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03-S-1672

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June 28, 2007

*Via Overnight Delivery*

Honorable Jaclyn A. Brillig  
Public Service Commission  
Three Empire Plaza  
Albany, New York 12223

Re: Case No. 03-S-1672 - Con Edison Steam Business Development Plan

Dear Secretary Brillig:

Consolidated Edison Company of New York, Inc. ("Con Edison" or "Company") respectfully submits an original and five copies of its July 1, 2007 steam business development plan quarterly status report, as required by the Commission's December 5, 2005 order in Case 03-S-1672.

Yours very truly,

Richard B. Miller

cc: Active Parties to Case No. 05-S-1376 (via e-mail)  
Enc.

**JULY 2007**  
**STATUS REPORT ON**  
**STEAM BUSINES**  
**DEVELOPMENT PLAN**  
**ACTION ITEMS**

**Work Plan No. SBDP- 2**  
**Pipeline Asset Management System**

**Objective:** Develop a pipeline asset management profitability/value analysis program.

**Overall Completion Date:** September 1, 2007

**Summary of Activities, 1<sup>st</sup> Quarter 2006:**

1. Prior in-house studies were reviewed. The parameters and basis of these efforts can be used and enhanced upon for additional on-going analysis.
2. System-wide unit costs have been identified using the Annual Report (FERC Form 1) for year ending December 31, 2004, and, on an interim basis, the Operating & Financial report of December 2005. A new Annual Report, for the period ending December 31, 2005, was available in April 2006.
3. Year-end costs have been identified in order to benchmark pipeline (radial main) profitability. The items considered in establishing a ranking metric of pipeline profitability include elements specific to steam production, distribution, and carrying charges.

The following unit costs have been identified:

Production Elements

- Sales Revenues – (Accts. 601, 604, 605, 607, 608, 610, and 615)
- Operation and Maintenance – fuel, water (Accts. 701 – 714)

Distribution Plant Elements

- Main Investment (Acct. 353)
- Services (Acct. 359)
- Maintenance of Mains and Services (Accts. 756 – 772)
- Pipe Lengths (feet) in service, by diameter (inches)

Carrying Charges

- Production Plant in Service (Accts. 310, 311, 312, 315, and 316)
- Depreciation on Mains (Acct. 353)
- Franchise Taxes on Mains
- Rate of Return

**Anticipated Activities, 2<sup>nd</sup> Quarter 2006:**

1. Commence evaluation of customer account costs for production costs, distribution costs, and carrying charges such that segment-specific (de-averaged) pipeline costs may be calculated.

### **Summary of Activities, 2nd Quarter 2006:**

1. The following additional unit costs have been identified:
  - Production Elements  
Production Plant – (Accts. 310, 311, 312, 315, 316)
  - Distribution Elements  
Trap Manholes – quantity and inspection cost  
Slip Joint Manholes – quantity and inspection cost  
Pump Manholes – quantity and inspection cost
  - Operating Revenues  
Send out – Mlbs sold
2. Carrying charges were eliminated from the evaluation based upon advice from the Accounting department. Mains are regulatory assets, included in rate base, and therefore are subject to capital recovery from the customer through base rates (Depreciation and Rate of Return). Any asset, regardless of the age at which it is retired, will be fully recovered through the rate base.
3. The spreadsheets that accompanied the original in-house evaluation have been updated with the above referenced Distribution Plant cost items.

### **Anticipated Activities, 3rd Quarter 2006:**

1. Refine the original database that accompanied the in-house radial main evaluation with additional data that can be extracted from the electronic mapping system to more effectively identify underutilized mains.
2. When the manual mapping is completed for Work Plan SBDP No. 3, this map will be used as a tool to determine if there are any potential customers in close proximity to a radial main that has low usage. If there are no potential customers that exist on a low usage radial main, a well-informed decision can be made whether the radial main can be capped, i.e., disconnected for the system, consistent with the Company's Public Service Law obligations.

### **Summary of Activities, 3<sup>rd</sup> Quarter 2006:**

1. In order to refine the database from the original in-house radial main evaluation, an examination of approximately 240 radial mains was conducted by comparing the data from the in-house radial main evaluation with the steam system map (Steam Operations Mapping and Information System or SOMIS). Corrections were made to the database to conform to this examination. In addition, we determined a method for continually updating the database.

2. As described in Work Plan No. SBDP-3, Mapping & Locational Analysis, the manual mapping tool is not yet completed.

**Anticipated Activities, 4<sup>th</sup> Quarter 2006:**

Upon the completion of the manual mapping tool, we will update the original in-house radial main evaluation spreadsheet with sales and usage (pure base revenue and Mlbs) information on a service line-specific basis.

