



Metro Nashville
DISTRICT ENERGY SYSTEM

DES Advisory Board Meeting
Second Quarter FY26
February 19, 2026



Presented by:
MNDES Project Administrator
Thermal Engineering Group, Inc

Agenda

1. Call to Order
2. Review & Approval of Previous Meeting Minutes
3. Metro Liaison Update
4. Customer Sales
5. Marketing
6. Review of DES Contractor Performance
7. Natural Gas Purchasing Update
8. FY26 Costs to Date
9. FY26 Budget
10. Review of EGF and EDS
11. Capital Projects Review & Status
12. System Operator Update
13. Special Topics
14. Other Board Member Items
15. Adjourn

1. Call to Order
2. Review & Approval of Previous Meeting Minutes
3. Metro Liaison Update

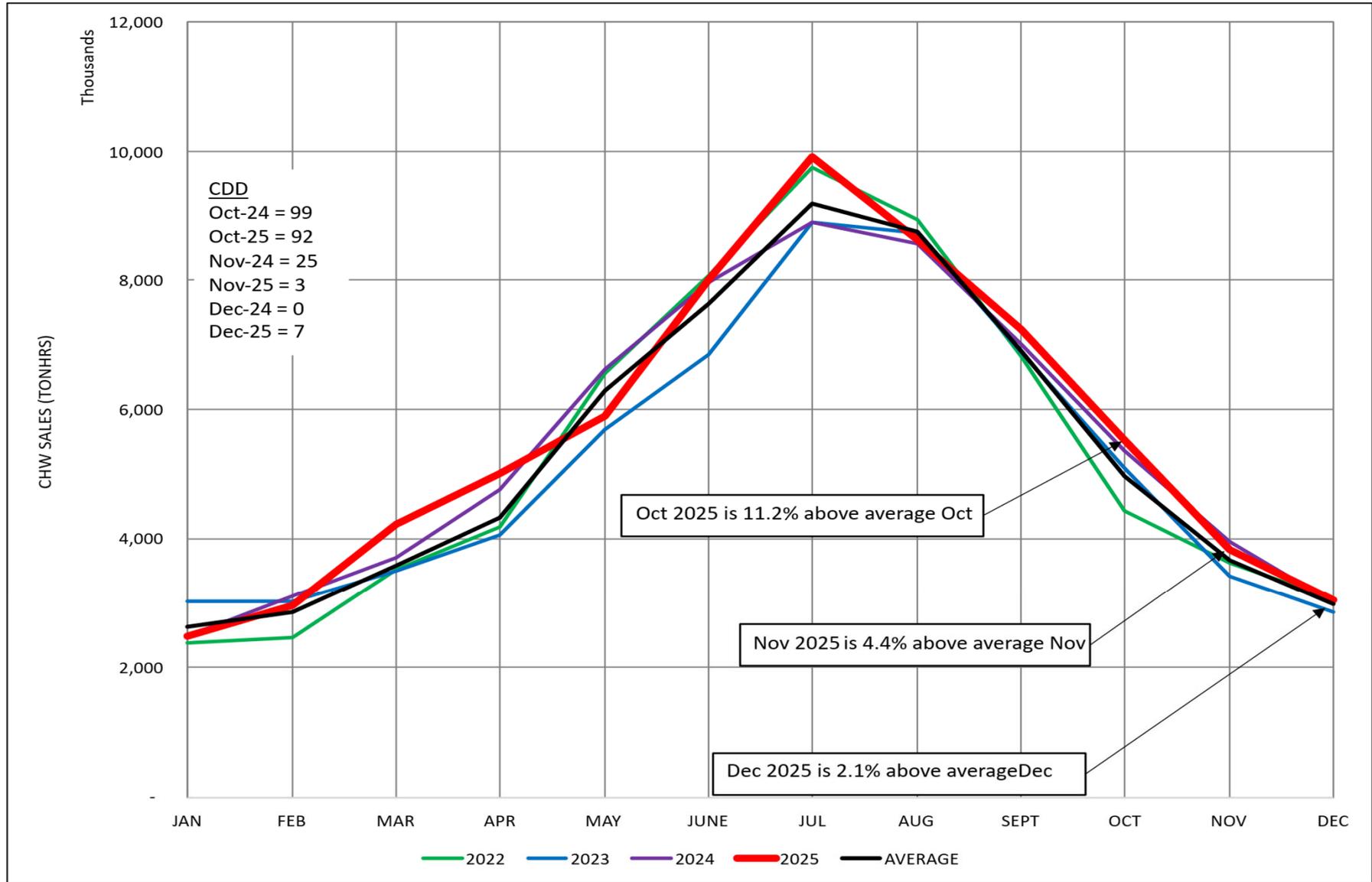
4. *Customer Sales*

- ❖ There are 0 customers in arrears more than 30 days
- ❖ Table 5: Customer Cost Comparison for the Previous 12 Months
- ❖ Figure 5A: Historic Chilled Water Sales
- ❖ Figure 5B: Historic Steam Sales

