



Metro Nashville
DISTRICT ENERGY SYSTEM

Advisory Board Quarterly Meeting
First Quarter FY10

Presented to
District Energy Advisory Board

November 19, 2009



Agenda

1. Call to Order
2. Review & Approval of Previous Meeting Minutes
3. Review of DES Contractor Performance
4. Natural Gas Purchasing Status
5. Financial Reports – 1st Qtr FY10
6. FY09-10 Budget Status Report
7. Capital Projects Review and Status Report
8. DES Emergency Response Plan
9. Adjourn



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1. Call to Order

2. Review and Approval of Previous Meeting Minutes



3. Review of DES Contractor Performance

Contractor (CNDE) is in compliance with their contractual obligations for FY10.

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



Summary Table 3: Customer Cost Comparison for the Previous 12 Months

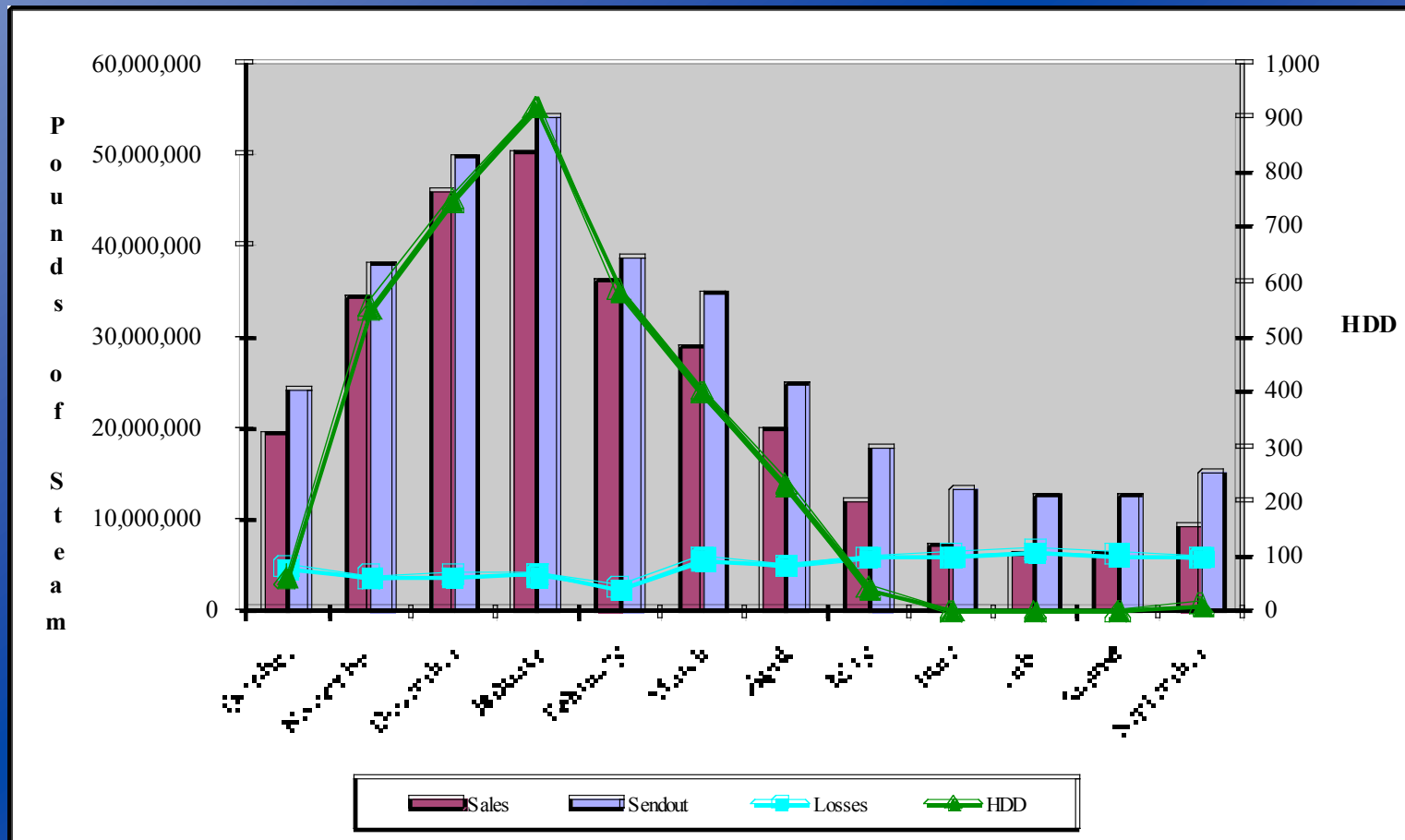
	Steam (\$ millions)			Chilled Water (\$ millions)		
	10/07 -9/08	10/08- 9/09	% Diff.	10/07 -9/08	10/08- 9/09	% Diff.
Private	\$2.350	\$2.197	-6.5%	\$3.884	\$3.564	-8.2%
State	\$2.898	\$2.805	-3.2%	\$3.224	\$3.213	<1%
Metro	\$2.701	\$2.636	-2.4%	\$3.055	\$3.053	<1%
Aggregate	\$7.950	\$7.638	-3.9%	\$10.163	\$9.830	-3.3%