**Summary of Activities, 4<sup>th</sup> Quarter 2006:**

As described in Work Plan No. SBDP-3, Mapping & Locational Analysis, we have acquired software for a Manhattan real estate property database and requested the vendor to incorporate the location of the steam mains into that database.

**Anticipated Activities, 1<sup>st</sup> Quarter 2007:**

Following receipt of the vendor's work, and the integration of the customer database, we will update the prior radial main analysis to identify "underperforming" mains and determine potential new customers located on or near these mains.

**Summary of Activities, 1st Quarter 2007:**

Over half of the under and/or marginally performing steam mains have been examined against our internal mapping system (SOMIS) and the recently acquired Manhattan real estate property database. This examination has identified potential radial main retirement opportunities, as well radial mains that are now profitable due to the recent addition of new business. As additional new accounts are acquired on radial mains, customer account information will be updated in the database.

**Anticipated Activities, 2nd Quarter 2007:**

1. We will continue to evaluate the remaining under and/or marginally performing steam mains.
2. We will complete our investigation on the value of incorporating steam main location information into the Manhattan real estate property database.
3. We will update unit cost items, as appropriate.

**Summary of Activities, 2nd Quarter 2007:**

1. We have completed the evaluation of the remaining under and/or marginally performing steam mains.

2. We have completed our investigation on the value of incorporating steam main location information into the Manhattan real estate property database and determined not to incorporate the information because there is a limited benefit and there were security concerns over providing steam main information to the vendor.
3. Unit cost items have been updated.

**Anticipated Activities, 3rd Quarter 2007:**

We will prepare an evaluation report.

**Work Plan No. SBDP-8**  
**Conduct a Marginal Cost-of-Service Study**

**Objective:** To prepare and submit a new marginal cost-of-service study.

**Overall Completion Date:** June 1, 2007 (assuming that the next rate case will be filed in October 2007)

**Summary of Activities, 1<sup>st</sup> Quarter 2006:**

None required.

**Anticipated Activities, 2<sup>nd</sup> Quarter 2006:**

None anticipated.

**Summary of Activities, 2<sup>nd</sup> Quarter 2006:**

None required.

**Anticipated Activities, 3<sup>rd</sup> Quarter 2006:**

1. Organize and hold project kick-off meeting with relevant Company personnel.
2. Develop schedule and scope of work for study, due on September 30, 2006.

**Summary of Activities, 3<sup>rd</sup> Quarter 2006:**

A meeting of the Marginal Cost Working Group (MCWG) was held on September 13, 2006. A scope-of-work and project schedule were approved.

The MCWG is comprised of personnel from the following Con Edison departments: Rate Engineering, Steam Business Unit (SBU), and Energy Management. The next meeting of the MCWG is scheduled for mid-October, at which time the methodology for calculating the marginal cost will be discussed and finalized.

Once the methodology is finalized, the necessary data will be assembled and analyzed over the next few months. Project status meetings will be held as necessary during the 4<sup>th</sup> Quarter 2006.

**Anticipated Activities, 4<sup>th</sup> Quarter 2006:**

1. Finalize methodology.
2. Assemble data and perform initial analyses
3. Hold Working Group meetings as required.

**Summary of Activities, 4th Quarter 2006:**

The methodology for calculating the marginal cost was discussed and finalized at a meeting of the MCWG.

**Anticipated Activities, 1st Quarter 2007:**

1. Develop estimated marginal cost calculations and prepare a first draft of the study report.
2. Hold meetings of the MCWG, as needed.

**Summary of Activities, 1st Quarter 2007:**

1. A first draft of the study was circulated to the MCWG for comments.
2. A meeting of the MCWG was held in March 2007 to discuss various open issues related to the calculations.

**Anticipated Activities, 2nd Quarter 2007:**

Update the draft study and circulate for review.

**Summary of Activities, 2nd Quarter 2007:**

An updated draft study was completed and circulated for management review.

**Anticipated Activities, 3rd Quarter 2007:**

Finalize the report, following management review.

**Work Plan No. SBDP-13**  
**Develop a Condensate Re-Use Product**

**Objective:** Assess effectiveness of pre-selected condensate re-use products and seek recognition and integration of its benefit into appropriate energy efficiency programs, such as the United States Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) program.

**Overall Completion Date:** September 1, 2007

**Summary of Activities, 1<sup>st</sup> Quarter 2006:**

1. Reviewed the analyses and conclusions of the Condensate Re-Use study prepared by Goldman Copeland in June, 2005. The following condensate re-use measures were identified for studying in a pilot program:

- a. Cooling tower make-up
- b. Hot water pre-heating

These measures were chosen based on their anticipated potential for cost effective water or energy savings. The consultant found that retrofit work for these measures in office buildings that do not operate 24 hours per day is generally not cost effective. The consultant also found that retrofit work to use condensate in laundry facilities, although potentially cost effective in hotels and hospitals, may have limited applicability because there are relatively few of these types of buildings in Manhattan.

