STATE OF CONNECTICUT

CONNECTICUT ENERGY ADVISORY BOARD

Review of Integrated Resource Plan Filed Pursuant to Section 51 of Public Act 07-242	February 7, 2008

COMMENTS OF THE

CONNECTICUT MUNICIPAL ELECTRIC ENERGY COOPERATIVE

The Connecticut Municipal Electric Energy Cooperative ("CMEEC") hereby respectfully files its written comments in response to the "Request for Written Comment and Notice of Public Hearing on Electric Distribution Companies' Procurement Plan for Connecticut" (the "Notice") issued by the Connecticut Energy Advisory Board ("CEAB") with respect to the Integrated Resource Plan Report ("IRP" or "Proposed Plan") prepared by the Brattle Group, Connecticut Light and Power Company ("CL&P") and United Illuminating Company ("UI"), dated January 1, 2008, in response to the requirements of P.A. 07-242, section 51 (the "Act").

As described in more detail below, CMEEC is a load-serving entity ("LSE") in Connecticut through its member and participant municipal electric utilities representing approximately 6% of the electric needs of the State. The Act did not include CMEEC or the Connecticut municipal electric utilities as entities required to prepare and submit the IRP. Accordingly, CMEEC has not participated in the development of and analysis contained in the IRP. CMEEC, as of this time, has not reviewed in detail the analysis and models underlying the conclusions drawn in the Proposed Plan but has some general issues and observations with regard to the Proposed Plan as described in greater detail below. As a LSE vitally affected by developments in the Connecticut wholesale power industry and CMEEC has a substantial interest in the outcome of this proceeding.

CMEEC's comments on the IRP are based upon initial review of the Proposed Plan and the report entitled "Initial Review of Integrated Resource Plan for Connecticut" prepared by La Capra Associates, Inc. dated January 28, 2008 (the "La Capra Report").

Below, CMEEC, first, provides a brief description of CMEEC and its interest in this proceeding and follows with comments on the recommendations set forth in the IRP and, separately, regarding certain of the planning assumptions set forth in the IRP. These comments are preliminary in nature. CMEEC intends to participate actively during the review process of the IRP before, first, as directed by the Act, the CEAB, and subsequently, the Department of Public Utility Control ("DPUC").

I. Background regarding CMEEC.

CMEEC is a political subdivision of the State of Connecticut created in 1976 pursuant to Conn. Gen. Stats. §§ 7-233a *et seq.* It is a non-profit municipal joint action electric agency which provides the power supply requirements, at wholesale under long-term contracts, to six municipal electric utilities with retail service territories in Connecticut (five of whom are members of CMEEC and one of whom is a participant in CMEEC) as well as several other Connecticut customers purchasing power at wholesale who then sell that power at retail in Connecticut.[1] In 2007, the electric consumption at retail represented by CMEEC's members, customers or participants was approximately 2 million megawatthours, or approximately 6.0 % of Connecticut's aggregate electric load for the period.

[1] Specifically, CMEEC provides power supply service to members: the City of Norwich Public Utilities, the City of Groton Department of Utilities, the Borough of Jewett City Department of Public Utilities, the Second Taxing District of the City of Norwalk -- South Norwalk Electric and Water, the Third Taxing District of the City of Norwalk -- Electric Department; and to a participant: the Town of Wallingford Department of Public Utilities – Electric Division; and to customers: the Bozrah Light & Power Company (owned by the City of Groton Department of Utilities) and the Mohegan Tribal Utility Authority.

CMEEC is an active participant in the New England wholesale power markets, a NEPOOL Participant, and is the "LSE" for the municipal electric utilities which comprise its members, participants and customers. A central mission for CMEEC is to purchase and supply stable, reasonably-priced electric capacity and energy to its members, participants and customers in a manner consistent with appropriate risk management practices and environmental stewardship objectives. The analysis and recommendations for future action set forth in the Proposed Plan, their evolution through the review process before the CEAB and subsequently the DPUC and the implementation of the Plan, following approval, has the potential for profoundly affecting and reshaping the electric power sector in both Connecticut and New England as a whole and, in turn, economic activity and development and the quality of life within the State. As such, CMEEC has a strong interest in this proceeding and the success of the intent of the Act establishing this process.

II. Comments Regarding the Companies' Recommendations.

1. IRP recommendation to maximize the use of demand side management ("DSM"), within practical operational and economic limits, to reduce peak load and energy consumption.

