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May 18, 2012

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

RECEIVED
MAY 18 2012
CONNECTICUT
SITING COUNCIL

Re: Docket No. CSC 424 - Interstate Reliability Project

Dear Mr. Stein:

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

Response to CSC-02 Interrogatories dated 04/30/2012

CSC-027, 028, 029, 030, 031, 032, 033, 034, 035, 036, 037, 038, 039, 040, 041

Very truly yours,

Robert Carberry
Manager
Siting and Permitting
NUSCO
As Agent for CL&P

cc: Service List

Witness: CL&P Panel
Request from: Connecticut Siting Council

Question:

Page 5-77 of Vol. 1 of the application discusses the Quinebaug and Shetucket Rivers Valley National Heritage Corridor. Are there any specific restrictions on development within the Corridor? What specific places crossed by the proposed and/or existing CL&P ROW are considered historic, recreational, cultural, natural and scenic resources of the Corridor?

Response:

No, there are no specific restrictions on development within the Quinebaug-Shetucket Rivers Valley National Heritage Corridor, which was created by act of Congress in 1994. As detailed in a Connecticut Office of Legislative Research report (OLR Research Report, April 26, 2000, 2000-R-0329), the corridor was created partially in recognition of the fact that Connecticut ranked last in terms of amount of federally protected park and open space, and the law designating the corridor encouraged the state to prepare a non-binding management plan and provided matching funds to assist in the implementation of the plan. The OLR Report further notes that:

"neither the federal law that designates the corridor nor the state law that authorizes the corridor's management plan limits, bans, or restricts development in it....But federal law does 'encourage' the corridor's management plan to include non-binding land use and development criteria....Ultimately, towns in the corridor continue to regulate development within their jurisdictions."

"Connecticut law created an advisory council to develop the management plan (CGS §25-109q), and the governor designated the non-profit Quinebaug-Shetucket Heritage Corridor, Inc. (QSHC) to administer the federal funds for implementing the plan."

In 2009, Connecticut passed PA09-221, which created the Connecticut Heritage Areas Program, directing all state entities to take the resources of the national heritage corridors into consideration in planning and projects.

The QSHC is now referred to as The Last Green Valley, Inc. (TLGV), which remains a private, non-profit organization responsible for administration of the plan for the heritage corridor. The objectives of preserving the valleys' natural and historic attributes remain the same. TLGV has no regulatory authority, but rather implements the original management plan for the heritage corridor and is responsible for producing planning documents related to the heritage corridor. The latest planning document for the heritage corridor is *Vision 2020: The Next 10 Years* (published in 2010).

TLGV identifies the special attributes of the heritage corridor as the Shetucket and Quinebaug rivers themselves, ponds and lakes, state forests, state parks and wildlife management areas (WMAs), trails (including the East Coast Greenway, a National Millennium Trail), agricultural uses, the large unbroken tracts of forest, town greens, and structures designated on the national and state registers of historic places. (refer to the TLGV website at www.tlgv.org)

The attributes listed by TLGV for the national heritage corridor were considered in CL&P's analysis of land uses and visual resources crossed by or in the vicinity of the Project ROW. These resources are discussed generally in Volume 1, Section 5.1.4.1 (Existing Land Use), Section 5.1.4.4 (Public Forests, Parks, Open Space, Recreational / Public Trust Lands, and Trails), and Section 5.1.4.5 (Protected Scenic Resources). Tables 5-14 and 5-15 (Volume 1) identify these resources in relation to the ROW. In addition, the *Visual Resource Analysis* (Volume 8) provides additional details, including representative photographs and photo-simulations, regarding these resources. Finally, the aerial-photography based maps in Volumes 9 and 11 offer additional perspectives regarding the location of the CL&P ROW in relation to natural and cultural features such as state forests, trails, parks, designated historic sites, etc.

Overall, the proposed alignment of the new 345-kV transmission line along CL&P's existing corridor is consistent with the historical use of the ROW for energy transmission purposes, and will not be incompatible with the preservation of natural and cultural resources in the heritage corridor.

Witness: CL&P Panel
Request from: Connecticut Siting Council

Question:

Has CL&P received any comments from the Quinebaug-Shetucket Heritage Corridor, Inc. on the proposed project? If so, please provide.

Response:

CL&P has not received any written comments from The Last Green Valley (TLGV), formerly known as the Quinebaug-Shetucket Heritage Corridor, Inc.. However, it has received oral comments in the course of personal meetings. Interstate Reliability Project team members met with the representatives four times over the past four years. Meetings took place on the following dates:

- May 1, 2008
- October 2008
- November 12, 2011
- April 12, 2012

The following representatives from TLGV attended these meetings:

- Charlene Perkins-Cutler, Executive Director
- Lois Bruinooge, Deputy Executive Director
- Bill Reid, Director of External Affairs

A presentation on the current status of the proposed Project and the siting process was given at each meeting, followed by a dialogue consisting of overall observations and specific questions. Members of TLGV noted that they understood the need for the Project and appreciated the multiple opportunities for public participation in the process. Their number one priority and request to CL&P is that the Project be built in a manner with the least environmental impact. They also requested that the Project continue to proactively communicate with them throughout the siting process, which CL&P has agreed to do. Other TLGV questions were focused on the number of existing rights-of-way NU has, how the Project will be funded, consideration of alternatives, and the construction process. Based on our conversations with these TLGV representatives, it appears that we adequately addressed their questions.

