



Metro Nashville
DISTRICT ENERGY SYSTEM

Advisory Board Quarterly Meeting
Second Quarter FY10

Presented to
District Energy Advisory Board

February 18, 2010



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 – 2nd Qtr FY10**
- 6. FY09-10 Budget Status Report**
- 7. Capital Projects Review and Status Report**
- 8. Liaison Transition of Duties**
- 9. Adjourn**



Metro Nashville
DISTRICT ENERGY SYSTEM




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

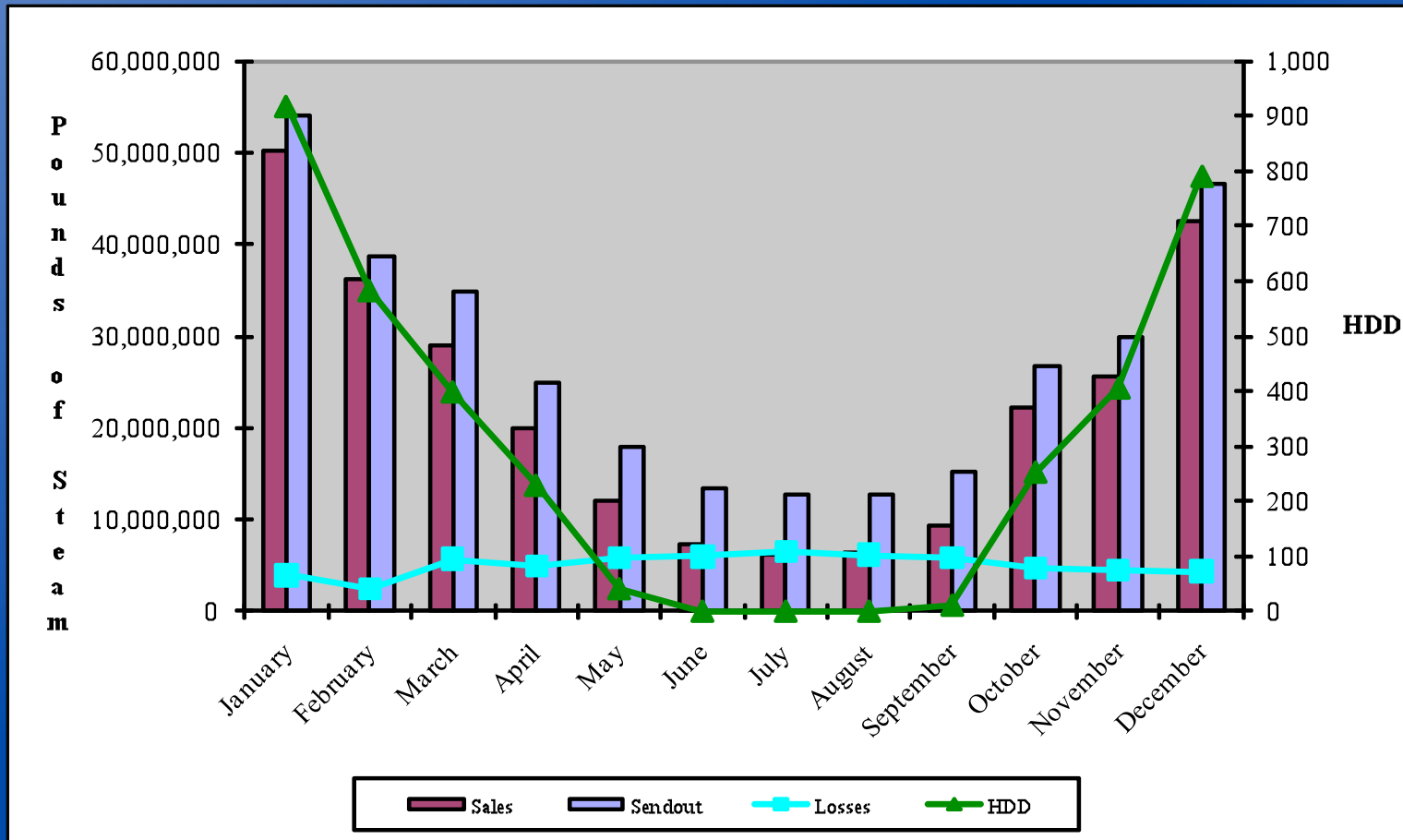
	Steam (\$ millions)			Chilled Water (\$ millions)		
	01/08 – 12/08	01/09-12 /09	% Diff.	01/08 – 12/08	01/09-12 /09	% Diff.
Private	\$2.439	\$1.943	-20.3%	\$3.827	\$3.497	-8.6%
State	\$3.100	\$2.513	-18.9%	\$3.257	\$3.191	-2.0%
Metro	\$2.856	\$2.225	-22.1%	\$3.055	\$2.967	-2.9%
Aggregate	\$8.395	\$6.681	-20.4%	\$10.139	\$9.656	-4.8%

