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December 14, 2011

Mr. Robert Stein
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: Docket No. LIFE-CYCLE 2011 - LIFE-CYCLE 2011

Dear Mr. Stein:

This letter provides the response to requests for the information listed below.

Response to CSC-02 Interrogatories dated 10/21/2011
CSC-005, 006, 010, 011, 012, 015

Response to OCC-01 Interrogatories dated 10/21/2011
OCC-003, 004, 005, 011, 013

Very truly yours,

John Morissette /ts

John Morissette
Manager
Transmission siting and Permitting
NUSCO
As Agent for CL&P

cc: Service List

Witness: Michael B. McKinnon
Request from: Connecticut Siting Council

Question:
This question refers to first set of 2011 Council interrogatories. The table CL&P provided as responses to questions 1 and 5 show widely varying O&M costs for overhead and underground transmission lines. The unexpected underground cable failures in 2007 and 2009 are mentioned; however, the O&M costs for both overhead and underground nearly double when looking at 2006 and 2008. Can you please elaborate on the cause of this substantial increase in a 3 year span?

Response:
Please see the response for Q-CSC-004.

Underground
The cost impact of the increased underground splice-vault inspections was realized in 2008. This included the costs associated with the implementation of a new time-based inspection program.

Overhead
During 2008 a one-time repair program for stapling of grounded downlead wires on wood poles was performed. The vegetation management program was also enhanced. Additional costs incurred in 2008 included the costs of implementing more energized line maintenance, which was implemented to reduce congestion costs associated with some circuit outages.

Witness: Raymond L. Gagnon
Request from: Connecticut Siting Council

Question:
Are there any updates or changes to the factors provided in the 2006 Council interrogatories that have an impact on CL&P's overhead transmission line capital costs? If so, please identify these factors and the impacts they have on transmission line life-cycle costs.

Response:

The factors identified in the 2006 Council interrogatories, specifically CSC-02, Q-CSC-004, that can affect transmission line capital costs remain the same with similar impacts. There are no updates or changes to the factors provided in the 2006 Council interrogatories.

Witness: Raymond L. Gagnon, Bradley P. Bentley
Request from: Connecticut Siting Council

Question:
Are there any updates or changes to the coordination of transmission and distribution planning activities within CL&P or in conjunction with the ISO New England Regional System Planning process? If so, please discuss the changes and the impacts they have on transmission line life-cycle costs.

Response:
For typical projects there have not been any significant changes to the coordination of transmission and distribution planning activities within CL&P or in conjunction with the ISO New England Regional System since CL&P's 2005 response to CSC-02, Q-CSC-007.

Witness: Raymond L. Gagnon
Request from: Connecticut Siting Council

Question:
Since the 2006 Council interrogatories, have there been any significant changes in the costs of right-of-way for underground or overhead transmission lines? If so, please discuss the nature and extent of these changes.

Response:
Since the 2006 Council interrogatories, specifically CL&P's response to CSC-02, Q-CSC-008, there have not been any significant change in the factors affecting the cost of right-of-way for underground or overhead transmission lines as the cost of such right-of-way is site specific and follows the real estate market.

Witness: Anthony W. Johnson III
Request from: Connecticut Siting Council

Question:
Has CL&P's vegetation management practices changed in any way since the 2006 Council interrogatories? If so, please describe these changes and their effect on transmission line life-cycle costs.

Response:
Since 2006, CL&P has instituted several changes to the transmission vegetation management program that have impacted the life-cycle costs. These changes are as follows:

1. More patrols now occur on 345-kV transmission circuits, which are regulated under the North American Electric Reliability Corporation's (NERC) Transmission Vegetation Management Standard - FAC-003-1. Previously, these lines were patrolled once per year, and this frequency has been changed to include two additional patrols each year. All of these patrols are now performed by the Transmission Vegetation Management personnel.

2. LiDAR surveys of NERC designated transmission lines have been initiated and are currently scheduled on a three-year cycle. These surveys increased maintenance expenditures by $1,500 per mile of surveyed line in 2008 (the initial flights and data acquisition) and will add an additional cost of $500 per mile of surveyed line (not mile of right-of-way) every three years. These surveys are currently limited to the 345-kV system.

3. Efforts have increased on inspections and corrective actions for off-right-of-way trees that CL&P considers at higher risk of failing and falling into transmission lines. CL&P's annual cost for this effort varies and averages about $100,000 per year.

4. Since 2007 CL&P increased its efforts to remove tall growing red cedar trees within areas under lines that are subject to the requirements of the NERC Transmission Vegetation Management Standard, FAC-003-1. The company currently removes all cedar trees that will encroach within the minimum clearance distances before the next maintenance period. Other cedar trees are also removed, however, typically no more than 50 percent of the total cedar trees within a line span (structure to structure) are removed during a maintenance year. The company does not normally trim cedar trees.