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

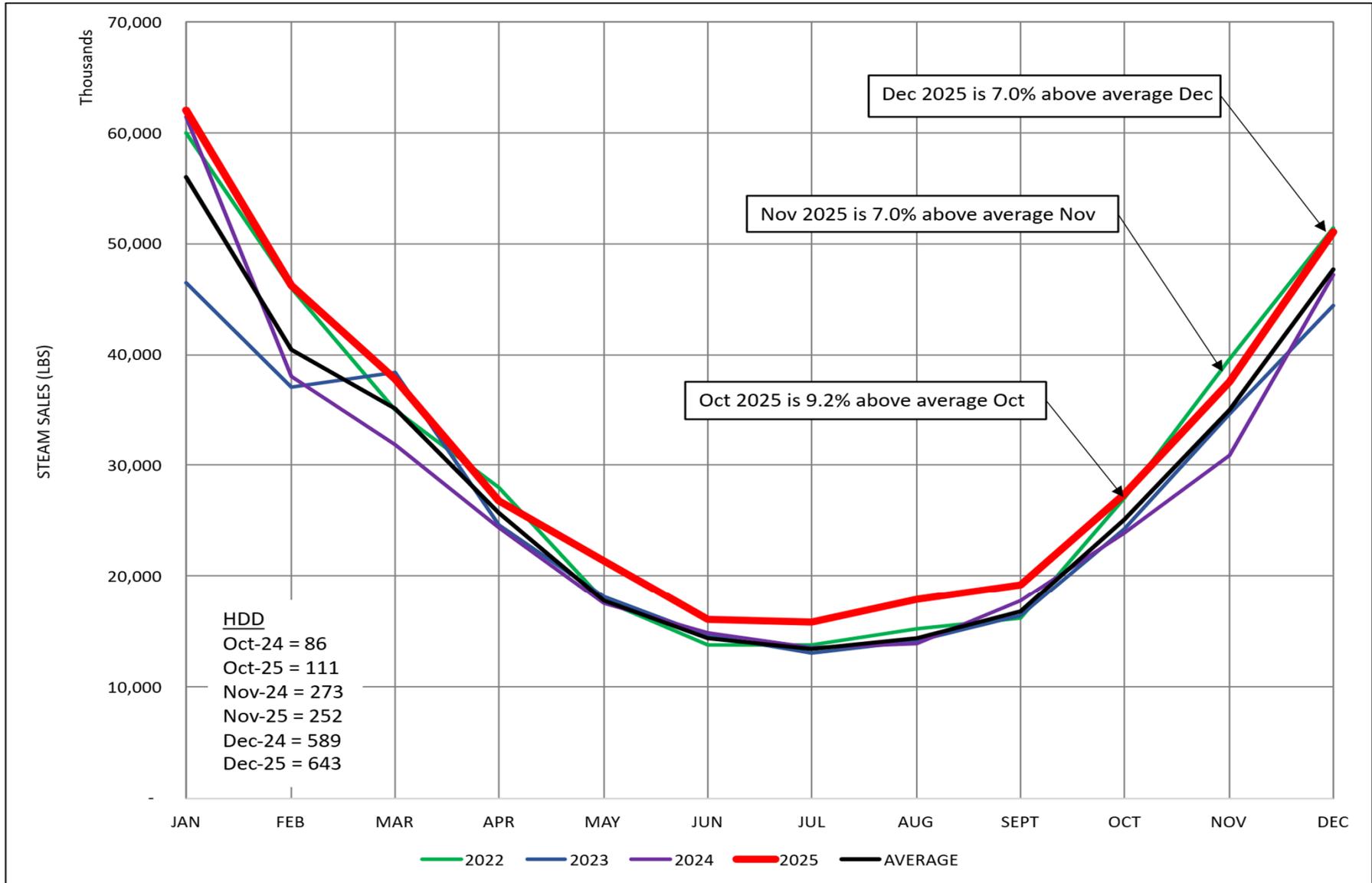
	Steam - Rolling 12 Month			Chilled Water - Rolling 12 Month		
	Jan 2024-Dec 2024	Jan 2025-Dec 2025	% Diff.	Jan 2024-Dec 2024	Jan 2025-Dec 2025	% Diff.
Private Cost	\$ 1,628,688	\$ 1,700,808	4.43%	\$ 4,557,002	\$ 4,765,681	4.58%
Usage (lbs or tonhrs)	93,290,523	101,487,661	8.79%	22,870,224	23,326,547	2.00%
State Cost	\$ 2,015,002	\$ 2,125,015	5.46%	\$ 3,494,206	\$ 3,617,211	3.52%
Usage (lbs or tonhrs)	104,883,323	124,508,621	18.71%	13,091,551	14,622,379	11.69%
Metro Cost	\$ 2,020,395	\$ 2,156,552	6.74%	\$ 5,330,261	\$ 5,448,669	2.22%
Usage (lbs or tonhrs)	136,961,938	152,642,543	11.45%	29,446,197	28,797,892	-2.20%
Aggregate Cost	\$ 5,664,085	\$ 5,982,375	5.62%	\$13,381,469	\$13,831,561	3.36%
Usage (lbs or tonhrs)	335,135,784	378,638,825	12.98%	65,407,972	66,746,818	2.05%
Unit Cost	\$ 16.90	\$ 15.80	-6.5%	\$ 0.205	\$ 0.207	1.29%

Figure 4A. Historic Chilled Water Sales



Averages include the years 2022, 2023, and 2024.

Figure 4B. Historic Steam Sales



Averages include the years 2022, 2023, and 2024.

5. *Marketing*

- Remaining Capacity for Sale (approximate)
 - 1,800 tons of chilled water
 - 35,100 pph of steam
- Potential New Customer Interest
 - ~8,500 tons
 - ~97,000 pph (or equivalent)
- Decoupling Existing Customers
- Existing Building Renovations – New Contracts
 - Parkway Towers – Converting to Hotel
 - Mourya Hotel – Converting to Hotel

Marketing (con't)

- Rolling Mill Hill Development
 - 1st and KVB
 - Development on hold
 - 4th and Lea Ave
 - Re-evaluating development; on hold
- Two Large Developments in Preliminary Design

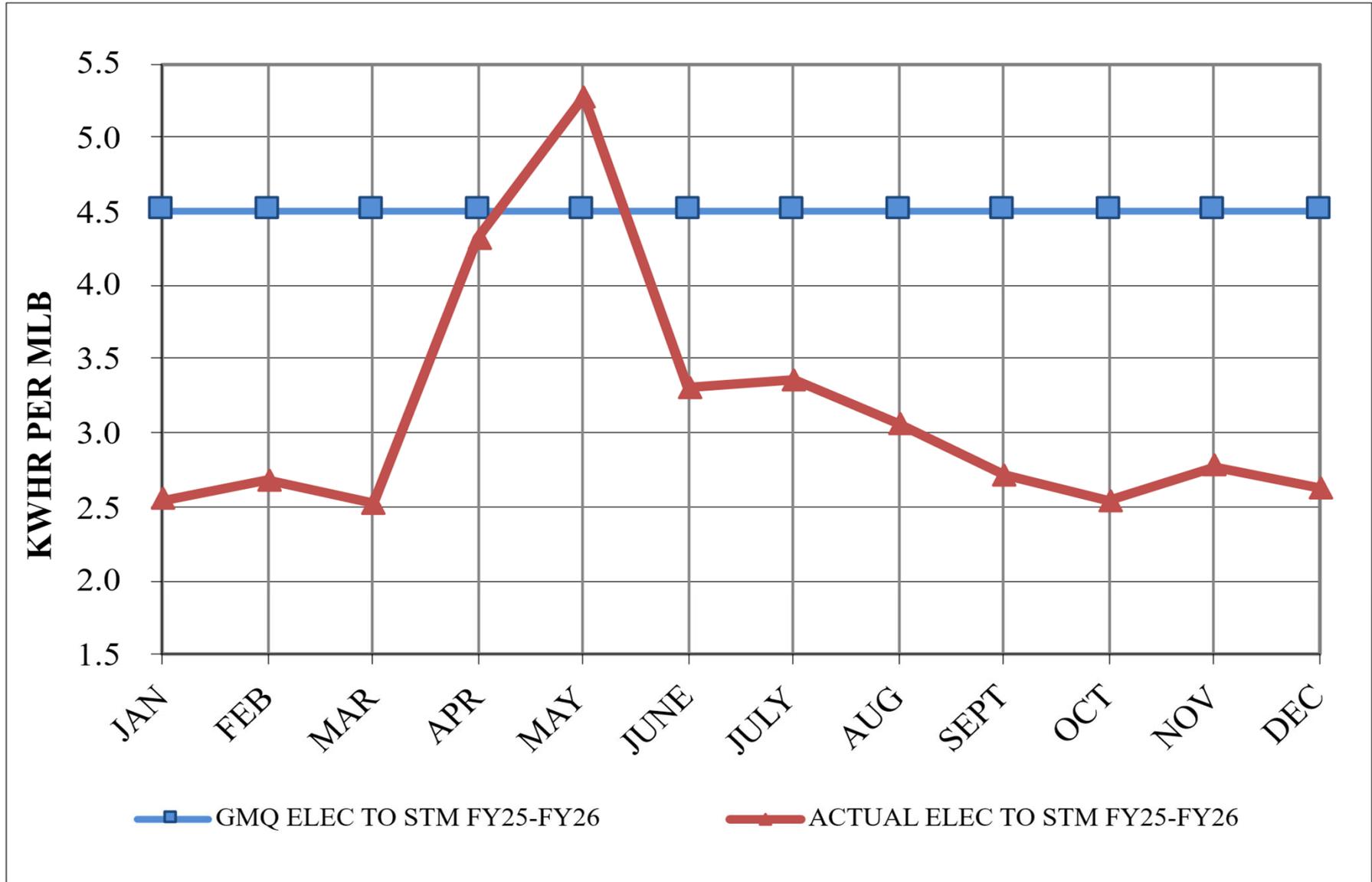
Marketing (con't)