Ms. Charlene Perkins-Cutler commented on behalf of the TLGV at the Public Comment Hearing in Brooklyn on April 19, 2012. In her comments, she noted that while TLGV is not in the position to endorse or oppose the Project, she commended CL&P for its proactive communications and expects those communications to continue throughout Project construction.

Witness: CL&P Panel
Request from: Connecticut Siting Council

Question:
What is the total increase in flood storage that would result from the construction of the proposed project?

Response:

CL&P is in the process of evaluating the impacts to flood-storage volumes from construction of the new line. CL&P currently does not anticipate any increase in flood-storage volume resulting from the construction of the project. In areas where structures may be located within a floodway, the Project will evaluate the potential impact on flood storage, and if required, will provide compensatory flood-storage volume to offset the loss of flood-storage volume resulting from the installation of new structures.

Witness: CL&P Panel
Request from: Connecticut Siting Council

Question:

Page 6-40 of Vol. 1 of the application states that "New line structures would be situated in an additional 10 wetlands that include areas that function as vernal pools or amphibian breeding habitat; however no structures are anticipated to result in impacts to vernal pools." Please clarify this statement. How would CL&P minimize or eliminate impact to these vernal pools?

Response:

During the field investigations of vernal pools and amphibian breeding habitat performed in 2008 and 2011, both traditional vernal pools and so-called "cryptic" vernal pools were identified along the ROW.

Traditional vernal pools are those that meet the criteria of the Connecticut Department of Energy and Environmental Protection (CT DEEP), as defined on page 5-32 of Volume 1. These are generally characterized by a confined basin depression that contains water for approximately two months in the spring and/or summer; lacks a surface water connection with other wetlands or water bodies; does not have fish populations; and supports the breeding of obligate and/or facultative vernal pools species (e.g., wood frog, spotted salamander, fairy shrimp).

"Cryptic" or non-classic vernal pools are areas within a larger wetland that exhibit hydrology (season flooding) appropriate to support the breeding of obligate and/or facultative vernal pools species.

The statement made on page 6-40 of Volume 1 refers to the location of proposed 345-kV line structures in large wetlands, portions of which were identified as "cryptic" vernal pools. Although the proposed 345-kV line structures must unavoidably be located within these wetland complexes, none will be sited within the areas specifically delineated as "cryptic" vernal pools. In addition to the structures, temporary work (crane) pads and access roads necessary to reach the structure sites will be located within these wetland complexes.

Table 6-5, located at the end of Volume 1, Section 6 (pp. 6-95 and 6-96) identifies the proposed structures that will be located in wetland complexes that include cryptic vernal pools. (Refer to the column in this table under "Proposed Project Facilities and Vegetation Clearing" entitled "Structures Located in Wetland Providing Habitat".)

Based on more detailed analyses (conducted subsequent to the submission of the Application in December 2011), there are seven wetland complexes that together include 12 cryptic vernal pools. These are listed in Table Q-CSC-030-1 on pages 2 and 3 of 8.

Avoidance and minimization measures for vernal pools:

CL&P has attempted to site new transmission line structures and, to the extent practicable, work pads (i.e., crane pads, pulling pads) outside of defined traditional or cryptic vernal pools. In addition, CL&P and National Grid have coordinated to develop a protocol for avoiding and minimizing impacts to vernal pools during the construction of the Project. The protocol, Exhibit CSC-030-1 on pages 4 through 8 of 8, identifies the measures that CL&P will use during construction to limit adverse effects to vernal pools. In addition, CL&P anticipates that additional mitigation measures for vernal pools may be identified during the CT DEEP and U.S. Army Corps of Engineers regulatory review processes for the Project.

Table Q-CSC-030-1
Summary of Wetland Complexes Containing Cryptic Vernal Pools and Relationship of Vernal Pools to Proposed Structure Locations