Items 1, 3, and 4 have increased annual line maintenance costs. Item 2 has increased the maintenance costs every third year. These added costs are incurred to increase line reliability and may decrease future maintenance costs associated with line outages and vegetation management.

Witness: Anthony W. Johnson III
Request from: Connecticut Siting Council

Question:
Please provide updated costs per mile for CL&P's vegetation management activities for transmission line rights-of-way.

Response:
CL&P currently manages vegetation on approximately 810 miles of transmission line rights-of-way ("ROW"). CL&P's ROW widths vary, and the number of transmission lines on any one ROW varies from one to four. Due to these differences the cost per mile of some vegetation management activities must be presented as a range. In addition, some vegetation management activities occur only on limited miles of ROW where the work is performed.

Side trimming and brush control can be presented as a cost per mile of ROW metric. Other costs that cover the entire system on an annual basis can also be calculated as costs per mile of ROW based on the total annual costs of these activities divided by the total miles of ROW. However, some costs, such as the cost of increased numbers of patrols of 345-kV lines, will only apply to those ROWs where 345-kV lines are located, and LiDAR survey costs are based on a mile of line - not mile of ROW.

Brush maintenance is performed on approximately 25 percent of the total ROW miles each year, and average costs for a mile of ROW in 2011 range from $3,050 - $4,700. The reason for a range is that the costs for a mile of maintained ROW varies with the ROW width that is maintained. For example, one mile of ROW that is 100 feet wide will cost less than a mile of ROW that is 200 feet wide.

Side trimming is performed on approximately 10 percent of the total ROW miles each year. The cost range for side trimming in 2011 is $1,000 - $13,000 per mile, and the average cost is $5,610. The density of the forested lands adjacent to each side of the ROW, the number of trees requiring trimming to maintain the required clearances from conductors and the method of disposal for the vegetation debris all impact the trimming cost per mile of ROW. In addition, trimming costs along the Metro-North railroad are very high ($13,000 per mile of ROW) due to the added costs for railroad flaggers and electricians (estimated to be an additional $7,500 per mile).

Hazard tree work in 2011 cost approximately $185 per mile of ROW.

Additional costs solely for miles of 345-kV line ROW include the costs of additional patrols at approximately $110 per mile of ROW each year, and the LiDAR survey costs that are approximately $500 per mile of transmission line every third year.

Witness: Raymond L. Gagnon
Request from: Office of Consumer Counsel

Question:
Ref Responses to Interrogatories CSC-002 and -004. Provide the depreciation life by transmission plant categories as listed in the Responses to CSC-002 and -004.

Response:
Each capital FERC account for transmission plant is listed below with its associated average depreciation life.

Account	Transmission Plant	Average Depreciation Life (Yrs)	Notes:
350.0	Land	Indefinite	
350.0	Land Rights	65	
352.0	Structures and Improvements	45	
353.0	Station Equipment	41.2	
354.0	Towers and Fixtures	51.3	
355.0	Poles and Fixtures	38	
356.0	OH Conductors and Devices	42	
357.0	UG Conduit	45.8	
358.0	UG Conductor and Devices	39.2	
398.73	Communications Equipment	43	1

Notes: 1 Includes lightning shield wires containing fiber optic strands

Witness: Raymond L. Gagnon
Request from: Office of Consumer Counsel

Question:
Ref. Response to CSC-002. Provide the following additional information for costs associated with overhead lines:
(a) (CL&P) The calculation for the total cost of capital over the life of the plant using CL&P's current cost of debt and, for the equity portion, use the NEEWS project's return on equity (ROE) with FERC-approved incentives totaling 12.89%.

(b) (CL&P and UI) Average embedded land cost per mile.

Response:
(a) Please see the attached cost of capital (COC) calculation for CL&P using the FERC-approved NEEWS Project Return on Equity (ROE) of 12.89%. This COC calculation is based on information for CL&P as of December 31, 2010 as filed in its 2010 FERC Form 1. Assuming CL&P's capitalization and cost of debt, preferred stock and equity remain fixed over the life of the asset, this calculation will remain the same. Therefore, the cost of capital is 9.35%.

