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May 7, 2007

Mr. S. Derek Phelps
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: Docket No. F-2007 – Connecticut Siting Council Review of the Ten-Year Forecast of Connecticut Electric Loads and Resources – Response to Interrogatories of the Connecticut Energy Advisory Board

Dear Mr. Phelps:

The United Illuminating Company (UI) hereby provides responses to Interrogatories CEAB-1 through CEAB-4 in the above mentioned docket.

Respectfully submitted,

THE UNITED ILLUMINATING COMPANY

by _____
Michael A. Coretto.
Director – Regulatory Strategy &
Retail Access

MAC

Q-CEAB-1: Please provide a detailed description of the methodology by which the energy and peak load forecasts contained in your initial filing in this proceeding were prepared.

A-CEAB-1: As in previous years, The United Illuminating Company ("UI" or "Company") sales forecast is developed for budgeting and financial planning purposes. This year, the Company has developed a new peak forecasting model. Unlike previous years in which the peak forecast was tied to the sales forecast through the load factor, this year's peak forecasting model incorporates econometric based forecasts along with specific identified customer load growth. Residential and Commercial-Industrial econometric models were developed to provide the underlying economic and demographic underpinnings to enable enhanced forecasting of future system peak loads.

The energy forecast is the same forecast used for Financial Forecasting purposes which was developed in the fall of the previous year. The energy forecast was developed by beginning with the previous year's weather corrected sales. Added to this was the net load additions and deletions based on UI's Economic Development Forecast. For years with minimal or no projected Economic Development activity, a fixed forecast sales figure was used. Projected Conservation & Load Management (CLM) activity was taken into account. Next historic sales growth figures were used to predict sales growth by customer class. Finally leap years were adjusted for the additional one day of sales.

This year the Company includes its normal peak load forecast and one sensitivity forecast which, when taken together, represent a range of possible futures. It is for this reason that the Company has developed a peak load forecast that assumes average/normal weather and weighted economic development activity along with a load forecast that assumes extreme weather and aggressive economic development activity.

Weather Normalization

The methodology used to forecast the peak load evaluates load growth through weather normalization of peak loads and kilowatt-hour (kWh) sales and econometric modeling of the key driver of system peaks – electricity sales by class. The peak load forecast was developed by weather normalizing the historical system peak and monthly sales data. The system peak was normalized against 12-hour average temperature

humidity index (THI). Historical monthly sales were normalized against heating and cooling degree days (HDD) and (CDD) and cycle adjusted to more closely match the billing cycle-affected monthly sales data.

The historical peak data was normalized for weather to determine the impact of weather on system peak load. Non-holiday peak load data was normalized against 12-hour average temperature humidity index (THI) over the period June 15 through September 15. Weather data for the Bridgeport-Sikorsky weather station in Stratford was used as a proxy for UI system-wide weather in the weather normalization process.

The result of the weather normalization process is a historical dataset of UI system peak load and monthly sales that are statistically evaluated to be treated on a consistent weather basis. The weather normalization process allows for consistent and valid modeling of different probabilities of extreme weather for UI's system (i.e. "90-10" and more extreme weather). This sets the stage for consistently evaluating the growth in UI's system due to econometric and demographic drivers.

Econometric Modeling

Multiple regression models were employed in the energy sales forecast models. The modeling approach is one that uses available historic economic and demographic data and tests the statistical significance of that data in explaining growth in normalized historical quarterly energy sales. Several datasets and sources are tested in this process using multiple regression techniques. Datasets that best explain sales by class growth are used in the final forecast model.

Economic and demographic data were analyzed for statistically significant relationships with the weather normalized energy sales data by class. Where economic and demographic data were found to be statistically significant, these data were incorporated in the model to forecast the growth in residential and commercial-industrial sales. The variables include publicly available data such as: number of households, household income, gross state product, New England electric and gas prices and Consumer Price Index-based deflators employed where appropriate. The resultant sales forecasts were then increased by a loss factor – which include Company usage and electric energy losses - to develop the system energy requirements.