- New Developments North of KVB
 - Printer's and Banker's Alley (DES203)
 - Development on hold; design includes chilled water
 - 7th and Commerce (DES202)
 - Development progressing; current design includes steam and chilled water
 - Washington Square
 - Anticipate replacing existing chiller with DES
- Two Existing Buildings Considering DES with their Renovations
- Two New Buildings Considering DES in Preliminary Design
- 15 Contacts with Potential Customers in Past Year

6. Review of DES Contractor Performance

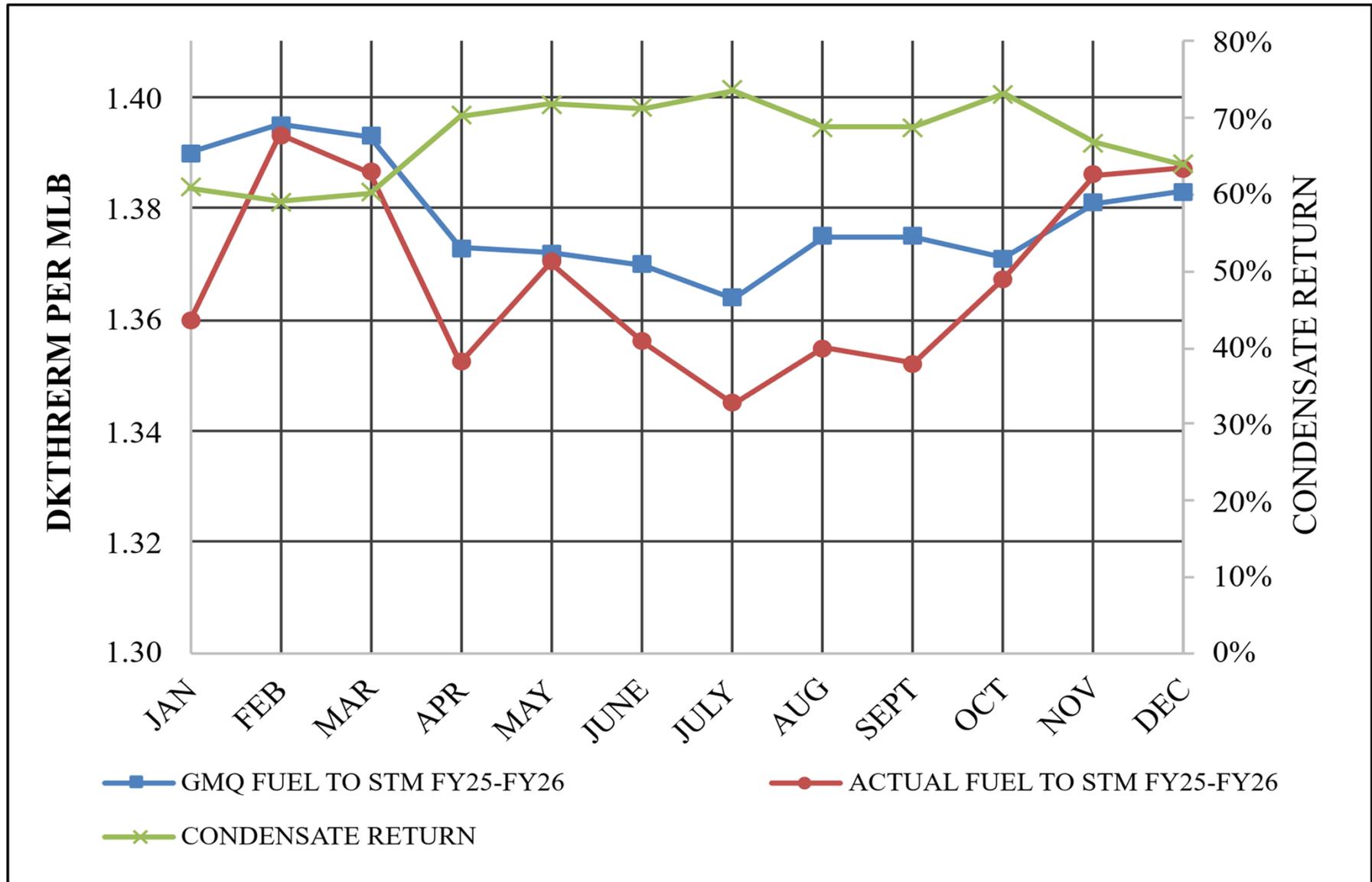
DEAO failed to meet the steam-to-fuel performance metric for two months in the quarter. All other metrics met during the quarter. DEAO continues to address the system energy usage.