*FY08 MFA = \$2,193,075; FY09 MFA = \$3,217,986 post-True-up; MFA not included in values shown



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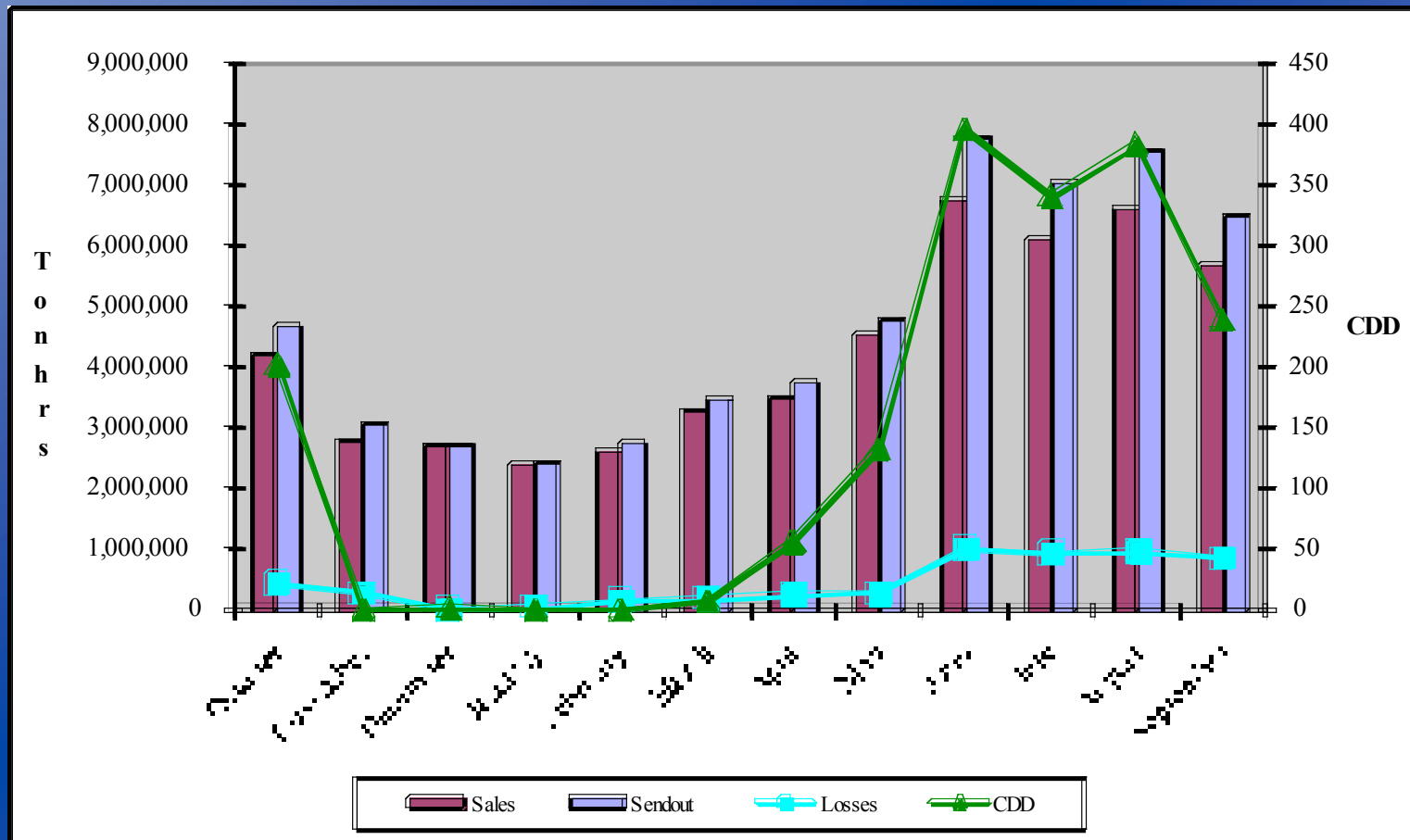
FY10 Operations: Steam





