Northeast Utilities System

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Mr. Stephen J. Rourke
Vice President – System Planning
ISO New England, Inc.
One Sullivan Road
Holyoke, MA 01040-2841

Re: TCA Application NU-07-TCA-24: Request for Pool-Supported PTF Cost Treatment for Glenbrook Cables Project - Comments on Draft Determination

Dear Mr. Rourke:

The purpose of this letter is to provide the comments of Northeast Utilities Service Company ("NU") on the Draft Determination of ISO New England, Inc. ("ISO") on Transmission Cost Allocation Application NU-07-TCA-24 submitted by NU in connection with the Glenbrook Cables Project. NU has several substantive comments and concerns with regard to the three different types of costs that are designated as Localized Costs in the Draft Determination, and requests that ISO reconsider its Draft Determination with regard to the issues raised below.

I. Third Set of Conduits Within the Duct Bank

The Draft Determination indicates that $32,527,233 of costs allegedly associated with construction of the third set of conduits within the duct bank will be treated as Localized Costs. We have two discrete issues regarding this determination.

A. The Draft Determination Improperly Localizes Costs Associated With Building Two Sets of Conduits in the Duct Bank That Were "Sized" for Future Conversion to 345-kV:

Based on our reading of the Draft Determination, it appears that ISO intends to localize the costs associated with constructing the third set of conduits within the duct bank, but does not intend to localize the costs associated with constructing *two* sets of conduits of sufficient size to

allow for future installation of a 345-kV circuit(s) within the duct bank. NU's interpretation of the Draft Determination is corroborated by the following excerpt from the Prefiled Testimony of Richard Kowalski filed by ISO with the Connecticut Siting Council in Docket No. 292:

> Q. *Was the 345kV transmission line from Norwalk to Glenbrook included in the RTEP?*
>
> A. While general need for Norwalk-Stamford transmission improvements has been identified since RTEP01, a 345kV transmission cable was specifically included in RTEP03 as a long-term response to such needs. It was subsequently determined, however, that a 115kV transmission solution would be suitable to meet demand for a number of years, and RTEP04 has approved such a solution **as long as it can be upgraded in the future expansion to 345kV.**

(Prefiled Testimony of Richard Kowalski dated October 13, 2004, p. 10) (Emphasis added.)

Thus, ISO's testimony seems to imply that, while the circuits for the Glenbrook Cables Project were to be constructed as 115-kV circuits, the duct bank and conduits should be presently sized to accommodate 345-kV circuits in the future.

The Draft Determination concludes that the amount of costs associated with the installation of the third set of conduits was $32,527,233, and therefore proposes localization of this amount. However, ISO has inadvertently miscalculated the marginal costs associated with the third set of conduits, and NU therefore requests that ISO correct the amount of localized costs.

The $32,527,233 figure cited by ISO is based on NU's February 12, 2009 response to ISO data request #12 dated January 25, 2008. (See Exhibit A attached.) In this data request, ISO sought information *not only* as to the marginal costs associated with installing the third set of conduits, *but also* the costs associated with installing two sets of conduits that are used today for the Project of sufficient diameter so as to accommodate 345-kV circuits in the future. The $32,527,233 figure provided by NU in its response includes both of these types of costs, but only the costs associated with the third set of conduits should be localized under the rationale of the Draft Determination.

Exhibit B attached contains a table that itemizes the marginal costs associated *solely* with the installation of the third set of conduits. We have prepared this table in the same format as the table in NU's February 12, 2009 response to ISO data request #12, so that you can compare this calculation with that provided in our previous response. As outlined in Exhibit B, the increased cost attributable to the third set of conduits is $27,965,096 (not $32,527,233), and therefore only this reduced amount should be localized under the reasoning of the Draft Determination.

B. Localization of Costs Related to Constructing the Third Set of Conduits:

NU is not contesting ISO's determination that costs associated with constructing the third set of conduits should be treated as Localized Costs. NU acknowledges that, under existing ISO Tariff provisions with regard to the categorization of PTF, the question of the treatment of spare equipment or other facilities associated with PTF is still unsettled, and may not be eligible for regional cost support. However, if at some point in the future the categorization of spare equipment is clarified, then the cost of the third set of conduits should be eligible for regional cost support at that time. Moreover, if a third party, such as a generation owner, should require the use of all or some of this spare set of conduits in the future, then this third party should be required to provide reimbursement to NU for the cost of any portion of the conduits utilized. Finally, if at some point in the future the third set of conduits is used for the installation of a PTF asset, or otherwise becomes associated with PTF transmission lines, then appropriate adjustments should be made at that time to treat the cost of constructing the third set of conduits as PTF and eligible for regional cost support.