Performance Measurement FY26: Steam Electric



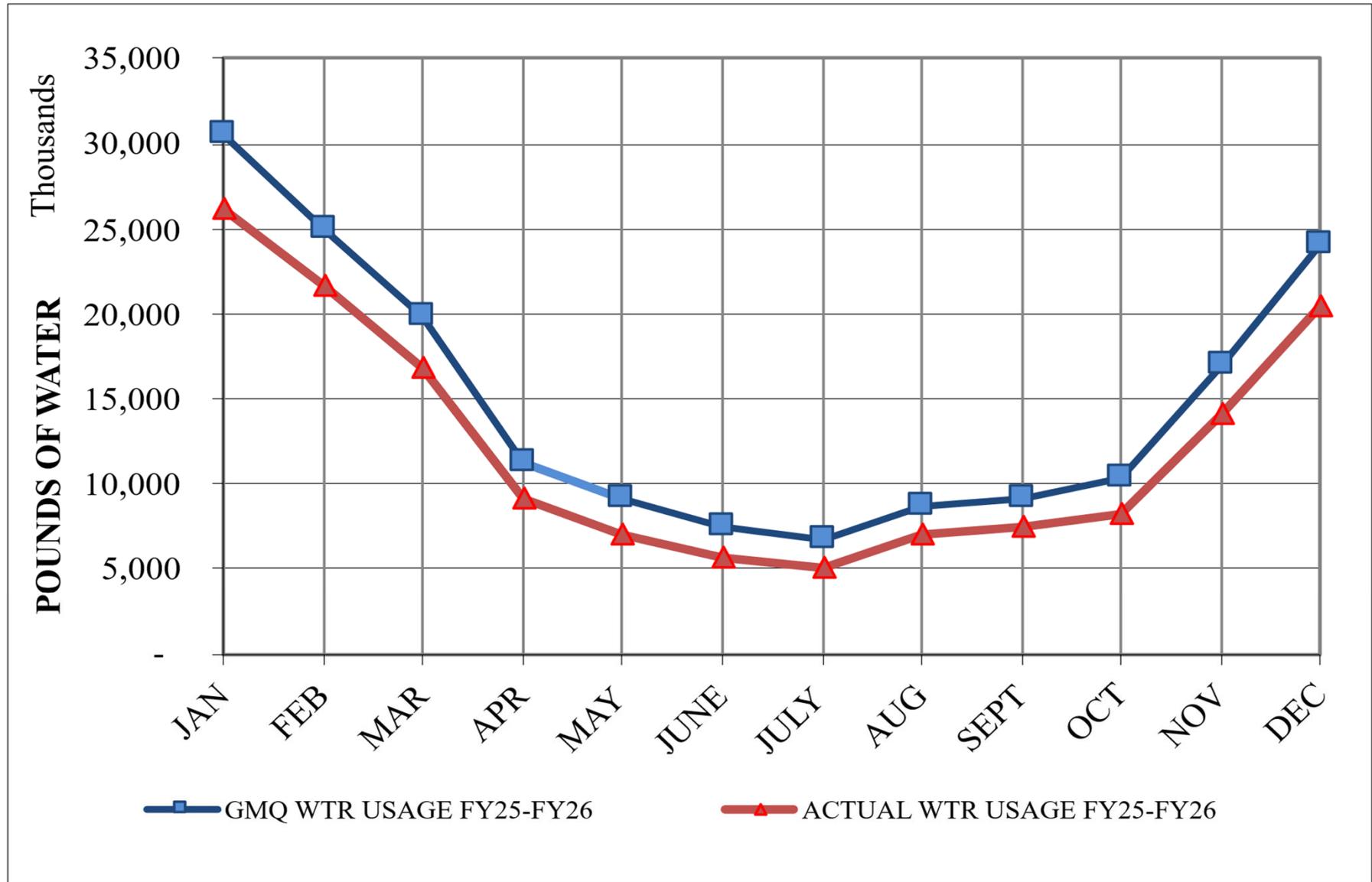
GMQ not met in May.

Performance Measurement FY26: Steam Plant Eff



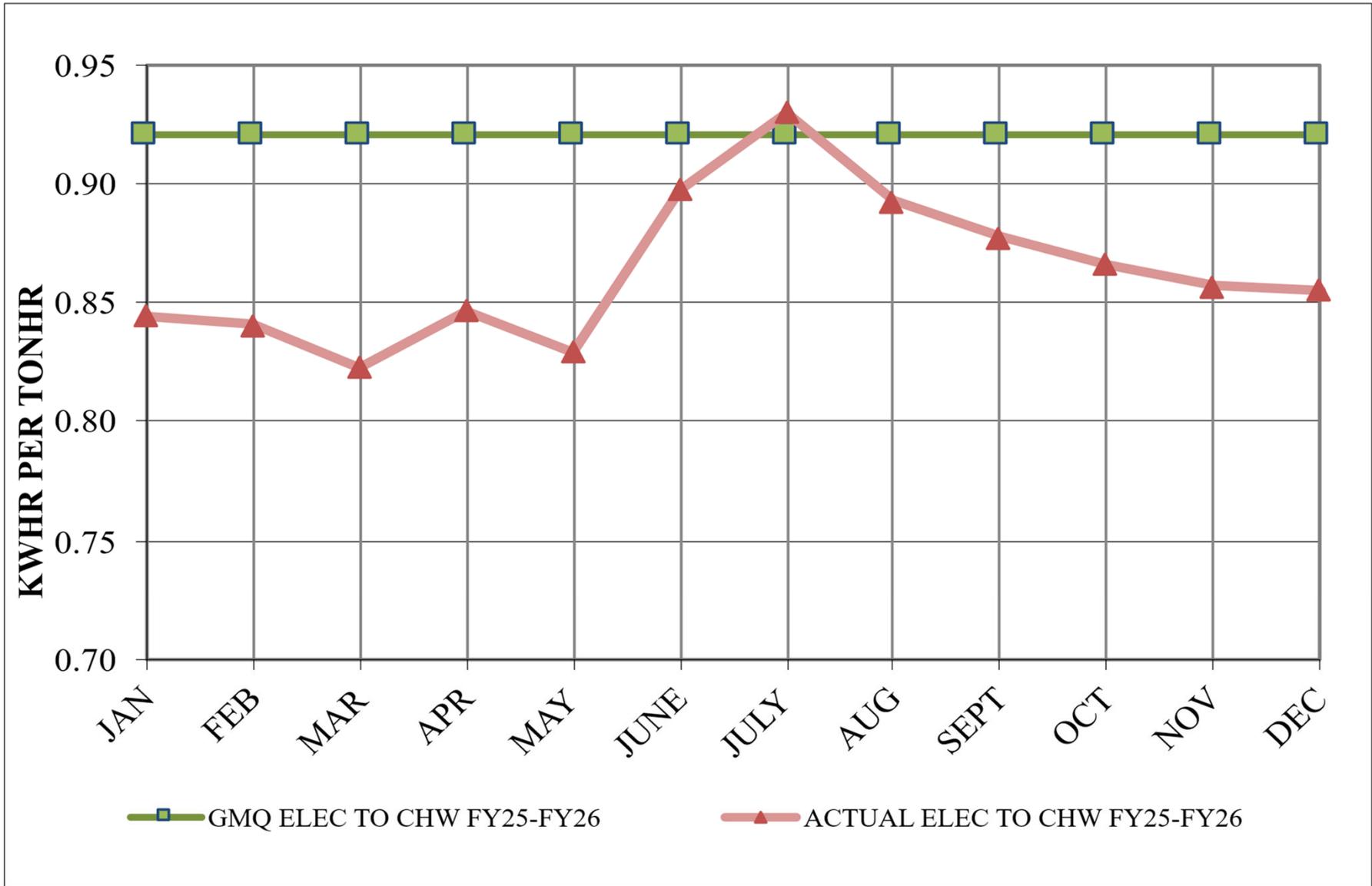
GMQ not met Nov and Dec.

