

Steam Peak Reduction Collaborative

Status Report as of August 27, 2010

BACKGROUND

In its December 17 Order in Case 09-S-0029, the Commission stated that "[w]e expect this proceeding to examine - and the Company to undertake where warranted - cost-effective measures to reduce the need for generation at Hudson Avenue, thereby deferring or eliminating the need to install all of the planned package boilers at the site." The Commission also stated that "[s]uch measures could include, for example: a standard offer for customers to propose efficiency measures or customer-sited generation that would reduce steam demand; a comprehensive energy efficiency program available to all customers; or a program to assist low-margin customers in switching to alternative heating sources." In response to the concerns raised by the Commission, the Company, staff of the Department of Public Service ("Staff"), and interested parties ("Interested Parties") established the Steam Peak Reduction Collaborative ("SPRC").

OBJECTIVE

The objective of the SPRC is to consider methods to align steam capacity with steam peak demand, exploring ways to mitigate the need to build new capacity for its Steam System by reducing the steam peak demand, and by developing programs and tariff mechanisms to accomplish those objectives. Reducing the steam peak demand may result in the offset or avoidance of new steam capacity and may enable Con Edison to service accounts in a more cost effective manner. A report will summarize the results of this collaboration.

Status

The participants of the SPRC commenced discussions in early May, and the scoping document was completed in late May. Since finalizing the scoping document, the SPRC has met eleven times, either by conference call or in person (with phone-in capability). The SPRC convenes weekly by phone to address follow-up items established during prior meetings. Additional calls to focus on specific programs/measures are scheduled as necessary and appropriate.

The key external stakeholders participating have been: Staff, NYC, NYECC, CPA, and COW. The County of Westchester may no longer participate due to recently initiated budget cuts.

The SPRC has debated and discussed many concepts and approaches to steam peak reduction. As described below, Company working group, comprised of representatives from its Steam Operations, Energy Management, Regulatory Services, Rate Engineering, and Energy Efficiency departments, are evaluating these concepts and approaches to determine their potential as viable programs/measures to meet the goals of the SPRC

The Company has concluded that steam capacity at the Hudson Avenue generating station is not required for design peak loads below 9,800 Mlb/hr. Based on the current steam peak demand forecast, the Company is suspending work associated with replacement of steam capacity at Hudson Avenue. An evaluation is being conducted to determine if the plant can be retired before the end of 2014.

PROGRAMS AND MEASURES

The SPRC is focusing on six types of programs and measures:

Demand Response

- The group will study both voluntary and mandatory programs and measures by which customers would reduce their use of steam during peak periods and that the Company could rely on for system planning purposes, thereby reducing the costs associated with serving a higher system peak demand.

Status

Initial feedback from the participants indicates that in order for any demand response program to be effective in reducing the steam peak, the Company should provide participating customers with capacity and energy payments. The Company is in the process of developing proposed payments levels.

To first assess the market for and level of potential demand response, the participants are working towards developing a voluntary demand response pilot.. The Company has determined that based on its new forecast a demand response program is not needed this winter but the Company will continue to work on developing a demand response program for the future. The majority of other participants, however, would like a voluntary demand response program to be developed for this upcoming heating season. In addition, assuming the continued need for a demand response program, the SPRC will consider a mandatory¹ program. In order to implement a demand response program, the following issues, among others, need to be resolved:

- (1) The development of a customer baseline methodology;*
- (2) Pricing and payment levels that consider Company avoided costs;*
- (3) The development of a measurement and verification methodology that is accurate and repeatable across account types and customer building configurations; and*
- (4) A mechanism for measuring and recovering program costs, customer incentives, and net lost revenue attributable to program implementation.*

¹ As it relates to a demand response program, the term “mandatory” means that enrolled customers would be required to respond to Company directions to reduce demand.

Obligation to Serve

- Evaluate the current tariff provisions that address the Company's obligation to serve, including a review of the legal implications of potential modifications to such provisions, to the extent that any are identified by the SPRC.
- Analyze costs that the Company bears when it attaches new load to the Steam System and maintains service to low load factor and low margin customers.
- Consider amending the steam tariff to reduce the 250 foot rule to 100 feet.
- Review tariff provisions that prescribe the customer cost responsibility associated with serving the increased load of new and existing customers to ensure that the tariffs better reflect the life cycle costs of integrating such customers into the system (e.g., by requiring contributions in aid of construction where costs exceed a threshold level).
- Consider electric and gas as service alternatives and the possibility of encouraging low load factor and low margin customers to switch to alternative heating sources.