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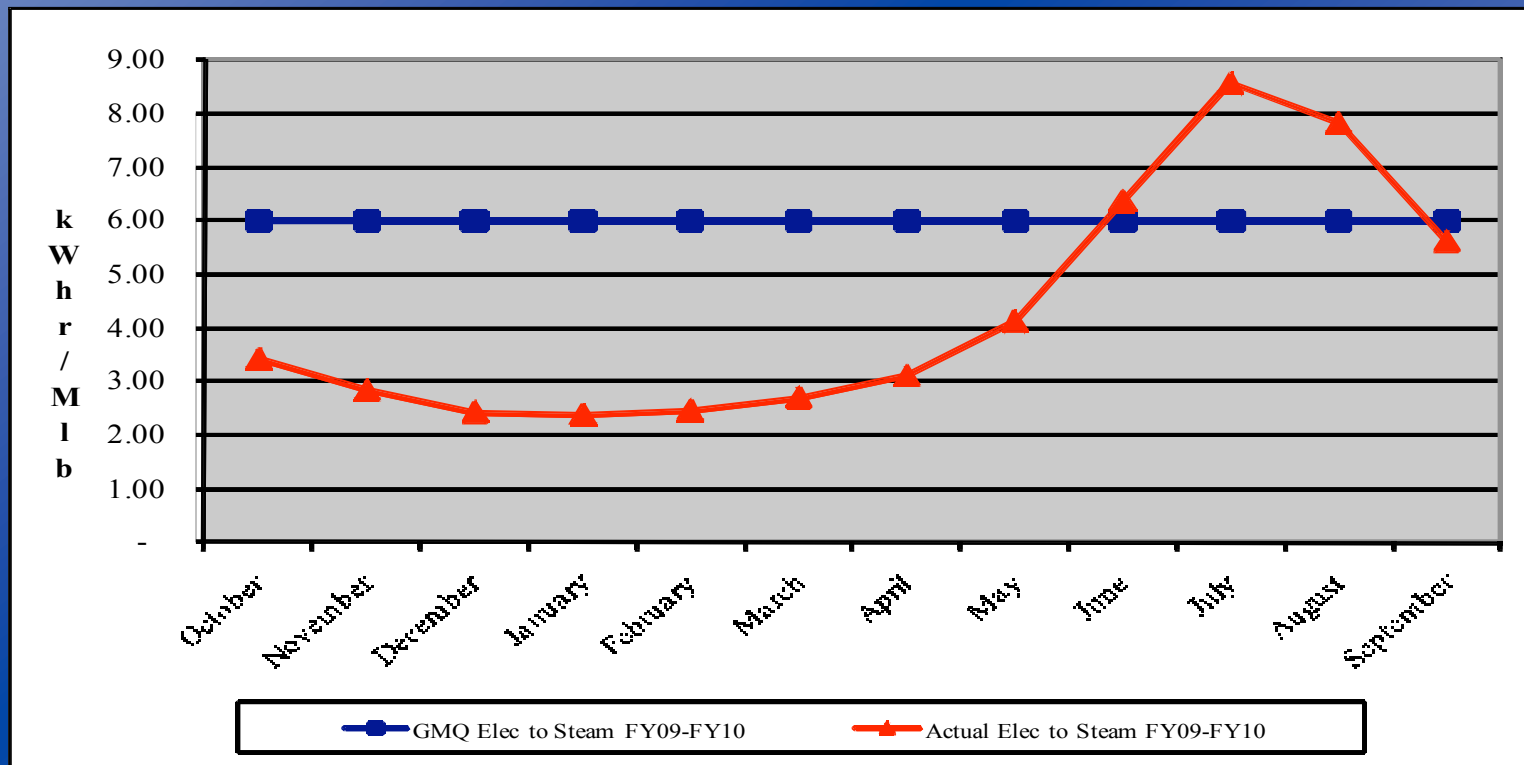
FY10 Operations: Chilled Water