II. Use of GITL At Glenbrook Substation:

The Draft Determination concludes that $3,305,000 in costs associated with the use of a gas insulated transmission line (GITL) configuration at Glenbrook Substation, rather than an overhead transmission line, should be treated as Localized Costs because aesthetic considerations were allegedly "a major factor in the choice of the GITL option." (Draft Determination, p. 10) NU respectfully submits that ISO has misinterpreted the record evidence on this issue and requests that ISO reconsider this ruling.

The major disadvantages of the overhead option at Glenbrook Substation were: (1) the reliability concerns with spanning over existing transmission facilities that if collapsed could fall on additional transmission equipment with the potential for an extended outage; and (2) the construction risks of installing the foundations in the vicinity of existing duct banks and rolling the conductors in short spans. Aesthetic issues were a consideration in the choice of the GITL option, but they were not the major factor, and they could have been mitigated through changes to the Development and Management Plan. Most importantly, aesthetics were not a "but for" factor in the selection of GITL. Given the reliability and construction risks associated with the overhead option, NU would have reached the same conclusion as to the use of GITL even if there had been no aesthetic considerations. In addition, NU has on other projects avoided "crossovers" to reduce the potential for multiple transmission equipment outages, a good utility practice to promote highly reliable operation of the bulk power system. Under these circumstances and under the guidelines of Schedule 12C and ISO Planning Procedure 4, NU respectfully submits that the use of GITL qualifies for treatment as a Pool-supported PTF cost.

III. Cable/Trench Routing on Route 1:

The Draft Determination localizes $2.57 million in costs associated with the requirement of the Connecticut Department of Transportation (CDOT) that numerous splice vaults be placed outside the highway right-of-way. While NU is not challenging the substance of this ruling, NU requests that ISO revise the Draft Determination because it makes incorrect factual assertions that are unnecessary to the rationale of the decision. Specifically, the Draft Decision incorrectly states that "it appears that NU did not pursue an exception or an encroachment agreement that would have permit[ted] routing within the highway pavement and avoided the costs of an inefficient, zigzag routing." (Draft Determination, p. 11). As outlined below, NU in fact did all it could do to obtain permission to install *all* the splice vaults in the right-of-way, but was only successful in convincing CDOT to permit 18 of the 39 splice vaults to be installed within CDOT's right-of-way.

In support of its request for correction of these misstatements in the ruling, NU provides the following summary of the process through which it obtained an encroachment agreement from the CDOT:

- NU could not begin any construction in the CDOT right-of-way without entering into an encroachment agreement with CDOT governing the terms and requirements for installation of its facilities within and along Route 1. CDOT therefore had significant leverage over NU in these discussions because it essentially had control over when NU would be allowed to begin construction.

- Based on its prior experience with CDOT and on statements in the prefiled testimony of CDOT in the Glenbrook siting proceedings, NU was aware that CDOT's policy was to require that utility splice vaults be placed outside the CDOT right-of-way on private property.

- NU anticipated this problem of "CDOT leverage" arising from the encroachment agreement process, and therefore specifically asked the Siting Council to order CDOT to allow us to install all facilities within the right-of-way in NU's final brief filed in the Glenbrook siting proceedings. (See Siting Council Docket No. 292, Finding of Fact #91, pp. 12-13: "CL&P requests that the Council specify in the Decision and Order for this docket, if approved, that splice vaults be located within the paved roadway.") The Council did not grant this relief but instead ordered NU to negotiate with CDOT through the encroachment agreement process. (See Council Docket No. 292, Decision & Order, p. 1, item 4: "The Certificate Holder shall coordinate with [CDOT] regarding the installation and maintenance of the cables in State roads.")

- In NU's subsequent discussions with CDOT regarding the negotiation of the encroachment agreement, NU requested CDOT to permit all splice vaults to be installed within the CDOT right-of-way, and thus did in fact seek an exception to CDOT's policy. CDOT granted this request in part, allowing NU to install 18 of the 39 splice vaults within the right-of-way.