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



Metro Nashville DISTRICT ENERGY SYSTEM

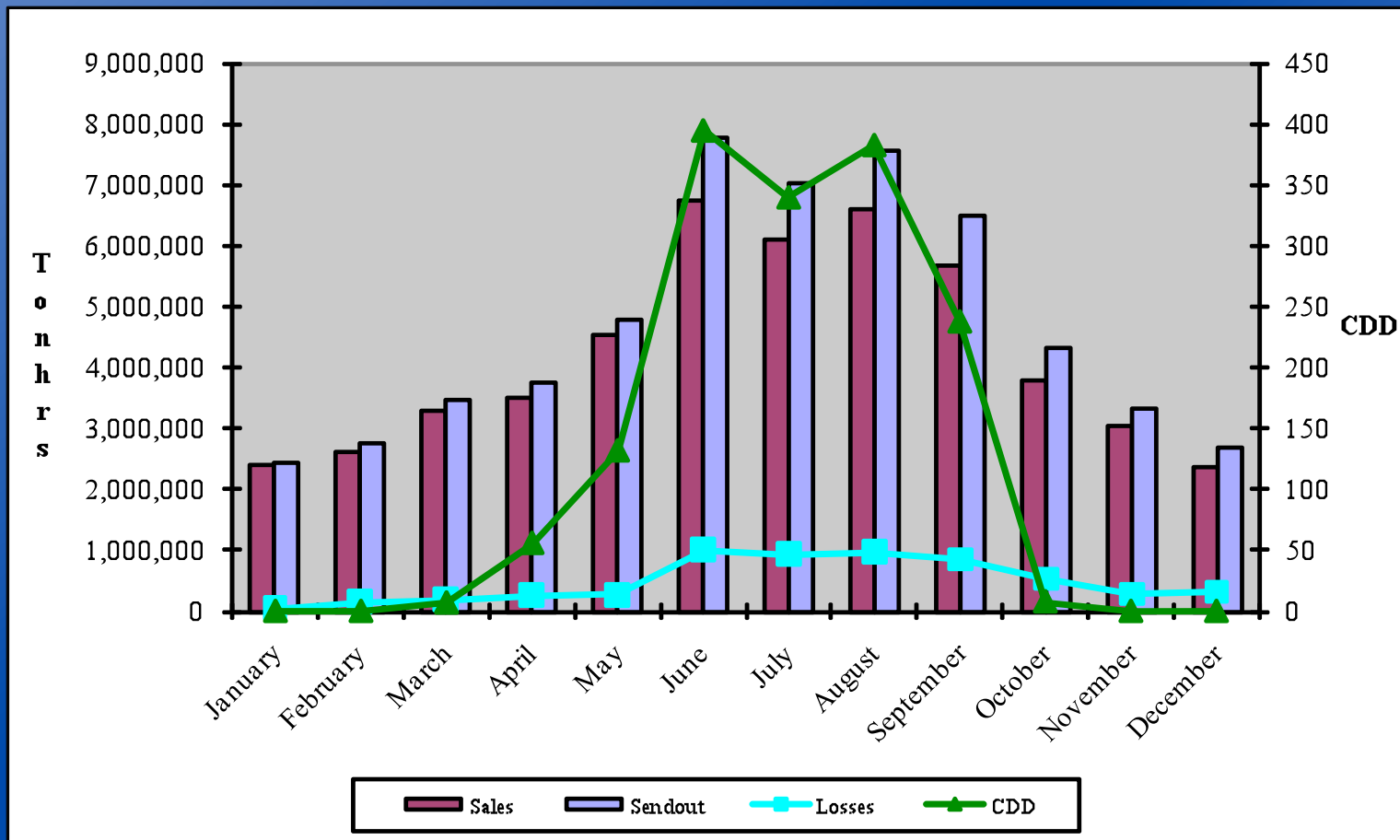
FY10 Operations: Steam