The Connecticut Light & Power Company (CL&P)
Estimated Investment Return Calculation for NEEWS
As of 12/31/10

	CAPITALIZATION 12/31/2010	CAPITALIZATION RATIOS	COST OF CAPITAL	WEIGHTED COST OF CAPITAL
LONG-TERM DEBT	$ 2,318,940,090	47.99%	5.89%	2.83%
PREFERRED STOCK	$ 116,665,523	2.41%	5.27%	0.13%
COMMON EQUITY	$ 2,397,008,715	49.60%	12.89%	6.39%
TOTAL INVESTMENT RETURN	$ 4,832,614,328	100.00%		9.35%

(b) Land costs for transmission projects vary widely from project to project based on several factors such as the actual right-of-way (ROW) locations for specific project, the timing of the project, whether the project will use existing ROW for which the requisite property rights were previous acquired (sometimes several decades earlier) or the project will require acquisition of new property rights. Thus, it is not possible to determine "generic" land costs for types of transmission lines and consequently, land costs have not been included in this analysis.

Witness: Raymond L. Gagnon
Request from: Office of Consumer Counsel

Question:
Ref Response to CSC-004. For underground lines, provide the same information as requested in the previous interrogatory.

Response:
(a) CL&P's cost of capital calculation is the same for its overhead and underground transmission facilities. Refer to the response in OCC-004 for CL&P's cost of capital calculation.

(b) The same factors that affect land costs for overhead transmission facilities also affect land cost for underground transmission facilities. Please see response to OCC-004.

Witness: Bradley P. Bentley, Raymond L. Gagnon
Request from: Office of Consumer Counsel

Question:
Explain how ISO-New England allocates the cost of spare parts between the regional and the local levels.

Response:
ISO-NE uses its FERC Electric Tariff No. 3, Open Access Transmission Tariff's Section 12C and its Planning Procedure No. 4, entitled "Procedure for Pool-Supported PTF Cost Review" as guidelines for its technical review of a transmission owner's Transmission Cost Allocation Application. The ISO-NE technical review seeks to determine if a regional transmission project is deemed to have any costs that should not be included in regional transmission rates and therefore should be deemed to be "localized", i.e. recovered from a transmission owner's local customers. As part of the ISO-NE's technical review of a transmission project, ISO-NE also issues a determination regarding the appropriate rate treatment for a transmission project's spare parts. Please see the remaining pages of this response for a copy of ISO-NE's Planning Procedure No. 4.

ISO NEW ENGLAND PLANNING PROCEDURE NO. 4

PROCEDURE FOR POOL-SUPPORTED PTF COST REVIEW

EFFECTIVE DATE: August 7, 2009

Planning Procedure No. 4
Procedure For Pool-Supported PTF Cost Review

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Planning Procedure No. 4
Procedure for Pool-Supported PTF Cost Review[1]

1.0 General

This procedure ("PP-4") provides detailed guidance, pursuant to the ISO New England Transmission, Markets and Services Tariff (the "Tariff"), regarding the cost review of those necessary regulated transmission solution additions and modifications, reconstructions or replacements (referred to herein as "Projects") of Pool Transmission Facilities ("PTF") that are eligible for regional cost support: including Regional Benefit Upgrades ("RBUs"); plans requiring submittal for review under Section I.3.9 of the Tariff; and reconstruction/replacement of the PTF.

Under Section II.50 and Schedules 11 and 12 of Section II of the Tariff, ISO New England Inc. ("ISO") with advisory input from the Reliability Committee ("RC") will determine whether there are Localized Costs to be excluded from Pool-Supported PTF costs.

This PP-4 provides guidance on: what Projects are subject to cost review, what information the applicant for cost review (the "Applicant") must provide to the ISO, the process for RC and ISO review of an Applicant's Project, the factors that will be considered in determining whether there are Localized Costs associated with a Project, and periodic reporting of costs associated with a Project.

This Planning Procedure also provides guidelines for preparing a Transmission Cost Allocation ("TCA") application ("TCA Application") for use by the ISO and the RC. The Applicant must support the TCA Application with the necessary information and analysis of the Project. This procedure provides guidance on what information and analysis should be available and supplied to support a TCA Application. The completed form provided in Attachment B and all supporting materials describing and assessing the impact of the proposed plans together shall constitute submittal of a TCA Application.

Approval of a TCA Application allows an Applicant to include the approved costs associated with the Project into Pool-Supported PTF costs, subject to determinations made pursuant to this PP-4 by the ISO.

This PP-4 shall be submitted to the review of the RC, at least annually, to evaluate the appropriateness of the minimum threshold set out in section 1.1.2 of this PP-4.

[1] Capitalized terms used in this Procedure are intended to have the same meaning given to such terms in Sections I.2.2, II.1, and/or III.1.3 of the Tariff.

1.1 Projects Requiring a TCA Application

1.1.1. Categories of Projects requiring TCA Application

This procedure pertains to the cost allocation treatment of upgrades/additions/modifications to the PTF on and after the Effective Date. These upgrades/additions/modifications include the following: RBUs; plans requiring submittal for review under Section I.3.9 of the Tariff; or reconstruction/replacement of the PTF. These upgrades/additions/modifications to the PTF are referred to in this PP-4 as "Projects".

