June 30, 2009

Robert E. Carberry, Manager NEEWS Projects Siting and Permitting Northeast Utilities Service Company P.O. Box 270 Hartford, CT 06141-0270

<u>Delivered via Email and Mail</u>

Re: **DOCKET No. 370** – The Connecticut Light & Power Company application for Certificates of Environmental Compatibility and Public need for the Connecticut Valley Electric Transmission Reliability Projects which consits of (1) The Connecticut portion of the Greater Springfield Reliability Project that traverses the municiplaities of Bloomfield, East Granby, and Suffield, or potentially including an alternate portion that traverses the municipalities of Suffield and Enfield, terminating at the North Bloommfield Substation; and (2)) the Manchester Substation to meekville Junction Circuit Separation project in Manchester, Connecticut.

Dear Mr. Carberry:

Citizens Against Overhead Power Line Construction (CAOPLC), a party to this Connecticut Siting Council ("CSC") proceeding, requests responses to the attached questions by July 30, 2009. The questions are grouped by subject heading for your convenience. All questions are underlined.

Definitions:

A. As used in these interrogatories, "any" shall include "all," and "all" shall include "any," as needed to make the request inclusive and not exclusive.

B. As used in these interrogatories, "and" shall include "or," and "or" shall include "and," as needed to make the request inclusive and not exclusive. For example, both "and" and "or" mean "and/or."

C. As used in these interrogatories, "include" and "including" mean "including but not limited to."

CAOLPC means Citizens Against Overhead Power Line Construction, a grassroots East Granby and Suffield coalition advocating safe and environmentally responsible transmission power line construction.

CL&P, as used in these interrogatories, means inclusively Connecticut Light and Power and its present or former subsidiaries, affiliates, branches, divisions, principals, associated persons, control persons, directors, officers, employees, agents, trustees and beneficiaries; Northeast Utilities (NU); NUSCO; Burns McDonnell; any contractor or sub-contractor hired to perform work under CL&P's direction on the GSRP or NEEWS projects; and to include but not be limited to any law firm, scientific or engineering consulting firm, lobbyist or public relations firm or other professional firm or person engaged by Connecticut Light and Power to furnish professional services, or to perform work on the GSRP or NEEWS projects. Each reference to CL&P shall be deemed to include any, all, or any grouping or sub-grouping of persons and

entities named in the foregoing enumeration as needed to make the reference inclusive and not exclusive.

CSC means the Connecticut Siting Committee

FERC means the Federal Energy Regulatory Commission

GSRP means the Greater Springfield Reliability Project

HELCO means the Hartford Electric and Light Company

NEEWS means the New England East-West Solution projects.

NU means Northeast Utilities, the parent company of CL&P, WMECO and Yankee Gas.

ROW means the right of way easement in which CL&P may be approved to construct the GSRP project.

WMECO means Western Massachusetts Electric Company, a NU owned subsidiary company, CL&P's counterpart for the Massachusetts portion of the GSRP.

EMF Questions

These questions refer to an EMF calculation done by CL&P and Burns McDonnell for my home on Newgate Road. The study was sent via email on June 16, 2009.

• CL&P assumes too much knowledge on the part of local residents when communicating to them. We need a basic education in the abbreviated terminology that CL&P's engineers use.

<u>Please explain what XS-2 is?</u> <u>Does XS mean a cross section?</u> <u>Is it one type of power pole vs. another type?</u> <u>How does XS-2 relate to, impact, or qualify your answers to the EMF questions below?</u>

- Please provide a simple "laypersons" formula to convert micro Tesla units (μT) to milliGauss (mG) so that we can accurately reference European EMF studies and standards for EMFs to US standards.
- I would like to preface the next group of questions by commenting on my own situation of trying to understand and quantify EMF risk. It is an example that applies to all GSRP right of way residents.

With all due respect to the information CL&P provided, the average EMF number quoted for my house at the edge of the ROW at 350 feet, is a meaningless number to me and the other residents. To explain this important point that is either being missed or ignored by CL&P:

We could take some comfort in CL&P's quoted EMF number of 2.7 mG at our house at a distance of 350 feet from the edge of the power line ROW, if we intended to stay locked in our homes and not ever venture out. But that is not why someone buys acreage property or chooses to live in the country vs. a city. We spend time outdoors, walking, cross country skiing in the winter, walking our dogs up to Newgate Road and beyond, my orchard in particular is much closer to the power lines, and we do work in our fields like mowing and tree and fire wood cutting – there is a lot of outdoor

activity — and that holds true for all of the residents in our area especially for families with children. It is a wonderful place for children to grow up.

Given the above prefaced situation and importantly that that CL&P has quoted a 200 mG reading directly below the proposed GSRP 345 kV power line, our questions are these:

CL&P verbally stated that there is no risk from GSRP EMFs in both East Granby and Suffield public and in residential home meetings. A Suffield resident emailed CL&P to ask that CL&P to put that claim into writing that the GSRP power line will not create health risks and has not received an answer. Will CL&P confirm in writing that there is no EMF health risk to East Granby and Suffield residents from the GSRP power lines?