Performance Measurement FY10: Steam

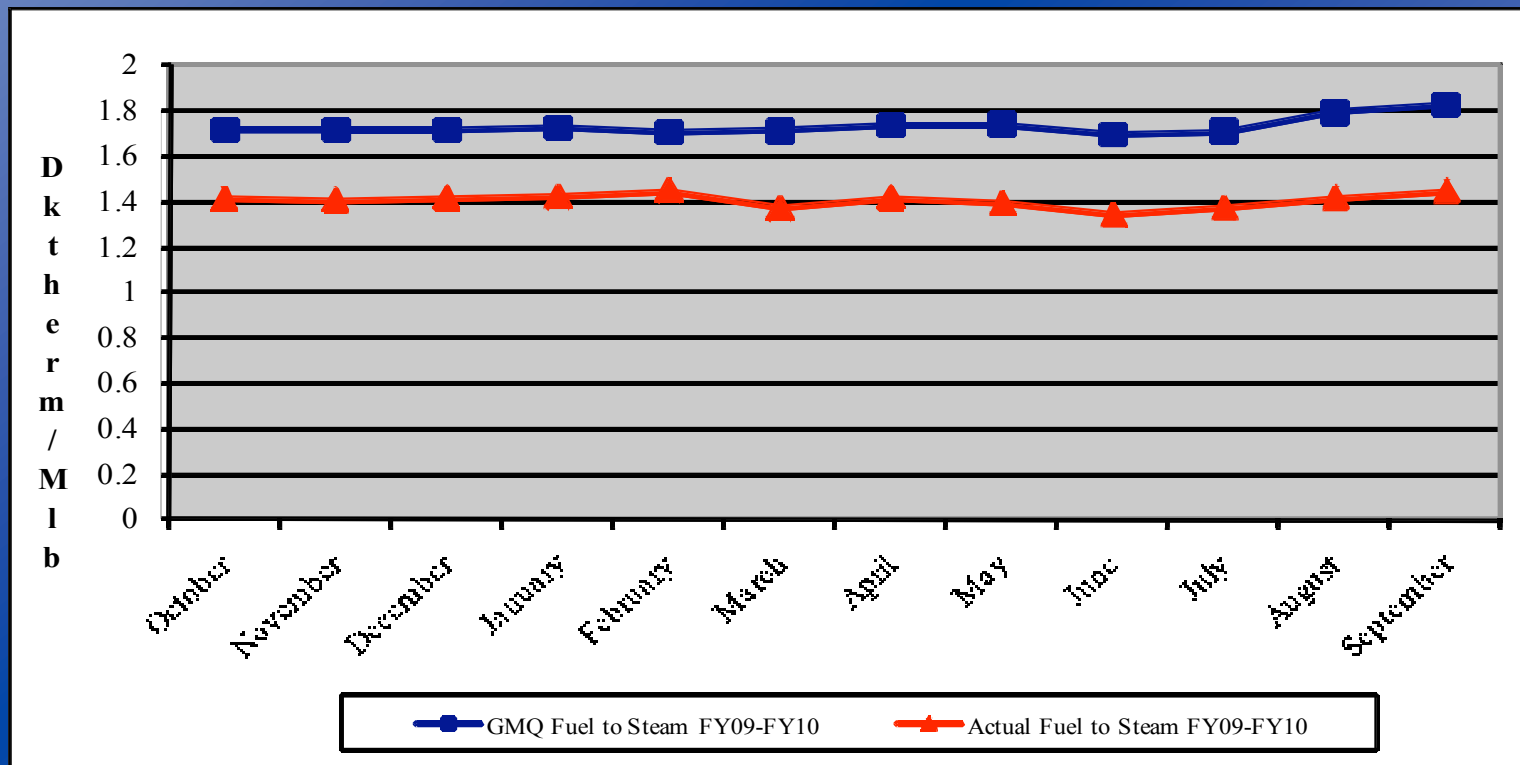
Electric Conversion





Performance Measurement FY10: Steam

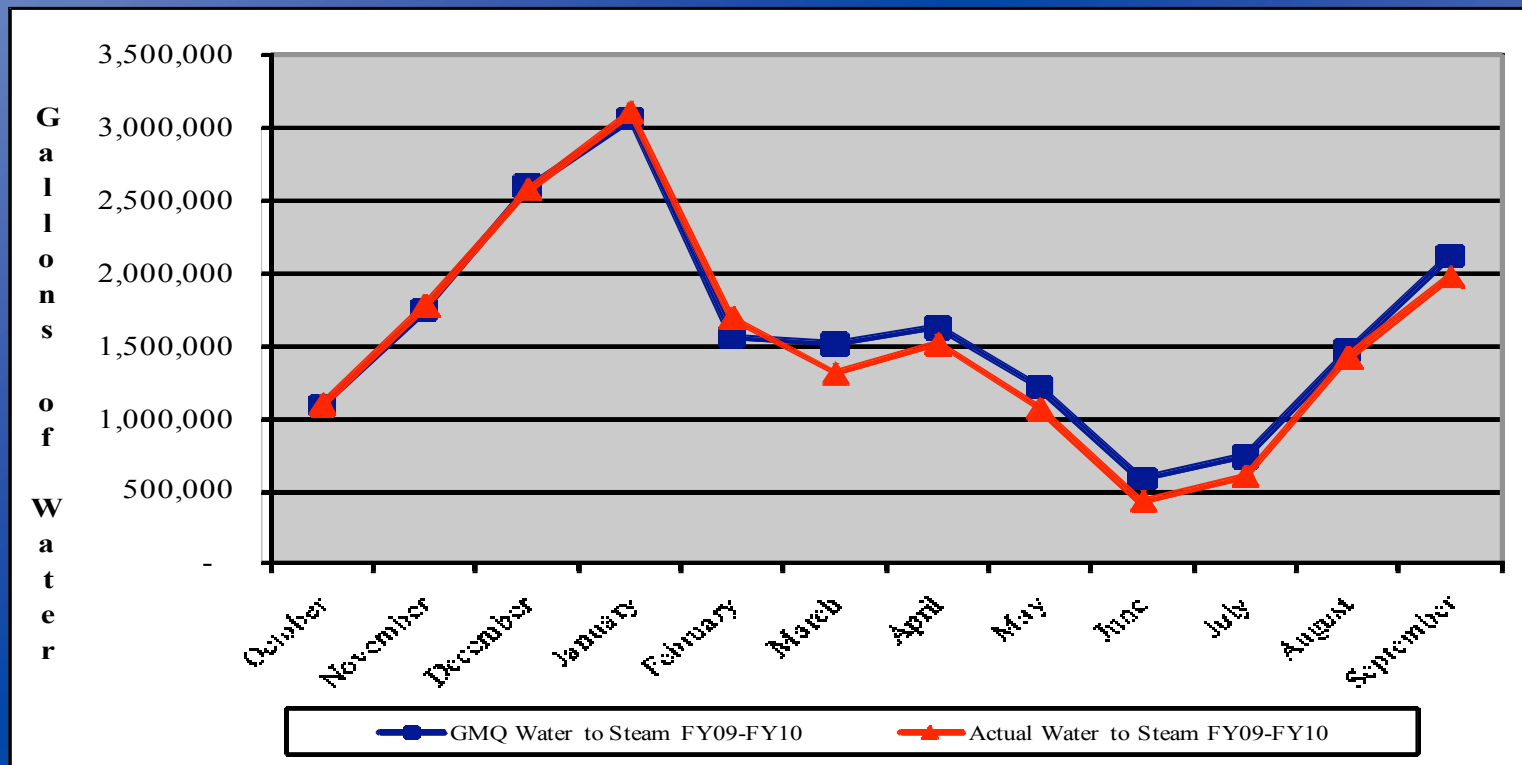