The Companies are proposing the implementation of an unprecedented level of DSM (both energy efficiency and demand response) as part of the Proposed Plan. In principle we agree with pursuing the maximum level of achievable cost effective DSM within the State. Implementation of DSM at the very high levels projected in the Proposed Plan has the always attendant issues of cost shifting between customer classes and between DSM program participants and non-participants and the allocation of non-market costs, such as transmission, distribution, system benefit and/or system control costs, that are not affected by the spot market for capacity and energy, over a smaller base of kWh sales.

2. IRP Recommendation to explore other power procurement structures such as longer term power contracts on a cost-of-service basis with merchant and utility owners of existing and new generation.

The Proposed Plan recommends the exploration of other or enhanced mechanisms for purchasing electric energy and capacity than those currently deployed by the electric distribution companies ("EDCs"). As indicated in the Proposed Plan, cost of service contracts do have the potential for dampening the impact on customers of new fuel related swings in wholesale spot market costs. On the other hand, such costs of service contracts also have the potential for shifting development and operating risks from project developers to the State's electric consumers which should be commensurate with appropriate investment returns as determined by appropriate regulatory oversight. With regard to cost of service long term contracts, we believe one approach that should be considered in this area is the negotiation of contracts or contracts that could be made available to all the utilities in the State rather than the state's utilities all competing against each one another for long term cost of service type contracts.

3. IRP Recommendation to evaluate the structure and costs of Connecticut's renewable portfolio standard (RPS) in the context of a regional re-examination of the goals and costs of similar policies in New England.

CMEEC and the State's municipal electric utilities support development and implementation of cost-effective renewable resource projects to the greatest extent possible. Development of renewable resources has the potential for reducing the amount of natural gas burned in electricity production. At the same time, the Independent System Operator – New England, Inc. ("ISO-NE") has reported that natural gas is the marginal fuel driving wholesale electric prices over 85% of the time. CMEEC believes these factors support the Proposed Plan's

recommendation to review renewable resource policies in the context of renewable resource development throughout the region.

4. IRP Recommendation to consider potential ways to mitigate the exposure of Connecticut consumers to the price and availability of natural gas.

As noted above, studies by ISO-NE have indicated that natural gas fired generation operates at the margin in the ISO-NE administered spot markets for electric energy over 85% of the time. These prices, in turn, are a major price determinant for prices of power procured under bilateral contract, particularly if the contract is short-term and the power committed under contract is load following in nature. As the IRP points out, the resulting close link between natural gas pricing and wholesale electric power costs in Connecticut visits the high and volatile level of cost on natural gas directly on LSEs and ultimately retail consumers of electricity in Connecticut. The Proposed Plan highlights consideration of alternative contractual and ownership arrangements to encourage investment in non-gas baseload capacity as a vehicle for partially adjusting this problem. Considerations for evaluating such alternative arrangements needs to include careful balancing of operational, price and development risks between the project developers and the State's electric consumers.

III. Comments on Planning Assessments.

1. Projected Energy and Capacity Requirements.

The Proposed Plan's discussion of the projected energy and capacity requirements to meet Connecticut's levels of electric consumption relies largely on forecasting work completed by ISO-NE. CMEEC believes that the basic load forecast numbers are reasonably accurate. These projections are adequate for determining resource adequacy across the entire State or major sub-regions (*i.e.* Forward Capacity Market) but may not encompass resource mix and

system security related issues (*i.e.*, second contingency coverage leading to uplift and/or the need for reliability must run ("RMR") contracts).

2. Reductions or Elimination of Growth in Electric Demand.

The report leaves open the question of the priority between and the level of effort devoted to achieving energy efficiency or peak demand reduction, respectively. There are potentially significant different cost benefits and environmental considerations between achieving energy efficiency or peak load reduction as well as cost allocations between customers participating in programs and those not able to participate. Final decisions on specific programs must take these considerations into account.

