you are aware, on November 1, 2015 NYISO issued a solicitation for the Western New York Public Policy Transmission Need. The development of the public policy transmission need and the solicitation were undertaken pursuant to NYISO's Federal Energy Regulatory Commission ("FERC") approved Tariff for solicitation of public policy transmission needs. The Western New York Public Policy Need arose out of a determination by the New York Public Service Commission that New York public policy warranted addressing transmission constraints in Western New York.

NYISO'S Determination of the More Efficient Or Cost Effective Solution to the Identified Need

The solicitation was issued under Section 31.4 of NYISO's Tariff addressing determination of public policy transmission needs, and the solicitation and evaluation of proposals to meet such needs. That Section was developed to address the mandates of FERC Order No. 1000,[1] the goal of which is the determination of the "more efficient or cost effective"[2] transmission solution to an identified need. Tariff Section 31.4.8 adopts the specific wording of Order No. 1000, requiring that the "ISO **shall select** . . . the more efficient or cost effective transmission solution to satisfy a Public Policy Transmission Need . . .." The results of Order No. 1000 solicitations in the California Independent System Operator, Inc., PJM Interconnection, L.L.C., and the Midcontinent Independent System Operator, Inc. each show that transmission developers' willingness, through cost containment commitments, to accept risks traditionally borne by ratepayers has been a significant beneficial impact of Order No. 1000.

NYISO staff has indicated that as part of its determination of the "more efficient or cost effective" project it will not evaluate any cost containment commitments made by submitting developers in response to the solicitation. In the most recent ESPWG meeting, NYISO staff went so far as to assert that it was "prohibited" by the tariff from evaluating cost containment commitments as part of its evaluative process, except when cost containment was used in as "tie-breaker." As NAT discusses below, there is certainly no affirmative prohibition in the Tariff precluding NYISO's evaluation of cost containment commitments and NAT's reading of the Tariff in fact supports the requirement for affirmative review of such commitments. As such, there is no legal or policy justification for NYISO refusing to evaluate cost containment commitments as part of its evaluation, giving such commitments the weight that NYISO deems appropriate. Reading a prohibition into the Tariff and thereby refusing to even evaluate cost containment commitments as part of its overall evaluative process and required transparent selection report to stakeholders leaves NYISO's public policy transmission planning process open to legal challenge.

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1 *Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities*, Order No. 1000, 136 FERC ¶61,051, *order on reh'g and clarification*, Order No. 1000-A, 139 FERC ¶61,132, *order on reh'g and clarification*, Order No. 1000-B, 141 FERC ¶61,044 (2012), *aff'd sub nom. S.C. Pub. Serv. Auth. v. FERC*, 762 F.3d 41 (D.C. Cir. 2014).

2 *Id.* at ¶11

NAT has found no provision of Section 31.4 of the Tariff that can be read as "prohibiting" NYISO from including among the evaluation criteria, a cost containment proposal received in response to its Western New York Public Policy Transmission Need solicitation. Section 31.4.8 and subsequent Subsections address the NYISO's "Selection of More Efficient or Cost Effective Public Policy Transmission Project" with Section 31.4.8 providing in relevant part:

> The ISO ***shall evaluate*** any proposed regulated Public Policy Transmission Projects that are eligible for selection in the planning cycle of the Public Policy Transmission Planning Process using the metrics set forth in Section 31.4.8.1 below. For purposes of this evaluation, the ISO will review ***the information submitted by the Developer*** and determine whether it is reasonable and how ***such information*** should be used for purposes of the ISO evaluating each metric." [emphasis added]

Although NYISO could read this section as permitting NYISO the discretion to decide how best to factor a cost containment commitment into the overall evaluation process, the Tariff provision makes it clear that NYISO is not permitted to simply ignore the fact that a cost containment commitment was proposed. On the contrary, once NYISO has reviewed any cost containment commitments as part of its evaluation of the more efficient or cost effective solution, NYISO must disclose to stakeholders that such commitments were made and NYISO's "assumptions, inputs, methodologies and the results of its analyses" with respect to such commitments. (Section 31.4.11).

