



Metro Nashville
DISTRICT ENERGY SYSTEM

Advisory Board Quarterly Meeting
First Quarter FY09

Presented to
District Energy Advisory Board

November 20, 2008



Agenda

1. Call to Order
2. Election of Chair & Vice Chair
3. Review & Approval of Previous Meeting Minutes
4. Summary of Performance
5. Natural Gas Purchasing Up-Date
6. Financial Reports – 1st Qtr FY09
7. Capital Projects Review
8. DES Capacity – New Convention Center
9. Other Board Member Items
10. Adjourn



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- 1. Call to Order*
- 2. Election of Chair & Vice Chair*
- 3. Review and Approval of Previous Meeting Minutes*



4. Summary of Performance

Contractor (CNDE) is in compliance with their contractual obligations for FY09.

-  Excellent Performance – No Improvement Necessary
-  Satisfactory Performance – Some Improvement Could Be Made
-  Poor Performance – Much Improvement Necessary



Summary Table 4: Customer Cost Comparison for the Previous 12 Months

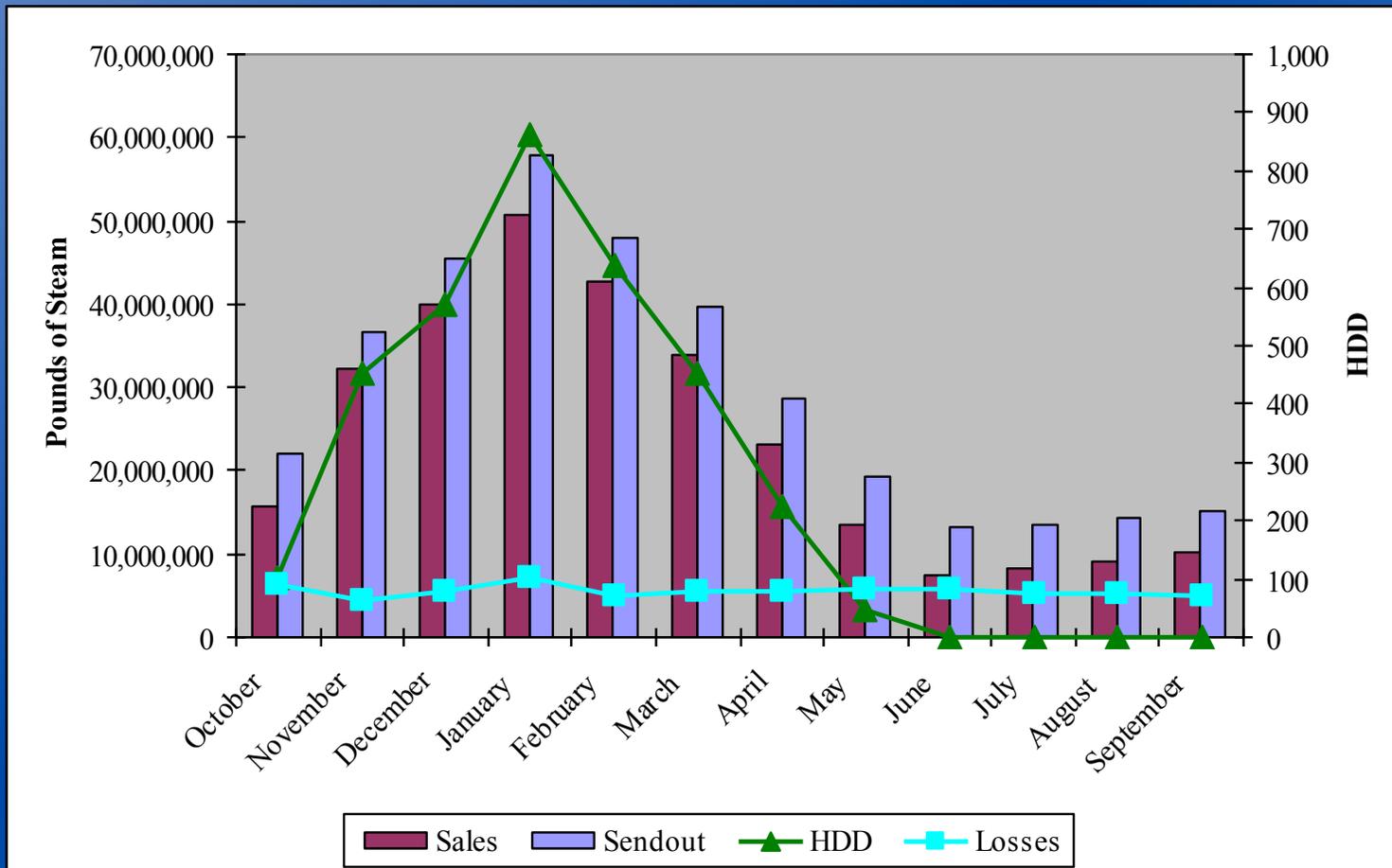
	Steam (\$ millions)			Chilled Water (\$ millions)		
	10/06 – 9/07	10/07-9/ 08	% Diff.	10/06-9/ 07	10/07-9/ 08	% Diff.
Private	\$2.587	\$2.350	-9.2%	\$3.877	\$3.883	<0.2%
State	\$3.150	\$2.898	-8.0%	\$3.144	\$3.224	2.5%
Metro	\$3.330	\$3.162	-5.0%	\$4.531	\$4.591	1.3%
New Customers	\$1.558	\$1.503	-3.5%	\$3.068	\$3.120	1.7%
Aggregate	\$9.067	\$8.410	-7.2%	\$11.552	\$11.698	1.3%

