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November 29, 2006

VIA OVERNIGHT MAIL
Honorable Jaclyn A. Brilling
Secretary
State of New York
Public Service Commission
Three Empire State Plaza
Albany, New York 12223-1350

Re: Case 05-S-1376 – Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Consolidated Edison Company of New York, Inc. for Steam Service.

Dear Secretary Brilling:

The Commission's Order Determining Revenue Requirement and Rate Design, issued on September 22, 2006 in the above-referenced proceeding, provides as follows:

> Within six months of the date this Proposal is filed, the Company will develop, with input from interested parties, an implementation plan for one or more cost-beneficial projects for reducing overall steam losses or improving efficiency of the production/distribution of steam. The Company will file with the Commission and provide active parties to this proceeding with a copy of the implementation plan on or before December 1, 2006.

Enclosed please find an original and five copies of implementation plans for two efficiency projects. The Company provided these plans to interested parties for their review on November 20, 2006.

Please contact me if you have any questions regarding this matter.

Very truly yours,

Richard B. Miller

cc: Active Parties (via e-mail)

November 29, 2006

Con Edison Steam Rate Plan Efficiency Projects

Steam Main Re-Insulation In Wet Areas

1.0 Project Description

The Con Edison steam system has some mains that are installed in wet locations that are below sea level and affected by tidal action of the Hudson and East Rivers and heavy rains. Steam mains are installed with a thermal insulation to reduce thermal losses and encased in a housing that provides protection from mechanical damage and water infiltration. In wet locations, over time, water can infiltrate the housing and degrade the insulation leading to increased heat loss. This re-insulation need precipitated the investigation into trench-less, pumpable methods of re-insulating steam mains.

2.0 Project Cost-Benefit

The Ceasefire™ insulation is a pumpable product that does not require expensive trenching and has proven itself to be durable. Con Edison completed a reinsulation project in November 2005 for East 10th to East 13th Street on Avenue D. Some quantitative data has been gathered during the winter 2005-2006 for steam flows of 300 – 600 Mlbs/hr under dry conditions. To calculate the payback period for this re-insulation project, the initial results for that insulation project were compared against the savings gained from a decrease in the heat loss. The following table compares pre- and post-insulation cases where the values were similar in terms of mass flow rate and pressure.

	Pre-insulation	Post-insulation	Savings
Date	5/7/03	7/21/06	
Mass flow rate	302 Mlbs/hr	302 Mlbs/hr	
Absolute Pressure	204 psia	202 psia	
Heat loss	2304.13 BTU/hr-ft	869.46 BTU/hr-ft	
Hourly cost per ft	0.0413 dollars/ft-hr	0.0155 dollars/ft-hr	**0.0258 dollars/ft-hr**
Date	3/20/03	7/21/06	
Mass flow rate	433 Mlbs/hr	433 Mlbs/hr	
Absolute Pressure	215 psia	213 psia	
Heat loss	2782.82 BTU/hr-ft	868.86 BTU/hr-ft	
Hourly cost per ft	0.0502 dollars/ft-hr	0.0155 dollars/ft-hr	**0.0347 dollars/ft-hr**
"The Ceasefire"	insulation is a pumpable	product that does not	require expensive trench
Date	2/5/03	7/21/06	
Mass flow rate	497 Mlbs/hr	500 Mlbs/hr	
Absolute Pressure	226 psia	223 psia	
Heat loss	2792.31 BTU/hr-ft	768.66 BTU/hr-ft	
Hourly cost per ft	0.0506 dollars/ft-hr	0.0138 dollars/ft-hr	**0.0368 dollars/ft-hr**
gained from a decrease in the heat loss. The		following table compares	pre- and post-insulation
		Average Savings:	**0.0324 dollars/ft-hr**

The Company decided to conservatively estimate savings at 2.5 cents/ft-hr (based on lower flow rates). Using this amount, the yearly savings can be calculated as:

Total Yearly Savings = Savings per ft $* L_{13th\ to\ 10th\ st.}$

$$Total\_Savings_{yearly}\left[\frac{\$}{yr}\right] = 0.025\left[\frac{\$}{ft-hr}\right] * 865[ft] * 24\left[\frac{hr}{dy}\right] * 365\left[\frac{dy}{yr}\right] = \$189K/yr$$

The total costs for the re-insulation project from E13th Street to E10th Street were approximately $580,000.

Therefore, the simple payback period can be calculated as follows:

$$\text{Payback Period} = \frac{\text{Costs for Re - insulation project}}{\text{Total Annual Savings}}$$

$$PaybackPeriod = \frac{\$580K}{\$189K/yr} = 3.1yrs$$

3.0 Project Timetable

The present plan is as follows:

2008 would be devoted to re-insulation of a second portion of the Avenue D main. The Company will continue to evaluate the results of both Avenue D projects. Additional areas of re-insulation (after 2008) will be determined based on the results of the two re-insulation projects through 2008.

Year	Location	ELEV.	Length [ft]	Approx. Cost
2008	Avenue D: 10th Street to 8th Street	0-2.5'	~480	~$350,000

74th Street Station - Unit 122 Air Preheater Basket Replacement

I. Project Description:

The proposed project is to replace the Unit 122 air preheater (AH) baskets and seals in both of the Unit's AH's (122-1 and 122-2). The existing air preheater baskets in Unit 122 were installed in the mid 1980's. These replaceable regenerative baskets deteriorate over time due to acid corrosion from the sulfur content of the fuel and material wastage. As a result of such deterioration, these baskets have lost their ability to effectively transfer the heat from the exiting flue gas to the incoming combustion air and thus basket replacement is recommended. This causes higher flue gas exit temperatures, which result in a loss of unit efficiency. The new baskets should last about 20 years.

II. Project Cost-Benefit

The project payback is estimated to be approximately three years. The estimated project capital cost is $500,000.

Over the last 12 months the AH gas outlet temperature, on average, is running approximately 40 degF above normal. Every 40 degF increase in AH outlet temperature is equal to a 1% loss in efficiency. Max load testing over the last 12 months averaged 454Klb/hr steam sendout at 842 psig and 843 degF with an average feedwater temperature of 372 degF. The enthalpy of the outlet steam and feedwater is calculated from the steam tables.

Heat out of the boiler [btu/hr] = Steam sendout [lb/hr] x (enthalpy steam – enthalpy water [btu/lb])

490×10^6 btu/hr = 454Klb/hr (1425 - 345btu/lb)

Heat into the boiler [btu/hr] = Heat out of boiler [btu/hr] / efficiency [%]

For a change in efficiency of 1% the difference in heat input to the boiler is approximately 7×10^6 btu/hr.

Average fuel costs = 8.82$/mmbtu

Cost of the extra fuel usage [$/hr] = Change in heat input [btu/hr] x Cost of fuel [$/mmbtu]

61.74$/hr = 7×10^6btu/hr x 8.82$/mmbtu

Average capacity factor for the 74th St HP boilers over the last 7 years = 33.9%

Payback [yr] = Project Cost [$] / (Extra Fuel Usage [$/hr] x 8760 [hr/yr] x Capacity Factor [%])

2.7yrs = $500,000/ ($61.74/hr x 8760hr/yr x 33.9%)

III. Project Timetable:

The new baskets will be ordered by January 2007 as they have a four month lead time. The installation of these baskets is projected to take place by the fall 2007. Installation of new baskets and seals takes approximately four weeks.