Section 31.4.8.1 sets forth the "Metrics for Evaluating More Efficient of Cost Effective" project to address an identified public policy need. NAT reads three of those Subsections as supporting a full evaluation of cost containment commitments in NYISO's evaluation of solutions to public policy needs. Two of those Subsections address capital costs:

> 31.4.8.1.1 The capital cost estimates for the proposed regulated Public Policy Transmission Project, *including the accuracy of the proposed estimates*. For this evaluation, *the Developer shall provide the ISO with credible capital cost estimates for its proposed project*, with itemized supporting work sheets that identify all material and labor cost assumptions, and related drawings to the extent applicable and available. The work sheets should include an estimated quantification of cost variance, providing an assumed plus/minus range around the capital cost estimate. . . .
>
> 31.4.8.1.2 The cost per MW ratio of the proposed regulated Public Policy Transmission Project. *For this evaluation, the ISO will first determine the present worth, in dollars, of the total capital cost of the proposed project in current year dollars.* The ISO will then determine the cost per MW ratio by dividing the capital cost by the MW value of increased transfer capability.

Each of the referenced Sections supports the evaluation of cost containment commitments made by prospective developers. While Section 31.4.8.1.1 focuses on cost "estimates" it is clear that the accuracy of the developers cost estimate is of critical importance. A cost estimate cannot be any more accurate or credible than one that is fixed by the developer such that costs in excess of the identified amount are borne by the developer rather than ratepayers. The history of Subsection 31.4.8.1.1's requirement for "credible capital cost estimates" indicates that cost containment commitments were anticipated as part of adding 'credibility' to the cost estimates. In its July 16, 2013 presentation to stakeholders, NYISO focused on "binding" cost estimates. (NYISO Process and Metrics for Evaluating Public Policy Solutions, July 16, 2013 at 2). Likewise, NAT believes that for NYISO's determination of the cost of the project on a per MW basis as required by Section 31.4.8.1.2, NYISO must reflect the actual cost to ratepayers per MW for the evaluative criterion to have any meaning and be an accurate assessment of the impact on ratepayers of the proposal.

If there were any ambiguity in the above Subsections with regard NYISO's ability to evaluate the impact of cost containment commitments on the determination of the more efficient or cost effective solution – and NAT does not believe there is any such ambiguity – Subsection 31.4.8.1.8 removes that ambiguity by requiring:

> 31.4.8.1.8 *The ISO shall apply* any criteria specified by the Public Policy Requirement or provided by the NYPSC and perform the analyses requested by the NYPSC, to the extent compliance with such criteria and analyses are feasible.

For the Western New York Public Policy Transmission Need, the NYPSC specifically identified cost containment as a criterion in the evaluation of prospective solutions. See specifically, In the Matter of New York Independent System Operator, Inc.'s Proposed Public Policy Transmission Needs for Consideration, Case No. 14-E-0454, October 13, 2016, where the New York Public Service Commission held:

> The Commission strongly supports the use of risk mitigation proposals, such as cost containment measures, to ensure ratepayers are not exposed to higher costs than necessary. To ensure the NYISO can adequately consider risk mitigation in its evaluation, the NYISO should incorporate into its remaining process, as practicable, a mechanism for implementing risk mitigation measures and cost-overrun-sharing incentives. The Commission believes that this additional information will be of assistance and may be crucial to discerning between close bids. The Commission expects the NYISO to give due consideration to such measures when making any selection of a project for purposes of cost allocation and recovery.

As the New York Public Service Commission recognized, a key component of any determination of the more efficient or cost effective solution to an identified need is the actual cost ultimately borne by ratepayers, taking into account the possibility of significant cost overruns (the possibility of which is, unfortunately, a fact of life in any large infrastructure project). NYISO's evaluation of proposals cannot reflect the actual cost to ratepayers unless its

evaluation appropriately accounts for those project developers willing to enter into legally binding commitments to bear cost overrun risk (instead of ratepayers bearing that same risk). In this regard, the 'independent cost estimate' prepared by NYISO's consultant (*see*, Technical Review Report at 5) is materially higher than NAT's binding cost cap. Given NAT's binding cost cap, even in the event NAT's project were to suffer significant cost overruns, the ratepayers could ***never*** be held responsible for project costs at the level estimated by NYISO's consult. The consultant's estimate thus clearly reflects an inaccurate view of the cost to ratepayers of the NAT proposal. To the extent that other project developers submitted cost containment mechanisms, the draft Technical Review Report would likewise reflect inaccurate cost information for NYISO's evaluation. By ignoring NAT's (and any other developers') cost containment commitments, the draft Planning Report's reliance on the Technical Review Report clearly does not accurately reflect the relative risk borne by ratepayers versus the developer with respect to each proposal. A process that permits a project of the magnitude of the Western New York Public Policy Need to be selected without an accurate assessment of such relative risk does a grave disservice to the NYISO ratepayers.