2. Identified the following customers who have these measures installed:

<b>Customer:</b>	<b>Measure Installed:</b>
Office building	Cooling Tower Make-Up
Office building	Hot Water Preheating
Office building	Hot Water Preheating
Hotel	Hot Water Preheating

**Anticipated Activities, 2<sup>nd</sup> Quarter 2006:**

1. Establish a data logging process to measure and quantify water and heat savings (with support of consulting engineer).
2. Develop a set of representative product specifications for selected applications and post them on the Company web site (with support of consulting engineer).
3. Seek partnership opportunities with NYSERDA and the City of New York to support installation of pilot or demonstration systems.

**Summary of Activities, 2<sup>nd</sup> Quarter 2006:**

1. Established a data logging process to measure and quantify water and heat savings.
2. Developed a set of guidance sketches for cooling tower make-up and domestic hot water pre-heating using condensate reuse/recovery applications and posted them on the Company Web site.

3. Started discussing partnership opportunities with NYSERDA for a pilot program. The following is a proposed pilot program scope:

- Install a data logger, water meters, and temperature sensors in up to four customer locations that already use condensate to either preheat domestic hot water or as cooling tower make up (at least one customer for each measure).
- Collect data for 3 months in the case of domestic water preheating and for five cooling months (May – September) for cooling tower make-up.

4. Obtained tentative agreement with a residential customer who could potentially participate in a pilot program to measure steam savings resulting from domestic water preheating using condensate.

5. Started discussions with New York City to identify City office buildings that use condensate for cooling tower make up and that would be interested to participate in a pilot program to measure water savings.

**Anticipated Activities, 3<sup>rd</sup> Quarter 2006:**

1. Obtain tentative agreement for pilot program participation from up to four customers.
2. Develop pilot program installation cost estimates and obtain commitment for any funding from NYSERDA or other sources.

**Summary of Activities, 3<sup>rd</sup> Quarter 2006:**

1. Obtained tentative agreement for pilot program participation from two customers. One is a large residential customer who currently reuses condensate to preheat domestic water. The other is a large commercial customer who reuses condensate to preheat some of its domestic water and for cooling tower makeup.
2. Developed engineering designs for temperature sensor and flow meter installations at these two customer locations. Obtained installation cost estimates.
3. Obtained NYSERDA's agreement to allocate funding in support of this effort. It will issue a Program Opportunity Notice in November to include condensate reuse pilot projects.

**Anticipated Activities, 4<sup>th</sup> Quarter 2006:**

Prepare and seek to finalize agreements for two customer sites.

**Summary of Activities, 4<sup>th</sup> Quarter 2006:**

Prepared draft agreements for two customers. The Company will finalize the agreements after it receives the final cost estimates from the customers.

**Anticipated Activities, 1<sup>st</sup> Quarter 2007:**

Execute agreements for both customer locations and have customers initiate installation work.

### **Summary of Activities, 1<sup>st</sup> Quarter 2007:**

1. Executed an agreement for a high-rise residential complex that reuses condensate to preheat domestic water.
2. An agreement was sent to the second customer and we are awaiting a response.

### **Anticipated Activities, 2<sup>nd</sup> Quarter 2007:**

1. Explore with the NYC Department of Environmental Protection (NYCDEP) a discount or credit for water and sewage rates for condensate re-users.
2. Complete the installation at the residential location, program the data logger, and initiate data acquisition.
3. Execute the agreement with the second customer.
4. Explore possible credits for condensate re-use with the USGBC and the U.S. Environmental Protection Agency's EnergyStar program.

### **Summary of Activities, 2<sup>nd</sup> Quarter 2007:**

1. Contacted the NYCDEP to clarify its rules pertaining to granting a wastewater allowance by reducing the conversion factor (the factor used to convert steam sales quantity to condensate discharge) for steam customers who re-use condensate. NYCDEP clarified that condensate re-use customers may apply for a reduction in the conversion factor. This information will be posted on the Steam Web site.
2. Secured partial funding from NYSERDA for the two pilot projects.
3. The hardware installation at the residential location is complete.
4. Continued to negotiate with the commercial customer.
5. We have learned that heat recovery from condensate that offsets steam consumption is eligible for EPA's EnergyStar program and the LEED program. Furthermore, condensate reuse may help with LEED recognition because doing so will improve water usage efficiency.