3. Leveling of Electric Demand by Reducing Peak Demand and Shifting Demand to Off-Peak Periods.

The Proposed Plan describes an aggressive scenario for leveling the time pattern of electric consumption, by reducing peak and shifting peak hour consumption to off-peak and shoulder hours, but does not provide a specific granular analysis of the manner in which this will be accomplished. CMEEC believes programs focused first on peak demand reductions offer significant opportunity to reduce near-term costs in the State without shifting costs from program participants to non-participants. CMEEC supports the concept of shifting and shaping loads to eliminate cost allocations from ISO-NE but also as a way to help reduce the cost of purchasing the basic commodity of electricity. CMEEC believes this concept has significant potential for costs savings but needs to be developed and studied further through the efforts set up in PA 07-242 with regard to pilot program efforts under the direction of the DPUC and the Energy Efficiency Partners program as proposed in PA 07-242 Section 94. Attached is a simple graphic produced by CMEEC's affiliate company, Sustainable Energy Analytics, LLC, illustrating these

potential benefits. Some of the benefits projected by the Proposed Plan from this effort will also require that ISO-NE recognize the impact of the demand reductions in its operational planning and system dispatch. The Proposed Plan should, therefore, include recommended actions to be taken by ISO-NE to facilitate the achievement of the Proposed Plan's goals.

5. Impact of Current and Projected Environmental Standards.

A key assumption embodied in the Proposed Plan is that all existing generation in Connecticut remains in service throughout the planning period, even though the existing generation fleet is aging. Given increasing environmental requirements (particularly those emanating from adoption of the Regional Greenhouse Gas Initiative ("RGGI) and possible similar action at the federal level over the next several years), these units may run less if environmental costs are incorporated into energy market bids. This added cost may cause units to run even less, increasing the possibility of retirement. In addition, the Propose Plan should give much more serious consideration of the potential environmental benefits of each aspect of the Plan, as example, the environmental benefits of reducing emissions for units required to be on line for second contingency uplift requirements. The Proposed Plan should include an analysis of mechanisms for responding to changes in this assumption. One such mitigating factor could be consideration of market impacts of potentially increased transmission import capability into the State as a result of currently proposed and additional transmission projects to increase transfer capability into the State.

6. Energy Security and Economic Risks Associated with Potential Energy Resources.

The overall scenario analysis described in the Proposed Plan is a reasonable attempt at exploring alternative impacts, with the exception of the failure to analyze scenarios with

reductions in the existing generating fleet due to environmental and/or age of plant considerations noted previously. It is unclear, however, to what extent this analysis addresses non-market impacts such as uplift and RMR contracts. Moreover, the overall scenario analysis does not consider the potential operational enhancements and market efficiency implications of added transmission import capability into the State, which would result from the completion of the NEEWS project in one of its several potential configurations or a comparative balancing and assessment of transmission enhancements with other expansion alternatives.

7. Estimated Lifetime Cost and Availability of Potential Energy Resources.

The Proposed Plan makes a reasonable attempt to evaluate the lifecycle cost of conventional technologies. A critical assumption employed in this analysis, however, is the reliance on the continued operation of the existing generation fleet, notwithstanding that much that fleet is aged. In addition, potential transmission enhancements such as the NEEWS project may also have implications for such lifecycle analysis.

IV. Additional Consideration:

Whatever specific approaches are endorsed or adopted as elements of a robust IRP, it will result in significant dollars being expended which ultimately become regulatory assets that have to be recovered from the State's electric customers. A significant effort should also include assessment of alternative legal and financial structures in order to achieve the development of the IRP elements at the lowest reasonable cost of capital.

V. Conclusion

CMEEC appreciates the opportunity afforded it by the CEAB to provide the foregoing preliminary comments on the IRP. CMEEC intends to follow the proceeding before the CEAB and the subsequent evolution of the IRP with great interest. CMEEC reserves the right to file additional comments, as and to the extent authorized under the procedures of the various proceedings which may be conducted in review of the IRP.

Respectfully submitted,

CONNECTICUT MUNICIPAL ELECTRIC ENERGY COOPERATIVE

By: 