Performance Measurement FY26: Steam Water



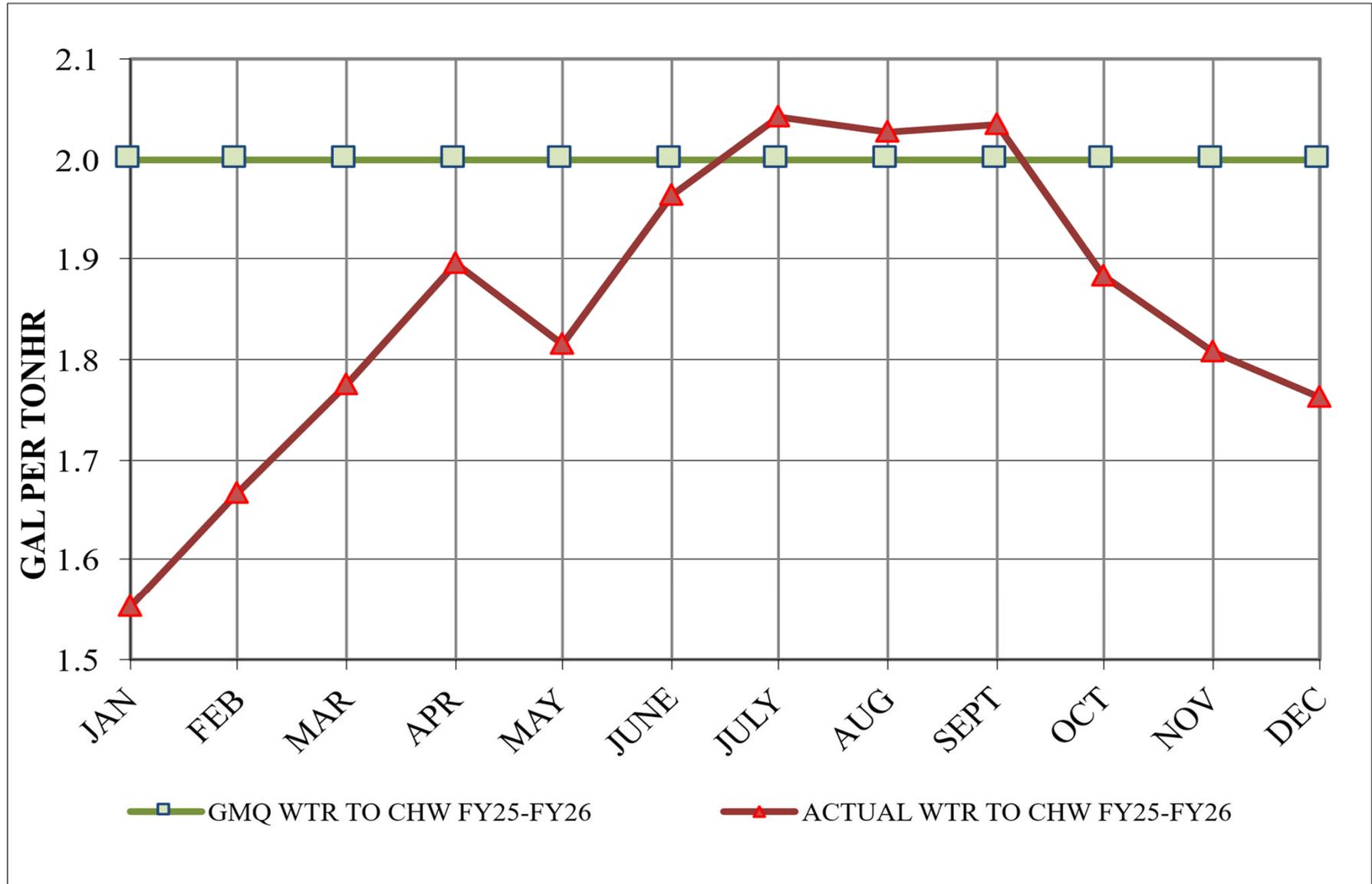
GMQ met in all months.

Performance Measurement FY26: CHW Electric



GMQ not met in July.