Includes MFA allocated to Metro Buildings (post-True-up)



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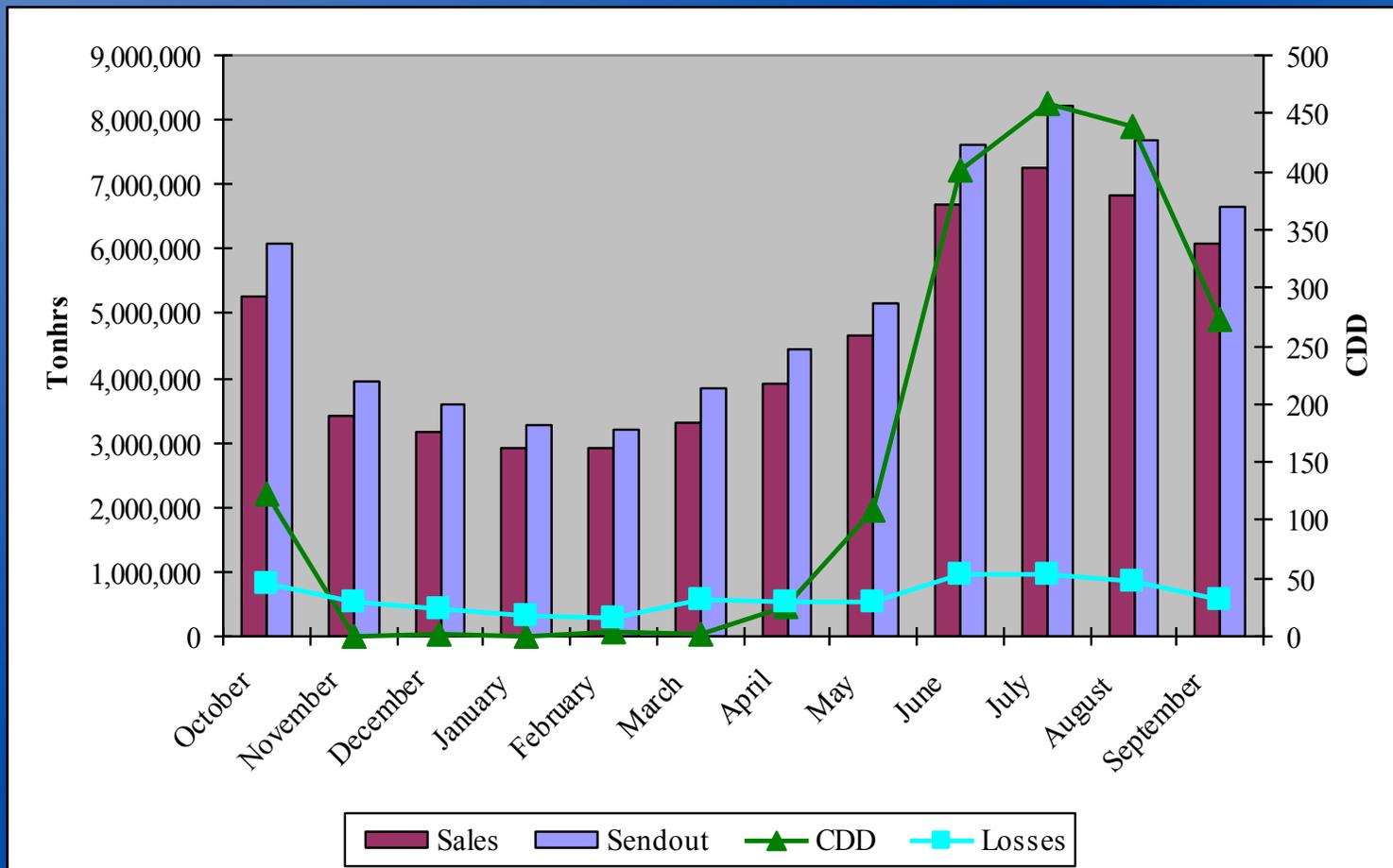
FY08 Operations: Steam