Municipality; Volume 11 Mapsheet No.	Proposed Structure No.	Wetland No.	Wetland Classification	Vernal Pool No.	Comments
Chaplin (41)	104	W20-81	PFO/PSS	CH-6-VP CH-7-VP CH-8-VP*	W20-81 is large wetland complex that extends across the ROW, associated with streams S20-26 and S20-27. Existing access road extends through vernal pools CH-7-VP and CH-8-VP. Proposed structure #104 is located within wetland, but to the north and east of the vernal pools.
Hampton (53)	135	W20-100	PFO-PSS	HA-3-VP	W20-100 is a large wetland associated with stream S20-34. Vernal pool HA-3-VP is located within this wetland, along a forested portion of the ROW (which will have to be cleared of trees for the Project). One of the H-frame poles for proposed structure #135 is located within W20-100, approximately 150 feet to the north of the vernal pool
Hampton (54)	136	W20-100	PFO-PSS	HA-4-VP*	HA-4-VP is located within wetland W20-100, south of the existing access road that extends through the wetland. One of the H-frame poles for proposed structure #136 is located within the northern portion of the wetland, approximately 200 feet from the vernal pool.
Killingly (105 and 106)	262	W20-177 / -178	PSS/PFO	KI-2-VP* KI-3-VP*	Wetland W20-177 is large federal wetland (W20-178 is an associated state wetland) located east of the Quinebaug River. Vernal pool KI-2-VP is within this wetland complex (and also within a smaller federal wetland W20-177), and is located primarily underneath the existing 345-kV line, relatively close to the river. Structure 262 is located approximately 150 feet east of this vernal pool. Vernal pool KI-3-VP is located within W20-177 more than 500 feet northeast of proposed structure 262.
Putnam (117)	291	W20-187	PFO/PSS/PU B	PU-5-VP	W20-187 is a large wetland complex associated with stream S20-60D. Structure 291 is an angle structure, which must be aligned in this wetland. Vernal pool PU-5-VP is located south east of structure 291, generally beneath the existing 345-kV transmission line.

EXHIBIT CSC-030-1
PROJECT-WIDE
AVOIDANCE AND IMPACT MINIMIZATION PROTOCOL
FOR
VERNAL POOLS

INTRODUCTION

Vernal pools are recognized as important habitats on both the federal level (USACE and U.S. EPA) and by the states of Connecticut, Rhode Island, and Massachusetts. The term “vernal pool” commonly refers to a small isolated fresh water body, typically contained in a small depression, that fills with water seasonally and reaches maximum depth in the spring, does not have fish populations, and provides breeding habitat for certain species of woodland amphibians, invertebrates, and/or other animals that are adapted to seasonal water drawdowns and that require the absence of fish populations to survive. As such, some species rely on the micro-habitat provided by vernal pools for all or portions of their lifecycles.

Pool-breeding amphibians depend on both aquatic and terrestrial habitats for survival. Thus, vernal pool habitat includes three main features¹:

- Vernal pool depression/seasonal breeding pool;
- Vernal pool envelope (area within 100 feet of the vernal pool depression edge); and
- Vernal pool critical terrestrial habitat (area within approximately 100-750 feet of the vernal pool depression edge), consisting mainly of terrestrial (upland) non-breeding habitat.

Generally, federal and state agencies recommend protecting vernal pool habitat by:

- Avoiding direct impacts to the vernal pool depression and vernal pool envelope.
- Limiting site clearing, grading and construction activities to <25% of the vernal pool terrestrial habitat.
- Implementing best management practices (BMPs) as documented in the literature (e.g., Calhoun *et al.*, refer to footnote):

¹ Calhoun, A. J. K. and M. W. Klemens. 2002. Best development practices: Conserving pool-breeding amphibians in residential and commercial developments in the northeastern United States. MCA Technical Paper No. 5, Metropolitan Conservation Alliance, Wildlife Conservation Society, Bronx, New York.

**Table VP-1
Summary of Vernal Pools Located along Project ROWs**

VERNAL POOL LOCATION ALONG ROWS	STATE		
	Connecticut	Rhode Island	Massachusetts
Vernal Pools Identified within ROWs (full easement widths) (No.)	88	34	16
Vernal Pools in Relation to Presently Managed Portions of the ROWs			
<ul style="list-style-type: none"> • Vernal pools traversed by existing access roads (No.) • Existing transmission line structures in wetlands containing vernal pools (No.) • Existing transmission line structures located directly in vernal pools (No.) • Vernal pools located entirely within managed (scrub-shrub) portions of existing ROWs (No.) 	9 17 0 45	3 4 0 18	4 9 0 4

PROJECT CONSTRUCTION ACTIVITIES AND VERNAL POOLS

The principal types of Project construction activities that could directly or indirectly affect vernal pools and the obligate or facultative species that rely on such habitats include:

- The removal of vegetation in, or the tree canopy over vernal pools located along the Project ROWs;
- The development of new access roads or improvements to existing access roads through vernal pools (especially the man-made vernal pool habitats located along existing access roads);
- The movement of vehicles and equipment use on access roads or work pads in the vicinity of vernal pools and associated amphibian migratory routes;
- The placement of structures, counterpoise, and guys directly in vernal pools (if such areas cannot otherwise be avoided); and
- The development and use of temporary work pads in order to install or remove structures in or near vernal pools, especially during breeding periods.

AVOIDANCE AND MINIMIZATION MEASURES

After the completion of the vernal pool habitat studies, the Companies performed constructability field reviews and engineering evaluations to assess the locations of the vernal pools in relation to the proposed Project facilities. Based on the results of these analyses, new transmission line structures, access roads, and work pads were adjusted to avoid or minimize direct adverse effects to vernal pools to the extent practicable, taking into consideration engineering design requirements for the new transmission lines and the need to maintain safety during construction.

