



Metro Nashville
DISTRICT ENERGY SYSTEM

Advisory Board Quarterly Meeting
First Quarter FY08

Presented to
District Energy Advisory Board

November 15, 2007



Metro Nashville
DISTRICT ENERGY SYSTEM

Agenda

1. Call to Order
2. Review and Approval of Meeting Minutes for August 16, 2007
3. Review and Comparison of DES Unit Costs
4. Review of Operations Monitoring Reports
5. Natural Gas Purchasing Up-Date
6. Financial Report: 1st Quarter FY08
7. Capital Projects Review
8. Customer Contract Capacity Reviews
9. Other Board Member Items
10. Adjourn



Metro Nashville
DISTRICT ENERGY SYSTEM

1. Call to Order



Metro Nashville
DISTRICT ENERGY SYSTEM

2. Review and Approval of Meeting Minutes of August 16, 2007



Metro Nashville
DISTRICT ENERGY SYSTEM

3. Review and Comparison of DES Unit Costs

Summary Table 3A: FY08 & FY07 Unit
Cost Comparison

Summary Table 3B: National Unit Cost
Comparison

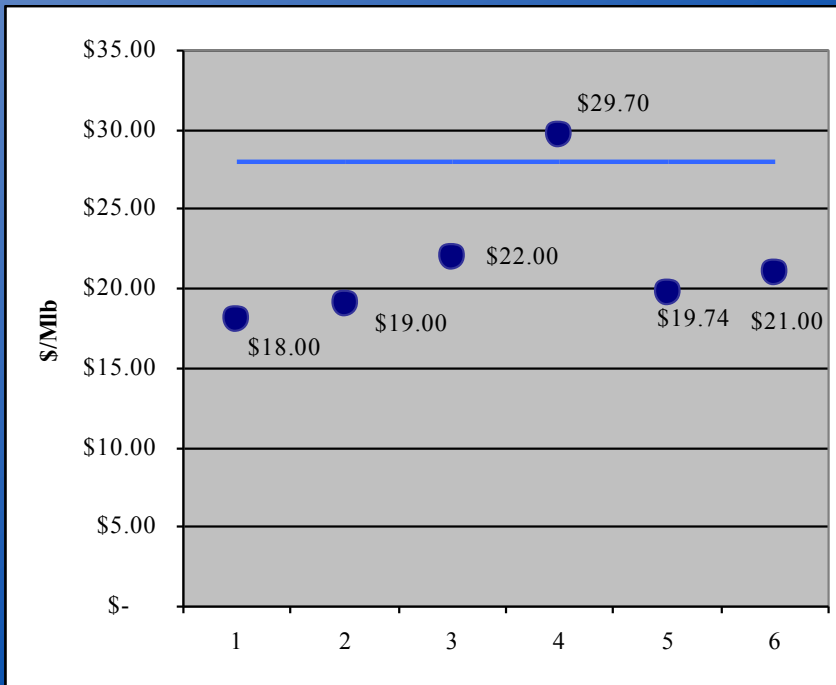


Summary Table 3A: 1st Qtr FY08 & FY07 Unit Cost Comparison

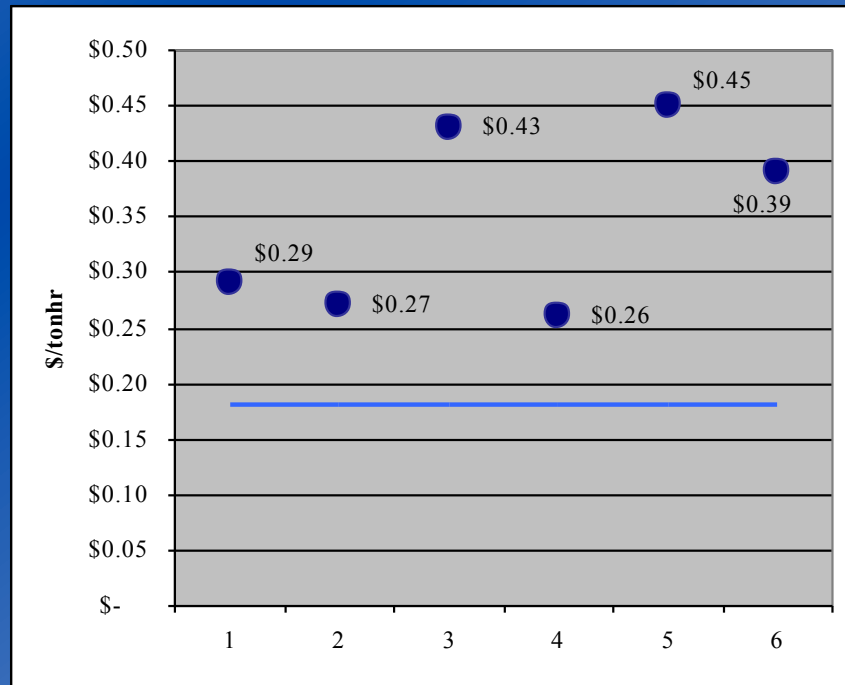
	Steam (\$ per m lb)			Chilled Water (\$ per ton-hr)		
	FY07	FY08	% Diff.	FY07	FY08	% Diff.
Private	\$26.83	\$29.57	9.27%	\$0.157	\$0.183	14.4%
State	\$27.75	\$26.45	-4.93%	\$0.163	\$0.173	5.52%
Metro	\$27.68	\$30.04	7.86%	\$0.167	\$0.192	13.20%
New Customers	\$23.32	\$26.75	12.82%	\$0.165	\$0.164	.21%
Aggregate	\$27.12	\$27.97	3.04%	\$0.163	\$0.181	9.80%



Summary Table 3B: National Unit Cost Comparison (Rolling DES 12 Month Avg)