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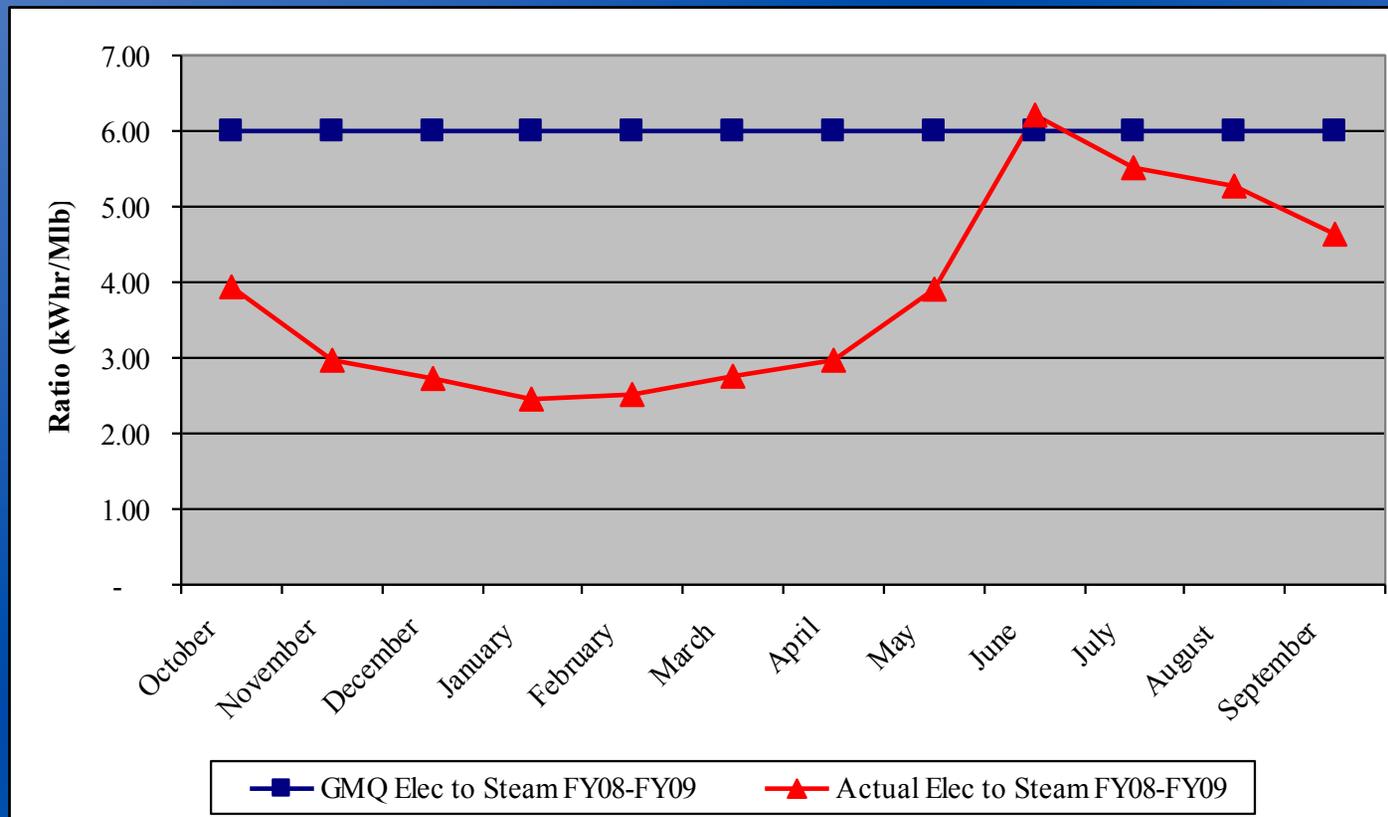
FY08 Operations: Chilled Water