- For Project activities that must occur adjacent to or within vernal pools during amphibian migration periods, measures will be implemented on a site-specific basis as necessary to facilitate unencumbered amphibian access to and from vernal pools. Mitigation measures will be identified after taking into consideration site-specific conditions, including the type of construction activity in proximity to a vernal pool, the amphibian species known to occur in the vernal pool, and seasonal conditions. Options to be evaluated to allow amphibian access to vernal pools may include, but not be limited to, placing wood chip ramps at intervals along erosion and sedimentation control fencing in the immediate vicinity of vernal pools; leaving gaps in or staggering the installation of erosion and sedimentation controls; and aligning erosion and sedimentation controls to avoid bifurcating vernal pool habitat. Installation of any mitigation devices will be based on field and seasonal conditions, and will depend on species-specific requirements. Further, in some cases, the objective may be to fence off construction areas near vernal pools, allowing amphibian access around such areas entirely.
- Construction activities that must occur in or near vernal pools will conform to the measures detailed in the Companies' *Wetland Invasive Species Control Plan* to avoid or minimize the potential for the spread of invasive species to vernal pool habitat.

Erosion and sedimentation control devices will be promptly removed upon final re-vegetation and stabilization of the ROW.

Witness: CL&P Panel
Request from: Connecticut Siting Council

Question:
What is CL&P's policy on bird nests found on transmission line structures? Does the presence of these nests cause any problems with operation?

Response:

Typically, smaller nesting birds do not present a problem to the operation of transmission lines, but larger nesting birds, particularly pileated woodpeckers and osprey, can present problems. As a result, CL&P has implemented deterrents to try to reduce the attractiveness of transmission lines to such species.

Woodpeckers can severely damage poles in the search for potential nesting cavities, as well as food and mates, by creating large holes in wood poles. This is one advantage of using steel structures for new lines. On existing wood-pole lines, CL&P has installed wire mesh in certain areas that are particularly prone to such bird damage, however, the wire mesh only deters these birds for a short period of time until they can breach the mesh.

Larger nesting birds have the potential to reduce phase-to-ground or phase-to-phase distances with either their wingspan, or any nest that may be constructed on a structure. Long excrement streams from some larger bird species can also short circuit a line if dropped from a crossarm to a conductor alongside a suspension insulator string. CL&P has therefore installed deterrents on some structures to minimize any flat areas that would be potentially attractive as nesting sites. CL&P has also installed remote nesting poles to try and lure such species away from the transmission structures.

Ospreys frequently use transmission poles for nesting sites. Active nests (March through August) prevent transmission poles and lines from being maintained, and active nests cannot be removed until after the young have left. Ospreys are known to rebuild their nests at the same location the following year.

Witness: CL&P Panel
Request from: Connecticut Siting Council

Question:

Referring to Table 6-6 on page 6-46 of Vol. 1 of the application, under the column "Habitat (Nesting/Breeding/Active Periods)" are the month ranges provided periods to avoid construction?

Response:

No. The column entitled "Habitat (Nesting/Breeding/Active Periods)" is intended to provide an indication of the principal periods that each state-listed species uses particular habitat types.

CL&P expects to consult with CT DEEP to define species-appropriate mitigation strategies. As noted on page 6-49 of Volume 1 of the Application, such strategies may include performing vegetation clearing outside of bird breeding and nesting seasons, which would effectively remove nesting habitat from the portions of the ROW that will be affected by construction activities. However, construction activities in general cannot be scheduled to avoid all of the state-listed species "active periods", which typically coincide with prime construction periods (i.e., spring through summer / early fall).

Witness: CL&P Panel
Request from: Connecticut Siting Council

Question:

Page 6-60 of Vol. 1 of the application states that CL&P has reviewed the Conservation and Development Policies Plan for Connecticut 2005-2010. Is there a more recent version of this Plan? If so, are there any changes to the in the Plan to the areas that would be impacted by the proposed project?

Response:

The *Conservation and Development Policies Plan for Connecticut 2005-2010* (C&D), which was adopted in 2005, is the latest available adopted version of the plan. The Connecticut Office of Policy and Management (OPM) typically updates the C&D Plan every five years. However, as noted in the Application, Volume 1, Section 5, Footnote 46 on page 5-80, the process for revising the current C&D plan has been delayed. As a result, the 2005-2010 C&D Plan will remain in effect until the 2013 legislative session when the Connecticut General Assembly is scheduled to vote on the adoption of the next plan revision.

However, after the publication of the Application in December 2011, OPM issued a public draft of the 2013-2018 C&D Plan (March 2012). This draft is available on the OPM website at <http://www.ct.gov/opm/cwp/view.asp?a=2990&q=467686>.

CL&P representatives reviewed the public draft and found no new policies that would be inconsistent with the proposed Project. For example, the draft C&D Policies Plan includes the following policies that are potentially relevant to the proposed Project:

- Growth Management Policy #1: *Redevelop and Revitalize Regional Centers and Areas with Existing or Currently Planned Physical Infrastructure* recognizes the importance of investment in physical infrastructure, including energy generation and transmission, to take advantage of Connecticut's strategic location within the Northeast.
- Growth Management Policy #4: *Conserve and Restore the Natural Environment, Cultural and Historical Resources and Traditional Rural Lands* states that there is a need to protect Connecticut's natural, cultural and historical resources, which contribute to the state's high quality of life. This policy calls for the continued protection of open space, no net loss of wetlands, management of water resources, protection of Connecticut's heritage areas and archaeological sites, etc.
- Growth Management Principle #5, *Protect and Ensure the Integrity of Environmental Assets Critical to Public Health and Safety* notes that planning for Connecticut's energy future will have broad implications for the environment and society and advocates approaches that are environmentally sound, provide operational flexibility, and will provide for reductions in air pollutants, prevent pollution in general, and allow the efficient use of energy.