If the answer is NO, please explain why CL&P is unable to provide a written assurance that the GSRP power lines are safe? Please do not equivocate and say "it is company policy not to comment" because that is meaningless, but instead provide a legal justification if CL&P won't confirm safety as to why.

Please answer and explain if it would then be an appropriate and/or a reasonable assumption for residents who live near the CL&P ROW in East Granby and Suffield to believe that CL&P, by its refusal to answer YES, is concluding that the GSRP power lines are not safe and that there is risk?

What is the dispersion of EMFs from directly under the proposed GSRP 345 kV power line eastbound towards the Metacomet Trail and westbound towards Newgate Road in 20 or 25 foot increments? Please create and produce a dispersion graph.

Because many properties are heavily wooded did CL&P take into account what the change in EMF will be from "leaves up" seasons to the seasons when leaves are off the trees?

We understand that foliage provides a good degree of shielding, is that correct or incorrect? How much shielding in terms of a range of EMF reduction in mG can be attributed to foliage? Would this change the mG reading at 350 feet when leaves are down? Why or why not?

We would like a calculation done for 1204 and 1208 Newgate Road of what the EMFs would be for the proposed 345 kV line directly under the 345 kV line given that the lines slope northward up a hill causing the lines to be much closer (we estimate 30 to 40 feet) to the ground crossing because of that slope.

We want to know how much more EMF exposure we would have under these sloped power lines than under a level power line. What can or will CL&P do to mitigate EMF exposure when a grade lowers the power line downward towards the place where people cross under the power line? Are there past projects you can point to as examples of CL&P's mitigation solutions?

What calculable and quantifiable effect does height have on EMF levels? For example, if the EMF level is 200mG directly under a 345 kV lines on a 110 foot tower, what would the corresponding EMF levels be under a 90 foot tower, a 150 foot tower and/or a 180 foot tower like those used in

the Durham and Middlefield areas? Is there a formula for calculating EMF reduction vs. cable height from the ground? If so please provide it.

The statement in the report, "At this distance, the actual height of the line conductors above ground has very little effect on the calculation result" written into CL&P's EMF calculation while technically accurate, ignores the point we are making above because it does not assume or account for the fact that we will be closer to, and spend time directly under, the power lines every day. Thus height would play an important role in determining EMF exposure. Agree or disagree? Please explain your answer.

We want a chart or study that shows cancer or any other health risks vs. time exposed at 115 kV and 345 kV EMF levels. Can CL&P furnish epidemiological data such as this? Given all of the data presented by CL&P in CSC docket 272, did CL&P or its expert witnesses present this type of information? Can and will CL&P present this data at the docket 370a evidentiary hearings, why or why not?

On the actual 345 kV power line loads calculated in the study that CL&P sent on June 16, 2009 what and whose assumptions did CL&P use? What percentage increase is CL&P factoring in for growth in electric demand over the next 1, 2, 3, 4, and 5 years, and in 10 years.

Has CL&P anticipated the growth of plug in electric hybrids (PHEV) and fully electric vehicles? Are PHEV vehicles and electric cars considered and contained in the demand forecasts and load and reliability assumptions used for the GSRP? If No, please explain why not and why CL&P feels this data can be omitted?

How much of the actual power that will be transmitted through the GSRP/NEEWS power lines will be used in Connecticut? Please provide a percentage range.

How much of the actual power that will be transmitted through the GSRP/NEEWS power lines will pass through Connecticut and ultimately be used by consumers outside of Connecticut's borders? Please provide a percentage range.

Here is an explanation of why metrics like the AAL are not meaningful especially to a layperson concerned about his or her EMF exposures and cancer risk: Suppose I had a Ferrari. If my average speed for a six hour European trip was 55 mph that sounds very responsible and safe. But what if I then told you that I derived that average speed by travelling back roads at 37 mph for most of the trip with a couple of bursts to 170 mph on the German Autobahn?

The average speed is not problematic or dangerous, the maximum speed is. An average EMF without quantifying the low and high boundary numbers is very misleading and of little or no value. So given this example as our preface:

What is the theoretical maximum EMF that could come from the proposed 345 kV GSRP line at theoretical maximum demand? What is the theoretical minimum and maximum power that can go through the 345 kV transmission lines?

How much more would the EMF's increase on the GSRP power lines if the demand assumptions are wrong and PHEV and/or electric use escalates over the next decade 10%, 15% and 20% beyond current GSRP/NEEWS and ISO-NE demand assumptions?

Would CL&P ever propose the use of 765 kV power lines in Connecticut? Does CL&P feel that ultra high voltage lines such as 765 kV lines can be safely used in residential areas?

And while technically not an EMF question; please provide estimates on noise (in db levels) that could be expected to arise from the GSRP 345 kV transmission lines both in dry and wet conditions.

We understand that there is much audible noise in foggy or wet conditions from the power line's corona. Does CL&P agree or disagree that just like there is a "buffer zone" for EMF's (established by the CSC in docket 272 to be the ROW edge) that it would be appropriate to establish a "residential noise buffer zone" in the siting of transmission power lines?