Performance Measurement FY26: CHW Water

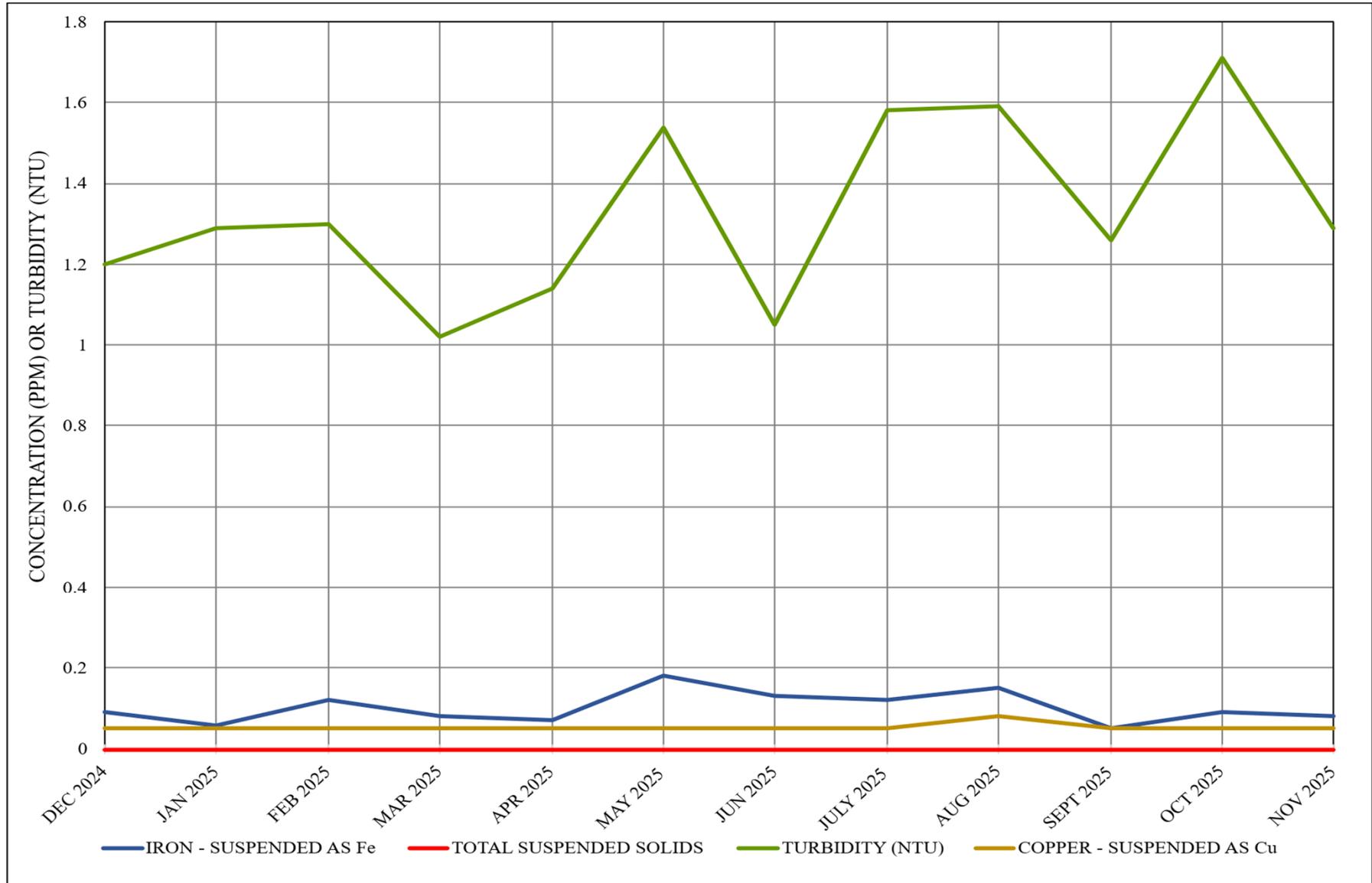


GMQ not met July, Aug, and Sept.

Water Treatment

- ❖ Steam and Condensate
 - ❖ Corrosion
 - ❖ Iron
 - ❖ Hardness
 - ❖ Chlorine/Sulfite
- ❖ Condensing Water
 - ❖ Conductivity
 - ❖ Biologicals
- ❖ Chilled Water
 - ❖ Hardness
 - ❖ Corrosion
 - ❖ EGF and Customer Biologicals Good
 - ❖ Side Stream Filter

Side Stream Filter Performance



7. Natural Gas Purchasing

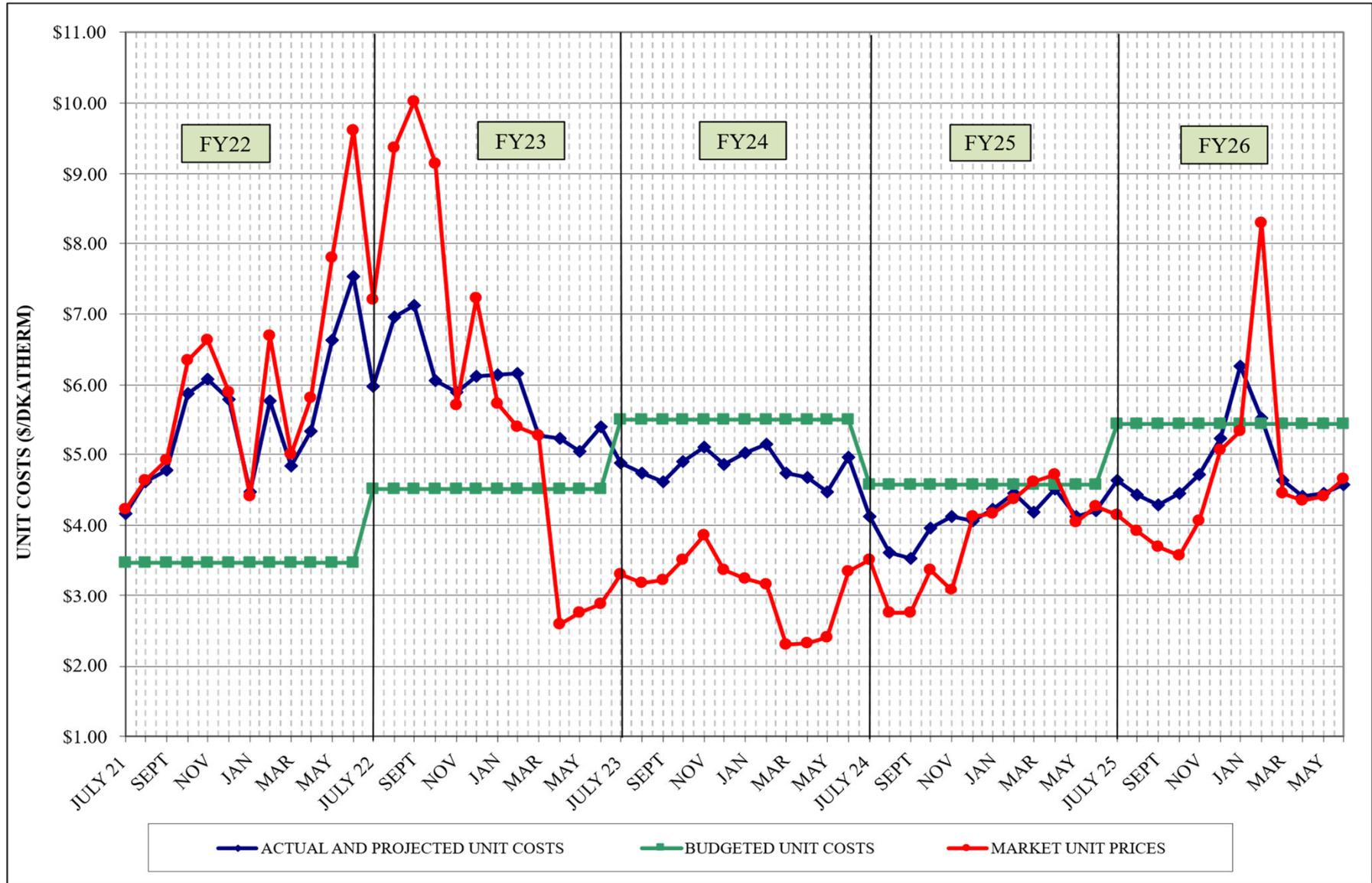
- ❖ Natural Gas Purchasing Review
 - ❖ Table 7: FY26 Gas Spending & Budget Comparison
 - ❖ Figure 7: Actual and Projected Fuel Cost Comparison