The proposed Project will assist in the realization of these C&D Plan objectives by providing options for access to newer, less-polluting electric generators than are currently available to Connecticut consumers. Further, the proposed Project will be collocated within CL&P's existing rights-of-way and substation / switching station sites, which are already devoted to electric transmission purposes, and thus will not create new energy corridors that may not be consistent with environmental or land-use policies. In addition, CL&P will avoid, minimize, or provide compensatory mitigation for temporary and permanent environmental impacts associated with the Project, and, by virtue of the creation of additional shrubland habitat along the managed portions of the Project ROWs, will enhance this habitat type in Connecticut. Consequently, the Project will be consistent with the draft 2013-2018 C&D Plan.

Witness: CL&P Panel
Request from: Connecticut Siting Council

Question:

In "post-NEEWS" electric and magnetic field calculations, what projects are included? Do the calculations include the GSRP and MMP as approved?

Response:

The 2020 post-NEEWS system model used for running load flows to determine line currents to use in magnetic field calculations reflected completion of all of the NEEWS projects, including the Rhode Island Reliability Project, the Greater Springfield Reliability Project, the Manchester to Meekville Junction Project, The Interstate Reliability Project and the Central Connecticut Reliability Project. The first three of these projects are currently under construction, and changes made to these projects during their siting and permitting processes are reflected in the system models. All other New England transmission projects approved by ISO-NE and included in their system models as of December 2010, and which have projected in-service dates before 2015, are also included in the system model.

Witness: CL&P Panel
Request from: Connecticut Siting Council

Question:

In the Tables on pages 7B-18 and 7B-19 in Vol. 1 of the application, how is the cost per section determined? Do the section costs use the cost per mile for each of the line configurations that were provided on pages 7B-9 through 7B-12?

Response:

The tables on pages 7B-9 through 7B-12 provide generic, per-mile estimated costs for various line designs, using typical structure size and type assumptions as well as assumed numbers of tangent, angle and deadend structures in a generic mile of each type of line.

The Tables on pages 7B-18 through 7B-19 include estimated costs for specific uses of the generic line designs in the focus areas. These cost estimates rely upon a preliminary line design that considers the specific layout and topography of each focus area, local factors that may cause differences from the generic line assumptions regarding structure types and sizes. Therefore, the cost estimates in the tables on pages 7B-18 and 7B-19 more accurately represent the expected cost of each of the design options in each focus area.

Witness: CL&P Panel
Request from: Connecticut Siting Council

Question:

What is the current status of ISO-New England's assessment of Need for the proposed project?

Response:

In March, 2012, after CL&P had filed its Application in this Docket, ISO-NE undertook to update its needs assessments of all New England reliability projects, including the Interstate Reliability Project, in light of new planning information. We understand that this information includes the outcome of the Forward Capacity Auction (FCA) held on April 2, 2012.

Significantly, as part of its update, ISO-NE is considering the potential impact of a contemplated change in its approach to modeling energy efficiency measures in long-term planning studies. It has been ISO-NE's practice to reduce the load modeled in planning studies to reflect demand resources that have been committed in a Forward Capacity Auction, but not to reduce forecasted load by projected increases in those resources beyond the three future years for which auctions have been held. Rather, the committed demand resources are assumed to continue at their current level through the ten-year planning period. This approach is consistent with ISO-NE's practice of assuming that generation resources for which capacity commitments have been made in the most recent FCA will continue in operation through the planning period, rather than projecting future additions and retirements that may occur.

ISO-NE has been developing an approach for forecasting future energy efficiency (EE) measures, and it is now considering how that EE forecast should be used in planning studies, and which projects should be re-evaluated with the new methodology. This subject was the topic of a Planning Advisory Committee (PAC) meeting on May 17, 2012, and ISO-NE is still considering these issues, particularly given some of the feedback it has received.

It is CL&P's position that the first applications of this new methodology should be cautious, and that the new methodology should not be applied to projects that have been defined in approved solution studies and for which Proposed Plan Application approvals have been issued by ISO-NE pursuant to section I.3.9 of ISO-NE's tariff. The Interstate Reliability Project is one of two such projects. (The other is the Lower SEMA Project in Massachusetts.) CL&P does not know whether ISO-NE ultimately will decide to apply the new methodology to the Interstate Reliability Project, and if so, how it will be applied or what the outcome will be.

ISO-NE has advised CL&P that it expects to have resolved these issues and to have completed its latest analytical updates and be ready to participate in siting proceedings by July 9, 2012.

Witness: CL&P Panel
Request from: Connecticut Siting Council

Question:

What caused the delay in CL&P's filing of the Interstate Project given that the initial Municipal Consultation Filing occurred in 2008?