Metro Nashville DISTRICT ENERGY SYSTEM

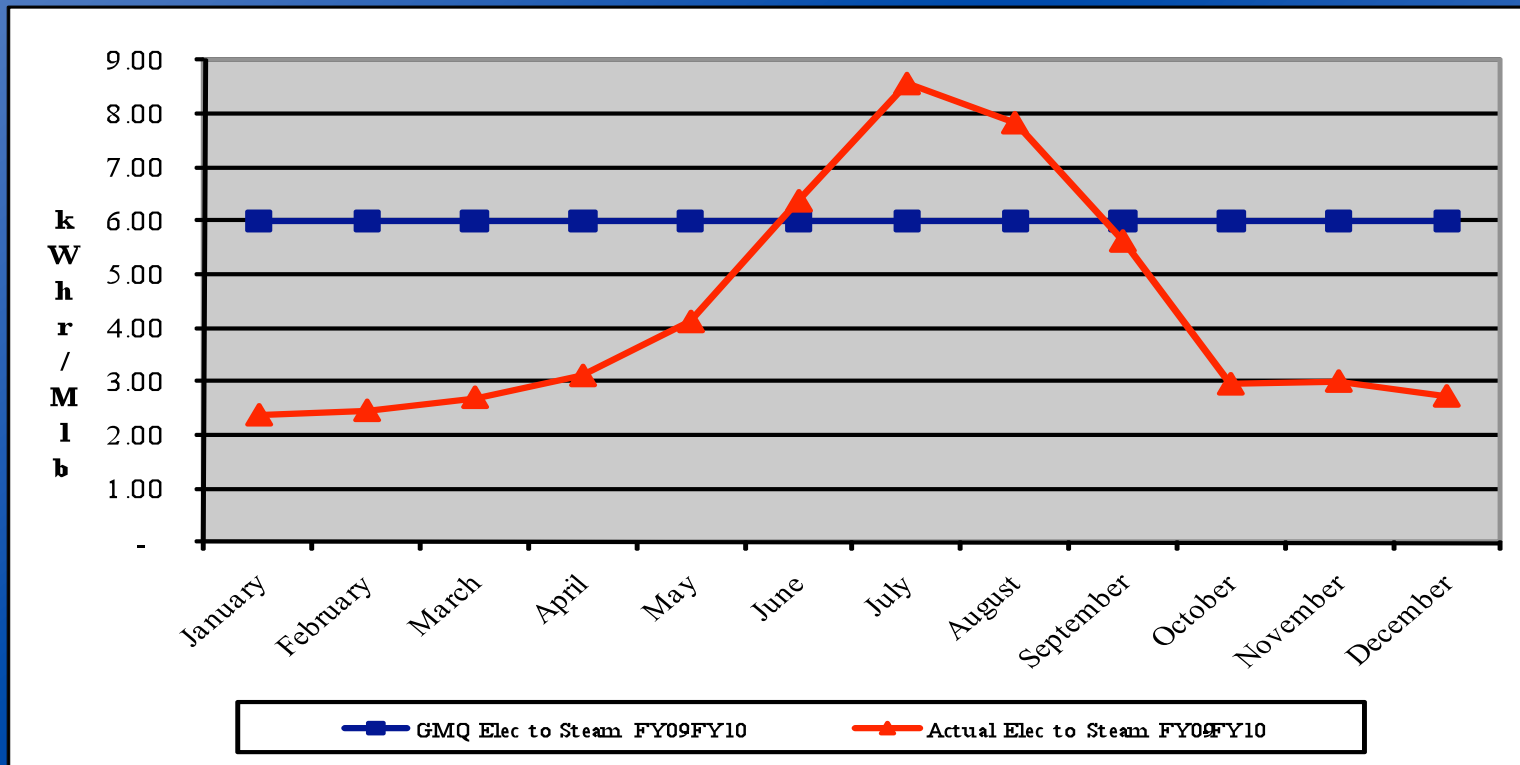
FY10 Operations: Chilled Water





Performance Measurement FY10: Steam