What is CL&P's assessment of the environmental impact on our native fauna from corona noise? Have studies been done on this subject? If so, please include references of where these studies can be found for review.

Would CL&P be willing to ask the CSC to develop and adopt regulations for a "residential noise buffer zone"? Why or why not?

CL&P's Interactions with Right of Way Land Owners and Abutters

CAOPLC sent an email to CL&P (Jeff Towle) on October 30, 2008 with several requests and questions regarding work that would be done in the right of way easement for the GSRP.

Here is a reprint of that October 30th letter (bold and italics emphasis added). Please read the material below and provide answers to the following questions, including legal justification for your answers:

"(4) I am, and if I may speak for our group Citizens Against Overhead Power Line Construction, uncomfortable and not satisfied with a door hanger notice that provides minimal information about what is going to occur with the drilling process.

Here is what I and Citizens Against Overhead Power Line Construction feels is a reasonable, mutually respectful and realistic request:

(a) We want certificates of insurance from CL&P and/or any sub-contractors who will be entering and working on our properties. This should include General Liability, Workers' Compensation, Automobile, Inland Marine, Umbrella and Professional Liability insurance coverage. The certificates of insurance coverage should follow the (risk management) protocols that CL&P would require of sub-contractors whenever you engage people or companies to do work for CL&P, and that is to include the name of the applicable insurance company per line of insurance coverage, each insurer's A.M Best rating, policy and coverage expiration dates, coverage limits and note any significant exclusions such as a pollution exclusion.

Also, should any of the multitudes of your engineers and consultants and other experts and professionals' work product or expert opinion or expert conclusions be found to be in error and favorable to CL&P, we want to preserve not only our right to sue but make certain that there is an adequate source of funds through a *professional liability policy* to provide us with appropriate and sufficient compensation for their act, error or omission.

(b) We want a hold harmless from CL&P and any sub-contractor executed in favor of each property owner. Our part of Suffield and East Granby, while residential, is different than say a residential neighborhood in Westport or Milford. Our towns embrace and preserve the historic agricultural heritage that is the very essence of this part of Connecticut, the Metacomet Trail and the Tobacco Valley. I will say this once again, our agricultural heritage is a large factor in our quality of life and why we choose to, and love to, live here.

But that difference means there may also be old metal objects in the soil, strands of barbed wire and other possible injurious objects, animals or other situations in or along the right of way. CL&P is coming onto our property for its benefit and should assume all responsibility for any acts or injuries to workers and sub-contractors and also to our property and affirm so in writing each time it enters our property.

Should there be inadequate insurance coverage, we should be able to refuse entry and property access until satisfactory coverage in place."

(c) "CL&P should also ask each time it enters a property and seeks to remove trees or spray herbicides or bring onto the property other injurious chemicals, whether or not this is acceptable to the property owner. We discussed this topic in detail during the in-home meetings this summer."

Please explain why CL&P refuses to give each ROW property owner or abutter a certificate of insurance showing that any contractor or sub-contractor that CL&P has engaged to perform work in the ROW has proper Workers Compensation and Liability insurance? Please explain CL&P's reasoning and legal justification for this position beyond "it is not our policy to do so."

Given that CL&P is not an invitee and is entering the ROW for its own economic benefit, please explain why CL&P refuses to give each ROW property owner or abutter a hold harmless agreement for any CL&P employee or any contractor or sub-contractor that CL&P has engaged to perform work for CL&P in the ROW. Please explain CL&P's reasoning and legal justification for this position beyond "it is not our policy to do so."

CL&P has refused to refrain from spraying herbicides on ROW property even if and when a property owner asks CL&P not to use chemicals. Please explain in your answer CL&P's reasoning and legal justification for this position referencing the easement agreement and once again, "it is not our policy to do so" is not an acceptable and sufficiently detailed answer.

Has CL&P ever sued a ROW land owner, or sought compensation or legal remedy such as an injunction from the same for an accident to a CL&P employee or contractor? Has CL&P ever sought any of the above remedies for what CL&P felt to be a hazardous condition on a land owner's property?

CL&P, GSRP and ROW Residential Property Values

Please read the material below and provide answers to the following questions, including legal justification for your answers:

CL&P has said to me (Richard Legere) when I have questioned work that CL&P wants to do on my right-of-way property, that they have an absolute right to do so. For example I have told CL&P that I do not want herbicides sprayed on our property.

CL&P maintains that when we bought our property my wife and I enjoyed a reduced or below market price for our property because of the existing CL&P 115 kV power lines and that reduction in price establishes their contractual rights under the right-of-way agreement that was originally negotiated by HELCO. Further CL&P says it acquired the right-of-way land as a part of the HELCO purchase and this is what CL&P believes established their present day ROW rights.

On the other hand when it comes to questions of will CL&P compensate East Granby and Suffield residents for the loss of property value from the proposed new 345 kV overhead GSRP power line, CL&P paradoxically has told the affected residents that the new GSRP overhead lines will cause no loss of property value. Logically, either power lines cause a loss of property value or they don't.