Plant Efficiency ●





Performance Measurement FY10: Steam

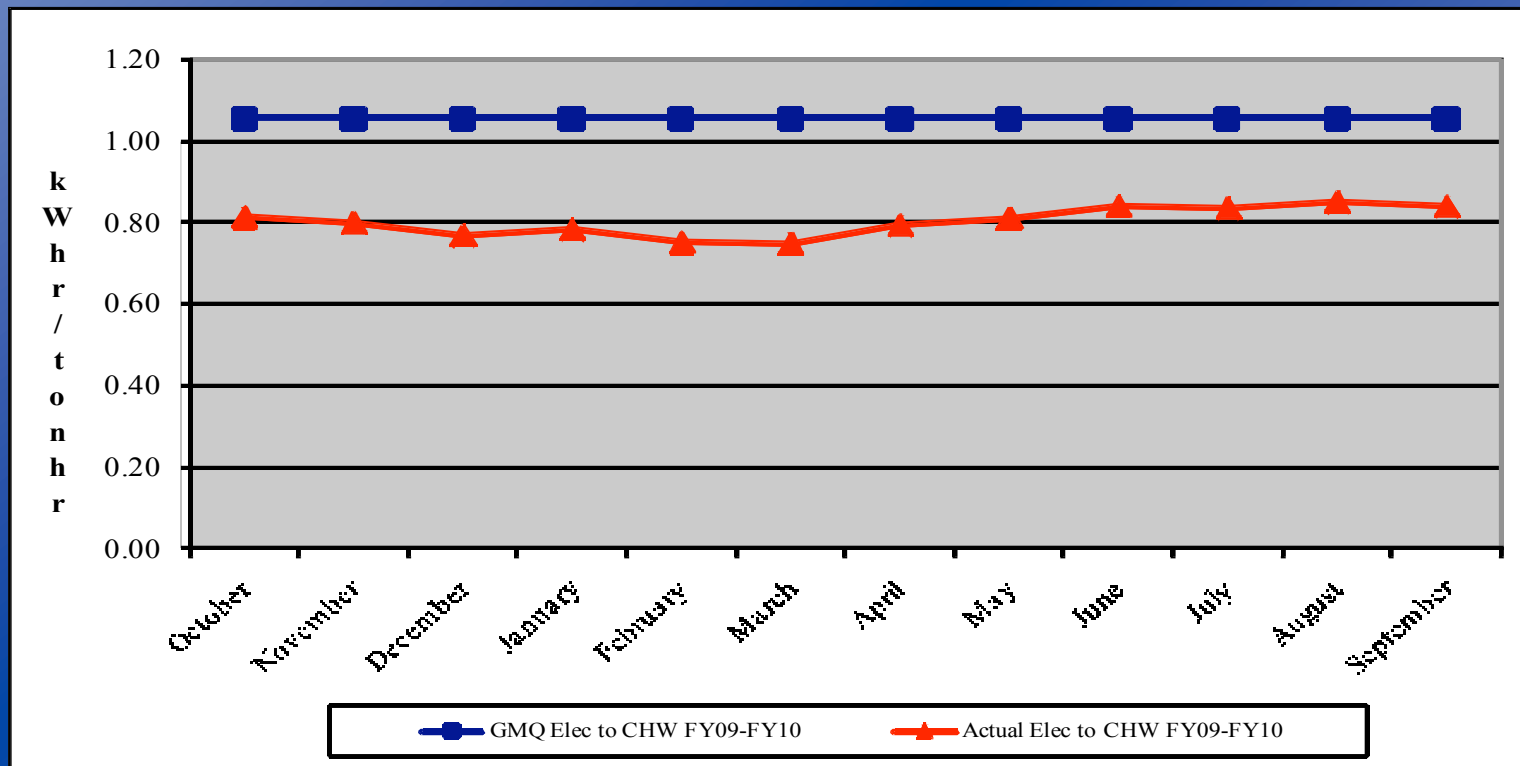
Water Conversion





Performance Measurement FY10: Chilled Water