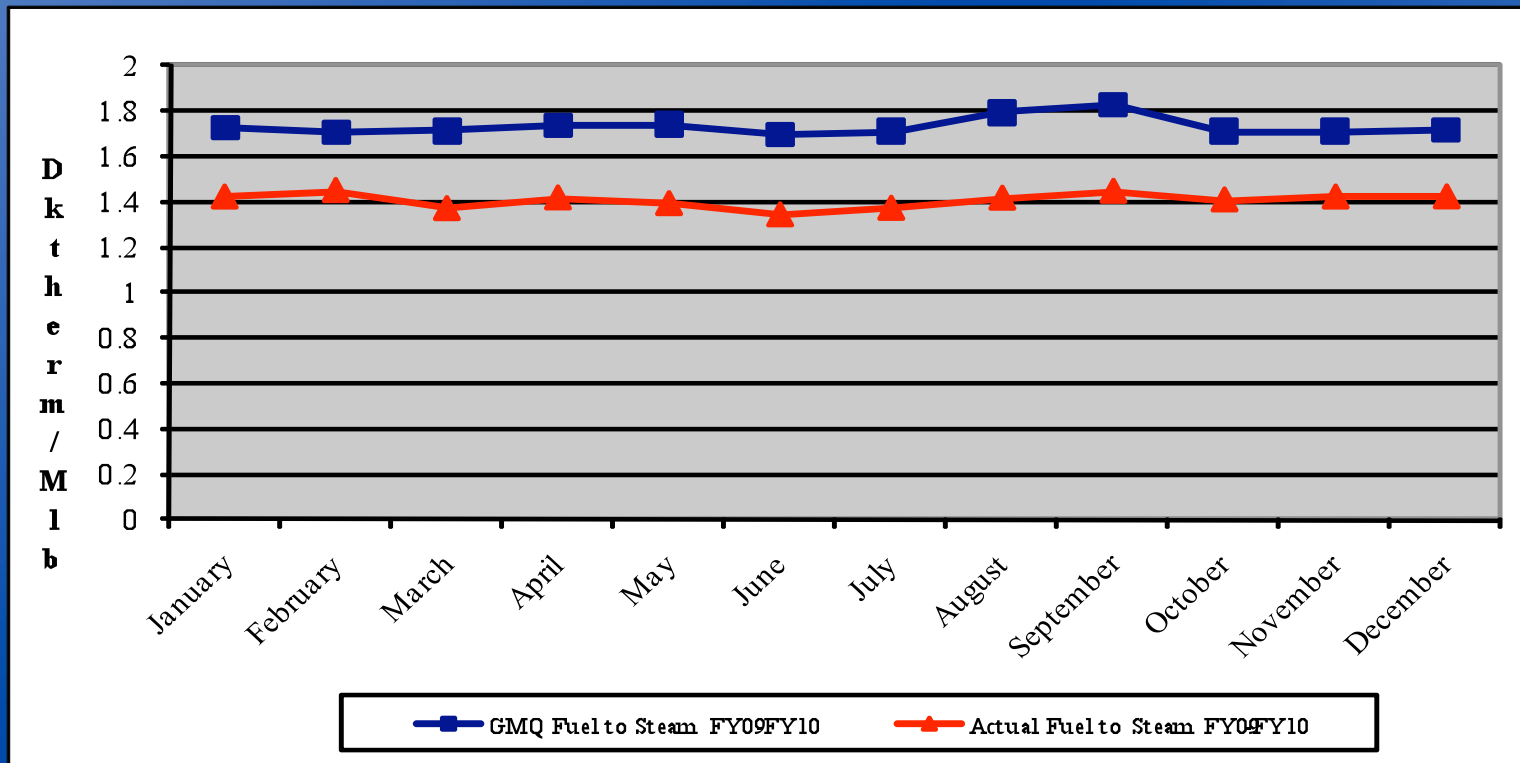
Electric Conversion





Performance Measurement FY10: Steam

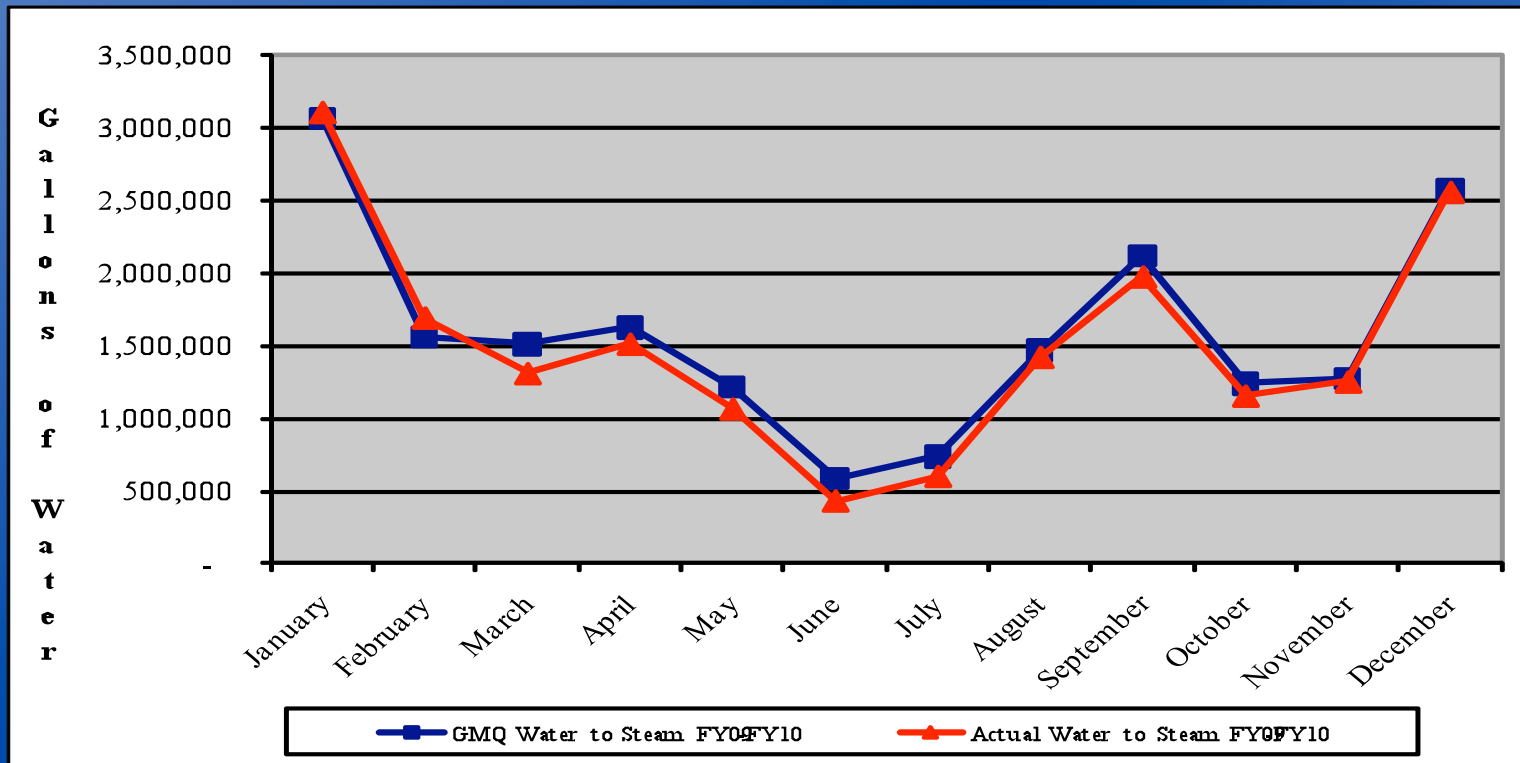
Plant Efficiency ●





Performance Measurement FY10: Steam

