



**Northeast
Utilities**

107 Selden Street, Berlin, CT 06037
Northeast Utilities Service Company
P.O. Box 270
Hartford, CT 06141-0270
(860) 665-2036

John R. Morissette
Manager – Transmission Siting and Permitting

October 9, 2012

Robert Stein, Chairman
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

Dear Chairman Stein:

Attached please find the responses from The Connecticut Light and Power Company to the Telecommunication Coverage Plan pursuant to §CGS 16-50ee questionnaire requested from The Connecticut Siting Council on September 25, 2012. An electronic copy was sent to David Martin at david.martin@ct.gov, this day, on October 9, 2012.

Sincerely,


John R. Morissette

Question Q-CSC-001:

For what purposes does CL&P use wireless telecommunications?

Response:

Wireless communications are used within the CL&P organization for the following business functions:

- Voice communications between offices, vehicles, and individuals utilizing a Land Mobile Radio (LMR) system constructed using low band spectrum (30 MHz range).
- Paging system utilizing a private 153 MHz system.
- Voice communications between individuals utilizing cellular (carrier based) communications.
- Data communications between offices and substations utilizing licensed and unlicensed microwave.
- Distribution Automation - communication with field devices for monitoring and controlling the electric distribution grid utilizing 220 MHz, 450 MHz, and 900 MHz spectrum.
- Automated Meter Reading (AMR) - reading meters utilizing 900 MHz spectrum .
- Fault indication and voltage monitoring (pilot program) using cellular carriers.
- Mobile workforce communications to support email and business application functions on laptops and smart phones utilizing cellular carriers.
- Local device communications to personal computing devices utilizing IEEE 802.11 and Bluetooth protocol standards.

Question Q-CSC-002:

What frequencies does CL&P use for its wireless telecommunications purposes?

Response:

CL&P uses the following frequencies for telecommunications functions:

- Low Band (30 MHz range) for Land Mobile Radio
- 153 MHz for operation of a paging system
- 220 MHz for Distribution Automation
- 450 MHz for Distribution Automation
- 900 MHz for Distribution Automation, Automated Meter Reading, and some local handheld radio operations
- 6 GHz, 11 GHz and 19 GHz for licensed microwave communications
- Unlicensed device communications utilizing 900 MHz, 2.4 GHz
- Cellular carrier frequencies from various providers including; 700 MHz, 900 MHz, 1.9 GHz

Question Q-CSC-003:

The federal government has adopted a goal of making more spectrum available for the commercial wireless carriers. Is there a danger that in making this spectrum available to the commercial carriers, the federal government could take away the frequencies that CL&P currently uses?

Response:

This is always a future risk; however, current Federal Communication Commission plans do not appear to impact spectrum that CL&P is currently utilizing for private communications infrastructure.

Question Q-CSC-004:

How will the requirements for advanced metering systems of Public Act 07-242, An Act Concerning Electricity and Energy Efficiency, affect CL&P's wireless telecommunications needs and operations?

Response:

Connecticut's Public Act 07-242 requires electric distribution companies to install advanced metering systems to support net metering, track hourly consumption, support proactive customer pricing signals and enable implementation of voluntary critical peak pricing or real-time pricing tariffs for all customer classes.

Order No. 4 of the Department of Public Utility Control's (DPUC, now PURA) December 19, 2007 decision in Docket No. 05-10-03RE01 required CL&P to provide a plan to perform an advanced metering infrastructure metering study and a plan to conduct a rate pilot, under which it could achieve PURA's objectives as set forth in Public Act 07-242. The meter study and the rate pilot objectives were to gather more information about how AMI meters could provide benefits for customers through time-based rates and to provide additional information which would assist PURA in making an informed and fact-based decision about the further deployment of AMI meters in CL&P's territory.

On December 1, 2009, CL&P reported the Pilot Program results, including customer response to dynamic pricing and a discussion of AMI metering performance. CL&P successfully executed the Pilot with 3,000 customers from June 1, 2009 through August 31, 2009. The Pilot, branded as the Plan-it Wise Energy Program, achieved its objectives to gain insight into customer interest in, and response to, three peak time rates, collectively referred to as "dynamic pricing" rates. At the same time, the Pilot gathered additional experience and insight into the capabilities and maturity of certain AMI technologies, including telecommunication technologies.

CL&P then used those results to analyze and determine the cost effectiveness of a best, worst and base case set of AMI and dynamic pricing deployment scenarios. CL&P submitted a filing with these results and recommendations for deployment on March 31, 2010.

On September 1, 2011, the Department of Energy and Environmental Protection (DEEP) requested PURA to suspend the proceeding in light of the recent passage of Public Act 11-80. DEEP indicated that to ensure that PURA decisions are consistent with new state policy directions, PURA should halt the currently pending smart meter dockets while the Bureau of Energy and Technology Policy develops a state policy around smart meters.

On September 8, 2011 PURA granted the motion to suspend the schedule until the Bureau establishes Connecticut's smart meter policy, at which time the Authority will evaluate the meter plan pursuant to §16-243n as amended.

At this time no smart meter policy has been established and the docket remains suspended. Consequently, at this stage it is premature for CL&P to elaborate on any implications that AMI might or might not have on wireless telecommunications needs and operations.

Question Q-CSC-005:

Briefly describe CL&P's DSCADA system and summarize any plans for its expansion or improvement likely to occur in the next five years.

Response:

The CL&P DSCADA system provides control and data acquisition (real time loading and voltage data) of field devices such as field reclosers and substation feeder relays and breakers. Primarily, this system allows CL&P operators to remotely switch (open and close) field devices for both work and outage restoration, providing a more reliable distribution grid. Additionally, this allows remote de-energization of downed primary conductors that are connected to such field devices, providing a much faster response to reported downed wires, thereby enhancing public safety.

The current DSCADA system is deployed on a 450 MHz platform that is becoming obsolete. CL&P has undertaken a multi-year initiative to upgrade this system to a 900 MHz platform that can handle more remote units while providing better system reliability. The build out of this 900 MHz system is scheduled to be complete by 2013 and will cover a large portion of the state. During and after this project, remote units currently on the 450 MHz platform will be migrated. It is projected that not all of the 450 MHz units will be within the 900 MHz coverage so CL&P will then look into alternative resources such as 220 MHz radios, cellular and satellite solutions.