Status

Taking into consideration the Company's legal obligation to serve, the SPRC has reviewed the practical impact of several approaches. The current steam tariff obliges the Company to serve customers within 250 feet of a steam service; the current statutory requirement applies to customers within 100 feet. The SPRC has debated at length the possibility of modifying the tariff-based obligation to serve. There is no consensus. Some participants prefer that the obligation to serve remain unchanged but want the Company to be more proactive when it reviews with customers the best strategy for serving their energy needs (e.g., steam, electric or gas) prior to submitting a steam load letter to the Company. This review could include a more accurate quantification of the cost of steam interconnection. Another possibility is that there may be enough potential lost business and conservation that the obligation to serve need not be modified in order for the Company to balance supply and demand on its system. One party suggested that the obligation to serve could be satisfied by Company-provided on-site steam service.

The SPRC examined new business by looking at the next five years and past 10 years. The analysis showed that approximately 85% of new business was within 100 feet of a steam main. Therefore, it was determined that reverting to the 100 foot rule would not likely have a material impact on the potential for the steam peak to increase. As an alternative, the Company is exploring a service prepayment requirement that is more specific to the full incremental cost of steam service, including steam production and distribution.

Energy Efficiency

- Consider for steam customers that are determined to be long term, cost effective energy efficiency programs and measures.
- Identify specific projects and programs that can be implemented (windows, insulation, trap monitoring, BMS, microturbines, condensate venturi, roofing, etc.).
- Identify energy efficiency technologies for future development, their potential for

demand reduction, and their costs.

Status

The Company provided a copy of the Energy Efficiency Potential Study, Volume 4, which had been previously released to Staff and the Evaluation Advisory Group. This study estimated the amount of steam energy savings potential based on technical, economic and achievable potential. The Company is taking these annual energy efficiency reduction estimates and converting them to estimated peak reductions. This will be provided shortly after the Company confirms certain calculations. The Company is also evaluating two recent studies that customers conducted of their buildings' energy efficiency efforts. Many of these customers' efficiency measures are driven by electric or gas incentive payments and some are to fulfill LEED certification objectives. Although the Company was unable to share the customer studies with the SPRC participants (per the customers' direction), the Company will provide to the SPRC participants (and the customers that provided the studies) the Company's evaluation of potential energy efficiency savings opportunities peak reduction impacts derived from the studies.

Some participants believe that the following information should be developed as part of the energy efficiency effort and all of the programs and measures of the SPRC (but, there was no consensus as to the need for this evaluation):

- *Steam long run avoided cost ("LRAC") estimates*
- *Total resource cost test ("TRC") for any energy efficiency program or measure that includes ratepayer subsidies and net lost revenues*

Re-Design Rates to Encourage Efficient Customer Behavior

- **Determine whether current rate structures can be modified to provide customers with additional incentives to use steam more efficiently. Any changes would be implemented on an overall revenue neutral basis.**

Status

The SPRC discussed the potential effect of redesigning demand rates to increase from 25% to 50% the amount of winter pure base revenues recovered through the demand component. The possible reasons for increasing demand rates would be to promote better price signals and to encourage demand management by steam customers. It also could reduce the cost subsidy provided by high load factor to lower load factor customers. The cost basis for changing the demand component also will be addressed by the SPRC.

Most participants believe that any increase in demand billing should commence no earlier than the 2011/2012 winter. Among other reasons, this delay would provide an opportunity to evaluate the effects of (1) the increase in steam rates effective 10/1/10; and

(2) a new segment of customers (14,000 annual Mlb and higher) experiencing their first winter of demand billing (note – these customers have based their budgets and winter operating procedures on the sample bills provided last winter at the 25% level). Accordingly, the Company intends to present the SPRC with the cost basis and analyze the potential impacts of an increase in the demand component after the winter of 2010/2011. CPA did not agree with the consensus to delay the implementation of higher demand rates.

Steam Air Conditioning and Off Peak Usage

- Consider the implications of encouraging the use of steam air-conditioning.
- Identify other off peak uses for steam.
- Determine strategies for implementing the results of the foregoing two tasks, as appropriate.

Status

The SPRC participants are considering whether a steam A/C incentive should be established and, more generally, whether optimizing annual steam usage improves the overall cost effectiveness of providing electric and steam service. Staff has advised that incentives for steam A/C could be pursued in the current Con Edison Electric Demand Response proceeding. Several SPRC participants questioned the merits of considering steam off peak usage within the SPRC other than the Company.