Response:

CL&P filed its initial MCF in August, 2008, as soon as it could following publication by the Independent System Operator - New England (ISO-NE) of the *Southern New England Transmission Reliability Report - Needs Analysis* (January, 2008) (*Needs Analysis*), the *New England East-West Solutions (Formerly Southern New England Transmission Reliability) Report 2, Options Analysis* (April, 2008) (*Options Analysis*), and the *Solution Report for the Interstate Reliability Project* (August, 2008) (*Solution Report*). The *Needs Analysis* identified a need for extensive transmission improvements in the Connecticut, Springfield, and Rhode Island areas in 2009 and urged: "Given the lead times necessary for permitting and other pre-construction activities, as well as the time required for construction itself, these problems constitute needs that should be addressed now." On May 19, 2008, ISO-NE made a presentation to its Planning Advisory Committee in which it reported that the latest (2008) CELT forecast predicted higher loads for 2009 and 2016 than those used in the modeling for the *Needs Analysis*, thus confirming the need identified in the *Needs Analysis*. Completion of the *Options Analysis* and the *Solution Report* was necessary in order to define the project for which siting approval would be sought, and to obtain ISO-NE's support for that project in siting proceedings. When it filed its MCF, CL&P anticipated filing its application for this project with the Council before the end of 2008, consistently with the recommendation of the *Needs Analysis* that the need "be addressed now."

However, as explained in section 2.4.2 of the Application, pursuant to Section 4.2(a) of Attachment K to its FERC-approved Open Access Transmission Tariff, ISO-NE updates its needs assessments periodically. Sometime in 2008, ISO-NE began needs reassessments for all four of the NEEWS components, and these reassessments were not completed by the end of 2008. CL&P recognized that ISO-NE would not testify in support of the project until it had completed its reassessment and, if the reassessment indicated that some change to the project was required, until the completion of solution studies to identify the optimum configuration for the revised project. Meanwhile, CL&P had filed its application for a certificate for the Greater Springfield Reliability Project on October 20, 2008.

Fortunately, ISO-NE completed its reassessment with respect to GSRP in time to present it to the Planning Advisory Committee on June 17, 2009, and that reassessment did not require any change in the configuration of the project. Accordingly, ISO-NE was able to submit pre-filed testimony in support of the GSRP on July 17, 2009, the due date for pre-filed testimony. However, the re-analysis for the Interstate Reliability Project was more complex than that for GSRP, so that ISO-NE did not complete and publish its reanalysis until April, 2011. See, *New England East-West Solution (NEEWS) Interstate Reliability Project Component Updated Solution Study Report* (April, 2011) (*the "Updated Needs Report"*), a copy of which is provided in Volume 5 of the Application. Because this reassessment identified an enhanced need, it was necessary to complete a new set of solution studies in order to identify a specific project design that would satisfy the enhanced need, before any siting applications could be filed, and before ISO-NE could support the project.

As explained in Section 13.1 of the Application, the ISO-NE Working Group (which included CL&P and National Grid) presented the results of these new solution studies in the *New England East-West Solution (NEEWS) Interstate Reliability Project Component Updated Transmission Analysis Solution Study Report*. ISO-NE posted a draft of this report (*the 2011 Updated Solution Study Report*) for stakeholder review on November 22, 2011, and the report was expected to become final on December 23, 2011. Accordingly, CL&P filed its Application on December 23, 2011, the earliest possible date. In fact, the final *Updated Solution Study Report* was published by ISO-NE in early February, 2012, and in redacted form later in February, 2012, and CL&P filed copies with the Siting Council as they became available.

Witness: CL&P Panel
Request from: Connecticut Siting Council

Question:

CL&P's response to Council interrogatory 10 provides a table with a note stating that the company has changed its preference for the configuration proposed to cross the Mansfield Hollow properties to the Minimal ROW Expansion Option. What was the reason for this change? Is CL&P's originally preferred option through Mansfield Hollow now to be eliminated from consideration by the Council?

Response:

CL&P's determination to adopt the 4.8-Acre Minimal ROW Expansion as the preferred option for the configuration of the new line across the federal lands is based on input received from the U.S. Army Corps of Engineers (USACE), the administrator of the federal properties, and the CT Department of Energy and Environmental Protection (CT DEEP), the leaseholder of the property for use as Mansfield Hollow State Park and the Mansfield Hollow Wildlife Management Area (WMA).

CL&P therefore requests that its original preferred configuration option, the 11-Acre ROW Expansion option, be eliminated from consideration by the Council.

By way of background, in the spring of 2011, CL&P identified three configuration options for the alignment of the new 345-kV transmission line across the federal lands in the Mansfield Hollow area. These options were the 11-Acre ROW Expansion, the No ROW Expansion, and the 4.8-Acre ROW Expansion. All of these options were presented in the July 2011 Supplemental Municipal Consultation Filing (MCF). Although the 11-Acre ROW Expansion was incorporated into CL&P's Proposed Route, the two other options were presented in detail and CL&P indicated that each was potentially feasible. During the Supplemental MCF consultation process, CL&P received no substantive comments indicating a preference for one configuration option over the other.