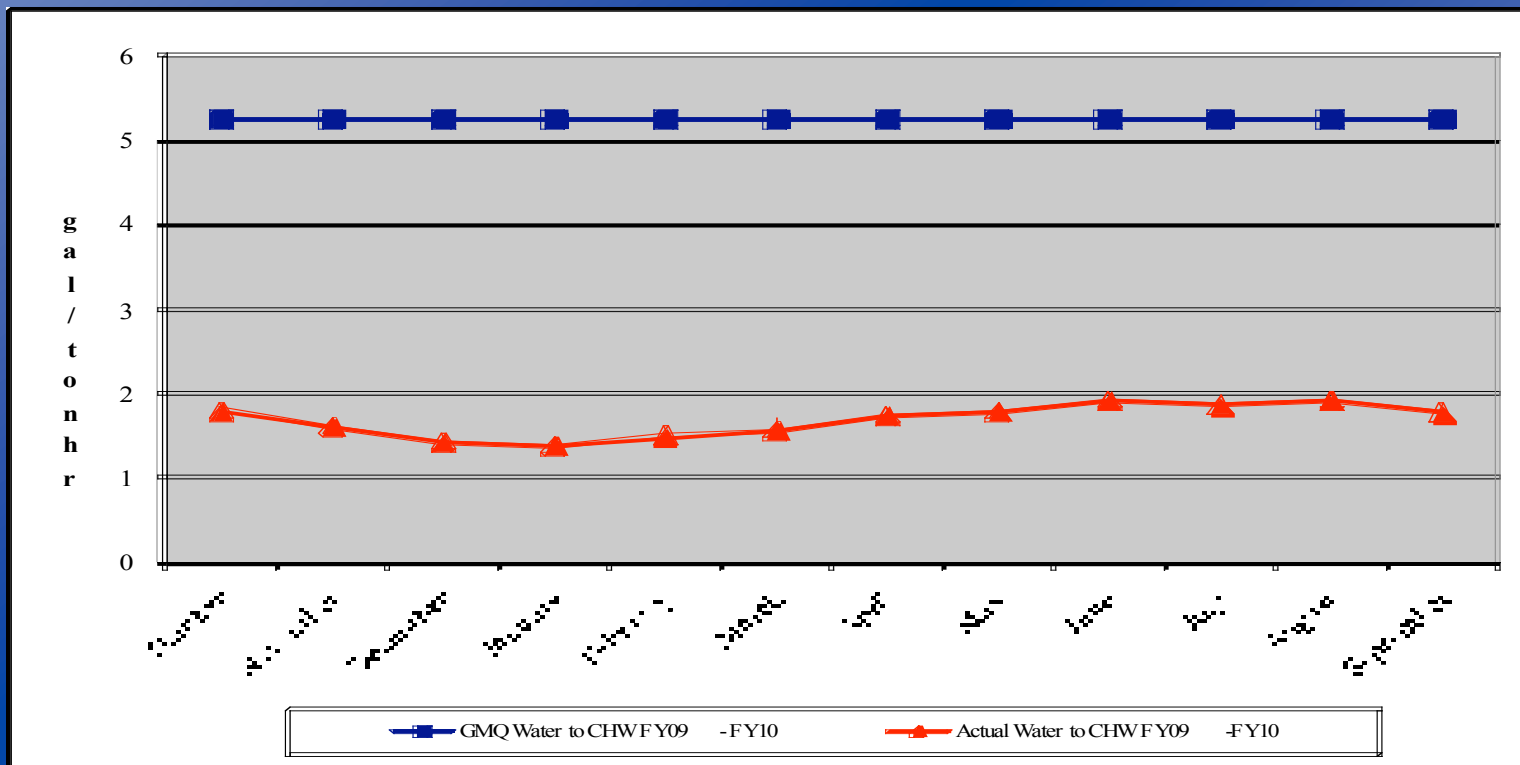
Electric Conversion





Performance Measurement FY10: 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 ●