TCA Applications are required for the following types of Projects that are seeking regional cost support: (1) an RBU as described in the annual Regional System Plan; (2) one or more plans that otherwise require submittal for review under Tariff Section I.3.9 and that address the same system need; and (3) reconstruction/replacement of PTF that does not require approval under Tariff Section I.3.9 but that has a total estimated PTF portion of the Project cost greater than or equal to $5 Million.

Although the Project may be projected over any time frame to demonstrate prudent planning, action on TCA Applications will only be taken on plans that have begun construction or are expected to begin construction no later than (5) years after the date of the TCA Application submittal.

Generally, an Applicant must file a single TCA Application for its Project, as identified in the Regional System Plan. The ISO may, in the exercise of reasonable discretion, allow multiple TCA Applications for individual components of a single Project.

1.1.2. Exemptions from TCA Application Requirements

If a Project is not subject to Section 1.1.1 above, or if the total estimated PTF portion of the Project cost is less than $5,000,000, then the Applicant does not need to file a TCA Application unless specifically requested to do so by the ISO.

1.1.3. Projects not subject to this Procedure

This Review Process does not pertain to:

1. Schedule 11 of Section II of the Tariff, Category C Generator Interconnection Related Upgrades ("GIRUs"), except to the extent such GIRUs may be eligible for regional cost support under the terms of Schedule 11

2. Elective Transmission Upgrades
3. Local Benefit Upgrades
4. Recovery of Localized Costs
5. Merchant Transmission Facilities or their interconnection

1.2 Review of Adequacy of TCA Application Documents

The complexity of proposed changes to the transmission system can range from minor changes to major alterations. The intent of the PP-4 process is to match information required as part of a TCA Application, to the review effort, and relative cost of the Project. Section 1.5 below provides guidance as to the level of information required in a TCA Application. The TCA Application, and any supporting documents, shall also reflect the cost information as illustrated in Appendix D – Project Cost Estimating Guidelines. The Applicant may request further guidance or preliminary review of Project-related information from the ISO and the RC prior to submitting a formal TCA Application.

1.3 Confidentiality

Should any documentation be submitted that is considered confidential, it is the responsibility of the Applicant to describe to the ISO, by name, the documents to be considered confidential. All information marked as confidential will be controlled in accordance with the ISO New England Information Policy.

1.4 Roles of PAC, RC and ISO in TCA Application Review Process

1.4.1 The Planning Advisory Committee (PAC) shall review proposed solutions and may offer advisory input to the ISO as to the most cost effective and reliable solutions for the region that meet a need identified in a Needs Assessment through the Regional System Planning Process. This information will be used by the Project proponent (i.e. Transmission Owner) in developing the TCA Application.

1.4.2 The RC, or its designee, will review the TCA Application and the RC will make a recommendation to the ISO as to whether there are Localized Costs associated with the Project that should not be supported as Pool-Supported PTF costs. Localized Costs will be identified based on the rules for PTF determination as defined in Attachment F of the Tariff and section 1.6.2 of this procedure.

1.4.3 The ISO will consider the RC's advisory recommendation in making its determination of whether there are Localized Costs associated with the Project that should not be included as Pool-Supported PTF costs.

1.4.4 The Applicant of Category 4 and 5 TCA Applications (as identified in Section 1.5, Table 1, of this procedure) must provide periodic updates (up to) three times per year in accordance with review of the Regional System Plan Project Listing) to the ISO, RC and, as deemed appropriate by the ISO, to the PAC in accordance with Appendix D of this procedure.

1.5 Evaluation

Based on the total estimated PTF portion of the cost of the Project, five (5) categories of analysis are identified in Table 1 below for supporting a particular Project (ranging from no analysis for exempt Projects to full costs analyses of transmission alternatives). The ISO and/or the RC may also, however, request additional information. The analysis categories are summarized as follows:

Table 1

Category	Total Estimated PTF Portion of the Project Cost	Documentation Detail Required (in accordance with Section 1.6.1 of this PP-4) [Note: The ISO and/or RC may request additional information]	Draft TCA Application to ISO-NE for Preliminary Review	Timeline for Submission of TCA Application for Action by the RC	RC Action	ISO Action
1	Less than $5,000,000	TCA Application is not required.	N/A	None	None	None
2	Greater than or equal to $5,000,000 but less than $20 Million	• TCA Application & Cover Letter (Ref. 1.6.1.a & 1.6.1.b) • Map and one-line diagrams (Ref. 1.6.1.d) • Correlation Table (Ref. 1.6.1.e)	30-days prior to a RC meeting for which action is expected.	15-days prior to a RC meeting for which action is expected.	Recommendation to the ISO	Written Findings and Determination