In September 2011, after several meetings and consultations regarding the Mansfield Hollow area, CL&P submitted a formal request to the USACE Real Estate Division to increase the easement width across the federal lands in Mansfield Hollow by 11 acres. In conjunction with this submittal, the USACE requested that CL&P also contact other federal and state agencies with whom USACE would consult regarding the easement expansion request. Therefore, in October 2011, CL&P provided detailed information to these agencies regarding each of the Mansfield Hollow configuration options and alternatives, including a draft copy of Volume 1, Section 10 of the pending CSC application which described the configuration options being considered for Mansfield Hollow. This draft of Volume 1, Section 10 reflected information concerning the Mansfield Hollow configuration options that CL&P had compiled and updated subsequent to the issuance of the July 2011 Supplemental MCF. It was similar to the final version of Section 10 included in the December 23, 2011 application. The agencies with whom the USACE asked CL&P to consult included EPA, US Fish and Wildlife, and CT DEEP, among others.

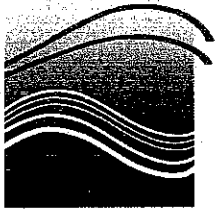
At the time that CL&P submitted its Application to the Council (December 23, 2011), CL&P had received no formal input from the USACE consulting agencies regarding the Mansfield Hollow area. Consequently, CL&P retained the 11-Acre ROW Expansion as part of its Proposed Route because this option represents the least-cost alternative and includes line-structure types that would match those of the existing 330 Line through the Mansfield Hollow area.

However, in early 2012, after further review of the three configuration options, USACE indicated a preference for the 4.8-Acre Minimal ROW Expansion. Similarly, CT DEEP indicated a preference for the 4.8-Acre Minimal ROW Expansion for Segment 2 due to its lower wetland impacts when compared to the 11-Acre ROW Expansion. CT DEEP also noted that there was no difference in wetland impacts between the 11-Acre ROW Expansion and the 4.8-Acre ROW Expansion in Segment 1 and so concluded that the lower cost option (the 11-Acre ROW Expansion) would be more practicable for Segment 1. (See page 3 of 3.) Local interests, including the Friends of Mansfield Hollow and the Town of Mansfield, have since expressed a preference for the No ROW Expansion Option.

Based on this feedback, CL&P has modified its original request to the USACE for a grant of easement to reflect the use of the 4.8-Acre Minimal ROW Expansion option. USACE will conduct further evaluations of this option to confirm that it represents the least environmentally damaging practicable alternative. Specifically, the USACE must complete an Environmental Assessment (EA) of the proposed real estate transaction (i.e., easement expansion) to confirm consistency with the National Environmental Protection Act (NEPA).

CL&P's eminent domain powers do not extend to federal land and therefore, any expansion of the ROW in the Mansfield Hollow area can only occur through a voluntary grant by the USACE. USACE will only enable the route and configuration that it determines to be the least environmentally damaging practical alternative. CL&P will then have no choice but to accept the USACE's determination. As such, CL&P respectfully requests that the Council approve the USACE's choice.

At present, the USACE's choice appears to be the 4.8-Acre Minimal Row Expansion Option. However, since the USACE will likely not make a final determination until after the record of this proceeding closes, CL&P's first choice would be for the Council to approve the proposed route over the federal properties, while deferring approval of the specific configuration of the lines to the subsequent development and management plan. Alternately, if the Council considers that it should specify a specific configuration in its Decision and Order, CL&P asks that the Council approve the 4.8-Acre Minimal ROW Expansion Option.



Connecticut Department of
**ENERGY &
ENVIRONMENTAL
PROTECTION**

February 27, 2012

Judith L. Johnson
Army Corps of Engineers
Evaluation Branch
696 Virginia Road
Concord, Massachusetts 01742-2751

Re: **Northeast Utilities Service Company**
Mansfield Hollow Environmental Analysis

Dear Ms. Johnson:

This letter concerns the Request for Input regarding the ongoing Environmental Assessment for the Interstate Reliability Project transmission line upgrade being proposed by the Northeast Utilities Service Company. The Environmental Assessment is specific to the Mansfield Hollow Area in the towns of Mansfield and Chaplin, CT. The Departments' Inland Water Resources Division has reviewed the Environmental Assessment and evaluated the proposed environmental impacts.

Project Impacts

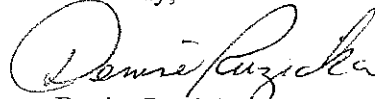
The proposed project consists of two separate segments of transmission line right-of-way that cross two sections of the federally owned Mansfield Hollow Wildlife Management Area. Segment 1 is 0.9 miles of transmission line right-of-way that traverses a portion of the Mansfield Hollow Wildlife Management Area leased to the Connecticut Department of Energy and Environmental Protection (CT DEEP). The Northeast Utilities Service Company has proposed to expand their right-of-way through this 0.9 mile segment by 55 feet in order to accommodate construction and operation of a new 345-kV transmission line adjacent to the existing 330 Line. The proposed configuration of the new 345-kv line and expansion of the existing right-of-way through this segment includes 0.1 acres of temporary wetland impacts associated with clearing of forested wetlands.