Steam



Chilled Water



Metro Nashville
DISTRICT ENERGY SYSTEM

4. Review of Operations Monitoring Reports 1st Quarter FY08



Quarterly Monitoring Report Outline

1. Operations

- Steam: Sales, Sendout, Losses and HDD
- Chilled Water: Sales, Sendout, Losses and CDD

2. Performance Measurement

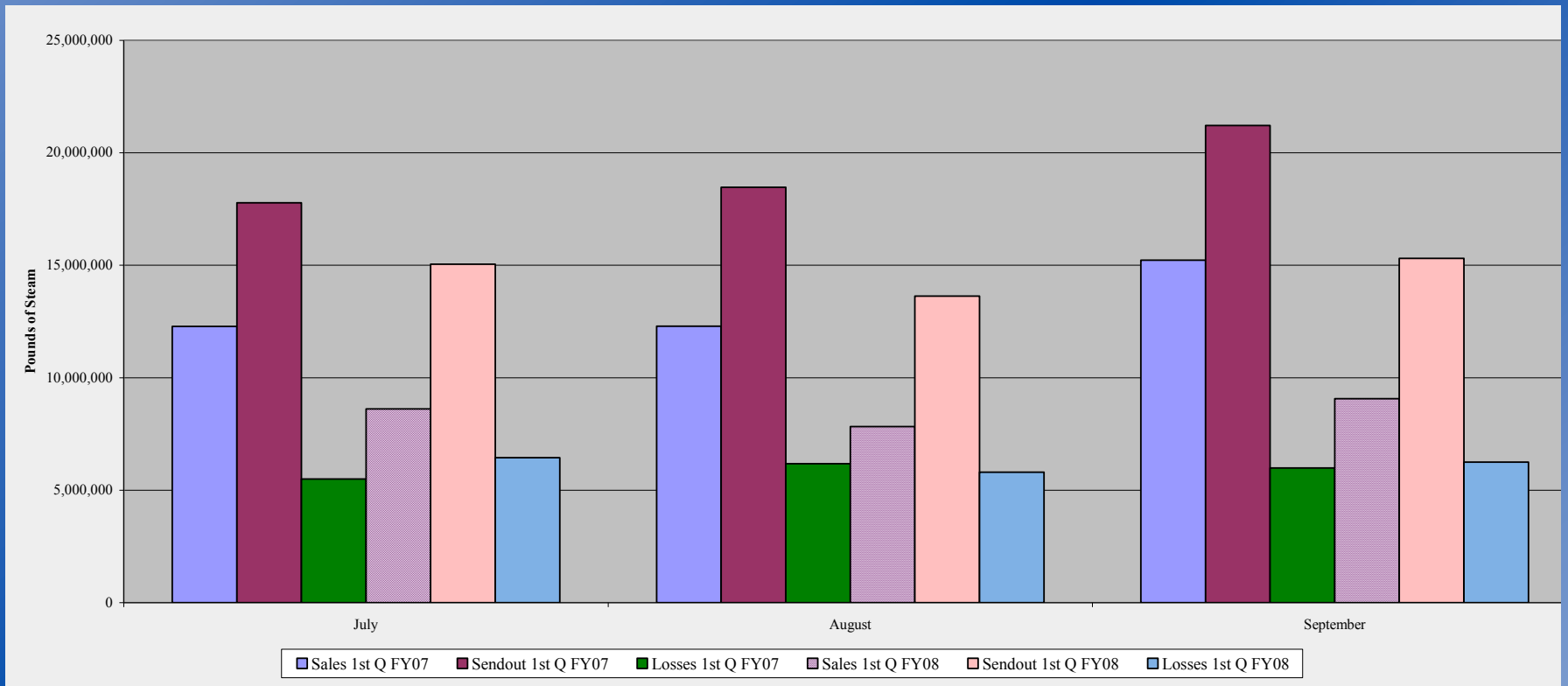
- Steam: Fuel, Condensate Return, Electricity, Water
- Chilled Water: Electricity, Water