Performance Measurement FY08: Steam

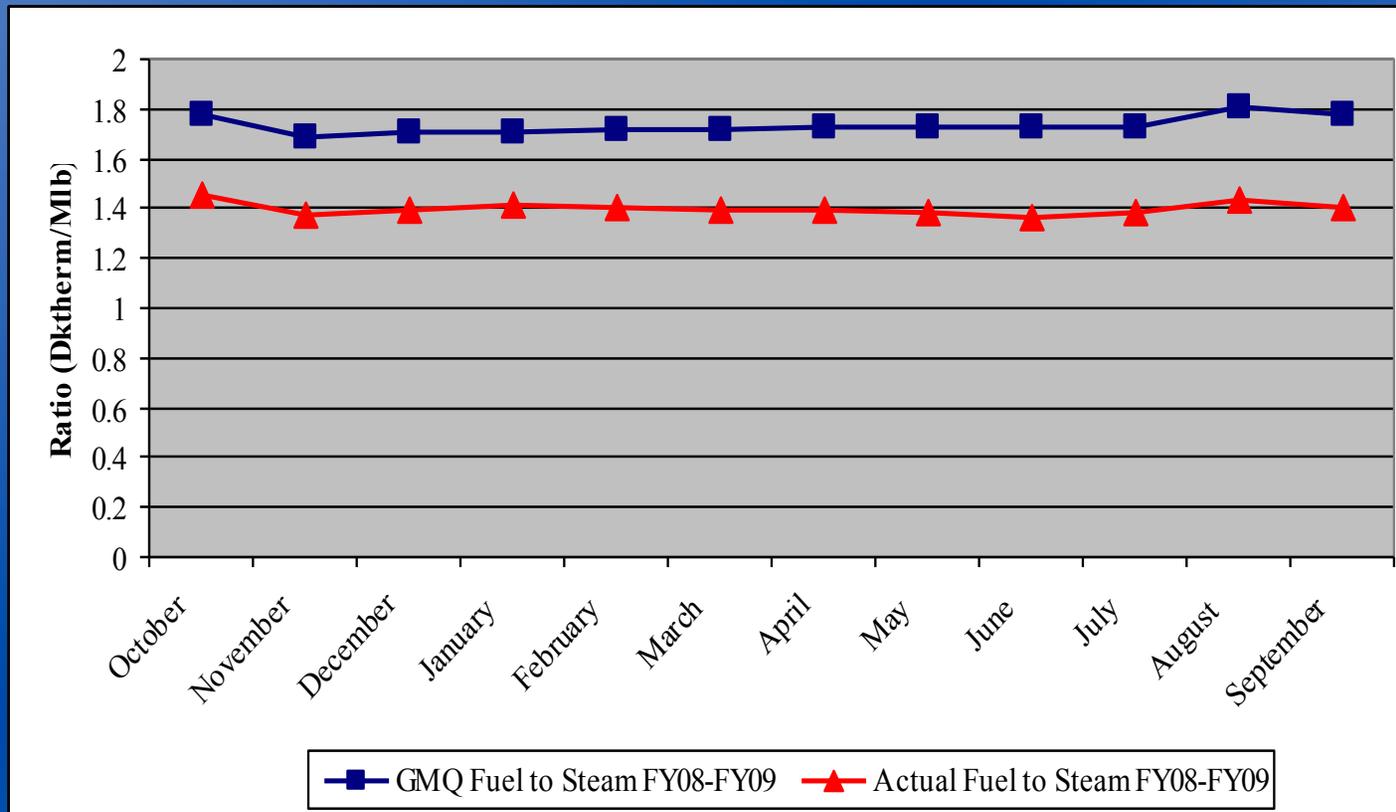
Electric Conversion ●





Performance Measurement FY08: Steam

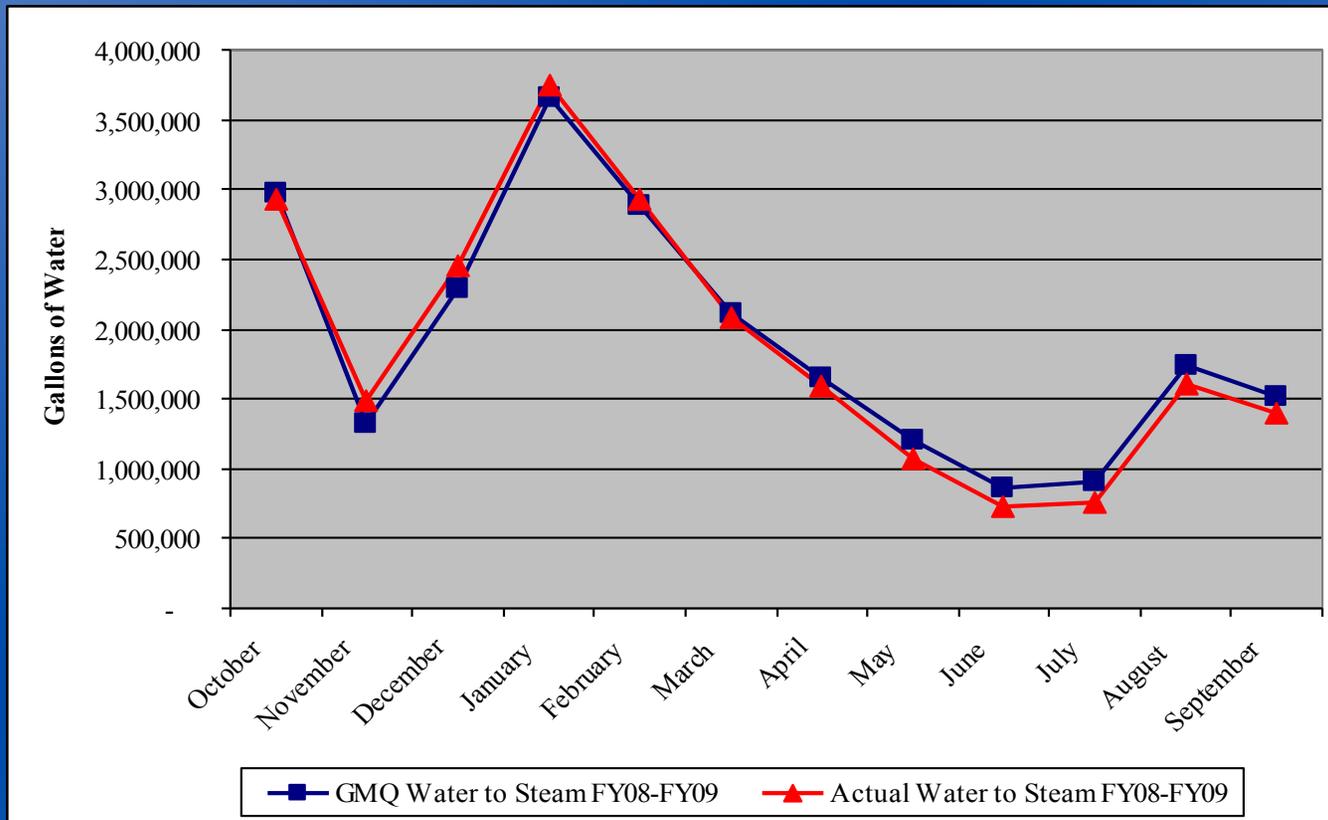
Plant Efficiency ●





Performance Measurement FY08: Steam

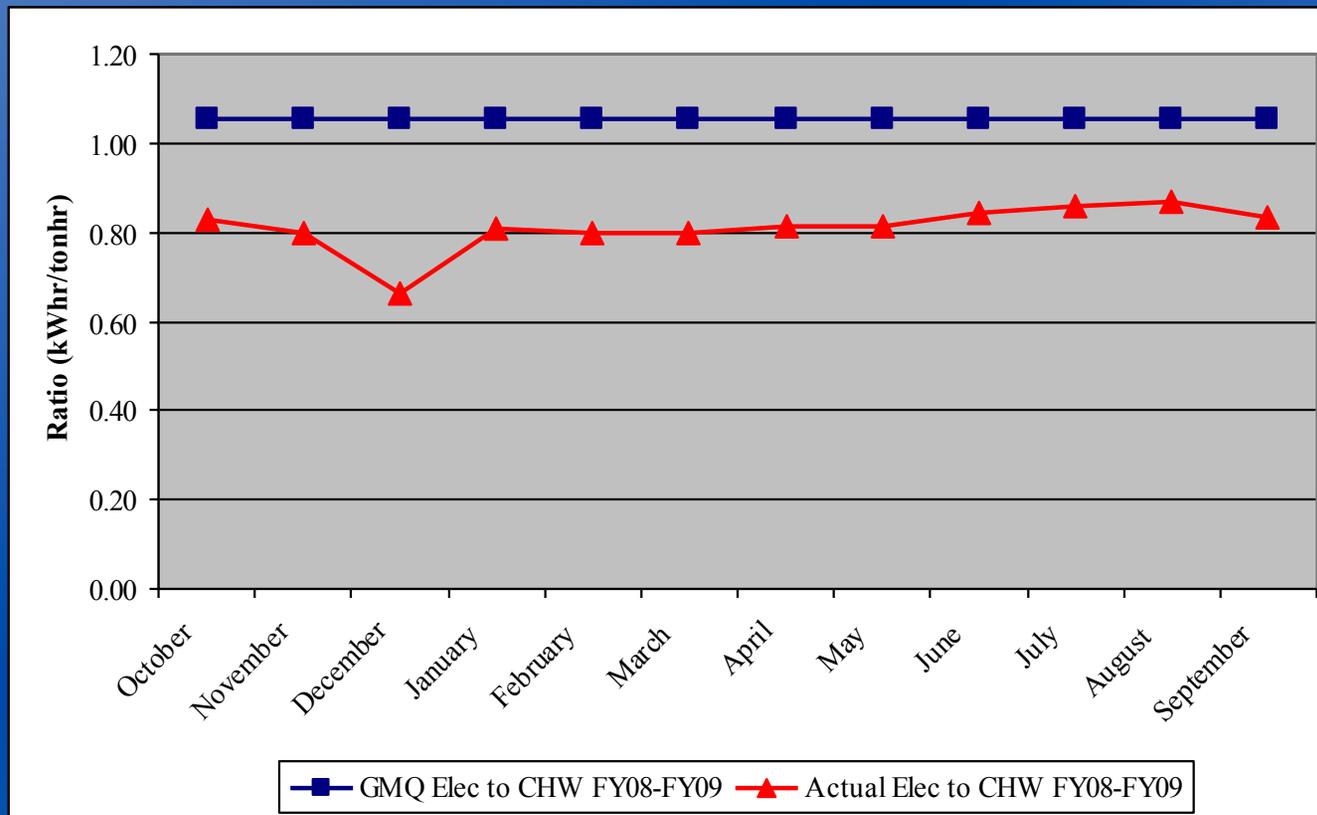
Water Conversion





Performance Measurement FY08: Chilled Water