<u>Please explain how or why CL&P believes its purported rights to the existing 115 kV power line easement in East Granby and Suffield have been perpetuated and exist?</u>

Why is CL&P refusing to acknowledge that East Granby and Suffield residents are allowed compensation for the diminished property values that will result from the GSRP power lines?

<u>Does CL&P plan to submit a paper on property values that CL&P commissioned from a Dr. James Chalmers, PhD into the CSC proceedings to support CL&P's claim that there is no loss of property value from newly constructed and existing overhead power lines?</u>

<u>Does CL&P plan to call Dr. Chalmers as an expert witness with respect to the commissioned property value study?</u>

Will Dr. Chalmers testify in person at the CSC hearings?

If Dr. Chalmers is not going to offer his testimony will another expert testify? If another person or firm will testify we would like to have their materials in advance for review.

Without asking CL&P or its attorneys to comment in detail on pending litigation, Yes or No answers will suffice for the following questions on the class action lawsuit brought against CL&P by the residents of Durham and several other Connecticut towns. This law suit alleges that significant loss of property value resulted from the installation of overhead line transmission lines on the Norwalk to Middletown part of NEEWS. This material is in the public record¹.

<u>Is it CL&P's stated position in defending against this law suit that power lines do not cause a loss of property value?</u> <u>Yes or No.</u>

<u>Is CL&P proceeding to trial on this matter?</u> <u>Yes or No.</u>

Has CL&P offered to negotiate a settlement with any or all of the plaintiffs? Yes or No.

¹ Reference to the Durham lawsuit can be found in the Hartford courant archives or at this link to the WFSB web site, http://www.wfsb.com/news/13490346/detail.html

Has CL&P reached a settlement with any or all of the plaintiffs? Yes or No.

If CL&P reaches a settlement with plaintiffs does CL&P seek to keep the settlement confidential? Yes or No.

Should CL&P reach a settlement with the Durham lawsuit plaintiffs, will CL&P voluntarily offer to fairly compensate East Granby and Suffield residents if GSRP overhead lines are approved and independent appraisals confirm that there is a loss of property value?

<u>Is CL&P</u> willing to provide a boilerplate settlement agreement similar to the one that it would potentially use in the above settlement questions? Yes or No.

Since the above question is general in nature and is not a question associated directly with the pending litigation, if CL&P's answer is NO, please explain why CL&P would not be willing to provide such a document for the CSC and other parties and intervenors to review to ascertain whether or not CL&P is treating plaintiffs fairly or onerously in settlement negotiations.

The Acquisition of the East Granby and Suffield ROW Easement by HELCO

Please read the material below and provide answers to the following questions, including legal justification for your answers:

CAOPLC conducted anecdotal interviews with area residents asking how HELCO established the East Granby and Suffield ROW easement. In the limited number of conversations we had with Suffield's ROW landowners or their children, those who sold ROW land to HELCO, it was said that how HELCO acquired the right of way property was to say, "We need your property to build a power line. You have two choices: We either pay you what we determine is fair market value or we will take your land through eminent domain and pay you nothing."

Eminent domain takings require fair compensation. So in CL&P's opinion if the land was sold at "gun point" does that or would that violate a key principle of contract law that of free entry into the contractual agreement? Please explain in detail if CL&P's answer is No, why in CL&P's opinion no principles of contract law were violated.

There was little negotiation on either price or contract terms and records show HELCO paid usually \$1.00; did the landowner get fair and reasonable compensation? Please explain in detail if CL&P's answer is Yes, why in CL&P's opinion no principles of contract law were violated.

We would like CL&P's comments and legal opinions on whether or not because of HELCO's actions and practices in acquiring the right-of-way agreement that the present ROW easement with CL&P could be rescinded because it is invalid under the principles of a "Contract of Adhesion" or that of an "Unconscionable Contract" or "Unjust Enrichment."

Does CL&P agree or disagree with the following statement, "If a demonstrable loss of property value occurs to a property owner from CL&P's GSRP overhead power line ROW construction project(s), that loss of property value constitutes a de facto Eminent Domain taking of property without giving the ROW resident the benefit of due process and legal representation." Please answer in detail with a legal justification for your answer.

GSRP Design, Siting and the Material Procurement Process

Please explain the design, siting and procurement process for the GSRP and NEEWS with regard to the following questions:

<u>Introductory Comment:</u> When asked about why CL&P is strongly proposing and advocating overhead vs. underground power lines, especially in light of CT 04-246 which requires underground lines in residential areas, In both public and in-home meeting with local residents, CL&P representatives, especially Mr. Carberry referred to a "least cost mandate" and said that CL&P is held to a "least cost mandate"?

Please define and explain what the "least cost mandate" is and provide a copy of its language for review. Is it a Connecticut law? Is it something imposed by DPUC or the CSC? Is it an internal cost saving mandate, or a business model, created by CL&P's management?

CL&P is proposing to use low H-frame wooden towers for the GSRP. What were the key considerations, criteria and metrics used, for proposing the H-frame design for the GSRP overhead power lines to the CSC?