3. EGF Walkthrough

4. EDS Walkthrough



Operations Summary 1st Quarter FY08: Steam



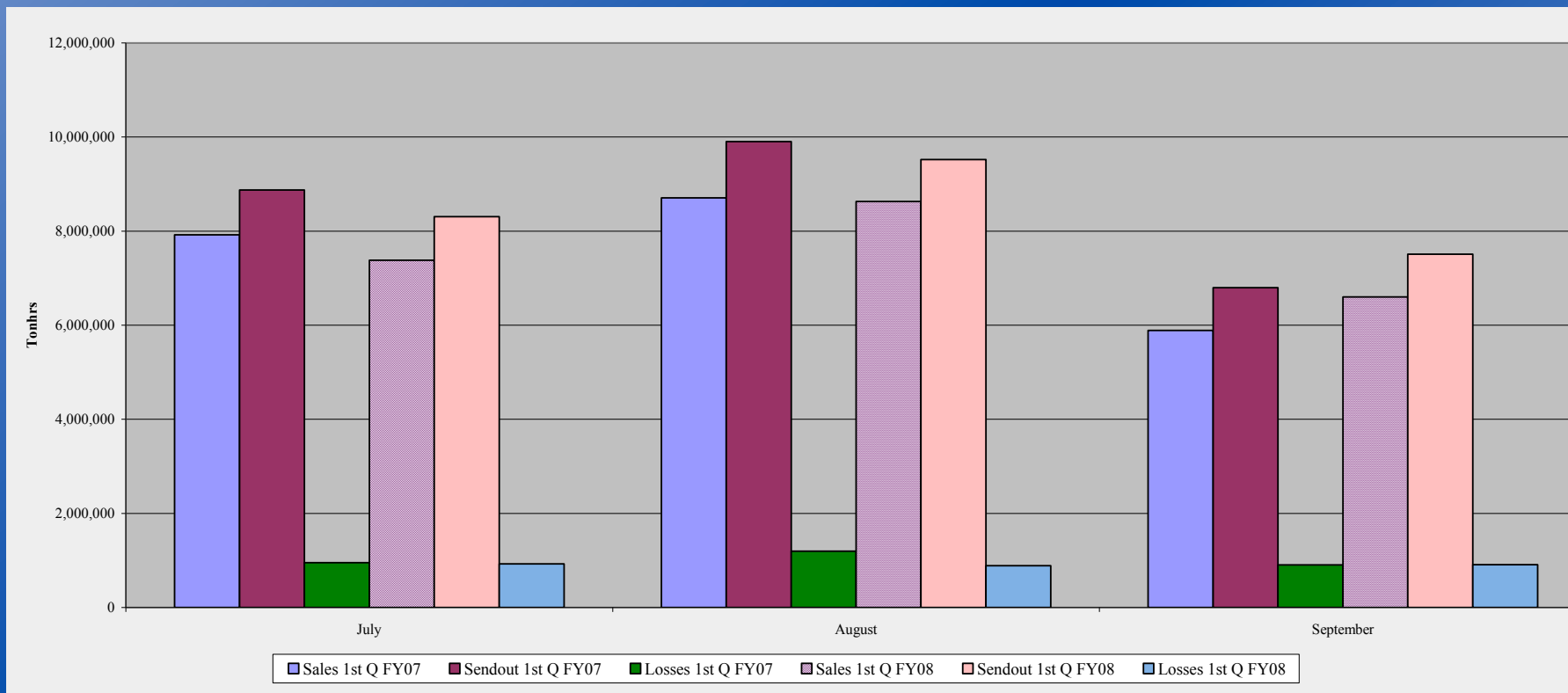


Operations 1st Quarter FY08 Summary: Steam

	1 st Qtr FY07	1 st Qtr FY08	% Difference
Sales (Mlbs)	39,792	25,504	-56.02%
Sendout (Mlbs)	57,455	43,990	-30.61
Losses (Mlbs)	17,663	18,486	4.45%
Peak (pph)	44,156	43,156	-2.32%
Load Factor	59.58%	46.17%	-29.05%
HDD	15	0	-



Operations Summary 1st Quarter FY08: Chilled Water





Operations 1st Quarter FY08 Summary : Chilled Water

	1 st Qtr FY07	1 st Qtr FY08	% Difference
Sales (tonhrs)	22,518,311	22,612,523	0.42%
Sendout (tonhrs)	25,573,600	25,339,600	-0.92%
Losses (tonhrs)	3,055,289	2,727,077	-12.04%
Peak (tons)	17,300	17,400	0.57%
Load Factor	67.69%	65.96%	-2.62%
CDD	1,248	1,491	16.30%

