



Memorandum

Date: August 24, 2007
To: Mira Vowles
From: Mark Frankel
Re: Incremental costs of package

The following identifies the incremental costs of the measures in the current small office package based on the RTF Subcommittee call on 8/16/07:

Measure	Notes	Incremental Cost
CEE Tier 2 Efficiency	Cost includes upgrade from code to Tier 1 and from Tier 1 to Tier 2 combined.	For small units: \$150/ton For large units: \$185/ton
Glazing Upgrade	Two measures are combined; U-value improvement and SHGC improvement. Upgrade cost carries both measures	\$2.75 per sf of window
Enhanced Economizer	Measure includes specific control and configuration upgrades, plus simple performance verification protocol at installation	\$250/unit for small equipment \$500/unit for large equipment serving VAV
LPD reductions to 0.75 wsf	Incremental cost based on upgrade cost per fixture. Prototype includes 300 fixtures.	\$37 per fixture
Lighting Controls; Occupancy sensors in areas where code allows timeclock for loads over 150w. These controls must be commissioned.	Incremental cost based on cost per sensor/controller. Prototype includes 18 sensor/controller locations.	\$312/sensor/controller
Integrated Design	Goal of measure is reduced equipment capacity and fan energy. Incremental cost is negative (a savings). Capacity reduction of 7 tons indicated in prototype analysis.	(\$1000/ton) savings