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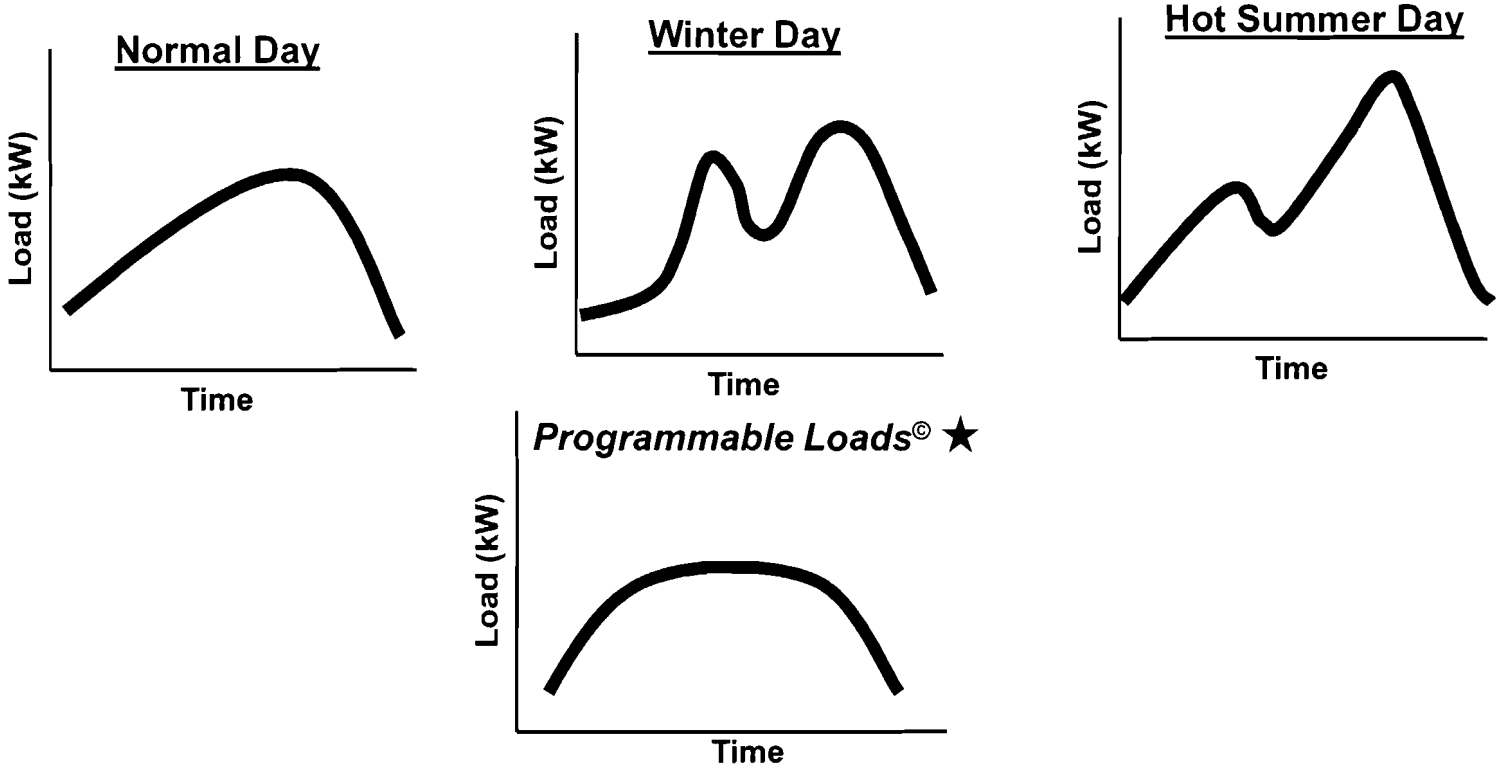
Shifting and Shaping loads

SEA
TOMORROW. TODAY.

Programmable Loads to Smooth Out Customer Load Profiles (Illustrative)

All 8760 hours of a year are different in terms of the load that you must meet. The risk premium of under- or over-buying power for any of these hours can be 20% of the cost. Programming loads is useful because commodity electricity that is more certain involves less risk to the wholesaler thus reducing the cost.