3	Greater than or equal to $20 Million but less than $50 Million	• TCA Application & Cover Letter (Ref. 1.6.1.a & 1.6.1.b)
		• A description of the Project, including a detailed discussion of alternatives considered and reasons for choosing the particular design based on the factors outlined in Schedule 12C of Section II of the Tariff. (Ref. 1.6.1.c) Requirements from section 1.6.1.c.3.ii should focus on:
		  • An overall project cost estimate and categorized cost breakdown for construction labor, materials, engineering and permitting.
		  • An overall cost estimate of each alternative and their cost comparison.
		• Map and one-line diagrams (Ref. 1.6.1.d)
		• Correlation Table (Ref. 1.6.1.e)
			60-days prior to a RC meeting for which action is expected.	30-days prior to a RC meeting for which action is expected.	Recommendation to the ISO	Written Findings and Determination

4	Greater than or equal to $50 Million but less than $200 Million	• TCA Application & Cover Letter (Ref. 1.6.1.a & 1.6.1.b) • A description of the Project, including a detailed discussion of alternatives considered and reasons for choosing the particular design based on the factors outlined in Schedule 12C of Section II of the Tariff. (Ref. 1.6.1.c) Requirements from section 1.6.1.c.3.ii should focus on: • An overall project cost estimate and a detailed description of the categorized cost estimates for construction labor, materials, engineering and	90-days prior to a RC meeting for which action is expected.	60-days prior to a RC meeting for which action is expected.	Recommendation to the ISO	Written Findings and Determination

Category	Total Estimated PTF Portion of the Project Cost	Documentation Detail Required (in accordance with Section 1.6.1 of this PP-4) [Note: The ISO and/or RC may request additional information]	Draft TCA Application to ISO-NE for Preliminary Review	Timeline for Submission of TCA Application for Action by the RC	RC Action	ISO Action
		permitting. • An overall project cost estimate of each alternative; the ISO may request a detailed description of the categorized cost estimates for construction labor, materials, engineering and permitting of each alternative. • Map and one-line diagrams (Ref. 1.6.1.d) • Correlation Table (Ref. 1.6.1.e) • Periodic reporting to PAC using the template in Appendix D[2]				
5	Greater than or equal to $200 Million	• TCA Application & Cover Letter (Ref. 1.6.1.a & 1.6.1.b) • A description of the Project, including a detailed discussion of alternatives considered and reasons for choosing the particular design based on the factors outlined in Schedule 12C of Section II of the Tariff. (Ref. 1.6.1.c) Requirements from section 1.6.1.c.3.ii should focus on: • An overall cost estimate and a detailed description of the categorized cost estimates for construction labor, materials, engineering and permitting. • An overall project cost estimate of each alternative; the ISO may request a detailed description of the categorized cost estimates for construction labor, materials, engineering and permitting of each alternative. • Map and one-line diagrams (Ref. 1.6.1.d) • Correlation Table (Ref. 1.6.1.e) • At ISO-NE's request, a stakeholder meeting may be held	90-days prior to a RC meeting for which action is expected.	60-days prior to a RC meeting for which action is expected.	Recommendation to the ISO	Draft Written Findings and Determination to be posted for a 30-day comment period prior to ISO-NE making its' final determination

[2] Appendix D, Project Cost Estimating Guidelines Document, provides detail on how the cost reporting templates are to be used.

Category	Total Estimated PTF Portion of the Project Cost	Documentation Detail Required (in accordance with Section I.6.1 of this PP-4) [Note: The ISO and/or RC may request additional information]	Draft TCA Application to ISO-NE for Preliminary Review	Timeline for Submission of TCA Application for Action by the RC	RC Action	ISO Action
		for complex Projects • Periodic reporting to PAC using the template in Appendix D[3]				

[3] Appendix D, Project Cost Estimating Guidelines Document, provides detail on how the cost reporting templates are to be used.

1.6 Submittal of TCA Application

TCA Applications will be submitted via e-mail to the ISO (as detailed in Attachment C) and shall be submitted per the described timelines in Section 1.5 above, and the guidelines within this section and Section 2.0 below, in order to provide the RC sufficient time to review the TCA Application before the requested action date. The timelines provided in this PP-4 are intended to provide guidance to the Applicant, the RC and the ISO but do not bind the Applicant, the RC or the ISO to take any action.

1.6.1 Review

An Applicant is encouraged to discuss their TCA Application and supporting documentation with the ISO to ensure completeness prior to submittal for review.

A completed TCA Application, and supporting documentation, shall be submitted electronically to the ISO (as detailed in Attachment C), who will collect, distribute, and provide a permanent record of the TCA Application.