Conservation and Load Management

UI's latest 10-year forecast of CLM is utilized in the peak load forecast. Since actual historical 2006 system peak and energy sales data are used in the load forecast model, only the 2007 through 2016 incremental

megawatts (MW) of forecasted CLM load are used in developing the load forecast.

Identified New Customer Loads

UI identified new customer load data are used in addition to the forecast models' results. These loads are from UI's Economic Development major projects summary and represent the information UI had regarding the location and size of new customer growth on its system. Attributes of the identified loads include: the substation supply, a peak load value, the timing of when they are anticipated to connect to the system, and a probability of connection.

Forecast Scenarios

The Company has developed two load forecasts. These were developed by weather normalizing historical peak load against 12-hour average THI. The first forecast (normal weather - "50-50") assumes normal weather, probability weighted economic development activity and UI's latest 10-year forecast of CLM. The second forecast (extreme weather - "90-10") assumes extreme weather, economic development activity that is not probability weighted, and UI's latest 10-year forecast of CLM. The extreme weather forecast was weather normalized by calculating a 12-hour average THI value that has only a 10% probability of being exceeded for the UI system.

Interrogatory CEAB-2

The United Illuminating Company — Witness: Archie McCullough, Pat McDonnell

Docket F-2007 — Page 1 of 1

Q-CEAB-2: Please describe in detail the role that your organization's personnel play (a) in assessing actual and foreseeable loads on your system(s), (b) in communicating that information to ISO New England load forecasters, and (c) in assessing ISO New England's approach to forecasting energy loads as applicable to your system. (d) Please state whether you have any current plan to assist ISO New England to improve its ability to collect information on end use loads and energy needs in your service territory. Please identify and explain all specific initiatives of this nature.

A-CEAB-2: (a) The energy load forecast is developed by the Company's Budgeting and Financial Forecasting area. The forecast is primarily used for financial purposes – budgeting and financial planning. This year's system peak load forecast was developed by UI's System Integrity group. The peak load forecast incorporated econometric based forecasts along with specific identified customer load growth and system wide Conservation and Load Management (CLM). The system peak load forecast is used for infrastructure planning purposes. Inputs to the energy and peak load forecasts are from various areas of the Company. The CLM forecast is developed by the CLM, Technical and Program Support Services section of the Company. UI's Economic Development area maintains the list of Economic Development activity in the territory. The list is compiled from various sources such as: the Town's or City's Economic Development Office, press releases, Account Managers, and other UI personnel.

(b) UI Transmission Asset Planning provides a 90/10 peak load 10-year forecast to ISO-NE by June 1 of each year.

(c) UI does not directly assess ISO-NE's approach to forecasting energy loads.

(d) UI Transmission Asset Planning provides a 90/10 peak load 10-year forecast to ISO-NE annually, which should assist ISO-NE in collecting information on end use loads. The peak load forecast incorporates econometric based forecasts along with specific identified customer load growth and system wide Conservation and Load Management (CLM).

To the extent that UI submits any or all of its demand side resources to the ISO Forward Capacity Market (FCM), ISO-NE will be aware of the specifics of those activities.

Interrogatory CEAB-3

Q-CEAB-3: Please explain whether the load forecast that you present in this proceeding is likely to be affected (i.e., reduced) by demand-side programs that are not among your organization's portfolio of demand-side programs.

A-CEAB-3: In the Company's filed load forecast, UI includes impacts of known activities. To the extent that demand-side activities occur on UI's system outside of UI's portfolio, the actual load, both peak load and energy, will be reduced.

Interrogatory CEAB-4

Q-CEAB-4: Please identify to the best of your knowledge any generating capacity potential or new supply side generating resources (including customer premises generating facilities, without any confidential customer information) that currently are under consideration or development within your service territory.

A-CEAB-4: A number of applications for capital grants have been submitted to the DPUC under the provisions of the Energy Independence Act (PA 05-1). As of May 3, 2007, applications for 17.5 MW of emergency generation (EG) and 94.5 MW of combined heat and power (CHP) have been filed with the DPUC by UI customers. The DPUC has not yet approved all of these applications.