Table 7: FY26 Gas Spending & Budget Comparison

	Actual FY26 To Dec 31	Budget FY26	Percent Difference
Steam Sendout (Mlbs)	199,043	196,821	1.1%
Fuel Use (Dth) (includes propane)	272,903	273,447	-2.0%
Plant Eff (Dth/Mlb)	1.371	1.433	-4.3%
Total Gas Cost (includes propane)	\$1,290,106	\$1,609,034	-19.8%
Unit Cost of Fuel (\$/Dth)	\$4.727	\$5.884	-19.7%

Excludes consultant fees, FEA, and pre-purchased and stored propane; Includes transportation and actual propane costs and usages. Budget values include price and weather contingencies.

Figure 7. Actual and Projected Fuel Cost Comparison



Currently hedging 64% on natural gas through end of FY26; transportation costs included.

8. FY26 Costs to Date

Item	FY25 Budget	FY26 Budget	FY26 Actual to date	Percent of FY26 Budget
FOC's	\$ 4,250,800	\$ 4,378,300	\$ 2,165,800	49.47%
Pass Throughs				
Administrative Costs	\$ 752,500	\$ 753,200	\$ 345,344	45.85%
Chemicals	\$ 379,300	\$ 330,300	\$ 167,919	50.84%
R&I Fund Transfers	\$ 322,200	\$ 763,600	\$ 381,800	50.00%
Water/Sewer	\$ 1,187,300	\$ 1,267,800	\$ 681,580	53.76%
Fuel Base	\$ 2,631,171	\$ 2,833,109	\$ 1,520,651	53.67%
Fuel Contingency	\$ 795,729	\$ 1,044,791	\$ -	0.00%
Electricity	\$ 6,801,900	\$ 6,212,900	\$ 3,297,524	53.08%
ORF Deposit	\$ -	\$ -	\$ -	0.00%
Debt Service	\$ 5,385,300	\$ 4,786,400	\$ 2,417,054	50.50%
Total Expenses	\$ 22,506,200	\$ 22,370,400	\$ 10,977,671	49.07%
Total Revenues	\$ 22,121,200	\$ 21,985,400	\$ 10,580,763	48.13%
Metro Funding	\$ 385,000	\$ 385,000	\$ 192,500	50.00%

Actual Costs and Revenues to Date include FY25 True-up Items.

9. FY26 Budget

Item	FY25 Budget	FY26 Budget	Percent of FY25 Budget
FOC's	\$ 4,250,800	\$ 4,378,300	3.00%
Pass Throughs			
Administrative Costs	\$ 752,500	\$ 753,200	0.09%
Chemicals	\$ 379,300	\$ 330,300	-12.92%
R&I Fund Transfers	\$ 322,200	\$ 763,600	137.00%
Water/Sewer	\$ 1,187,300	\$ 1,267,800	6.78%
Fuel Base	\$ 2,631,171	\$ 2,833,109	7.67%
Fuel Contingency	\$ 795,729	\$ 1,044,791	31.30%
Electricity	\$ 6,801,900	\$ 6,212,900	-8.66%
ORF Deposit	\$ -	\$ -	n.a.
Debt Service	\$ 5,385,300	\$ 4,786,400	-11.12%
Total Expenses	\$ 22,506,200	\$ 22,370,400	-0.60%
Total Revenues	\$ 22,121,200	\$ 21,985,400	-0.61%
Metro Funding	\$ 385,000	\$ 385,000	0.00%

Budget shown does not include any budget true-up items.

10. Review of EGF and EDS

- Routine maintenance of the EDS is the responsibility of System Operator and is defined within the ARMA. Additional maintenance is directed by the Project Administrator resulting from reviews performed quarterly for tunnels and manholes such that each section and manhole are reviewed annually as defined in the quarterly EDS reports.
- As identified in one or more EDS and EGF quarterly reports, there are several outstanding maintenance items that remain unaddressed.

EGF Walkthrough

- Equipment Maintenance
 - Pipe Insulation
 - Cooling Towers
- Operations
- Electrical
 - Metering
- Housekeeping
- Building Structure
- Building Exterior and Grounds

EDS Walkthroughs

- **Piping**
 - Valve condition/operation being evaluated
 - CND replacement in 3rd Ave
- **Insulation**
 - Tunnels
- **Water Infiltration**
 - Runoff through manways – various manholes
 - 7th Ave Tunnel infiltration
- **Corrosion**
 - State Tunnel
 - Main Tunnels
- **Housekeeping**
- **Safety**
- **Action Items**
 - Several repeat items

11. Capital Expenditure Update

	Spent to End of FY25	FY26 Spending	Balance to Date (12/31/25)
R&I Projects	\$5,502,812	\$452,240	\$63,851
49116-DES Infrastructure Fund	\$7,900,250	\$504,890	3,861,322
Total	\$13,403,062	\$957,130	\$3,925,173

Totals spent to date do not include reimbursable expenses for DES231.