### **Anticipated Activities, 3<sup>rd</sup> Quarter 2007:**

1. Initiate data acquisition at both locations to assess effectiveness.



## ***Work Plan No. SBDP-18***

### ***Develop New Steam-to-Steam and Electric-to-Steam Chiller Incentives***

**Objective:** working with the appropriate government agency or agencies, develop new steam-use incentives to complement existing government programs. Develop means to inform existing and potential new customers about these incentive programs.

**Overall Completion Date:** ongoing

#### **Summary of Activities, 1<sup>st</sup> Quarter 2006:**

1. On December 15, 2005, Con Edison met with the New York City Economic Development Corporation (NYCEDC) to discuss the creation of a steam incentive program that provides a rate discount to participants who install and operate steam chillers. It is noted that existing programs such as the Business Incentive Rate (BIR) and the Energy Cost Savings Program (ECSP) provide its participants with roughly a 30% reduction in their electric or gas bills, thereby promoting the use of non-steam cooling equipment.
2. On October 26, 2005 Con Edison met with the New York Power Authority, the Lower Manhattan Construction Command Center (LMCCC) and Staff to discuss the potential development of an incentive for steam-based chillers serving properties using NYPA power. Con Edison's analysis established the projected electric usage and demand reductions associated with a representative hybrid chiller plant, and converted these reductions to equivalent present-value saving based on forecasted Day-Ahead Market (DAM) and Incremental Capacity (ICAP) prices. The purpose of the meeting was to establish the potential viability for steam cooling to serve the Freedom Tower, but could be applicable to other NYPA customers that are installing new or replacement cooling equipment. The presentation established that hybrid chillers could be economical if NYPA were willing to make a contribution toward the capital cost of the chiller based in part upon the present value savings in DAM and ICAP prices. NYPA has not yet responded to this presentation.
3. On January 13, 2006, Con Edison provided to NYCEDC an analysis of the proposed terms for a new ECSP incentive program. Con Edison evaluated the economic contribution of incentives by Con Edison (via its SC-5 tariff), NYCEDC (new incentive), and NYSERDA (at approx. \$1,100 per kW, or roughly 75% of the first cost differential).
4. On February 24, 2006 Con Edison met with the NYCEDC to further review the proposed program. The primary objective was to establish the content of a presentation to be made to the NYC Office of Management and Budget (OMB) to substantiate the need and annual cost for the program. It was agreed that a new incentive program, specifically to promote steam cooling, would be proposed in order

to avoid conflict or modifications with the scope and intent of the existing NYC programs.

5. March 2006: The Company helped the NYCEDC prepare a presentation for City government officials that provides the justification for a steam cooling incentive program.

**Anticipated Activities, 2<sup>nd</sup> Quarter 2006:**

1. Continue interagency meetings and conversations between NYCEDC and Con Edison to prepare a legislative proposal and to address appropriate modification to ECSP program.
2. Seek the development of a hybrid chiller incentive program with NYPA.
3. Con Edison, with NYCEDC and NYPA input and concurrence, will complete strategic announcement(s) of the new programs.

**Summary of Activities, 2<sup>nd</sup> Quarter 2006:**

1. The Company made inquiries but is still waiting to hear from NYEDC on whether the City is ready to move forward with an amendment to ECSP. In addition, the Company reviewed the need for a steam BIR with the City and concluded that no steam BIR was necessary. The potential for making changes to the electric BIR to include a steam component will be discussed during the next electric rate case.
2. The Company made contacts to determine if NYPA was prepared to move forward with a hybrid chiller incentive program and was informed that NYPA was not ready.

**Anticipated Activities, 3<sup>rd</sup> Quarter 2006:**

1. Continue working with the NYCEDC on development of an ECSP steam cooling program that can be proposed for the next legislative session.
2. Continue to pursue a hybrid chiller incentive program with NYPA.

**Summary of Activities, 3<sup>rd</sup> Quarter 2006:**

1. NYCEDC has submitted a proposal to OMB for review. OMB contacted Con Edison for verbal clarification. OMB subsequently submitted information request to NYCEDC. Con Edison is assisting NYCEDC in preparing a response.
2. The Company made contacts to determine if NYPA was prepared to move forward with a hybrid chiller incentive program and was informed that NYPA was not ready.



**Summary of Activities, 2<sup>nd</sup> Quarter 2007:**

1. We answered an additional information request from the City concerning the proposed ECSP program. We are awaiting the City's response.
2. The current plan of the developer of the WTC towers is to not use central chilled water plants, which was the only viable option for steam chilling.
3. We met with NYSERDA to discuss Con Edison's concerns about incentive levels for steam cooling. They indicated that they may be able to raise the project incentive cap of \$1 million. They will also review the "65% of eligible cost" and "differential electric vs. steam installation cost" incentive caps for possible changes.

**Anticipated Activities, 3<sup>rd</sup> Quarter 2007:**

We will continue to work with the City and NYSERDA.