4. Natural Gas Purchasing

Natural Gas Purchasing Review

Table 4: FY10 Gas Spending & Budget Comparison

Figure 4: Actual and Projected Gas Cost Comparison for FY10



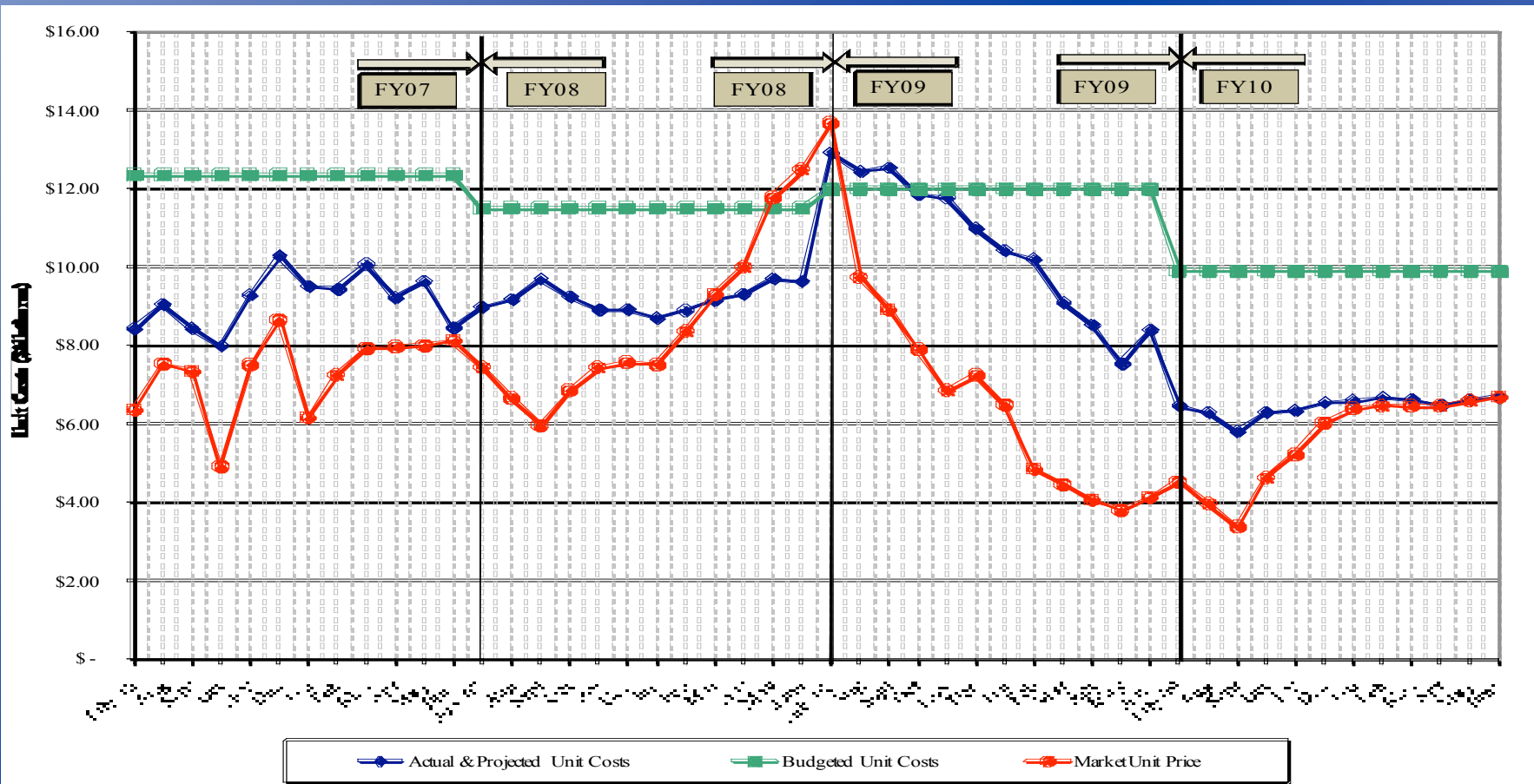
Table 4: FY10 Gas Spending & Budget Comparison

		Actual FY10 To date (Sept 30)	Budget FY10
Steam Sendout (Mlbs)		40,821	39,655
Fuel Use (Dth)	●	57,844	57,500
Plant Eff (Dth/Mlb)	●	1.413	1.450
Total Gas Cost	●	\$356,454	\$564,995
Unit Cost of Fuel (\$/Dth)	●	\$6.162	\$9.826



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Actual and Projected Gas Cost Comparison for FY10





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5. Financial Reports: 1st Qtr FY10