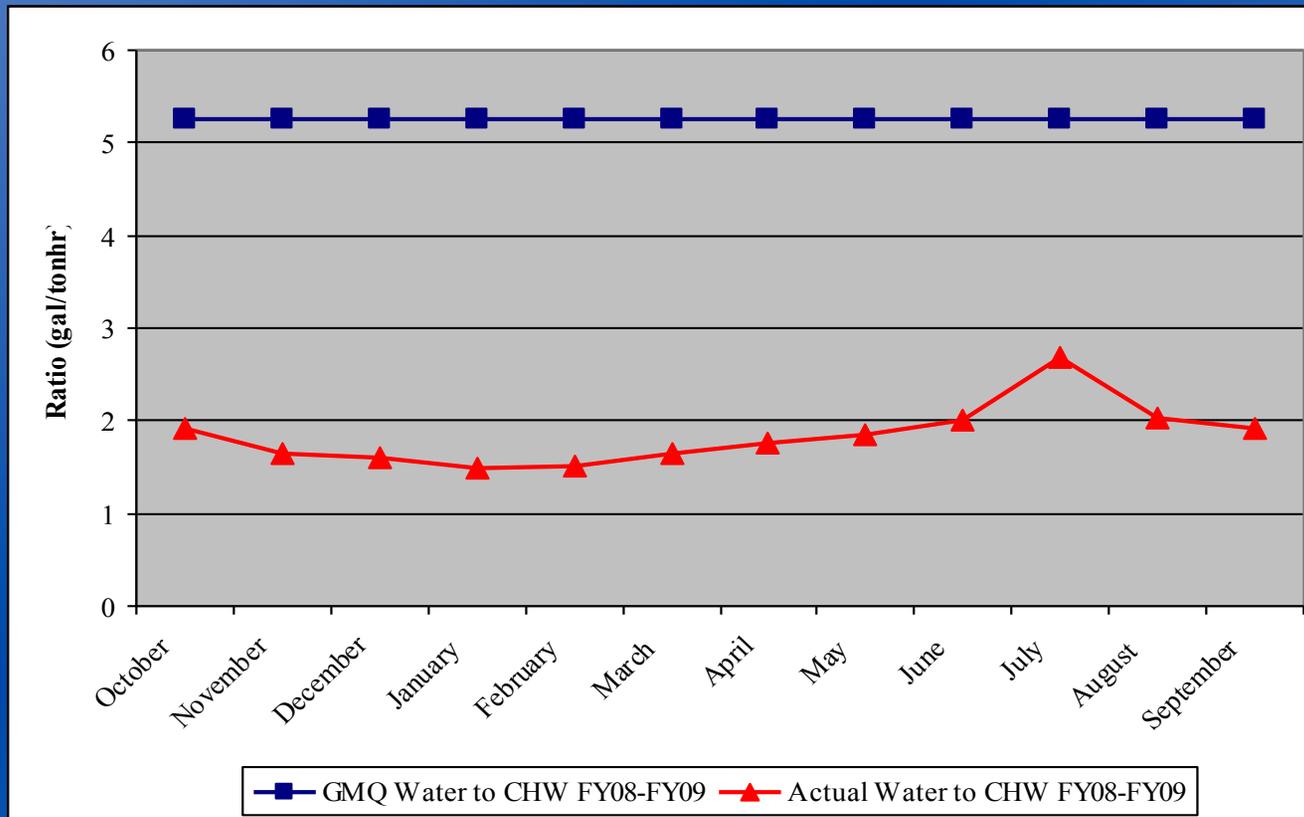
Electric Conversion ●





Performance Measurement FY08: Chilled Water

Water Conversion





Water Treatment

- Steam/Condensate
 - Corrosion 
 - Iron 
 - Hardness 
 - Chlorine/Sulfite 
- Condensing Water
 - Conductivity 
 - Biologicals 
- Chilled Water
 - Hardness 
 - Corrosion 
 - Biologicals 



EGF Walkthrough

Quarterly Inspection Process

- Equipment Maintenance ●
- Operations ●
- Electrical ●
- Housekeeping ●
- Building Structure ●
- Building Exterior and Grounds ●



EDS Walkthrough

Quarterly Inspection Process

- Manhole/Tunnel Housekeeping ●
- Maintenance Items
 - Insulation Repair/Replacement ●
 - Water Infiltration ●
 - Corrosion of Structural Metal Components ●
- Safety Items ●