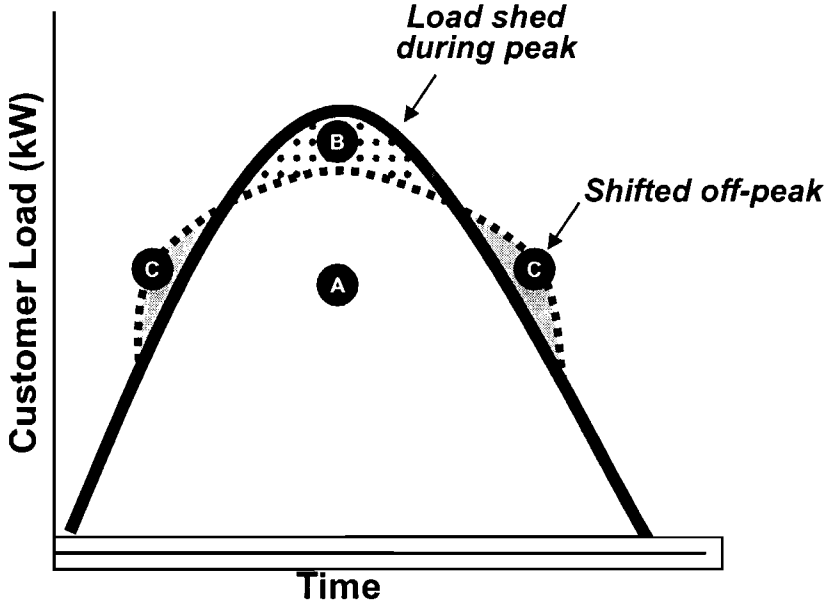


Shifting and Shaping loads

SEA
TOMORROW, TODAY.

Modifying the Customer Loads --Putting Strategies in Action

Your costs can be re-shaped through a variety of technologies including distributed generation, thermal storage, AMI and other load control. This can move wholesale purchasing from hourly strips to longer term bilateral contracts at lower costs. Thermal storage shifts the load from the peak to the off-peak period and with the right supply can reduce power costs.



Shifted load ≤ Non-programmed load on peak

Electricity used with thermal storage $= \Sigma$ A + C

Electricity used w/o Thermal storage $= \Sigma$ A + B

Programming Loads to Match Power Purchases

SEA
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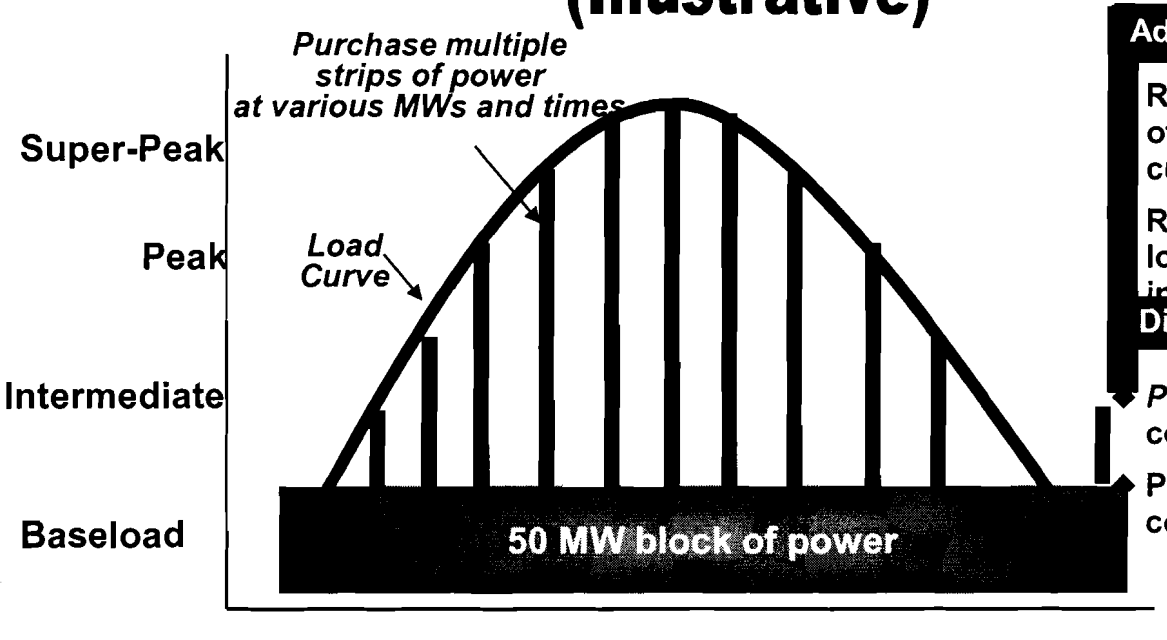
Purchasing Power for Specified Time Periods (Illustrative)



Advantages of purchasing strips

- Reduces volume risk of changes in customer use
- Reduces price risk of load changes that increase cost

Disadvantage

- Purchasing is more complex
- Purchasing is more costly

Multiple strips of power (red) can be purchased to supplement a contract for baseload energy, represented by the block (green) in the diagram above.