

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 November 16, 2023. The meeting was held in person at the Sonny West Conference Center and via WebEx teleconference.

November 16, 2023, Meeting

- Brian Taylor, Advisory Board Vice-Chair, called the meeting to order at 10:06 a.m., and confirmed that quorum was in attendance. Ann McGauran moved to accept the minutes of the previous meeting, and Randall Jones seconded the motion. The minutes were approved unanimously by verbal acceptance.
- Kevin Jacobs reviewed the Customer Sales. Mr. Jacobs stated that there are 0 customers in arrears for more than 30 days. In reviewing the Customer Cost Comparison, Mr. Jacobs reported that chilled water sales were down due to a relatively mild summer. Metro steam sales are down, whereas State and Private sales for steam are up.
- On Figure 3A, Chilled Water sales were at average levels. Mr. Jacobs noted on Figure 3B that Steam sales were trending at slightly below average levels. Ms. McGauran inquired if a line could be added to the graphs to indicate the multi-year average trend.
- 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 reflect seasonal variation and operational changes by CES that have improved efficiency. Mr. Jacobs noted that in the previous quarter, a condensate meter was replaced that appears to provide more accurate readings for the Steam- Water guarantee. Although the Steam-Water trend did not meet the guarantee in the previous 12 months, it does not indicate an issue for concern, and the trend continues to track closely with the guarantee and may not improve with ongoing CES operational changes. The Chilled Water-Electric guarantee was met every month for the past 12 months. The Chilled Water-Water guarantee was not met in the spring, but the trend dropped closer to the target in the last quarter. It is possible that the initial lack of a meter on the new sidestream filter may have impacted the accurate measurement of make-up water usage after the installation of the sidestream filter. Additionally, a decrease of make-up water in the distribution system may allow the metric to continue to fall within the guaranteed limit.
- Mr. Jacobs displayed a table to illustrate the FY2023 Fuel Efficiency Adjustment (FEA) True-up for the System Operator. Reconciling DES pass-through costs at the end of the fiscal year allows the system to provide a credit/rebate to customers if the funds collected exceed the expenses required for the year. In this example, DES will return approximately \$5,000 to customers due in part to utility meter corrections.
- Water treatment performance parameters continue to be excellent. Mr. Jacobs noted that the sidestream filter performance has significantly improved the quality of the chilled water distributed. Monthly data collected since

May [when the filter was started] illustrates continuous reduction in solids to below detectable limits. Mr. Taylor asked how the turbidity of the DES sidestream filtered water compares to Metro Water Services (MWS) drinking water; the turbidity of DES chilled water is approximately 1.3 Nephelometric Turbidity Units (NTU) and MWS water is 0.04 NTU.

- Mr. Jacobs stated that based on the quarterly EGF Walkthrough, Constellation continues to improve the maintenance of the plant, grounds, and equipment. Mr. Jacobs noted that some trees have been lost. The trees will be replaced by the neighboring contractor at the appropriate time of year and after the construction work is complete in that area.
- John Belcher discussed the EDS Walkthrough and relative improvements. Mr. Belcher highlighted a new category added under “Maintenance Items” to rate “Lower Priority/Deferred” items as distinguished from immediate priority and overall concerns. Mr. Belcher noted that maintenance of the tunnels continues to improve with several remaining items to address.
- Mr. Jacobs reviewed the natural gas spending. He noted that reduced Steam sales have resulted in below- budget fuel consumption and below-budget unit costs. The market unit price of gas has fallen below the DES net hedged price, but total purchases are below budget. DES purchases gas in advance as a hedge to protect the budget.
- Mr. Jacobs reviewed the FY2023 Costs to Date. Most costs are at approximately 25% of budget. Water/ Sewer costs are ahead of budget due to water losses in the cooling towers during the cooling season; that consumption drops as heating season begins. Natural gas use is at 14% but will increase in winter. Mr.
- Jacobs noted that one of the bonds will retire next year with a larger “balloon” payment. The net true-up of all items will be approximately \$24,000 for FY2023 returned to customers.
- Regarding Marketing, Dan Coyle reported on a meeting with the Metro Master Developer for the East Bank, The Fallon Company, and the DES team to share information about the opportunities to apply district energy to the new East Bank developments. He added that there will be approximately 3,000 tons of chilled water that will be available for new users after Nissan Stadium is demolished. Mr. Taylor asked about the nature of East Bank conversations and the viability of employing district energy on the East Bank. Adrienne Fancher responded that the DES team is awaiting further direction from the Mayor’s Office and that the team is developing the scope of a feasibility study to advance the East Bank concept. Ms. McGauran asked about proposed East Bank development that may be below grade and subject to flooding. Ms. Fancher responded that the DES concept plans do not include the flood-prone areas.
- Mr. Jacobs continued with updating the status of potential downtown customers – several of which are “on- hold” for financial or architectural/engineering design reasons. Mr. Jacobs reminded the Advisory Board that some potential DES customers have very long lead times to executed contract. Mr. Taylor asked for an example of a development that changed its design after committing to district energy. Mr. Jacobs offered the Hyatt Centric as a hotel that changed its roof structure and avoided equipment costs after committing to DES.
- Mr. Jacobs highlighted the Capital Expenditures to date through the first quarter of FY2024. He provided an update of capital projects in progress. Mr. Belcher reviewed capital projects in the EDS. Ms. McGauran asked about access to the Andrew Jackson Building – Mr. Belcher confirmed that access to the building is provided, but not free traffic flow. Mr. Belcher highlighted the success of the recent planned Steam system outage. Mr. Jacobs explained the value of the Chiller #2 repair/rebuild.
- The System Operator, Constellation Energy Solutions (CES), presented an update for the Advisory Board. Mike Winters clarified that the new category of “Lower Priority/Deferred” maintenance items is not a negative connotation, but rather a recognition that some projects have lingered due to action on urgent, higher priority issues. Mr. Winters highlighted the success of the safety program and cast a context for the system performance with respect to performance guarantees. Mr. Winters also praised the CES staff for the safe execution of the planned

Steam outage that was required by the Nashville Electric Service and was the result of 3-4 months of preparation – with no safety issues, no customer complaints, and completed hours ahead of schedule.

- For Other Board Member Items, Mr. Jacobs reminded the Board that it will be necessary to elect a new Board Chair. Ms. McGauran and Mr. Taylor suggested that the election wait until after the mayor appointed a replacement for the Metro Council Representative. Ms. Fancher and Sonia Allman, MWS Manager of Strategic Communications, shared plans for a celebration of the District Energy System 20th anniversary in December. Mr. Taylor initiated a brief discussion of the ability for DES to operate as a revenue-neutral utility. Ms. McGauran asked about the process for the System Operator contract that will expire in 2025.
- Mr. Taylor adjourned the meeting at 11:22 a.m.
- The next regular Board Meeting will be held Thursday, February 15, 2024, at 10:00 a.m.
- **These minutes were approved on February 15, 2024.**

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