Given that much higher steel towers were used in the overhead sections of the NEEWS power line in Durham and Middlefield, and given that CL&P can model the EMFs from the proposed 345 kV power lines:

Why would CL&P re-propose to use H-frame power poles that would not offer much mitigation from EMF exposures in the submitted design for the GSRP in East Granby and Suffield?

With regard to specifying and selecting the most appropriate components for use in the GSRP/NEEWS transmission project in terms of cost, reliability, maintenance issues, life span and other important criteria:

How does CL&P determine which and what type of cable(s) it will evaluate and propose for use in the GSRP? Please list the selection criteria

<u>Does ISO-NE opine on and/or suggest transmission power line designs or materials?</u>

Given that global warming is a serious concern, did CL&P and/or ISO-NE perform a "GREEN ANALYSIS" on overhead vs. underground construction, for example, looking at and quantifying

factors such as the environmental impact and environmental and societal costs of clear cutting forest land²?

<u>Did CL&P consider siting the GSRP transmission lines in the natural gas pipeline right of way that is owned by the Tennessee Gas Pipeline Company?</u> This pipeline ROW runs parallel to CL&P's 115 kV ROW easement through Bloomfield, East Granby and Suffield to CL&P's and goes into Massachusetts. <u>Given the footnoted statistic about forests being a valuable "carbon sink"</u>, would CL&P consider doing so? Please explain why or why not in detail.

Does CL&P and/or ISO-NE perform LCA analysis (Lifecycle Assessment Analysis) to analyze the "cradle to grave" CO₂ impact of materials selected for use in GSRP/NEEWS construction?

Is LCA cost presented in materials submitted to the CSC so that the CSC can fulfill its role "to objectively balance the statewide public need for adequate and reliable services at the lowest reasonable cost to consumers with the need to protect the environment and ecology of the state?" If not, why not?

<u>Please furnish a vendor list of the cable manufacturers CL&P considered and contacted to provide product specifications for CL&P's evaluation in the design process for the GSRP.</u>

Is it a common practice for utility and power infrastructure vendors and manufacturers to offer incentives, inducements, or take decision makers on trips such as golf outings, conduct seminars in resort areas or offer company sponsored vacations? This is a common marketing practice in many other industries is it so with CL&P's vendors and manufacturers? Has ISO-NE ever sponsored trips, "executive get-a-ways" or vacations?

<u>Does CL&P</u> have a corporate ethics policy prohibiting or setting a monetary limit on the value of a gift or inducement that a CL&P employee is allowed to accept from a vendor or manufacturer? What is prohibited by this policy?

<u>Does CL&P have a corporate conflicts of interest policy?</u> What is prohibited by this policy?

Has any CL&P person involved with GSRP or NEEWS (noting the broad definition of CL&P used in these interrogatories) participated in or enjoyed any type of vendor's or manufacturer's gift, inducement or trip in excess of \$20 dollars?

In one of CL&P's interrogatory answers³, CL&P furnished a chart showing a cost estimated for the construction of the power lines. The following questions refer to that chart:

In CL&P's chart what does "AFUDC" refer to? What does "escalation" mean or refer to? What is calculated or estimated to be in the "contingency" category?

² CAOPLC found that heavily wooded forest such as the forest found in the Metacomet Trail area can absorb as a "carbon sink" 9.2 tons of CO₂ per year per hectare (2.471 acres).

³ The answer was to a data request: OCC-01, dated 04-02-09, Q-OCC-005 page 7

How was item #5, "Connecticut Taxes" calculated?

Since CL&P was sued by the residents of a number of Connecticut towns in the class action Durham lawsuit, and since CAOPLC members told CL&P that we would likewise file a class action law suit if over head towers were approved and if independent appraisals showed that we lost property value:

<u>Does CL&P include a line item for "litigation and legal contingencies" as part of the cost for overhead lines?</u>

If the answer to the above question is NO, why does CL&P not consider litigation to be an expense worthy of disclosure to the CSC?

<u>Please explain what "reliability" means to a lay person.</u> <u>What types of fines does CL&P incur for reliability violations?</u>

What is system congestion? What types of fines does CL&P incur for congestion violations?

Would it be correct to assume that a 345 kV transmission line is not a perfect electrical conductor and that some generation losses will occur? If so, has CL&P modeled the generation losses from the proposed GSRP overhead power lines? What are those losses in a percentage of loss? Would underground lines have similar generation losses or would they offer an improvement and transmit energy more efficiently?

What is the transmission cost per kilowatt hour in Canada? If it is different, please explain why it is different?

What is the cost or transmitting power over high voltage power lines expressed in the cost per kilowatt hour of transmitting power and in terms of a cost per mile? Doe this cost vary between 115 kV lines and 345 kV power lines? If so please provide both costs. Does this cist vary regionally? If so, why?

How much, as a percentage, of the Connecticut residential electricity rate is attributable to transmission expense?

How much, as a percentage, of the Connecticut business electricity rate is attributable to transmission expense?

What will happen to this transmission expense percentage if the GSRP is constructed overhead?

What will happen to this transmission expense percentage if the GSRP is constructed underground?