Item	FY10 Budget	Total Expenses to Date	Percent of FY10 Budget
FOC: Basic	\$ 3,976,200	\$ 963,043	24.22%
FOC: 9th Chiller	\$ 37,200	\$ 9,024	24.26%
FOC: Change Order 6A	\$ 73,400	\$ 17,816	24.27%
FOC: Change Order 6B	\$ 64,300	\$ 15,597	24.26%
Chemicals	\$ 161,200	\$ 37,896	23.51%
Engineering	\$ 26,200	\$ 3,801	14.51%
Insurance	\$ 43,700	\$ -	0.00%
Marketing: CEPS Sales Activity	\$ 9,800	\$ -	0.00%
Metro Marketing	\$ 35,000	\$ 5,212	14.89%
Incentive Payments	\$ -	\$ -	n.a.
Project Administration	\$ 24,000	\$ -	0.00%
Metro Incremental Cost	\$ 526,400	\$ 94,387	17.93%
FEA : Steam	\$ -	\$ 14,041	n.a.
FEA : Chilled Water	\$ -	\$ 113,028	n.a.
ARFA	\$ -	\$ 13,987	n.a.
Metro Credit	\$ -	\$ (140,933)	n.a.
Water/Sewer	\$ 689,600	\$ 127,546	18.50%
Natural Gas/Propane	\$ 4,692,900	\$ 355,953	7.58%
Electricity	\$ 5,034,100	\$ 1,264,600	25.12%
EDS Repair & Improvement	\$ 176,500	\$ 35,648	20.20%
EDS Surcharge	\$ 70,600	\$ -	0.00%
Sub-total Operations	\$ 15,641,100	\$ 2,930,645	18.74%
2002 Bonds	\$ 4,362,900	\$ 1,090,698	25.00%
2005 Bonds	\$ 627,600	\$ -	0.00%
FY07 Projects	\$ 227,800	\$ -	0.00%
FY08 Projects	\$ 220,500	\$ -	0.00%
Debt Service Interest Revenue	\$ (123,700)	\$ (154)	0.12%
Oper. Reserve Funding Deposit	\$ -	\$ -	n.a.
Sub-total Debt Service	\$ 5,315,100	\$ 1,090,544	20.52%
Total Expenses	\$ 20,956,200	\$ 4,021,189	19.19%
Customer Revenues	\$ 18,512,100	\$ 3,543,483	19.14%
Total Metro Funding Amount	\$ 2,444,100	\$ 477,706	19.55%



6. FY2009-2010 Budget Status Review

	Spent to End of FY09	FY10 Spending	Balance to Date (09/30/09)
R&I Projects	\$764,130	\$35,648	\$485,062
2005B Bond	\$7,920,090	\$5,604	\$260,807
2007 Bond	\$2,620,771	\$0	\$237,729
2008 Bond	\$1,846,622	\$1,023,574	\$8,304
2010 Bond	\$0	\$6,088	\$2,403,912
Total	\$10,530,842	\$1,070,914	\$3,395,814



7. Capital Projects Review

Active Capital Projects

- DES 041/054: Symphony CND – closed
- DES 044: STM Repair & CND Replacement MH 5 to MH 9 – closed
- DES 0441: Modification of Manhole 9 - closed
- DES 046: Ryman CND – closed
- DES 050: MH Insulation – in construction/ongoing (DES 060 in FY 2010)
- DES 051: Replacement of 4th Avenue Tunnel Condensate Slip Joint - closed
- DES 055: Rebuild of MH “C” – closed
- DES 056: STM Repair & CND Replacement to Citizen’s Plaza – closed
- DES 057: STM & CND Valve Replacement: Phase I & II – closed



FY 2010 Proposed Projects

- DES 048: Tunnel Lighting Replacement Phase III
- DES 059: CJC Steam & Condensate Line Replacement – in design
- DES 060: MH Insulation – in construction/ongoing
- DES 061: Manhole & Tunnel Steel Corrosion Repair & Prevention
- DES 062: Wildhorse Stm & Cnd Line Replacement – in construction
- DES 063: Sump Pump Installation in MH A, B & M – currently bidding
- DES 067: Tunnel Rock Repair – in design
- DES 068: St Mary's Condensate Tempering
- DES 069: Municipal Auditorium Condensate Tempering
- DES 070: MH 6 to 23 Condensate Line Replacement – in design
- DES 071: Hermitage Hotel Service Modifications
- DES 072: Sheraton Hotel Steam and Condensate Replacement



Proposed Music City Center & New Hotel

- Music City Center
 - 3,500 tons
 - 35,000 pph
- New Hotel
 - 1,500 tons
 - 18,000 pph
- Est \$1,500,000 (~55%) Reduction in MFA
- No Impact on Existing Customers
- New Load Approaches EGF Capacity Limit



8. DES Emergency Response Plan

- Metro Business Continuity and Disaster Recovery Plan
- Constellation Energy Emergency Response Plan
- Customer Response Plans



Metro Disaster Recovery Plan

- Communications Between
 - Metro
 - CEPS
 - TEG
 - Customers
- EGF/EDS Functionality
- Relocation of Command
- Continuity of Services
- Priority Customers



CEPS Emergency Response Plan

- Emergency Response
 - Localized and Minor
 - Affecting Service from EGF
 - City-wide
- Communication (CEPS/Metro/TEG/Vendors)
- Damage Assessment
- Temporary Service
- Priority Customers



Customer Response Plans

- Customer HVAC Requirements in an Emergency
- Temporary Service Connections
 - Localized Service Only
 - EGF/EDS Non-functional
- Priority Customers
 - Criminal Justice Center
 - Metro Library
 - AA Birch/Courthouse
 - Hotels and Convention Center
 - State Buildings



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9. Adjourn