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The Real Economics of Steam

Catherine Luthin - May 22, 2008

Look at the Whole Picture

The annual cost of Steam is not \$30/Mlb

- Understand how the rate is calculated

Review Tariff Options

- Summer cooling discount
- SC 5 negotiation

NYSERDA Incentives

Potential Expansion Plans

Do not overestimate the cost of cooling

Example Steam AC Customers

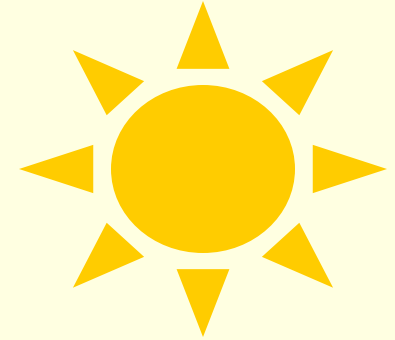
Utility Charge		Annual Cost	Heat and Domestic Hot Water	Summer Cooling
Consumption	#	#	#	#
Demand	#	#	#	
Customer Charge	#	#	#	
FAC	#	#	#	#
Taxes	#	#	#	#
SC2	\$26.39	\$31.66	\$18.58	
SC2 No2	\$25.59	\$32.97	\$18.52	
SC3	\$24.20	\$27.11	\$20.25	
SC3 No2	\$25.86	\$26.86	\$22.54	

↑
Annual

↑
Winter

↑
Summer

Summer Cooling Discount



- **Provision D** - Existing steam customer, replacing or expanding steam air conditioning capacity.
- **Provision E**- Replacement of electric air conditioning with steam.
 - Must notify 2 months before installation of the system to receive a discount
 - All usage after the first 250 Mlbs of steam is reduced by \$2 per Mlb for two years.
- Service Classifications can be found at <http://www.coned.com/documents/steam/Rates.pdf>

Negotiating with Con Edison

- **This SC5 option requires you to do your homework!!**
 - Templates are available for heating and cooling. Must show the detail requested.
 - Demonstrate the price of steam is a major factor to explore alternatives.
 - The alternative must be viable.
 - Agreement to a minimum level of steam use for a period of time.

NYSERDA Incentives

Current Program - Peak Load Reduction Program kW reduction performance incentive.

- Customer must be eligible/receive Con Edison SC 5 steam rate.
- \$600/kW avoided not installing electric system, kW calculated from baseline 2% more efficiency than code.
- Incentive limited to incremental cost of steam system over new electric system.
- Engineering Technical Assessment required.
- Maximum incentive per facility 1.25 million

NYSERDA Incentives (continued)

Future Program - Existing Buildings Program (combination of the Peak Load Reduction program and Enhanced Commercial Industrial Performance Program) kWh performance incentive - EEPS directive (Summer 2008).

- Program details being finalized
- Customer must be eligible/receive Con Edison SC 5 steam rate

NYSERDA Incentives (continued)

- Incentive structure will be based on annual kWh savings compared to electric system 2% more efficient than energy code
- Incentive limited to incremental cost of steam system over new electric system
- Engineering Technical Assessment required

Potential Expansion Plans

- If your expansion is significant, current electric capacity may be insufficient.
- Look at the capital cost of steam versus electric equipment.
- Look at the tariff options and incentives to arrive at the difference.
- Compare to the internal facilities electric capacity and additional Con Ed facilities cost.
 - New Facilities
 - \$900 to \$1,000 per kW for power required
 - Expansion
 - EDF (Excess Distribution Facilities) Charges
 - \$180 to \$210 per kW for additional service

The Bottom Line

**Before You make a decision regarding
your fuel choice, all options
should be explored.**