<u>Introductory Comment:</u> When Executives and Financial Officers of a corporation announce an acquisition or a major capital expenditure to their investors, the terms *accretive to earnings* or *dilutive to earnings* are frequently used to describe an asset that either positively impacts the company by adding value or negatively impacts a company by adding costs and diminishes value.

How would CL&P view transmission lines, not from the perspective of its balance sheet but from the perspective of a rate payer? Is a transmission line accretive or dilutive? Please explain your answer.

Is renewable energy accretive or dilutive?

Is a transmission line the only solution to solving reliability and congestion problems?

Introductory Comment: The next question relates to power transmission in the Pacific Northwest, an area that has used hydroelectric power for generations.

Please explain the Pacific DC Intertie, also known as Path 65, which is used to bring hydroelectric power from the Pacific Northwest to California. Explain what the intertie does, how it is constructed, the technology that is used, and whether or not the same or updated design and technology would benefit hydroelectric power transmission on the East Coast.

How would CL&P respond to the following material?

On reliable power, a key part of why CL&P wants the new power lines, CL&P forgets the 2003 blackout. It was largest power failure in recent history, 55 million people lost power, 11 people died and there was \$10 billion in damages. The 2003 blackout was caused by a tree branch falling on an overhead power line in Ohio. If the power lines were underground, no blackout.

When proposing overhead power lines vs. underground power lines, should the CSC include or discount past historic events such as the 2003 blackout? Please explain your answer in detail.

Please read the following material that is from Duke Energy's web site:

Solar Distributed Generation Project

In May 2009, the North Carolina Utilities Commission issued a revised order allowing Duke Energy to proceed with a proposal to install electricity-generating solar panels on the roofs and grounds at up to 400 sites in North Carolina, including homes, schools, office buildings, shopping malls, warehouses and industrial plants.

The project, one of the first large-scale initiatives of its kind in the U.S., will create a <u>solar distributed</u> <u>generation network</u> capable of supplying electricity to about 1,300 homes. Distributed generation is energy created close to customers rather than at large, centralized power plants.

Duke Energy will own and maintain the solar panels during their expected 25-year lifespan. The company also will own the electricity generated and pay a rental fee to property owners who host the panels for use of their roofs or land, based on the size of the installation and amount of electricity generated at any given site.

Instead of CL&P's and WMECO investing in a transmission power line, if CL&P and WMECO created similar plans and invested more extensively than Duke Energy is doing in local distributed generation projects, would that be a viable solution to the reliability and congestion problems the GSRP purports to solve?

Would decreasing demand through conservation along with the above plan and a smaller transmission project create the same outcome as a 345 kV power line?

Did CL&P and or ISO-NE model solutions such as the ones above? If not, why not?

Given that one of the preeminent fuel cell companies is located in Connecticut and is a part of UTC, did CL&P investigate using UTC fuel cells and a mix of solar in a distributed generation plan as an alternative to a transmission line?

<u>Please comment if CL&P's business model would let it make the same profits and return on investments and equity as that of transmission lines if conservation cut electric demand by the governor's mandated 20% and if DPUC did not approved a rate increase?</u>

Please read the following material from the National Association of Regulatory Utility Commissioners (NARUC):

State Public Utility Commissions around the country are expressing increasing interest in energy efficiency as an energy resource. However, traditional regulation may lead to unintended disincentives for the utility promotion of end-use efficiency because revenues are directly tied to the throughput of electricity and gas sold. To counter this "throughput disincentive," a number of States are considering alternative approaches intended to align their utilities' financial interests with the delivery of cost-effective energy efficiency programs. "Decoupling" is a term more are hearing as a mechanism that may remove throughput disincentives for utilities to promote energy efficiency without adversely affecting their revenues.

Is NU and CL&P advocating decoupling with state and federal legislators? Why or why not? If NU and CL&P is opposing decoupling please explain in detail why this is so in especially in light of Governor Rell's 20 x 20 mandate.

Will CL&P Allow Flexibility In The GSRP Design And Siting Process?

Please read the following material from FERC (bold and italics added). 4

Landowners are fundamental to FERC's siting process.

FERC encourages landowner participation in all aspects of certification. FERC notifies property owners of a proposal, convenes public hearings and provides assistance for landowners seeking to get involved in the pre-filing or filing phases of proposal review. This is done either directly or through the developer.

Landowners are full-fledged participants in the FERC process. They have a seat at the table, with those representing environmental organizations, utilities, states and federal agencies, and others with an interest in the project, during the pre-filling process.

Landowners are heard. FERC has a record of changing routes for projects to avoid problems with individual landowners' homes or businesses. In one gas pipeline case, a company proposed running a pipeline through the front yard of an elderly man's property. The man had felled the trees and built the house himself – it was something special to him. The man, who was ailing, attended a public meeting and laid out his situation. The

.

⁴ From: A GUIDE TO THE FERC ELECTRIC TRANSMISSION FACILITIES PERMIT PROCESS, pages 3 and 4

pipeline offered a route modification to move the pipeline from the front yard to the back yard. Eventually, the pipeline was rerouted around his property.