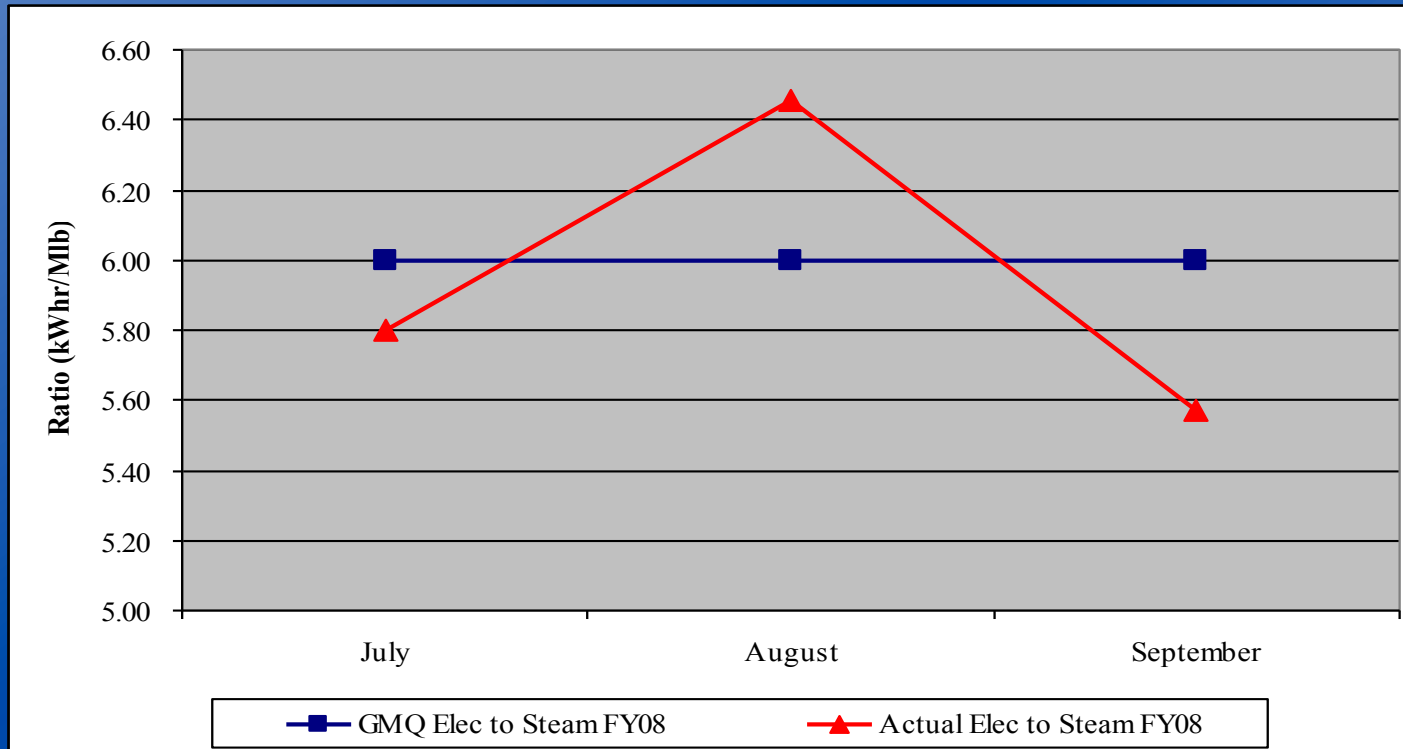


Performance Summary 1st Qtr FY08: Steam

	1 st Qtr FY07	1 st Qtr FY08	% Diff
GMQ Elec (kWhr/Mlb)	6.00	6.00	
Act Elec (kWhr/Mlb)	3.88	5.92	34.48%
GMQ Fuel (Dth/Mlb)	1.781	1.715	
Act Fuel (Dth/Mlb)	1.435	1.417	-1.26%
GMQ Water (kgal)	8,096	2,794	
Act Water (kgal)	7,439	2,840	-161.97%