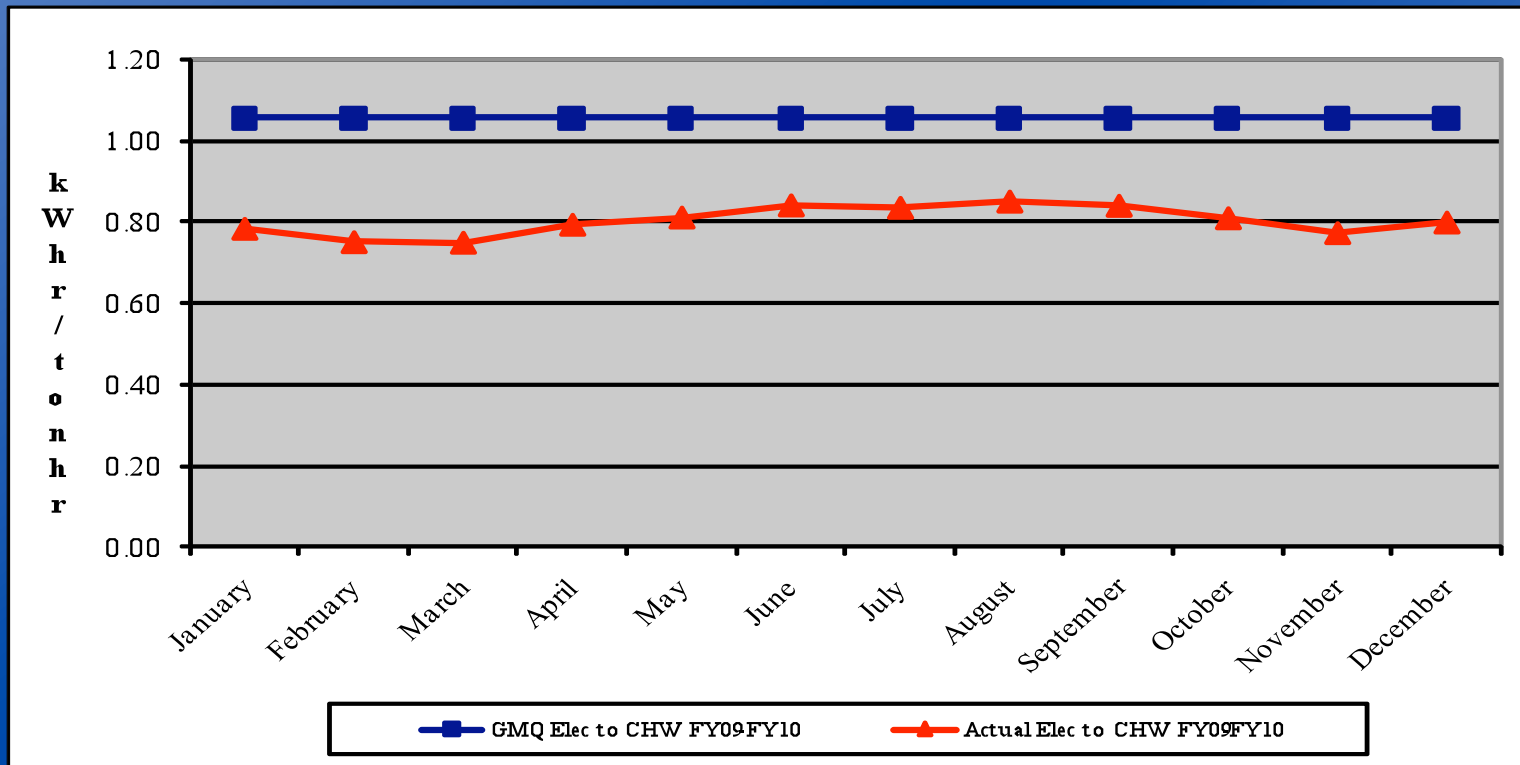
Water Conversion ●





Performance Measurement FY10: Chilled Water

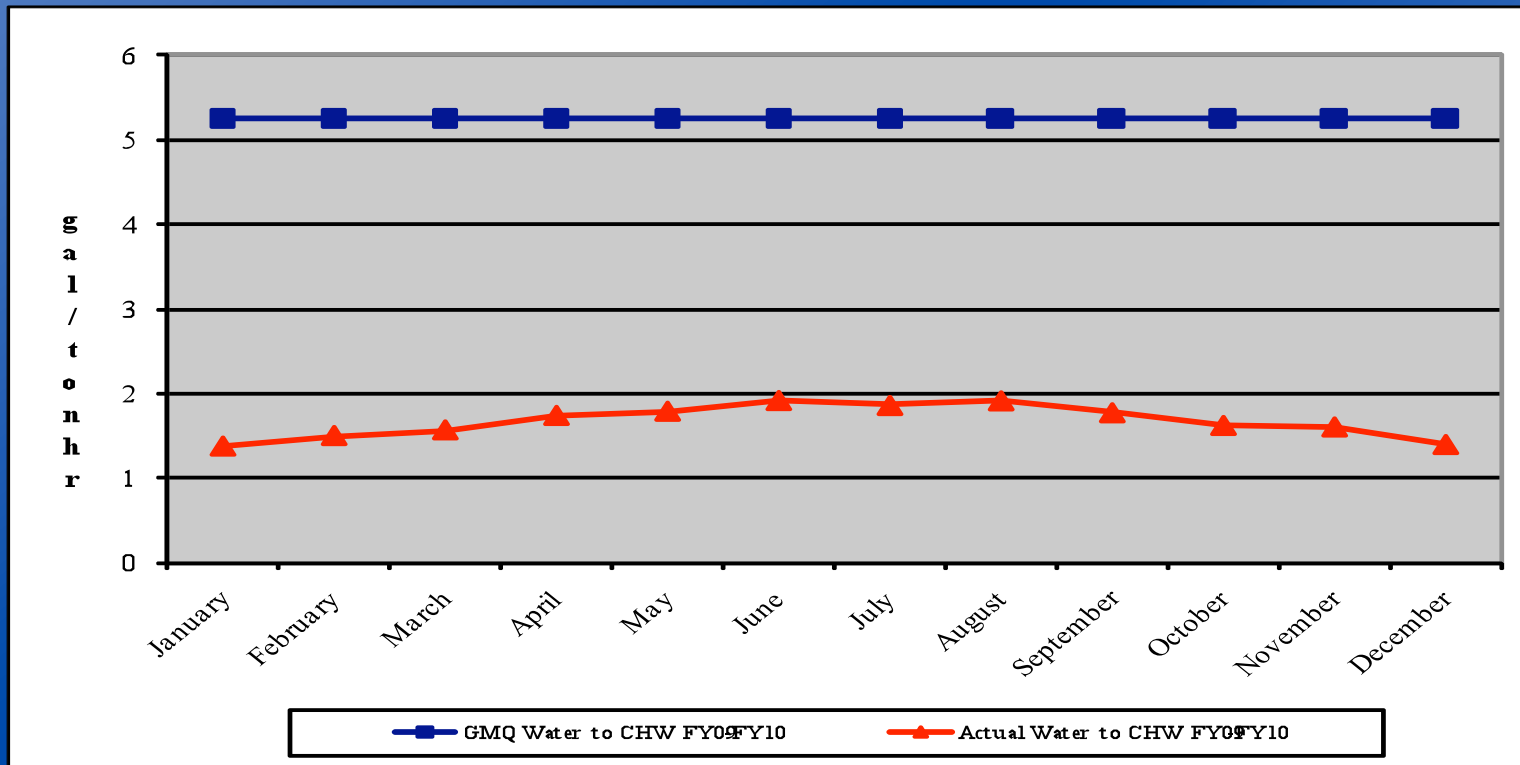