NYISO Staff's "Tie-breaker" Approach

While arguing that the Tariff prohibits NYISO from evaluating cost containment commitments, NYISO staff has simultaneously asserted that it can use cost containment as a "tie-breaker" among equal proposals. While NAT sees no support for that "tie-breaker" only position in the actual Tariff language, the technical performance of certain Tier 1 proposals in the Western New York Public Policy Transmission Need solicitation reflects nearly equal performance and also nearly identical cost per MW according to the draft Planning Report. Given the relative equality of these project proposals, even under the NYISO interpretation of the NYISO Tariff, cost containment commitments should be evaluated and reflected in the final NYISO recommendation.

Evaluation Versus Cost Recovery

Finally, the draft Planning Report makes reference to Section 31.4.8.2 as indicating that NYISO cannot take cost containment commitments into account because "[a]ctual project cost recovery, including any issues related to cost recovery and project cost overruns, will be submitted to and decided by the Commission." While this provision appropriately defers to FERC on issues of "actual project cost recovery" the language of Section 31.4.8.2 reflects no prohibition on NYISO evaluating cost containment commitments as part of the evaluation metrics for determining the more efficient or cost effective developer in the first instance. Rather, it is an affirmative obligation on the selected developer to submit its proposed cost containment in its FERC rates.

NAT believes that Section 31.4.8.2 is wholly consistent with the notion that NYISO will evaluate provisions related to developer acceptance of risks of cost overruns or other cost containment commitments, with the Tariff requiring that such provisions will be submitted to and ultimately enforced by FERC. Deferring any review of cost containment commitments until

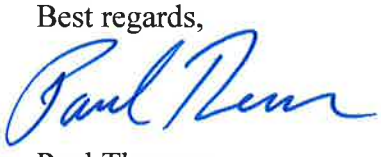
submitted to FERC as part of "actual project cost recovery" defeats the entire purpose of including cost containment provisions at the proposal stage, as under Section 31.4.8.2 only the selected developer will have an actual project cost recovery proceeding (and cost containment commitments provided by other developers will therefore never be evaluated or considered at all). By failing to address the beneficial impact of cost containment commitments in the NYISO evaluation process, NYISO would deprive ratepayers of those commitments by default.

Conclusion

In light of the foregoing, we ask that you address with your staff the need to adequately evaluate and account for cost containment commitments submitted in response to the Western New York Public Policy Transmission Need solicitation. To be clear, NAT is not suggesting that such proposals be given any particular weight in NYISO's evaluation as they relate to the other metrics of the evaluation process. Rather, all stakeholders are entitled to know from the NYISO's Public Policy Transmission Planning Report that NYISO reviewed ***all*** relevant aspects of each submitted proposal and the basis upon which it determined that its recommended solution is the "more efficient or cost effective" proposal. The NYISO cannot provide that understanding to stakeholders, or the NYISO Board for its approval of staff's recommendation, unless NYISO's Public Policy Transmission Planning Report fully reflects NYISO's evaluation of any cost containment commitments submitted. Nothing in the NYISO Tariff permits NYISO to ignore commercial elements of submitted proposals, substituting its judgment as to the cost of the project notwithstanding a developer's willingness to enter into a binding cost containment commitment, accepting risks[3] otherwise borne by ratepayers. Further, even if staff remains unwilling to evaluate cost containment proposals as a general matter, given that various of the Tier 1 proposals reflect nearly equal performance and cost according to the Planning Report, we respectfully request that, at a minimum, staff give due consideration to the relevant cost containment commitments as part of the "tie-breaking" process that staff has previously committed to utilize.

Your attention to this matter is appreciated.

Best regards,



Paul Thessen
President,
North America Transmission, LLC

CC: Robert E. Fernandez, General Counsel
Michael Bemis, Chairman of the Board

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3 While the NYISO staff employed review team purported to review "risks" associated with submitted proposals (Technical Report at 5-6), it ignored the risk mitigating aspects of cost containment commitments.