Quarterly Report to the State Building Commission

Metro Nashville District Energy System Advisory Board Meetings

By Ann McGauran, State Architect Advisory Board Representative of the Government of the State of Tennessee

The following section of the State Building Commission Policy and Procedures sets the reporting requirements:

13.01 METRO NASHVILLE DISTRICT ENERGY SYSTEM

The Commission, in accordance with the Metropolitan Government of Nashville and Davidson County requirements relating to the Metro Nashville District Energy System, will appoint for a term of two years, by name and State title, an individual to serve as the Representative of the government of the State of Tennessee on the Advisory Board for the Metro Nashville District Energy System, and the Representative shall report on the meetings of the Advisory Board to the Commission on a quarterly basis, or at any other such times the Commission requests.

This report addresses the Advisory Board meeting held on February 15, 2024. The meeting was held in person at the MWS Biosolids Conference Room and via WebEx teleconference.

February 15, 2024, Meeting

- Brian Taylor, Advisory Board Vice-Chair, called the meeting to order at 10:05 a.m., and confirmed that quorum was
 in attendance. Given that there were new Advisory Board members attending for the first time, Mr. Taylor invited all
 attendees to introduce themselves. Heidi Hoeffner moved to accept the minutes of the previous meeting, and Olivia
 Hill seconded the motion. The minutes were approved unanimously by verbal acceptance.
- Adrienne Fancher, Metro DES Liaison, introduced herself to and welcomed the new Advisory Board members. She
 welcomed all of the Advisory Board to the MWS Biosolids Facility. She thanked Board members that were able to
 participate in the 20th anniversary celebration in December and offered an invitation to the yet-to-be-scheduled 2024
 unveiling of an historical marker honoring the 50th anniversary of district energy in Nashville. Ms. Fancher noted
 that there were a few changes to update the agenda, and she welcomed any questions from the Board.
- Kevin Jacobs, TEG, reviewed the Customer Sales. Mr. Jacobs stated that there is 1 customer in arrears for more than 30 days. In reviewing the Customer Cost Comparison, Mr. Jacobs reported that costs and usage of steam are down compared to same period in 2022 due to a mild winter and lower cost of natural gas.
- Consumption of chilled water is also down compared to 2022. Compared to historic sales, 2023 was comparable to the average of the last six years.
- Regarding Marketing, Mr. Jacobs announced the addition of the Auto Nashville Hotel (at 8th & Demonbreun) as a new chilled water only customer. Service is expected to start in late 2025. Mr. Jacobs explained that the hotel plans to use electric resistance for heat rather than purchasing the net cheaper steam from DES. Mr. Jacobs noted that the remaining steam capacity available for sale includes potential equivalent hot water sales. Several development projects that have expressed interest in joining DES are on hold for various reasons, and other potential customers that are interested happen to be too small and/or too far away from the current service area to make district energy a viable option.

- In reviewing the operator's performance, Mr. Jacobs noted that the performance guarantee for Steam- Electric has been met for the previous 12 months. The Steam-efficiency metrics are based on volume and temperature of condensate return. During the last quarter, system maintenance required dumping some condensate. Previous variations in the Steam-Water metrics were due to a previously inaccurate meter; however, since replacing the meter, the actual performance is better aligned with the guaranteed values. The Chilled Water-Electric guarantee was met every month for the past 12 months, with typical seasonal variations. The Chilled Water-Water guarantee was met in the winter months.
- Water treatment performance parameters continue to be compliant. Mr. Jacobs noted that some hardness in the
 condensate was traced to a specific customer. Iron continues to drop toward zero as a result of the sidestream filter.
 Previous biological issues in the chilled water were treated with biocide, and continued biocide application prevents
 customer issues. The sidestream filter addresses suspended solids, not dissolved solids, and turbidity is expected
 to continue to reduce with the reduction of other constituents.
- Regarding natural gas purchasing, DES has pre-purchased gas as a hedge to secure a price lower than market
 price. The current hedging strategy and operating practices are beating the budget in all fuel categories. Because
 post-pandemic gas market prices are returning to pre-pandemic levels, our previous hedges will appear to be high
 for several months. However, we are purchasing small quantities of gas at progressively lower prices for FY25 to
 reduce the cost of the overall projected purchase commitments.
- For the FY24-to-date costs, Mr. Jacobs noted that at this midpoint in the fiscal year, most of the costs are at approximately 50%, except fuel due to pending winter fuel consumption. Mr. Jacobs provided a brief explanation of the customer pass-through costs and the Metro Funding Amount (MFA).
- Mr. Jacobs stated that based on the quarterly EGF Walkthrough, Constellation continues to improve the maintenance of the plant, grounds, and equipment. Jon Belcher discussed the EDS Walkthrough and his observations, noting that Constellation has made significant improvements in catching up maintenance items. Mr. Belcher also noted that tunnel infiltration is not under Constellation's control, but they continue to fight corrosion on the infrastructure.
- Mr. Jacobs highlighted the status of Capital Expenditures, projecting that DES expects to spend approximately \$1.25 million on capital improvements and repairs by the end of the fiscal year. Mr. Jacobs noted that the age of the system varies up to 50 years old. Mr. Jacobs proceeded to review the capital projects in progress. Ms. Fancher noted that although DES continues to look for opportunities to expand to the East Bank, it appears that DES will not serve the new stadium and its surrounding neighborhood. Ms. Hill added her interest in constructing a steam turbine plant to create a steam loop on the East Bank, which sparked a discussion of implementation factors. Mr. Belcher continued the discussion of current capital projects in the distribution system, including a highlight of a successful steam system outage. Mr. Jacobs added highlights of the Chiller No. 2 rehabilitation project that added a 7-year warranty to the equipment.
- The System Operator, Constellation Energy Solutions (CES), presented an update for the Advisory Board. Mike
 Winters emphasized the stewardship aspect of the partnership between Metro and CES to rehabilitate Chiller No.
 2. Mr. Winters also highlighted the good safety record for CES employees and subcontractors. Mr. Winters provided
 additional technical context for the previously highlighted projects and the financial impacts for customers of CES's
 performance with respect to the contractual guarantees. He noted that Metro, TEG, and CES are discussing potential

updates for the performance guarantees. Mr. Winters commended the Customer Service Manager, Chuck Tucker, for extraordinary efforts to coordinate customers through the NES-requested steam system shutdown. Mr. Winters also highlighted recent visitors to the plant, and he extended another invitation to the Board members to tour the facilities – particularly in late 2024 when it is expected to install a Metro Historical Commission marker for the DES plant. Mr. Taylor asked the DES team to inform the Board when the historical marker is ready for unveiling.

- For Other Board Member Items, Mr. Taylor initiated the election of a new Board Chair. Mr. Taylor nominated C/M
 Olivia Hill for Advisory Board Chair; Gerald Smith seconded the nomination. Ms. Hill was elected unanimously. Ms.
 Hill nominated Brian Taylor for Advisory Board Vice-chair; Heidi Hoeffner seconded the nomination. Mr. Taylor was
 elected unanimously. Mr. Jacobs added that the upcoming annual customer meeting would be scheduled in late
 spring.
- Mr. Taylor adjourned the meeting at 11:39 a.m.
- The next regular Board Meeting will be held Thursday, May 16, 2024, at 10:00 a.m.
- These minutes were approved on May 16, 2024.

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