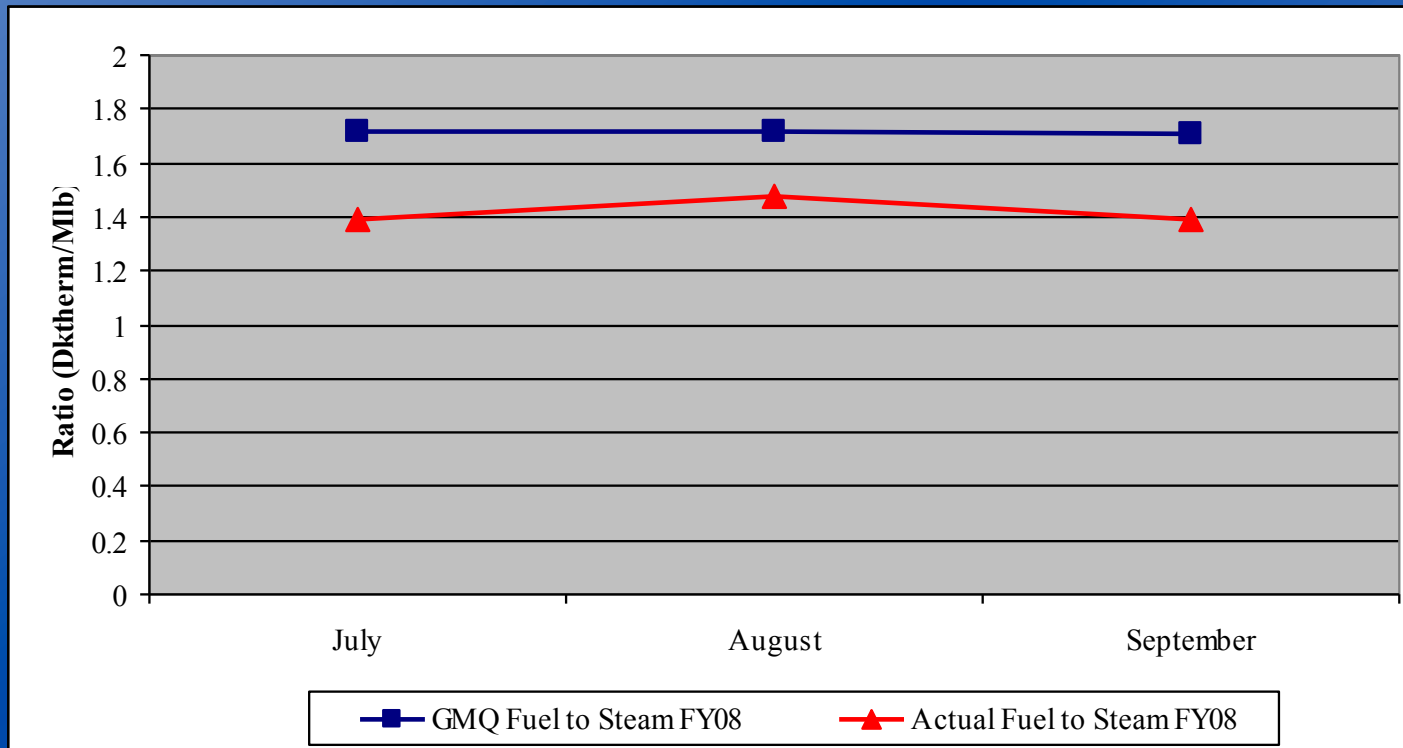


Performance Measurement 1st Qtr FY08: Steam Electric Conversion





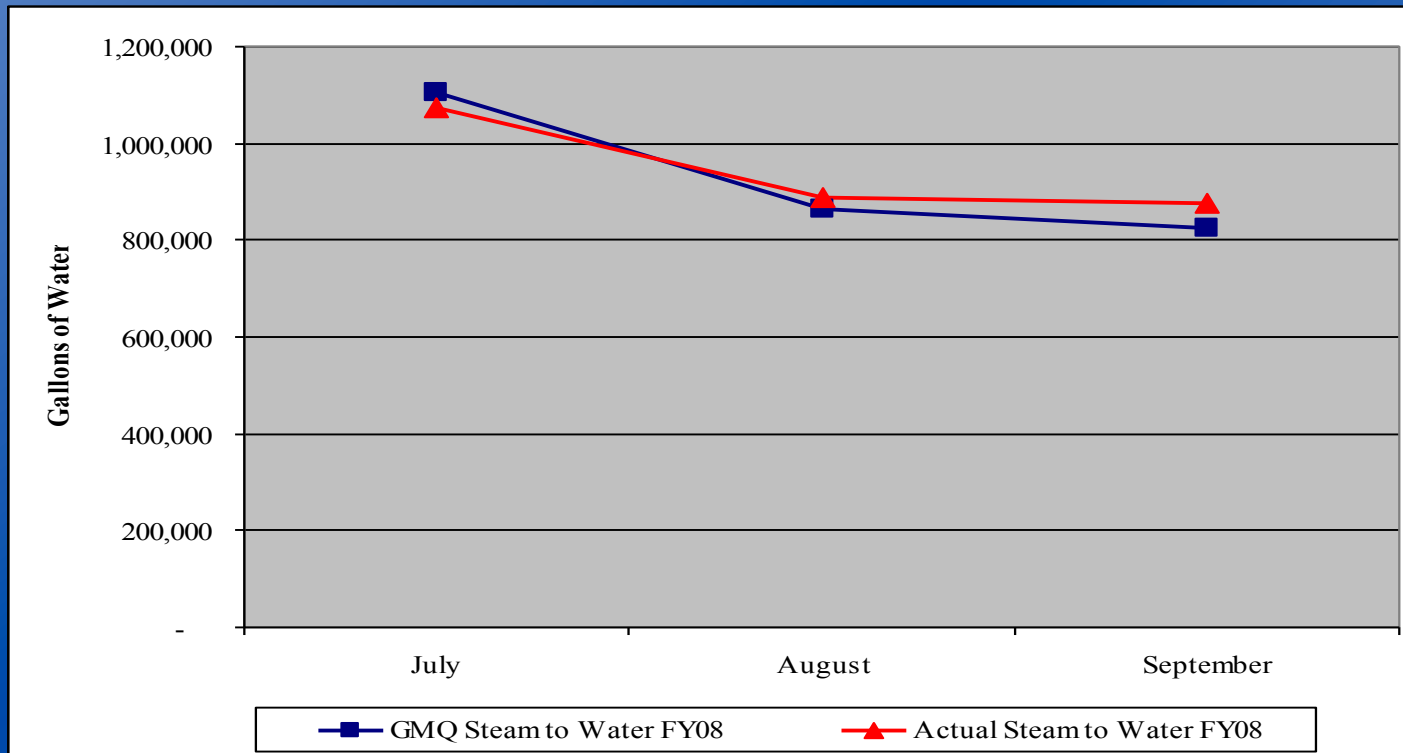
Performance Measurement 1st Qtr FY08: Steam Plant Efficiency





Metro Nashville
DISTRICT ENERGY SYSTEM

Performance Measurement FY07: Steam Water Conversion



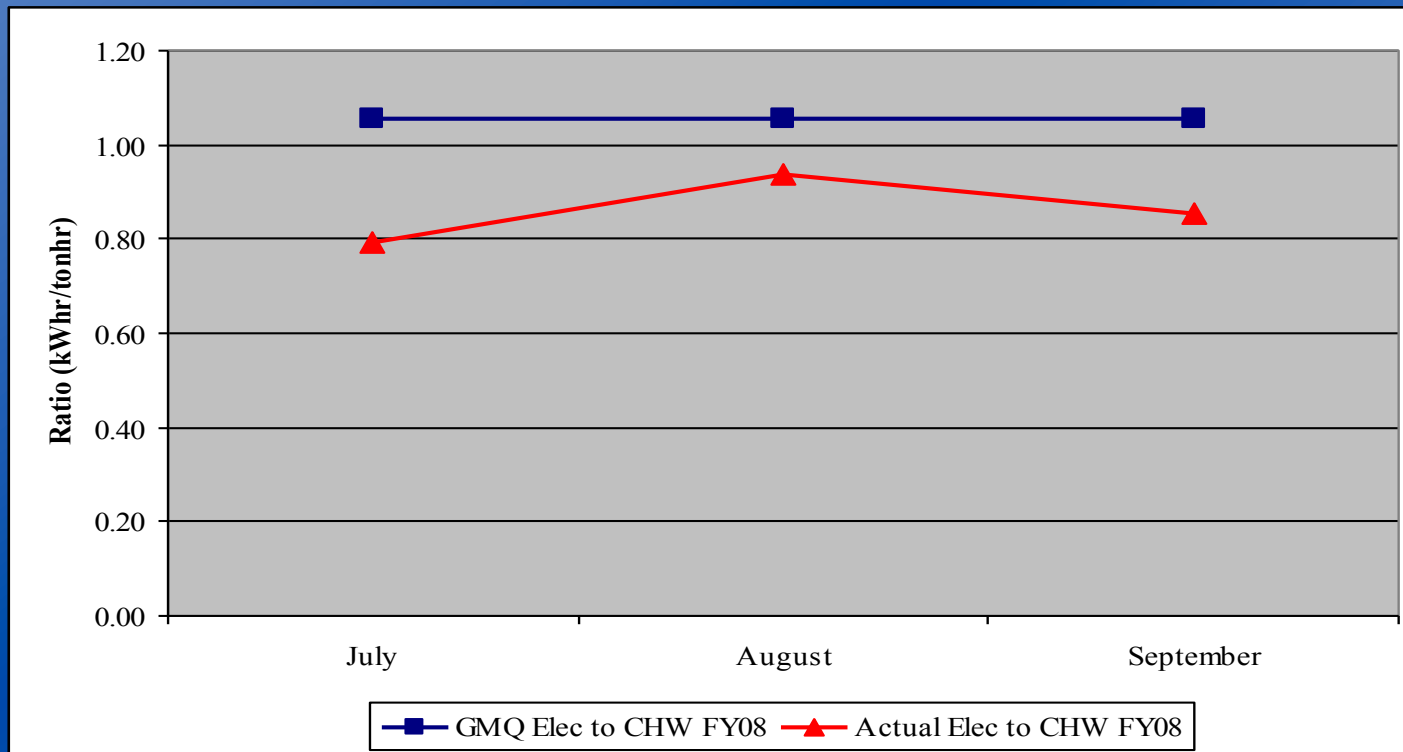


Performance Summary 1st Qtr FY08: Chilled Water

	1 st Qtr FY07	1 st Qtr FY08	% Diff
GMQ Elec (kWhr/tonhr)	1.055	1.055	
Act Elec (kWhr/tonhr)	0.885	0.866	-2.22%
GMQ Water (gal/tonhr)	5.25	5.25	
Act Water (gal/tonhr)	2.14	2.25	5.11%