This policy applies to businesses as well. In one pipeline case, a dairy farmer complained about a project proposed to run near his gestation and lactation facilities. The dairy owner explained the disruption would interfere with his cows' birthing and milk production. FERC staff developed a route variation in response to the landowners concern that avoided impact to his dairy operation.

Does CL&P agree with FERC's position and approach to solving land owners' problems? Why or why not? Please explain in detail including any legal justification or support of why CL&P would **not** want to comply with FERC's policy of resolving land owner problems. Can CL&P offer at least five examples of similar successful win-win resolutions of land owners' issues in prior NEEWS projects?

<u>Introductory Comment:</u> CAOPLC has noted that CL&P's has identified a few structures (horse barns) in the Newgate Road area that are very close to the eastern edge of the ROW. Further CL&P has said that these structures will have to be torn down and removed and that it will work with the residents to relocate them.

The barn on the Harris property at 1208 Newgate Road in Suffield has a similar history to the first case in FERC's above materials. It was hand built by the senior Mr. Harris (the father) and his son, Tim. Mr. Harris has now passed away. Mrs. Bev Harris, his wife, is now in her mid-80's and while she no longer rides her 5 horses, she enjoys looking after them every day.

Would CL&P extend the same courtesy that FERC did to find an alternative place for the GSRP power tower if a tower is approved by the CSC so that the Harris' barn is not demolished?

Note that CL&P chose to locate the proposed new GSRP tower at the far eastern edge of the ROW and that there is plenty of room to move the tower westward in the middle of the right of way towards the existing 115 kV tower, or alternatively to combine both lines onto one tower and place it where the existing 115 kV tower is now.

Would CL&P embrace and adopt one or both of these above solutions for unique situations such as the Harris' barn?

Metacomet Trail Questions

CL&P's answer to the below CSC interrogatory question on the Metacomet trail was the following:

Question:

Would the "Trail Management Blueprint" as associated with the Metacomet Trail impact the ability to locate new transmission line structures in the portion of the ROW that crosses the Metacomet Trail?

Response:

CL&P has obtained and reviewed the draft report entitled, "Metacomet Monadnock Mattabesett Trail System National Scenic Trail Feasibility Study and Environmental Assessment." The "Trail Management Blueprint" is included within that draft report.

It is CL&P's understanding, based upon its review of the referenced documents, that installation of a new transmission line (including its structures) within the existing CL&P ROW is not precluded, nor will such installation conflict with, the "Trail Management Blueprint."

Would CL&P identify (i.e. cite a page or page numbers) where in the Metacomet Monadnock Mattabesett Trail System National Scenic Trail Feasibility Study & Environmental Assessment document that CL&P feels the document specifically addresses the issues of power line construction or any type of construction or development adjacent to the MMM Trail?

<u>Is there such a section in this <u>Trail Feasibility Study & Environmental Assessment</u> document that <u>specifically permits electric utility infrastructure development next to the trail?</u></u>

<u>Please read and review this description of the mission and purpose of the National Trails System Act of 1968:</u>

The National Trails System Act of 1968 instituted a national system of historic, scenic, and recreation trails. National Scenic Trails are extended trails "so located as to provide maximum outdoor recreation potential, and for the conservation and enjoyment of nationally significant scenic, historic, natural, or cultural qualities of areas through which such trails may pass."

In CL&P's opinion does this text from the Act, "National Scenic Trails are extended trails so located as to provide maximum outdoor recreation potential, and for the conservation and enjoyment of nationally significant scenic, historic, natural, or cultural qualities of areas through which such trails may pass" express, communicate or suggest that the maximum outdoor recreational, scenic, historic, natural and cultural potential would be enhanced or conserved by the GSRP's rusty metal power towers and crackling transmission lines all of which would be visible and audible along the route of the MMM Trail? Please provide a detailed answer.

_

⁵ From the text of the NEW ENGLAND NATIONAL SCENIC TRAIL DESIGNATION ACT

Telecommunications Infrastructure Questions

<u>Do high voltage power lines such as those proposed for the GSRP have an effect on cell phone</u> communications? If Yes, please describe the effects.

What is the radius in which the effects would be most pronounced? At what distance or radius from a high voltage power line would any disruptive effect not be discernable?

<u>Do high voltage power lines such as those proposed for the GSRP have an effect on ham radio communications?</u> If Yes, please describe the effects. (Please include all authorized amateur radio frequencies).

What is the radius in which the effects would be most pronounced? At what distance or radius from a high voltage power line would any disruptive effect on ham radios not be discernable?

Do high voltage power lines such as those proposed for the GSRP have an effect on public safety agencies including fire, police, the Red Cross and other agencies also depend on the use of the special propagation properties found only in the HF radio spectrum? If Yes, please describe the effects.

What is the radius in which the effects would be most pronounced? At what distance or radius from a high voltage power line would any disruptive effect not be discernable on Public safety agencies including fire, police, the Red Cross and other agencies?