5. Natural Gas Purchasing Update

Natural Gas Purchasing Review

Table 5: FY08 Gas Spending & Budget Comparison

Actual Gas Costs for FY08

Projected Gas Costs for FY09



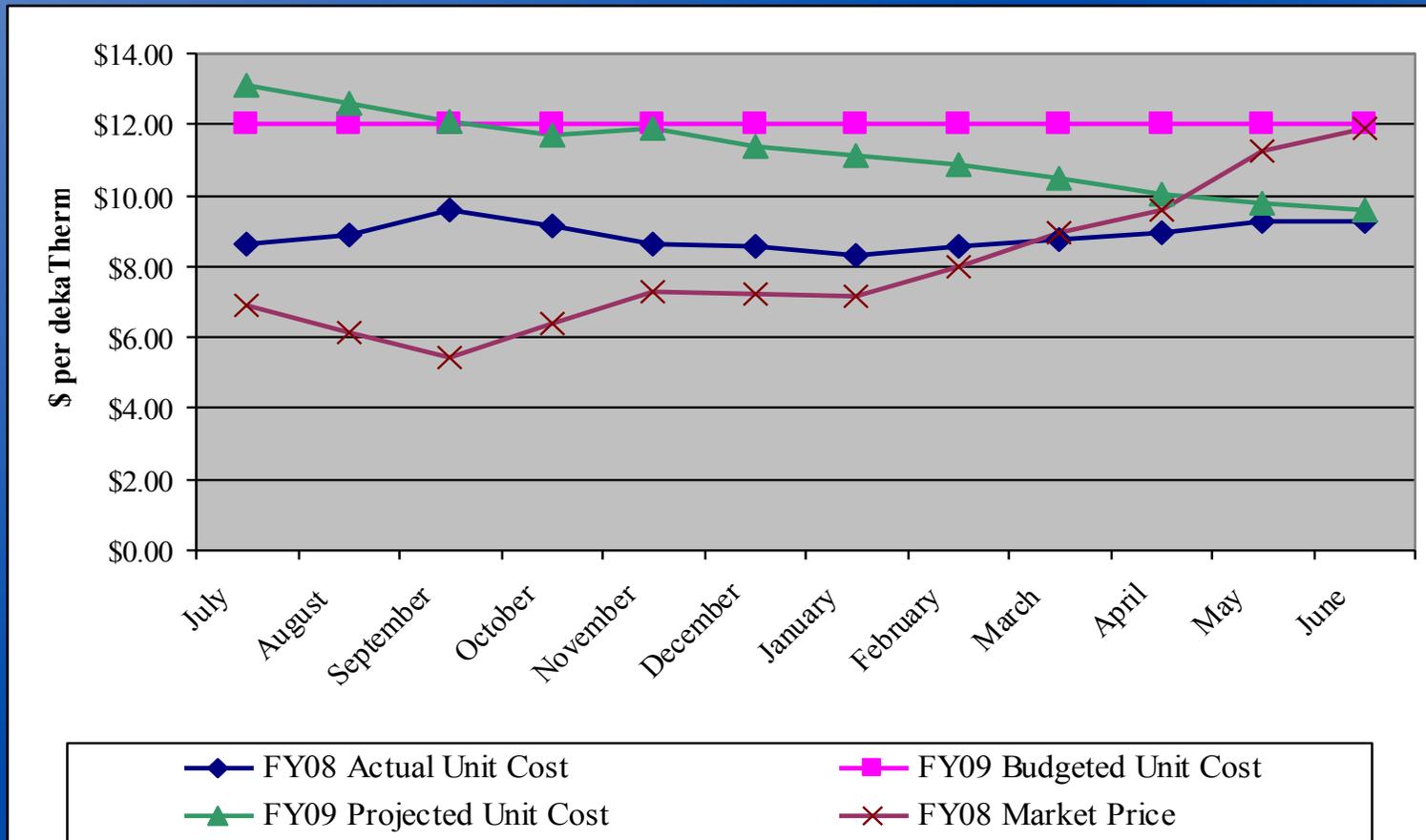
Table 5: FY09 Gas Spending & Budget Comparison

		Actual FY09 To date (Sept 30)	Budget FY09
Steam Sendout (Mlbs)		43,003	44,217
Fuel Use (Dth)	●	60,587	64,159
Plant Eff (Dth/Mlb)	●	1.408	1.451
Total Gas Cost	●	\$765,491	\$771,833
Unit Cost of Fuel (\$/Dth)	●	\$12.635	\$12.030



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Projected Gas Cost Comparison for FY09





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6. Financial Reports: 1st Qtr FY09