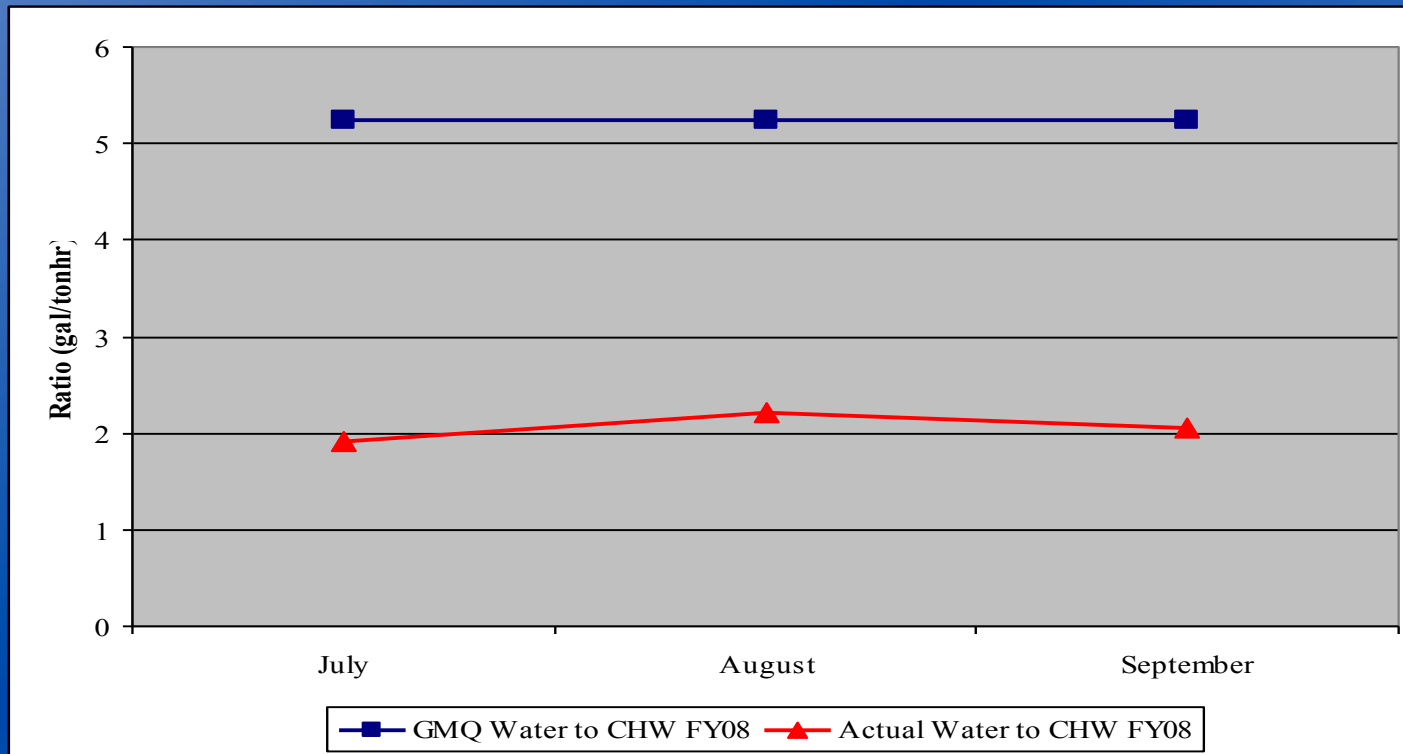


Performance Measurement 1st Qtr FY08: Chilled Water Electric Conversion





Performance Measurement 1st Qtr FY08: Chilled Water Conversion





Metro Nashville
DISTRICT ENERGY SYSTEM

EGF Walkthrough



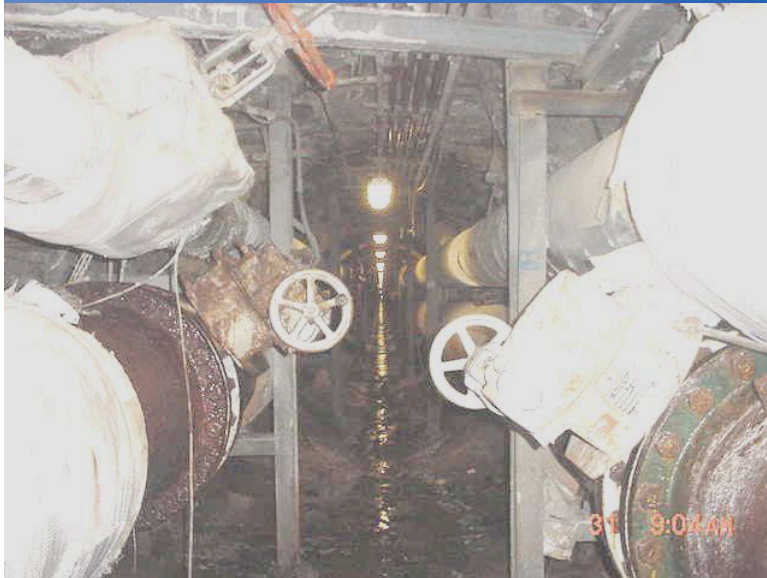
Quarterly Inspection Process

- Log Book
- Operations
- Housekeeping
- Equipment
- Building Structure
- Building Exterior and Grounds