Upon receipt of a TCA Application, the ISO will notify the Applicant if the submitted TCA Application is incomplete or additional information is required.

A typical TCA Application will include the following:

(a) Cover Letter (including when action by the RC is requested by)
(b) TCA Application (as detailed in Attachment B)
(c) Additional details and supporting documentation pertaining to:
1) A review and discussion of the need for the proposed Project.
- Note: To the extent that the needs analysis was conducted during the annual planning process (*i.e.*, "Regional System Plan" ("RSP")), a summary of that analysis may be considered sufficient.
2) A summary of the technical analysis performed for the Project and the identified transmission alternatives.
3) A discussion of why the Project was selected over other transmission alternatives, with a description of the benefits of the proposed Project over other transmission alternatives from an operational, timing of implementation, cost and reliability perspective.

(i) The proposed Project, and any feasible and practical transmission alternatives that were

considered, including those offered in the most recent RSP report and, if applicable, discussed at the PAC.

- Notes: (1) A feasible and practical transmission alternative means a transmission alternative that is feasible and practical from an engineering design and construction perspective. An alternative that is not or may not be approved by a siting or local review board may still be considered a feasible and practical transmission alternative. (2) When Non-Transmission Alternatives (NTA) analysis is performed, it should be briefly discussed in the TCA Application for informational purposes, even though it is not a requirement of Schedule 12 of the Tariff.

(ii) The most currently available cost estimates[4] of building the Project and, if required, transmission alternatives that were considered, including overall costs and categorized as identified in Attachment D of this procedure.[5];

(iii) A comparison of the potential operational impacts on the bulk power system during construction of the Project with any feasible and practical transmission alternatives that were considered;

(iv) A comparison of the potential operating costs of the Project and any feasible and practical transmission alternatives that were considered; and

(v) Design considerations affecting maintenance, construction and/or future expansion of the Project.

(d) One-line diagrams and a map locating the facilities[6].

(e) Correlation Table which indentifies the RSP Project ID, including sub-components, Proposed Plan Applications and relevant TCA Application description/costs.

[4] All dollar amounts shall be expressed in year of expenditure dollars and based on the project anticipated schedule. Escalation shall be included and be clearly identified with the assumption stated (escalation rate applied to the project). Alternatives and preferred Project shall be stated in the same valuation year.

[5] For each categorization of costs, year incurred shall be identified.

[6] If these documents were already submitted to the ISO as part of a Proposed Plan Application, they do not need to be re-submitted.

(f) Any additional relevant information requested by the ISO or the RC.

The Applicant has an ongoing responsibility to update any TCA Application when additional information relevant to review of the TCA Application becomes available prior to RC review and issuance of the ISO's written findings and determination.

1.6.2 Considerations

In making its determination of whether Localized Costs exist, the ISO, with advisory input from the RC, will consider the reasonableness of the proposed design and construction method with respect to:

(a) Good Utility Practice;
(b) Current engineering design and construction practices in the area in which the Project is proposed to be built/is being built;
(c) Allowance for appropriate expansion and load growth;
(d) Alternate feasible and practical transmission alternatives; and
(e) The relative costs, operation, efficiency, reliability and timing of implementation of the proposed Project.

Attachment A provides examples of relevant considerations for determination of Localized Costs.

1.6.3 Additional Costs Due to Regulatory or Public Requirements

The Applicant shall identify in their TCA Application any significant additional proposed Pool-Supported PTF costs introduced as a result of local or state regulatory and/or legislative requirements. The ISO will then determine, with the advice of the RC, whether these incremental costs resulting from the requirements of any local or state regulatory and/or legislative requirements will be identified as Localized Costs.

1.7 Time Guidelines

Applicants are urged to supply appropriate data, with adequate lead times for anticipated review as described in Sections 1.5 and 1.6 above. Failure to follow these timeframes may result in a delay of review of the TCA Application.

1.8 Actions on a TCA Application

On each TCA Application, the RC will provide a recommendation and suggested motion describing the conditions of the approval for the TCA Application. (Such motion should be distributed consistent with the

Bylaws that apply to the RC). Any such recommendations will be distributed with the meeting material and agenda to the extent practicable.

If in reviewing the TCA Application, the RC decides additional information, review, or study is required prior to acting on the Application, the RC may elect to defer action and solicit supplementary information, review, or study as required.

Therefore, the RC may defer action, recommend approval of the TCA Application by the ISO, or recommend a determination of Localized Costs by the ISO. Recommendations by the RC on TCAs require a vote equal to or greater than two-thirds of the aggregate Sector Voting Shares (as defined in the Participants Agreement).

In accordance with the Participants Agreement, the Secretary of the RC will notify the Members and Alternates of the Participants Committee and the ISO of the actions taken by the RC. This written notice will be delivered prior to the end of the fifth (5^{th}) business day following a meeting of the RC. This notification will constitute formal confirmation that such action was taken.