In sum, contrary to the statements in the Draft Determination, NU did in fact seek and obtain a partial exception to CDOT's policy regarding the location of splice vaults. Moreover, the Draft Determination does not reference the fact that the installation of some of the splice vaults outside the CDOT right-of-way produced some cost savings by providing schedule benefits. NU therefore requests that this portion of the Draft Determination be revised to properly reflect the underlying facts.

Please do not hesitate to contact me if you have any questions regarding these comments on the Draft Determination.

Very truly yours,

Allen Scarfone

Allen Scarfone, P.E.

EXHIBIT A

The Connecticut Light and Power Company
Docket No. ISO-NE TCA/12C

Data Request ISONE-01
Dated: 01/25/2008
Q-ISO-012-RV01

Witness: **CL&P Panel**
Request from: **ISO New England**

Question:
The TCA application supporting document section 3.4 states that for a "modest incremental expense" the addition of the triple duct/manhole design can be installed. Provide a breakdown of these additional costs (i.e. costs for larger duct diameters, additional manholes, manhole spacing, etc.) in the same valuation year of as the proposed Project.

Response:
This response revises and replaces CL&P's response on March 10, 208 to ISO-NE's Date Request Q-ISO-012.

CL&P considered one project alternative (referred to as Alternative T-2; see Figure 4-4 in the TCA Application) that included no future 345-kV expandability, and the "triple duct/manhole design" alternative (referred to as Alternative T-1; see Figure 4-3 in the TCA Application) that could be expanded in the future for 345-kV uses. While the expandable alternative was approximately 17% more costly than the nonexpandable alternative, it is substantially less costly than adding a new and separate 345-kV cable project in the future.

Per the calculations documented in the table below, the difference in the estimated cost between TCA Alternatives T-1 and T-2 is approximately $32,500,000 (2007 dollars) or 17% of the project costs.

Cost Reductions by Changing from the T-1 Duct/Manhole Design to the T-2 Duct/Manhole Design

Item	Quantity	Unit	Process	Total
1. Fewer Vaults	56	Each	Installation	$5,040,000
			Manufacture	$1,848,000
2. Smaller Vaults	36	Each	Installation	$360,000
			Manufacture	$297,000
3. Duct Bank/Trench Differences				
Three Fewer 8" Conduits Conduit, Spacers, etc.	136,821	Conduit Feet	Material Installation	$1,113,381 $1,322,696
Five Fewer 2" Conduits, Conduit, Spacers, etc.	228,035	Conduit Feet	Material Installation	$241,717 $412,743
Change (Six) 8" to (Six) 6" Conduits Conduit, Spacers, etc.	273,642	Conduit Feet	Material	$445,352
Reduced Trench Excavation/ Backfill	45,607	Linear Feet	Construction	$20,547,859
Reduced Thermal Backfill	45,607	Linear Feet	Material	$196,110
			Sub-total	$31,824,859
4. Less Land for Off-Road Vaults				$702,374
			Total	$32,527,233

CL&P believes that it was both reasonable and prudent to design the project so that it could easily be expanded for 345-kV cable uses. To construct an underground duct/manhole/cable system for two 345-kV cable circuits in the future would require the excavation of a completely new trench elsewhere in the same roadways, or in other roadways, and would cost approximately $200 million in 2007 dollars.

EXHIBIT B

Item	Quantity	Unit	Category	Total
1. Fewer Vaults	30	Each	Installation	$2,700,000
			Manufacture	$990,000
2. Duct Bank/Trench Differences				
Three Fewer 8" Conduits Conduit, Spacers, etc.	136,821	Conduit Feet	Material Installation	$1,113,381 $1,322,696
Three Fewer 2" Conduits Conduit, Spacers, etc.	228,035	Conduit Feet	Material Installation	$145,030 $247,646
Reduced Trench Excavation/ Backfill	45,607	Linear Feet	Construction	$20,547,859
Reduced Thermal Backfill	45,607	Linear Feet	Material	$196,110
			Sub-Total	$27,262,722
3. Land for Off-Road Vaults, Future Circuits				$702,374
			Total	$27,965,096