Metro Nashville
DISTRICT ENERGY SYSTEM

EDS Walkthrough



Quarterly Inspection Process

- Housekeeping
 - Debris left from Capital Projects
 - CDES has instituted a clean-up program
- Maintenance Items
 - Steam/condensate leaks
 - Steam trap operation
 - Insulation condition
 - Water infiltration
- Safety Items



Metro Nashville
DISTRICT ENERGY SYSTEM

5. Natural Gas Purchasing Up-date

Natural Gas Purchasing Review

Table 5A: FY08 Gas Spending &
Budget Comparison

Table 5B: Projected Gas Costs for
FY08



Table 5A: FY08 Gas Spending & Budget Comparison

	Actual FY08 To date	Budget FY08
Steam Sales (Mlbs)	25,504	355,192
Steam Sendout (Mlbs)	43,990	412,022
Fuel Use (Dth)	62,344	611,853
Plant Eff (Dth/Mlb)	1.417	1.485
Total Gas Cost	\$612,049	\$7,099,510
Unit Cost of Fuel (\$/Dth)	\$9.817	\$11.514



Table 5B - Projected Gas Costs for FY08

	Estimated Consumption (Dth)	Hedged Quantity Dth	Hedge WACOG Price	Current Market Price	Average Commodity Price	Marked to Market Value (Loss)/Gain	Actual Hedged Percentage Level	NDEST Targeted Hedge Volumes		
								NDEST Target Hedge Percentage	% of NDES Target Volume Unhedged	# Contracts to Meet NDES Target
Jul-07	26,000	20,700	\$8.668	\$6.929	\$8.313	-\$35,993.16	80%	80%	0%	0.0100
Aug-07	27,000	21,600	\$8.652	\$6.110	\$8.144	-\$54,911.52	80%	80%	0%	0.0000
Sep-07	34,000	27,300	\$8.689	\$5.430	\$8.047	-\$88,981.62	80%	80%	0%	0.0000
Oct-07	48,000	38,600	\$8.673	\$6.423	\$8.233	-\$86,857.72	80%	80%	0%	0.0000
Nov-07	62,000	49,700	\$8.645	\$7.269	\$8.372	-\$68,382.23	80%	80%	0%	0.0000
Dec-07	81,000	56,400	\$8.744	\$7.624	\$8.404	-\$63,151.08	70%	80%	10%	0.8400
Jan-08	86,000	60,600	\$8.742	\$7.996	\$8.522	-\$45,213.66	70%	80%	10%	0.8200
Feb-08	72,000	50,100	\$8.739	\$8.061	\$8.533	-\$33,957.78	70%	80%	10%	0.7500
Mar-08	62,000	43,300	\$8.749	\$7.926	\$8.501	-\$35,631.57	70%	80%	10%	0.6300
Apr-08	50,000	25,100	\$8.625	\$7.646	\$8.138	-\$24,580.43	50%	80%	30%	1.4800
May-08	36,000	18,100	\$8.626	\$7.691	\$8.161	-\$16,927.12	50%	80%	30%	1.0700
Jun-08	28,000	13,900	\$8.634	\$7.766	\$8.197	-\$12,067.98	50%	80%	30%	0.8400
Summary	612,000	425,400	\$8.698	\$7.239	\$8.348	-\$566,655.87	69%	80%	11%	6.4400

The result of the conference call (11/07/07) was to increase the hedged amounts highlighted to the levels shown



6. Financial Reports: 1st Quarter FY08

Item		FY08 Budget	First Quarter Expenses	Total Spending to Date	% of Budget
FOC:	Basic	\$ 3,769,247.05	\$ 934,992.75	\$ 934,992.75	24.81%
	9th Chiller	\$ 35,318.03	\$ 8,760.99	\$ 8,760.99	24.81%
	C/O 6A	\$ 69,729.10	\$ 17,296.74	\$ 17,296.74	24.81%
	C/O 6B	\$ 61,045.19	\$ 15,142.71	\$ 15,142.71	24.81%
Pass-thru Charges:	Water	\$ 681,640.00	\$ 166,496.32	\$ 166,496.32	24.43%
	Chemical Treatment	\$ 156,500.00	\$ 46,370.82	\$ 46,370.82	29.63%
	Engineering	\$ 55,401.26	\$ -	\$ -	0.00%
	Insurance	\$ 41,200.00	\$ 29,849.94	\$ 29,849.94	72.45%
	EDS Electricity	\$ -	\$ 8,410.27	\$ 8,410.27	
	EDS R&I	\$ 166,203.78	\$ 30,583.87	\$ 30,583.87	18.40%
	EDS Surcharge	\$ 66,371.15	\$ -	\$ -	0.00%
Marketing:	CES Sales Activity	\$ 27,000.00	\$ -	\$ -	0.00%
	Incentive Payments	\$ 29,200.00	\$ 7,259.91	\$ 7,259.91	24.86%
	Metro Marketing	\$ 53,730.00	\$ -	\$ -	0.00%
	Project Administration	\$ 25,640.00	\$ 1,328.69	\$ 1,328.69	5.18%
FEA:	Steam	\$ -	\$ 23,048.49	\$ 23,048.49	
	Chilled Water	\$ -	\$ 115,602.78	\$ 115,602.78	
Misc:	Metro Credit	\$ -	\$ (174,906.59)	\$ (174,906.59)	
	ARFA	\$ -	\$ 13,579.32	\$ 13,579.32	
	Deferral	\$ -	\$ -	\$ -	
	Subtotal - Man Fee =	\$ 5,072,021.77	\$ 1,213,233.14	\$ 1,213,233.14	23.92%
Reimbursed Management Fee		\$ 789,474.93	\$ 789,474.93		
Metro Costs:	Metro Incremental Cost	\$ 617,560.00	\$ 278,603.61	\$ 308,324.96	49.93%
	Natural Gas	\$ 7,099,510.00	\$ 612,049.30	\$ 612,049.30	8.62%
	Propane	\$ -	\$ -	\$ -	
	Electricity	\$ 4,693,460.00	\$ 1,315,459.26	\$ 1,315,459.26	28.03%
Subtotal - Operations =	\$ 17,648,755.55	\$ 3,449,929.18	\$ 3,479,650.53	19.72%	
Debt Service	2002 Bonds	\$ 4,297,568.53	\$ 56,950.00	\$ 113,900.00	2.65%
	2005 Bonds	\$ 629,837.50	\$ -	\$ -	0.00%
	FY07 Projects	\$ 227,768.58	\$ -	\$ -	0.00%
	Oper. Reserve Funding Deposit	\$ 191,460.22	\$ 47,233.66	\$ 63,170.69	32.99%
Subtotal - Capital =	\$ 5,346,634.84	\$ 104,183.66	\$ 177,070.69	3.31%	
Total =	\$ 22,995,390.39	\$ 3,554,112.84	\$ 3,656,721.22	15.90%	
Revenues =	\$ 20,586,822.46	\$ 4,374,090.55	\$ 4,374,090.55	21.25%	
Metro Funding Amount =	\$ 2,408,567.93	\$ (819,977.71)	\$ (717,369.33)	-29.78%	