If the Applicant seeks input by the Participants Committee, it may request TCA Application review after the RC meeting but before the fifth (5^{th}) business day following a meeting of the RC. The request should be submitted in writing to the Secretary of the RC with a copy sent to the ISO by the Applicant.

The ISO will consider the recommendations of the RC, and the Participants Committee as appropriate, in the process of making a determination on each TCA Application. The ISO may also seek additional information after RC or Participants Committee action and prior to making its decision. The ISO will transmit, in a timely manner, its written findings and determination to the Applicant (with copy to the RC) stating its decision, and the basis for its decision.

If the Applicant disagrees with the ISO's written findings and determination, the dispute resolution procedures outlined in Section 1.11 below and Schedule 12C of Section II of the Tariff should be followed.

1.9 Withdrawal of a TCA Application

Should an Applicant wish to withdraw its TCA Application, it should send a letter to that effect to the ISO (as detailed in Attachment C). The ISO will distribute the notice of withdrawal to the RC.

In cases where a Proposed Plan Application was not required, but a TCA Application was submitted, the ISO issued a written findings and determination and the Project was cancelled, the TCA Applicant must provide written notification to ISO within 60-days of such cancellation, requesting withdrawal of the approved TCA Application. Conversely, in cases where a Proposed Plan Application was submitted, and a TCA Application was submitted, the ISO issued a written findings and determination and the Project was cancelled, the TCA Application will automatically be withdrawn upon notification of withdrawal of the Proposed Plan Application. However, the Applicant may submit a TCA Application for costs incurred prior to cancellation of the Project.

1.10 Reviews and Update of Approved TCA Applications

The RC and the ISO will review an updated TCA Application for the proposed Project, as provided for below. The ISO, after considering the advice of the RC, may require that the Applicant resubmit its TCA Application.

The Applicant is responsible to inform the ISO of any significant additional Pool-Supported PTF costs or any material changes in the design associated with a proposed Project made subsequent to approval of the TCA Application. Such information shall be delivered to the ISO by submitting a revised TCA Application, including the reasons for resubmission in accordance with the template of Attachment D. Specifically, an Applicant, which has already received approval of its original TCA Application, must notify both the RC and the ISO if either: (i) costs have exceeded or are anticipated to exceed 10% of the amount determined by the ISO to be included in Pool-Supported PTF costs; (ii) costs have decreased or are anticipated to decrease by 10% of the amount determined by the ISO to be included in Pool-Supported PTF costs; or (iii) there is a material change in design of the Project. In the case that Pool-Supported PTF costs have decreased by 10% or more, a revised TCA application does not need to be filed but information must be provided to the ISO and RC, in a timely manner, using the templates in Attachment D which indentify and explain cost variance to the original TCA estimate. If an Applicant fails to notify the ISO of any of these developments, and it is discovered, such as during an audit, then the costs associated with such development will be excluded from the Pool-Supported PTF until the process described in this Procedure has been followed and the ISO accepts the costs following appropriate review by the RC and the ISO. In such instance, the costs shall be recovered only prospectively pursuant to the Tariff.

1.11 Dispute Resolution

Should the Applicant disagree with the ISO's written findings and determination as described in Section 1.8 above, a dispute may be filed.

Disputes should be submitted in writing first to the ISO (as detailed in Attachment C). They should describe in detail the basis for challenging the ISO's written findings and determination, and must be submitted within 60 days of receipt of the ISO's written findings and determination. The ISO will then enter into good faith negotiations for a period not to exceed 60 days from the date of the Applicant's written notice to try to resolve the dispute. If there is no resolution of the dispute at the end of the negotiation period, the Applicant may file a complaint. The ISO shall notify the RC of the outcome of the dispute resolution process.

2.0 TCA Application Forms

2.1. Summary Statement

The form in Attachment B must be submitted with each TCA Application as outlined in Section 1.6 above. Supporting documentation should supplement the form as appropriate.

2.2 TCA Application Identification

Application Number (Company - Year (2 digits) – TCA– Unique ID (Sequential Application #s) – Rev #

e.g. CMP-04-TCA-01
CMP-04-TCA-02
CMP-04-TCA-01-Rev 1

3.0 Attachment C – ISO Correspondence

The ISO may, per this Procedure, update Attachment C in regard to the mechanisms for exchange of correspondence, without approval. The ISO will notify the RC when such a change has been made.