Capital Projects Review

Active Capital Projects – General & Marketing

- DES 217: DES Service to Auto Nashville Hotel, LLC (8th and Demonbreun)
 - Routing design at 90%; development delayed with no firm construction start date; 1,300 tons chilled water contract capacity with no steam (budget = \$3.2M; schedule to accommodate customer; 2027)
- DES 243: Service to 414 Union
 - Preliminary evaluation to provide steam and chilled water service to existing building; building preparing for renovation; capacities under evaluation (budget = \$710K; schedule to accommodate customer; 2027)
- DES 244: Service to NFD HQ
 - Preliminary evaluation to provide steam and chilled water service to a proposed new Nashville Fire Department HQ; preliminary capacities at 390 tons and 2,000 pph; awaiting project development (budget = \$3.3M; schedule to accommodate customer; 2028)

Capital Projects Review

Active Capital Projects – General & Marketing

- DES 222: EDS Valve Identification and Tagging
 - Project established to identify EDS manhole and tunnel valves to assist with maintenance scheduling; manhole and tunnel drawings completed identifying each valve; DEAO's tagging is complete and has delivered mark-ups of valve identification drawings to TEG to make updates and modifications. (budget = \$44,000; schedule is ongoing)

Capital Projects Review

Active Capital Projects – Repairs/Modifications

- DES 213: 4th, 7th & Broadway Tunnel Piping Slide Support Repairs
 - Repair and replacement of pipe slides; pre-bid mtg was held in Dec with T&M NTE bids due in early Jan. (budget = \$321,500 this phase; schedule completion this phase Q4FY26)

- DES 236: 3rd Ave North Condensate Piping Replacement
 - Project initiated due to condition of piping discovered in DES 235
 - Replace of piping ~75 feet north of JRP to Deaderick St; ~ 480 feet
 - Bid in August; bidders schedules were not acceptable; decided to delay until spring '26
 - Discovered leak in JRP Intersection; replac. piping through intersection; discovered leak south of JRP & replaced additional ~50 feet of piping
 - Remainder of project to be bid in Q2FY26 (budget = \$450,000; schedule completion Q1FY27)

Capital Projects Review

Active Capital Projects – Repairs/Modifications

- DES 240: Viridian Manhole Platform
 - Platform needed to access valves (budget = \$40,000; bid Q3FY26; completion Q4FY26)
- DES 241: MH D3 Electrical Component Modifications
 - Due to water infiltration from an irrigation system, watertight elec. components need to be installed; some corroded attachments require replacement (budget = \$40,000; bid Q3FY26; completion Q4FY26)
- DES 242: Woodland St Bridge CHW Piping Insulation Repair
 - CHW piping casing and insulation repairs are needed; corroded pipe bracing needs to be replaced (on the east side of river) (budget = \$50,000; bid Q4FY26; completion Q1FY27)

Capital Projects Review

Active Capital Projects – Repairs/Modifications

- DES 245: MH 23 Concrete Anchor Pedestal Repair
 - Repair is needed for spalled concrete anchor (budget = \$10,000; completion Q4FY26)
 - Note: Scope may be expanded to include ceiling leakage repair

Capital Projects Review

Closed Capital Projects

- DES 228: Manhole B2 and B3 Dripleg Modifications - closed
- DES 229: Misc Manhole Insulation Repairs – closed
- DES 230: Manhole 6A Investigation – in close out
- DES 231: Tennessee Tower Service Piping Relocation – in close out
- DES 233: Manhole 12 to Manhole 15 Hot Spot Repair – in close out
- DES 237: Chilled Water Leak in 3rd Ave - closed
- DES 238: Leak at Indigo Hotel - closed
- DES 239: Manhole S4A Steam Leak - closed

12. System Operator Update

By System Operator's Service Manager



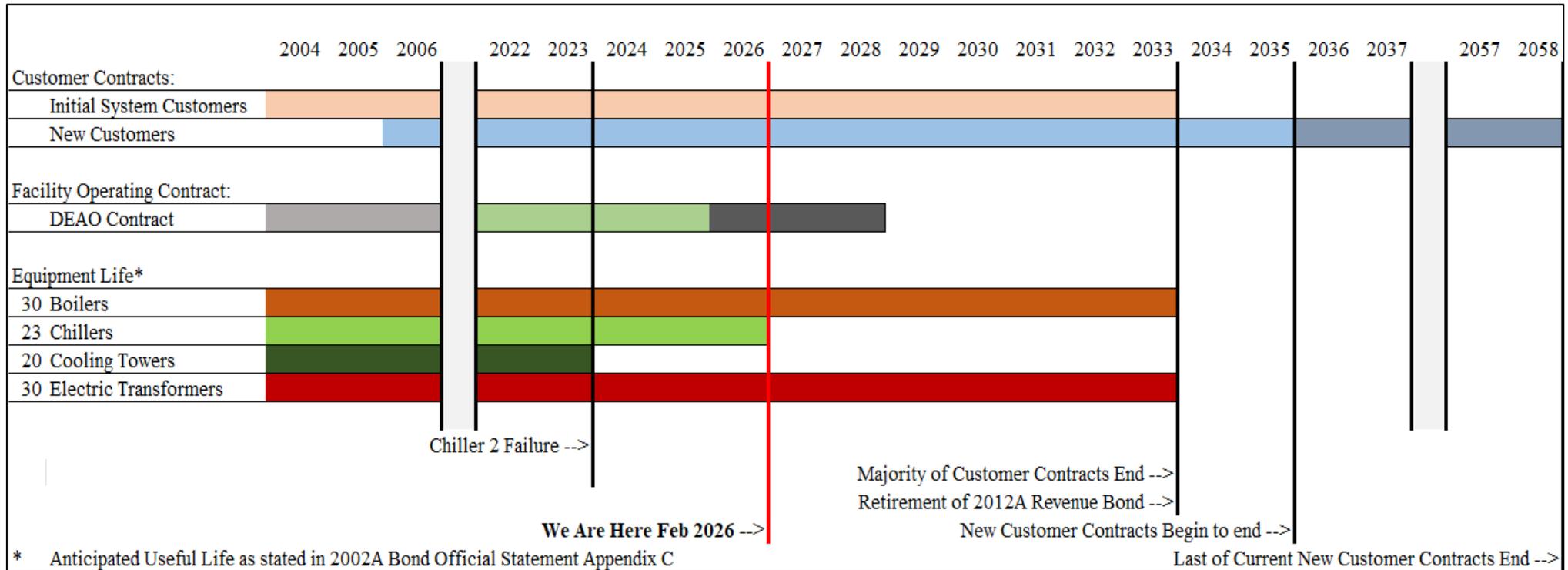
DE Asset Operations, LLC

13. Special Topics

- Continuing to track and evaluate plant performance and available capacities
- Metro Network Advisory Board Meeting Broadcasting

Special Topics

- Future Planning Key Milestones:



14. Other Board Member Items

15. Adjourn

- *Advisory Board Meeting Schedule*
- FY26 – 3rd Quarter Meeting – May 21, 2026
- FY26 – 4th Quarter Meeting – August 20, 2026
- FY27 – 1st Quarter Meeting – November 19, 2026
- FY27 – 2nd Quarter Meeting – February 18, 2027