Electric Conversion





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**



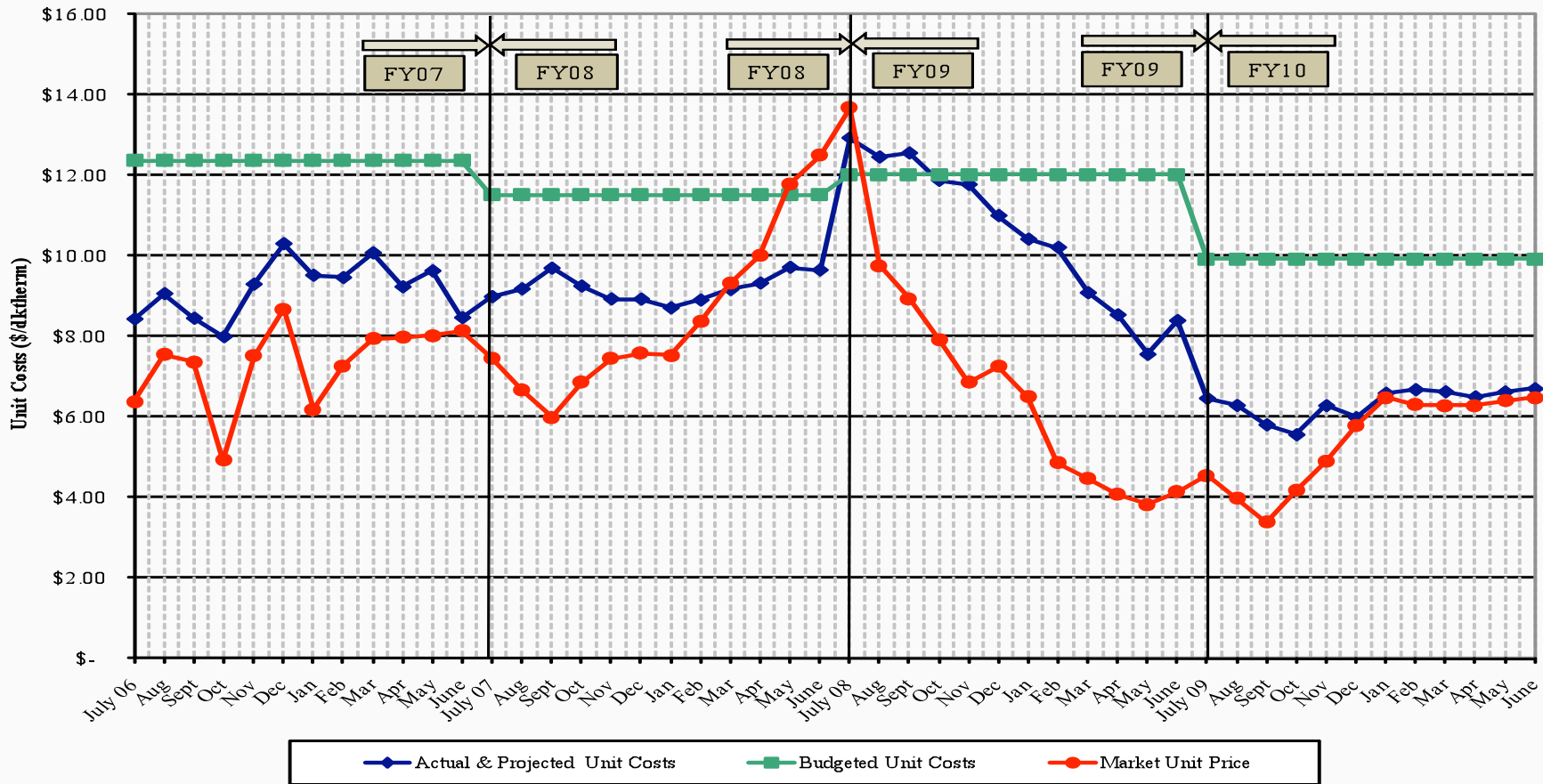
Table 4: FY10 Gas Spending & Budget Comparison