Document History[7]

Rev. 0 App.: 4/17/98
Rev. 1 Rec.: RC – 5/19/04; Eff.: PC – 6/11/04
Rev. 2 Eff: 2/1/05
Rev. 3 Rec.: RC – 12/6/06; Eff.: PC – 1/5/07
Rev. 4 Rec.: RC – 7/21/09; PC – 8/7/09; ISO-NE 8/7/09

[7] This Document History documents action taken on the equivalent NEPOOL/ISO New England Procedure prior to the RTO Operations Date as well as revisions to the ISO New England Procedure subsequent to the RTO Operations Date.

Attachment A
Supplemental Guidelines for Pool-Supported PTF Cost Review

In determining whether there are Localized Costs, the ISO will consider as appropriate and with the advisory input of the RC, the following non-exclusive list of factors:

- Costs of construction including all costs associated with rights of way, easements and associated real estate.
- Assessment of the schedule or in-service date of the Project from an engineering and construction standpoint rather than from the standpoint of potential delays in local or state siting.
- Relative reliability and operational impacts of the Project as compared to alternatives considered.
- Costs associated with operation and maintenance of the proposed design and alternatives, including consideration of whether the proposed design is consistent with Good Utility Practice.
- Costs of related and long-term congestion impacts, if any, of each proposed PTF and Non-PTF design alternative, including costs related to outages associated with construction.
- The proposed design's fit into reasonable future expansion plans including the "Regional System Plan" ("RSP")
- Consistency with current engineering, design and construction practices in the area.

The following, non-exclusive list of examples is provided for illustration of the types of Projects that would be considered to contain Localized Costs:

1. The Project costs more than a feasible or practical transmission alternative and has equal or less robust bulk power system performance than the transmission alternative.
2. The Project does not address a need identified in a Needs Assessment through the Regional System Planning Process need.
3. The Project includes underground transmission cable, which is selected (a) at the direction of a local or state siting board, or (b) to address other local concerns, and the cost of overhead transmission lines is less expensive, taking into account all relevant costs.
4. The Project is a gas-insulated or covered substation when an open-air substation would be feasible and practical for lower cost.

The following, non-exclusive list of examples is provided for illustration of the types of Projects that are not likely to contain Localized Costs.

1. The Project includes underground transmission cable but the total cost of the underground transmission cable Project is lower than a feasible and practical overhead transmission line, the operating and maintenance costs are

comparable, and the reliability benefits provided by the underground cable are equal to those provided by the overhead line.

2. The Project has higher total cost than feasible and practical transmission alternatives, but provides for more robust bulk power system performance consistent with the RSP planning horizon and predicted load growth, than such transmission alternatives.

Attachment B
TCA Application Form

See Separate Document

Attachment C
ISO Correspondence

TCA Applications:

TCA Applications should be submitted via e-mail to

TCApps@iso-ne.com

TCA Application Withdrawals:

TCA Application Withdrawals should be submitted in writing to

ISO New England,
Vice President, System Planning
One Sullivan Road,
Holyoke, MA 01040-2841

Disputes:

Disputes should be submitted in writing to

ISO New England,
Vice President, System Planning
One Sullivan Road,
Holyoke, MA 01040-2841

Attachment D
Project Cost Estimating Guidelines

See Separate Document

Witness: Raymond L. Gagnon
Request from: Office of Consumer Counsel

Question:
Ref. Life Cycle 2007 Report (2007 Report), pp. 20-23. In comparing underground to overhead costs, the 2007 Report includes issues such as land costs, materials cost escalation, degree of complexity, and transient voltages. Regarding other types of costs associated with the Bethel-to-Norwalk undergrounding that have a significant impact on Connecticut consumers, provide the average per-mile costs charged to Connecticut consumers due to: (a) localization of the underground line by ISO-New England, and (b) the added 46 basis points ROE incentive that was secured from FERC for use of "advanced technology" related to the length of the underground line.

Response:
(a) CL&P is assuming that the Office of Consumer Counsel is looking for the costs to Connecticut consumers for Pooled Transmission Facilities (PTF) on the Bethel-to-Norwalk Project that were deemed to be localized costs by ISO-NE, pursuant to the ISO-New England Cost Allocation Determination Letter dated September 22, 2006. The localized costs on the Bethel-to-Norwalk Project were approximately $117.4 million, including $2.4 million of self-declared localized costs. Assuming that Connecticut is approximately 27 percent of the New England load base, the additional costs borne by Connecticut consumers as a result of ISO-NE's localization decision are approximately $85.95 million. The lines portion of the Bethel-to-Norwalk project included 21 miles of new 345-kV line and 10 miles of replacement 115-kV lines. Using 31 miles as a basis to compute an average "localized per mile cost" for the Bethel-to-Norwalk Project, the result is $2.7 million/mile.

(b) The Bethel-Norwalk Project did not receive a FERC incentive of an additional 46 basis points ROE for "advanced technology".