CL&P's answer to the below CSC interrogatory question was the following:

The Connecticut Light and Power Company

Docket No. 370

Data Request CSC-01 Dated: 01/28/2009 Q-CSC-019 Page 1 of 1

Witness:

CL&P Panel

Request from:

Connecticut Siting Council

Question:

Do any wireless telecommunications carrier antennas exist along the ROWs that would be impacted by the proposed GSRP or MMP? If so, identify existing locations?

Response:

Yes, there is one wireless communication antenna installation on structure 20003 along the Manchester - Meekville Junction transmission corridor. This antenna can remain on this structure, and it will not be affected by the proposed construction. There are no wireless telecommunication antenna collocations on the North Bloomfield - Agawam corridor, and no installations on the Connecticut portion of the Southern Route alternative.

Why did CL&P choose to omit the large cell phone tower located in Suffield that is adjacent to the power line ROW (near Mountain and Phelps Roads) from its answer to the CSC?

Why did CL&P not point out the cell phone tower location when the CSC field trip bus stopped at the Suffield Sportsman Club location?

What methodology does CL&P use to identify cell phone structures such as the Suffield tower and why did it fail to identify this structure? Does CL&P notify cell phone companies of impending transmission line construction and CSC proceedings? If not, why not?

Canadian Hydro Power

On Friday May 22, 2009 the Hartford Courant ran an article entitled "NU Gets Line To "Clean" Power." The article discussed how 1 billion would be spent to construct the two hundred mile power line, how the line would bring 1,200 MW of hydro power into New England and how power is expected to arrive by 2014.

Given that all New England states have mandates similar to Governor Rell's 20 by 20 plan to have 20% of all CT energy be renewable or green energy by 2020, how will competition for Canadian hydro power be managed and who will managed it? Would a classic supply vs. demand competitive situation develop where all the New England states compete and drive up the price for this energy?

How much of this 1200 MW of hydro power generated electricity is expected to actually go to Connecticut? Given Governor Rell's 20 by 20 plan to have 20% of all CT energy be renewable or green energy by 2020, what percentage of Connecticut's renewable or green energy production would this be?

What type of transmission systems does Canada have? Is Canada like European countries that use different transmission line technology than the USA?

"bridge" or adapt one technology to work with another?

If construction is going to start in 2011, have transmission technology manufacturers or vendors been selected? Which manufacturers or vendors have won contracts?

Will the Canadian Hydro power line be the same technology as the transmission line technology CL&P is proposing for GSRP/NEEWS and prior completed sections of NEEWS? If not, why not?

General Questions for CL&P

Noting the broad definition of CL&P used in these interrogatories, please answer the following questions:

<u>Does CL&P have any ownership interest in Burns and McDonnell?</u>

Does CL&P (noting the broad definition of CL&P used in these interrogatories) have any ownership interest in any other contractor, vendor or manufacturer who may participate in the GSRP/NEEWS projects?

<u>Please list and detail if CL&P, or any PAC sponsored or directed by CL&P made any political contributions to any of the Selectmen in any of the towns that the GSRP project is anticipated to affect?</u>

<u>Please list and detail if CL&P, or any PAC sponsored or directed by CL&P made any political contributions to any of the Selectmen in any of the towns that the NRG generation project is anticipated to affect?</u>

Please list and detail if CL&P, or any PAC sponsored or directed by CL&P made any political contributions to any of the state legislators who represent any of the towns that the GSRP/NEEWS and/or NRG generation project is anticipated to affect?

At the East Granby and Suffield CSC public hearings a number of civic groups spoke in opposition to underground power lines. Their messages had similar talking points: (1) that low income and elderly individuals and families would be disadvantaged by the alleged high cost of underground power lines, (2) that underground power lines cost tens times that of overhead power lines, (3) that underground power lines would make Connecticut businesses less competitive by raising utility costs.

Please describe and provide details on the mission, goals and operations of CL&P's public and legislative relations outreach that CL&P conducted as a part of the GSRP/NEEWS project.

Please list and detail the civic and business groups CL&P contacted for the GSRP/NEEWS project.

Please detail how and in what form(s) of communication CL&P contacted various civic and business groups to build advocacy for CL&P's proposed overhead power line design for the GSRP. If letters were sent to these groups, please provide samples of these communications.

<u>Please list and detail any legislators and city and town officials CL&P contacted for the GSRP/NEEWS project.</u>

Would CL&P agree or disagree with the following statement? Please explain in detail.

Connecticut is the only New England state that does not have a law to allow low income and elderly residents to receive the wholesale vs. the retail rate for electricity. There was a bill to do that this year with bi-partisan support and the Governor's approval and it was passed by Connecticut's House. But it did not make it out of the Senate. It would be better to champion legislation to achieve this worthy goal rather than try to place the blame for increased utility rates on East Granby's and Suffield's residents and underground power lines.

Would CL&P agree or disagree with the following statement? Please explain in detail.

What was CL&P's position on the above low income/electric rate relief legislation? Did CL&P lobby for this legislation or did CL&P oppose it?

If CL&P took a neutral stance on the legislation, why did CL&P do so considering the goals of the bill and the relief to low income and elderly CL&P customers that the legislation would provide?