Segment 2 is 0.5 miles of transmission line right-of-way that traverses a second portion of the Mansfield Hollow Wildlife Management Area. Northeast Utilities has proposed to expand their right-of-way through this 0.5 mile segment by 85 feet in order to accommodate construction and

avoid and minimize wetland impacts without imposing a significant increase in construction costs to the Northeast Utilities Service Company.

If you have questions, you may contact Mike Salter at (860) 424-3552, michael.salter@ct.gov. All correspondence regarding the Mansfield Hollow Environmental Assessment should be addressed to Mike Salter, Inland Water Resources Division, Bureau of Water Protection and Land Reuse, Department of Environmental Protection, 79 Elm St., Hartford, CT 06106-5127.

Sincerely,



Denise Ruzicka, Director
Inland Water Resources Division
Bureau of Water Protection & Land Reuse

DR:MS

cc: Michael Marsh, US EPA Region 1
Robert Young, Burns & McDonnell
Anthony Mele, Northeast Utilities Service Company
Jeff Martin, Northeast Utilities Service Company
Bob Gilmore, IWRD

Witness: CL&P Panel
Request from: Connecticut Siting Council

Question:
Does the Table provided in response to Council interrogatory #10 account for the now CL&P-preferred Minimal ROW Expansion Option?

Response:

Yes. Table CSC-010-1, which compares the "A Options" to Option C-2.1, reflects CL&P's now-preferred use of the 4.8-Acre Minimal ROW Expansion Option for the configuration of the proposed 345-kV transmission line through the federally owned properties in the Mansfield Hollow area in the towns of Mansfield and Chaplin.

Overall, compared to the 11-Acre ROW Expansion Option, the use of the 4.8-Acre Minimal ROW Expansion will require approximately 6.2 fewer acres of easement from the USACE, 4.1 fewer acres of upland forest clearing, and 1.2 fewer acres of forested wetland vegetation clearing. Permanent wetland impacts (due to structure installation in wetlands in Chaplin) and temporary wetland impacts (due to access roads and work pads in wetlands) are relatively minor for either option, but will be slightly less for the 4.8-Acre Minimal ROW Expansion Option.

The Connecticut Light and Power Company
Docket No. CSC 424

Data Request CSC-02
Dated: 04/30/2012
Q-CSC-040
Page 1 of 1

Witness: CL&P Panel
Request from: Connecticut Siting Council

Question:
What list does CL&P use in determining what invasive species would be controlled along the proposed construction area?

Response:

The list used by CL&P for determining which invasive species would be controlled along the proposed construction area is the Connecticut Invasive Plant List - October, 2011. This list of invasive plants was developed by the Connecticut Invasive Plants Council pursuant to section 22a-381b of the Connecticut General Statutes. Invasive species to be monitored, controlled or eliminated as part of any permit or management plan within the project area would be selected from this list.

Witness: CL&P Panel
Request from: Connecticut Siting Council

Question:

Other than the Hawthorne Lane variation, has CL&P investigated a possible land swap with any private property owners along the proposed route?

Response:

Yes. As explained below, CL&P investigated a potential land swap with Diane L. Dorfer, who owns and operates a state-licensed child day care at 87 Bassetts Bridge Road in Mansfield. Ms. Dorfer requested a land swap for purposes of relocating a garden area that currently exists on the northwestern half of her property. Ms. Dorfer uses the garden area as part of her day-care curriculum, a purpose unrelated to Project facilities. In contrast, the potential land swap for the Hawthorne Lane variation was requested by certain Hawthorne Lane property owners to accommodate a shift in CL&P's existing ROW to minimize tree clearing and the associated visual impacts.

Ms. Dorfer approached CL&P to request a swap of the northwestern half of her property that runs under the existing 345-kV line for a similarly sized CL&P-owned parcel that abuts her property to the southeast. This CL&P-owned parcel is subject to an April 12, 2000 Memorandum of Understanding (MOU) with the then CT DEP (now DEEP), CL&P and Rocky River Realty whereby first DEEP, then the Town of Mansfield and then any interested land trust has the opportunity to acquire the property if CL&P wishes to dispose of it. In lieu of pursuing the lengthy MOU process (up to 270 days) as well as any applicable requirements set forth in Connecticut General Statutes Sections 16-43(a) (i.e., PURA approval for disposition of unimproved land with a value of \$50,000 and above) and 16-50c (i.e., town and DEEP first option to lease a property of 3 acres or more or a portion of such property) governing CL&P's disposition of land, with no certainty that such parcel would not be acquired by one of such parties and thus be unavailable to Ms. Dorfer, CL&P proposed a license (waiving its customary license fee) to Ms. Dorfer and Mr. Connolly (property co-owner) that would allow the day-care garden area to be relocated. A license agreement between the parties was entered into on May 18, 2011 and is currently in effect. This license allows Ms. Dorfer the opportunity to maintain the garden area under the lines and to develop a new garden area in the parcel located on the CL&P property.