		Actual FY10 To date (Dec 31)	Budget FY10
Steam Sendout (Mlbs)		144,218	145,172
Fuel Use (Dth)	●	205,313	210,500
Plant Eff (Dth/Mlb)	●	1.424	1.450
Total Gas Cost	●	\$1,297,0338	\$2,068,373
Unit Cost of Fuel (\$/Dth)	●	\$6.317	\$9.826



Metro Nashville DISTRICT ENERGY SYSTEM

Actual and Projected Gas Cost Comparison for FY10





Metro Nashville

DISTRICT ENERGY SYSTEM

5. Financial Reports: 2nd Qtr FY10

Item	FY10 Budget	Total Expenses to Date	Percent of FY10 Budget
FOC: Basic	\$ 3,976,200	\$ 1,926,085	48.44%
FOC: 9th Chiller	\$ 37,200	\$ 18,048	48.51%
FOC: Change Order 6A	\$ 73,400	\$ 35,631	48.54%
FOC: Change Order 6B	\$ 64,300	\$ 31,194	48.51%
Chemicals	\$ 161,200	\$ 74,891	46.46%
Engineering	\$ 26,200	\$ 16,578	63.28%
Insurance	\$ 43,700	\$ 27,723	63.44%
Marketing: CEPS Sales Activity	\$ 9,800	\$ -	0.00%
Metro Marketing	\$ 35,000	\$ 8,564	24.47%
Incentive Payments	\$ -	\$ -	n.a.
Project Administration	\$ 24,000	\$ -	0.00%
Metro Incremental Cost	\$ 526,400	\$ 186,757	35.48%
FEA: Steam	\$ -	\$ 53,980	n.a.
FEA: Chilled Water	\$ -	\$ 194,436	n.a.
ARFA	\$ -	\$ 27,973	n.a.
Metro Credit	\$ -	\$ (221,345)	n.a.
Water/Sewer	\$ 689,600	\$ 194,705	28.23%
Natural Gas/Propane	\$ 4,692,900	\$ 1,297,038	27.64%
Electricity	\$ 5,034,100	\$ 2,083,012	41.38%
EDS Repair & Improvement	\$ 176,500	\$ 63,339	35.89%
EDS Surcharge	\$ 70,600	\$ -	0.00%
Sub-total Operations	\$ 15,641,100	\$ 6,018,610	38.48%
2002 Bonds	\$ 4,362,900	\$ 2,181,405	50.00%
2005 Bonds	\$ 627,600	\$ 168,794	26.90%
FY07 Projects	\$ 227,800	\$ 112,075	49.20%
FY08 Projects	\$ 220,500	\$ 112,075	50.83%
Debt Service Interest Revenue	\$ (123,700)	\$ (7,835)	6.33%
Oper. Reserve Funding Deposit	\$ -	\$ -	n.a.
Sub-total Debt Service	\$ 5,315,100	\$ 2,566,514	48.29%
Total Expenses	\$ 20,956,200	\$ 8,585,124	40.97%
Customer Revenues	\$ 18,512,100	\$ 7,405,726	40.00%
Total Metro Funding Amount	\$ 2,444,100	\$ 1,179,398	48.25%



6. FY2009-2010 Budget Status Review

	Spent to End of FY09	FY10 Spending	Balance to Date (01/25/10)
R&I Projects	\$764,130	\$63,718	\$518,768
2005B Bond	\$7,920,090	\$14,126	\$252,284
2007 Bond	\$2,620,771	\$0	\$237,729
2008 Bond	\$1,846,622	\$1,031,878	\$0
2010 Bond	\$0	\$18,371	\$2,391,629
Total	\$10,530,842	\$1,128,093	\$3,400,410



7. Capital Projects Review

Active Capital Projects

- DES 060: MH Insulation - in construction/ongoing
- DES 062: Replacement of Steam and Condensate Service to 120 2nd Ave. North (Wildhorse Saloon) - in construction
- DES 063: Manhole A, B & M Sump Pump Installation - on standby
- DES 066: 1st Avenue Manhole & Steam Line Removal from Service -in construction
- DES 073: MH-18 Condensate and Platform Modification - in design
- DES 076: MH-S4A State Manhole Rebuild -in design
- DES 077: Expansion of Service to the Music City Convention Center - in design