Metro Nashville
DISTRICT ENERGY SYSTEM

7. Capital Projects Review

Financial Summary

Table 7A: Capital Projects Summary

Table 7B: Capital Project Detail



Table 7A: Capital Project Summary (09/30/07)

	Spent to End of FY07	1 st Qtr Spending	Balance at End of 1 st Qtr
2002A Bond	\$3,599,629	\$105	\$129,467
R&I Projects	\$132,104	\$25,250	\$311,962
2005B Bond	\$7,418,893	\$47,478	\$720,641
2007 Bond	\$1,979,628	\$90,703	\$788,168
2008 Bond	\$0	\$0	\$2,748,500
Total	\$13,130,254	\$163,536	\$4,698,738



Table 7B: Capital Project Detail (09/30/07)

	Budget	Spent through 1 st Qtr FY08	Remaining to Be Spent
2002A Projects			
Tennessee Towers Decoupling	\$1,350,422	\$1,223,738	\$126,684
<u>Total Closed Projects</u>	<u>\$2,377,281</u>	<u>\$2,377,281</u>	<u>\$0</u>
Total 2002A Projects	\$3,727,703	\$3,601,019	\$126,684
Repair/Improvement	\$276,840	\$25,250	\$311,962
2005B Projects			
Renaissance Re-piping	\$538,818	\$576,920	(\$38,102)
Customer Metering	\$1,676,439	\$1,695,682	(\$19,242)
Regions Cond Line Replacement	\$320,000	\$4,141	\$315,859
General and Admin	\$866,710	\$321,277	\$865,433
<u>Total Closed Projects</u>	<u>\$4,785,044</u>	<u>\$4,868,350</u>	<u>(\$83,306)</u>
Total 2005B Projects	\$8,187,011	\$7,466,370	\$720,641



Table 7B (cont' d): Capital Project Detail (09/30/07)

	Budget	Spent through 1 st Qtr FY08	Remaining to Be Spent
2007 Projects			
MH 18 to L Steam/Cond Replacement	\$818,206	\$821,757	(\$3,551)
TN Tower Cond Line Replacement	\$317,031	\$288,467	\$28,564
MH 5 to 6 Cond Replacement	\$489,688	\$417,332	\$72,356
JK Polk Cond Line	\$413,123	\$385,365	\$27,758
Tunnel Lighting Ph II	\$152,551	\$0	\$152,551
General and Admin	\$484,152	\$0	\$484,152
<u>Total Closed Projects</u>	<u>\$183,749</u>	<u>\$157,411</u>	<u>\$26,338</u>
Total 2007 Projects	\$2,858,500	\$2,070,332	\$788,168



Table 7B (cont' d): Capital Project Detail (09/30/07)

	Budget	Spent through 1 st Qtr FY08	Remaining to Be Spent
2008 Projects			
MH 5 to 9 Cond Replacement	\$500,000	\$0	\$500,000
MH 6 to 23 & Sheraton Cond Line Repair	\$700,000	\$0	\$700,000
Ryman Aud Cond Replacement	\$150,000	\$0	\$150,000
State Steam Tunnel	\$325,000	\$0	\$325,000
Tunnel Lighting Ph III	\$90,000	\$0	\$90,000
Temporary Boiler Connection	\$93,500	\$0	\$93,500
MH & Tunnel Insulation Repair	\$100,000	\$0	\$100,000
MH & Tunnel Access Modification	\$200,000	\$0	\$200,000
Expansion Jt Replacement 4 th Ave Tunnel	\$20,000	\$0	\$20,000
Wildhorse Steam & Cond	\$130,000	\$0	\$130,000
<u>General and Admin</u>	<u>\$370,000</u>	<u>\$0</u>	<u>\$370,000</u>
Total 2008 Projects	\$2,748,500	\$2,748,500	\$2,748,500



8. Customer Contract Capacity Reviews

- Most Customers Incurring TIFS
 - 19 in July 07
 - 21 in Aug 07 (higher ΔT ' s)
 - 20 in Sept 07
 - Same Customers Repeat
 - Most All State Buildings
- Ryman Auditorium & Renaissance Office CHW Demand Excursions July & Aug 2007



Metro Nashville
DISTRICT ENERGY SYSTEM

9. Other Board Member Items



Metro Nashville
DISTRICT ENERGY SYSTEM

10. Adjourn