Item	FY09 Budget	1st Qtr FY09 Expenses	Percent of FY09 Budget	Percent of FY08 Actual for 1st Qtr
FOC: Basic	\$ 3,852,170	\$ 963,042.51	25.00%	103.00%
FOC: 9th Chiller	\$ 36,100	\$ 9,023.76	25.00%	103.00%
FOC: Change Order 6A	\$ 71,260	\$ 17,815.74	25.00%	103.00%
FOC: Change Order 6B	\$ 62,390	\$ 15,597.00	25.00%	103.00%
Chemicals	\$ 156,510	\$ 43,118.73	27.55%	92.99%
Engineering	\$ 40,000	\$ 5,678.87	14.20%	n.a.
Insurance	\$ 42,440	\$ 29,721.89	70.03%	99.57%
Marketing: CEPS Sales Activity	\$ 27,000	\$ 2,005.57	7.43%	n.a.
Metro Marketing	\$ 52,890	\$ -	0.00%	n.a.
Incentive Payments	\$ 30,150	\$ 3,704.40	12.29%	51.03%
Project Administration	\$ 22,090	\$ -	0.00%	n.a.
Metro Incremental Cost	\$ 585,420	\$ 94,099.04	16.07%	68.76%
FEA: Steam	\$ -	\$ 34,016.86	n.a.	147.59%
FEA: Chilled Water	\$ -	\$ 112,987.27	n.a.	97.74%
ARFA	\$ -	\$ 13,986.69	n.a.	103.00%
Metro Credit	\$ -	\$ (149,216.72)	n.a.	85.31%
Water/Sewer	\$ 681,600	\$ 137,753.13	20.21%	82.74%
Natural Gas/Propane	\$ 6,570,400	\$ 765,490.08	11.65%	125.10%
Electricity	\$ 4,437,300	\$ 1,400,759.74	31.57%	106.07%
EDS Repair & Improvement	\$ 171,430	\$ 3,757.05	2.19%	12.28%
EDS Surcharge	\$ 68,460	\$ -	0.00%	n.a.
Sub-total Operations	\$ 16,907,610	\$ 3,503,342	20.72%	106.05%
2002 Bonds	\$ 4,361,770	\$ 1,090,373.43	25.00%	99.94%
2005 Bonds	\$ 631,590	\$ 172,074.13	27.24%	n.a.
FY07 Projects	\$ 227,800	\$ -	0.00%	0.00%
FY08 Projects	\$ 220,500	\$ -	0.00%	n.a.
Debt Service Interest Revenue	\$ (72,300)	\$ (46,161.38)	63.85%	n.a.
Oper. Reserve Funding Deposit	\$ 97,400	\$ 24,435.00	25.09%	51.18%
Sub-total Debt Service	\$ 5,466,760	\$ 1,240,721	22.70%	103.76%
Total Expenses	\$ 22,374,370	\$ 4,744,063	21.20%	105.44%
Customer Revenues	\$ 19,768,660	\$ 4,498,667	22.76%	103.39%
Total Metro Funding Amount	\$ 2,605,710	\$ 245,396	9.42%	75.97%



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7. Capital Projects Review

Financial Summary

Table 7: Capital Projects Summary

Active Project Status



Table 7: Capital Project Summary (09/30/08)

	Spent to End of FY08	FY09 Spending	Balance to Date (09/30/08)
2002A Bond	\$3,680,667	\$0	\$47,292
R&I Projects	\$626,555	\$1,878	\$415,280
2005B Bond	\$7,655,347	\$8,633	\$522,521
2007 Bond	\$2,620,771	\$0	\$237,729
2008 Bond	\$87,758	\$29,075	\$2,631,667
Total	\$14,671,098	\$39,586	\$3,854,489



Active Project Status

- DES 036: 4th Ave Tunnel Fan (R&I) - in construction
- DES 041/054: Symphony CND – in construction
- DES 042: 401 Union St. CND Replacement – in closeout
- DES 045: MH 6 to MH 23 CND Replacement – in close-out
- DES 046: Ryman CND – in design
- DES 047: State Tunnel CND Replacement – closed
- DES 049: Temp. Boiler Conn. @ MH 15 – closed
- DES 050: MH Insulation – in construction/ongoing
- DES 052: Wildhorse CND Tempering – in close-out



Return on Investment

- Capital Project ROI
 - Boiler O₂ Trim
 - Power Factor Correction Capacitor
 - Condensate Return
 - New Customers
- Funding



8. DES Capacity – New Convention Center

- TEG Hydraulic Analysis for EDS Chilled Water
- Expansion with New Convention Center
 - Peak Demands Decreasing Each Year: 2006, 2007, 2008
 - 11,500 gpm Additional Export Possible
 - Potential Servable Load at NCC Location ~7,200 tons
 - 7,200 tons Consumes Remaining EGF Capacity
- Potential Additional Customers at Other Locations



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9. Other Board Member Items

10. Adjourn