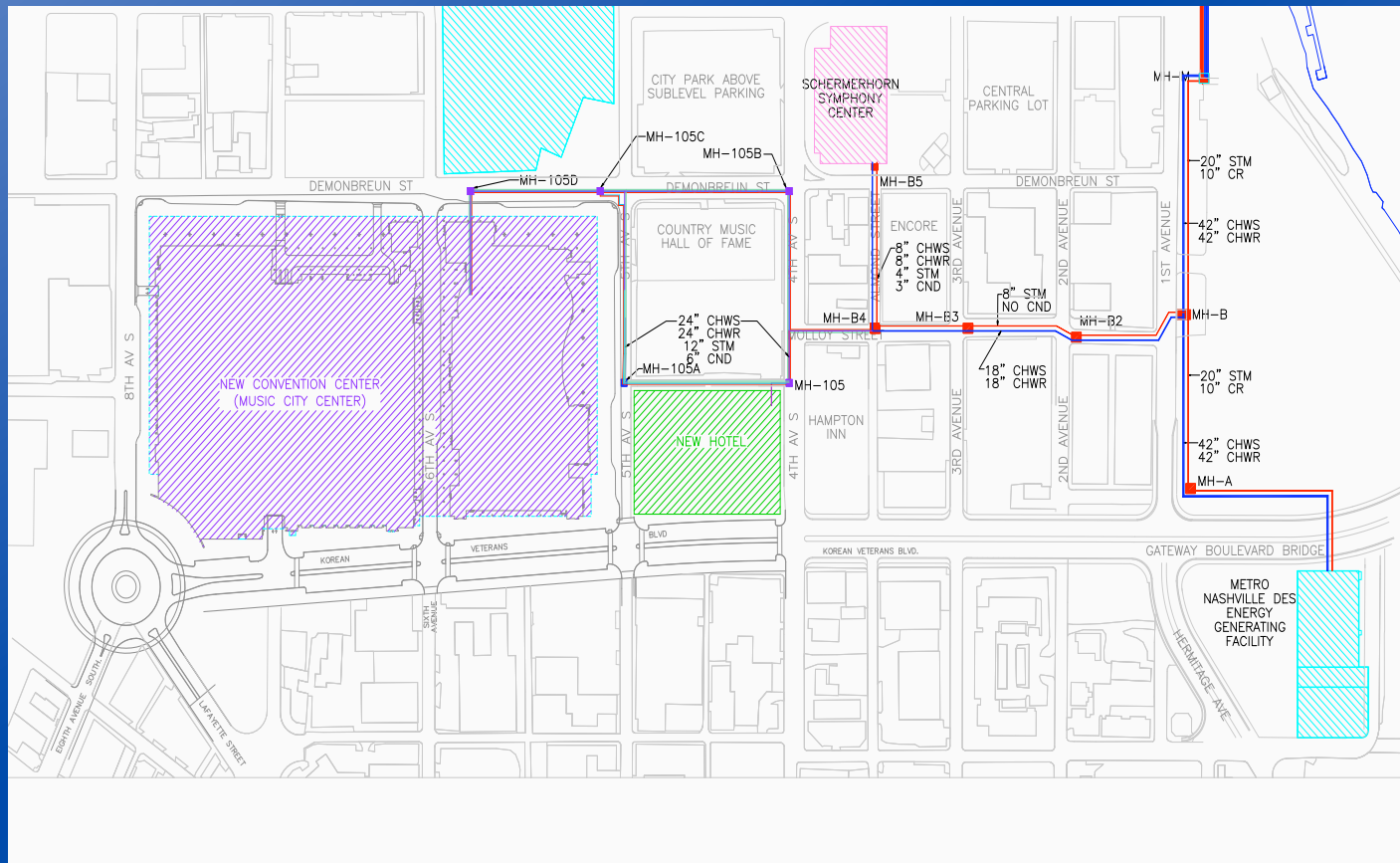
FY 2010 Proposed Projects

- 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 – on standby
- DES 066: 1st Avenue Steam Line & Manhole Removal from Service - in construction
- DES 067: Tunnel Rock Repair – in design
- DES 068: St Mary's Condensate Tempering/MH 10 Repair – in design
- DES 069: Municipal Auditorium Condensate Tempering
- DES 070: MH 6 to 23 Condensate Line Replacement – in design
- DES 071: Hermitage Hotel Service Modifications – in design
- DES 072: Sheraton Hotel Steam and Condensate Replacement



Metro Nashville DISTRICT ENERGY SYSTEM

Music City Center & New Hotel DES Location





Proposed Music City Center & New Hotel

- Music City Center
 - 4,000 tons
 - 35,000 pph
- New Hotel
 - 1,900 tons
 - 23,400 pph
- Est \$1,500,000 (~55%) Reduction in MFA
- No Impact on Existing Customers
- New Load Approaches EGF Capacity Limit



Metro Nashville
DISTRICT ENERGY SYSTEM

8. Liaison Transition of Duties

9. Adjourn