Expand on the Existing Customer - Sited Supply Collaborative

- Examine the risks and rewards associated with customer-supplied steam.
- Consider modifying existing tariffs and rules that pertain to the interconnection, reliable operation and potential disconnection of customer-sited CHP and on-site boilers that would address the supply of steam to the Con Edison steam system.
- Determine the extent to which steam supply from customer-sited CHP and on-site boilers that require back-up service mitigates the need for steam generation. Determine appropriate associated penalties for customer non-performance in providing contracted-for steam supply.
- Identify where the system is best suited to accept customer-supplied steam as well as its locational impacts on the system.
- Identify hourly, daily, and seasonal periods when accepting customer-supplied steam supply would be feasible.
- Develop an interconnection/operating agreement that covers such things as steam quality, steam purity, steam metering, continuous monitoring, operating parameters, and dispatchability.

Status

The Company has provided draft steam quality and chemistry specifications, as well as interconnection requirements, to the SPRC participants to review. A review of the Company's hydraulic models revealed that preferred locations for a potential CHP or boiler that could provide steam to the Company would be in: (1) the area bounded by 7th Avenue to 9th Avenue and from 30th Street to 40th Street and (2) the area south of Canal Street to the Battery west of Broadway. CPA retained a consulting engineering firm, Energy Concepts, to review the foregoing specifications and requirements. Energy Concepts is to develop a feasibility analysis from an existing customer to see how it matches up with Con Edison CHP requirements. CPA has provided pricing scenarios for energy and capacity for comment. The Company is reviewing these pricing scenarios.

Among the next steps in this process are examining the risks and rewards of customer-sited generation, determining the extent to which steam supply from customer-sited CHP and on-site boilers that require back-up service mitigates the need for steam generation, and determining appropriate associated penalties for customer non-performance in providing contracted-for steam supply.

It should be noted that the Company advised members of the SPRC that, at this time, there is no need for customer-sited steam supply in order for the Company to meet its steam supply obligations. The SPRC will, however, continue to evaluate customer-sited generation as an alternate to future capital investments and supply sources.

TASKS

- Establish an aggregate steam peak reduction goal and schedule necessary to mitigate the need for new replacement steam capacity.
- For each of the foregoing programs and measures:
 - 1) Estimate how much each program and measure could affect the steam peak demand forecast and steam sales.
 - 2) Estimate how each program and measure would have an impact on the minimum loads on the steam system as well as the impact on the dispatch of steam production units.
 - 3) Determine the actions required to implement each program and measure.
 - 4) Determine cost implications associated with the implementation and maintenance of the programs or measures and how such costs would be recovered.
 - 5) Determine the bill impacts on affected customers.
 - 6) Determine the resources required to support the program and measures.
 - 7) Determine the life of the program and measure, as applicable.
 - 8) Develop a preliminary implementation schedule.
 - 9) As provided for in the pending Steam Joint Proposal, the Company will be permitted to seek recovery of all net lost revenues (*i.e.*, net of avoided costs, if any) attributable to the implementation of such programs or measures in a manner to be determined by the Commission. The Company's filing(s) with the Commission will, to the extent

practicable, include information on the amount of the revenues projected to be lost during each rate year, support for any calculations provided, estimated bill impacts of the lost revenues on an overall customer class basis, and the details of the Company's proposed mechanism for identifying, measuring, and recovering lost revenues attributable to the implementation of any such programs or measures. If the Company's request for recovery of lost revenues is related to programs other than energy efficiency or demand response programs, the Company will demonstrate why the Company should be permitted such lost revenue recovery. Any rate changes approved by the Commission will be implemented on an overall revenue neutral basis.

- At the conclusion of the SPRC, the Company, with input from interested parties, will file a report with the Commission on the results of the collaborative efforts. All parties will have the opportunity to comment on the report. The Company will separately file with the Commission for approval any programs or measures developed by a consensus. Any proposed tariff changes required to implement such program or measure shall be submitted with this report or as soon thereafter as is practicable.

- Nothing precludes the Company, either alone or as part of a consensus, from proposing on or after August 1, 2010 a program or measure to the Commission for approval.

SCHEDULE

Week of May 24:

Submit final scoping document to the Judge and hold conference call with all participants to discuss next steps

Week of June 13:

Meet to review progress on analyses and assignments

Thereafter:

Meet weekly by conference call to discuss and review progress

Meet monthly to present results and status reports

First draft of SPRC report due by October 1, 2010

Final draft of SPRC report due by November 1, 2010

File the report with the Commission by December 31, 2010

Status

We are working to meet these target dates.