



Metro Nashville District Energy System Advisory Board

Regularly Scheduled Meeting of

November 17, 2022

Minutes of Meeting

***The meeting was held in person at the Sonny West Conference Center
and via WebEx teleconference.***

Facilitators: Dan Coyle, DES Project Contract Administrator and Kevin Jacobs, Thermal Engineering Group (TEG)

Board Members Present:

Freddie O'Connell
Brian Taylor
Michael Adcock
Laurel Creech (*on behalf of Velvet Hunter*)
Heidi Hoeffner (*on behalf of Kelly Flannery*)
Ann McGauran

Others Present:

Dan Coyle, TEG
Kevin Jacobs, TEG
Jon Belcher, TEG
Randy Pomeroy, Pomeroy Marketing/Communications
John Schaffer, Constellation
Michael Winters, Constellation
Mats Bergquist, Constellation
Bill Purcell, Frost Brown Todd LLC
Adrienne Fancher, Metro Water Services
Charda Johnson, Metro ITS (Webex host)

Freddie O'Connell, Board Chair, called the meeting to order at 10:16 a.m., and confirmed that quorum was in attendance. Ann McGauran moved to accept the minutes and Brian Taylor seconded the motion. The minutes were approved unanimously by verbal acceptance.

Mr. O'Connell asked Adrienne Fancher if the Program Administrator contract had been executed since the previous meeting. Ms. Fancher responded that terms of the contract were in negotiation at the Purchasing Department. Mr. O'Connell asked Ms. Fancher to keep the Board apprised of progress with the process.

Kevin Jacobs reviewed the Customer Sales. Mr. Jacobs stated that no customers were in arrears. In reviewing the Customer Cost Comparison, Mr. Jacobs noted that although costs were up relative to the previous 12 months, sales were also up for most customers – except the State, which was reduced presumably due to conservation efforts. The increase in sales was due, in part, to the economy re-opening after the pandemic shutdown. Increased loads and rising gas prices have driven up costs. Chilled Water sales were above the 5-year average in July and August, but closer to the average in September. Steam sales were above the 5-year average for July and August, but close to the average in September.

In reviewing the operator's performance, Constellation Energy Solutions (CES) did not meet all 5 of the performance metric criteria for every quarter of FY22. For the last 12 months, CES has met the Electric to Steam Conversion guarantee. The steam plant efficiency [fuel to sendout] guarantee was missed most



months, but it was met for September and October. The steam water conversion performance has been historically close to the guarantee. The condensate meter was replaced with a better-quality meter, but CES may still not be able to meet the guarantee going forward. The chilled water electric conversion guarantee was exceeded once during the previous 12 months. The chilled water water conversion performance exceeded the guarantee each month during the quarter; however, the actual performance was very close to the guarantee.

Regarding water treatment, there have been no adverse issues. The sidestream filter installation is scheduled for December 2022 or January 2023. The sidestream filter will improve solids removal in the chilled water return and improve water quality for the customers.

Mr. Jacobs stated that based on the quarterly EGF Walkthrough, Constellation continues the improved cleaning of the plant, improving the grounds, and continues to maintain the EGF equipment well. In spite of the dust from the blasting on the Peabody Union construction site next door, the cooling towers remain in reasonably good condition.

Jon Belcher discussed the EDS Walkthrough. Mr. Belcher noted the overall system still has room for improvement in the cleanup and maintenance of tunnels and vaults. Mr. Belcher complimented the additional effort CES has made to maintain the distribution system in better repair. Mr. Belcher was pleased to report that after completing the remaining 2 or 3 structural corrosion projects, CES will be able to proceed in full preventive maintenance mode.

Mr. Jacobs reviewed the natural gas purchasing. He noted that steam send-out and gas consumption were below budgeted levels, and the plant efficiency was greater than budget expectations. However, the cost of natural gas was much higher than expected. Therefore, the first quarter natural gas budget has been exceeded. The chart in Figure 5 shows the pre-contingency budget, actual, and market values of gas purchases – which illustrates the saving impact of gas price hedging. A portion of the natural gas purchased was hedged at \$3.60, compared to a market price of approximately \$10.00.

Mr. Jacobs reviewed the FY2023 Costs to Date, noting that water/sewer costs could exceed the budget based on its current trend. Water usage is expected to be higher in the warmer months and that usage should slow down as the weather cools. Additionally, there are condensate and chilled water leaks that should be repaired soon. Gas is over budget due to increased costs although use is below expectations. Electricity usage is also below budget expectation. A lower MFA payment is anticipated for this year (down by 40%), although there is a “balloon payment” on the debt service due in the next 2 years before the debt is retired. Consequently, there may be a higher MFA in that period.

Regarding Marketing, Mr. Jacobs noted that conversations continue with potential customers that have been identified previously, as well as with architects and engineers associated with new developments. To support the marketing effort, Metro Nashville will be featured in the *District Energy* magazine – the trade journal of the International District Energy Association (IDEA). Randy Pomeroy shared that a writer from the magazine came in September to interview Board members and customers.

Mr. Jacobs highlighted the Capital Expenditures to date through FY23. Expenditures thus far in FY23 have been primarily dedicated to completing projects from FY22.

Regarding Capital Projects, Mr. Jacobs described alternative parking arrangements [due to the construction of Guthrie Street for Peabody Union] that are under exploration with Project DES-195. For Project DES-201, Ms. Fancher noted that discussions are ongoing with Oracle and the Titans to serve those East Bank facilities with district heating and cooling. Mr. Belcher provided an update of the distribution system capital projects related to steel corrosion repair and prevention, primarily in manholes.

The System Operator, Constellation Energy Solutions (CES), presented an update for the Advisory Board. John Schaffer introduced Mike Winters, the new Plant General Manager. Mr. Winters noted that he was pleased to join a strong safety environment. Mr. Winters reframed the performance guarantees as dollars in



penalties and bonuses to illustrate the impact of performance. Mr. Winters highlighted the 12-point improvement plan for meeting the operations performance guarantees developed by CES.

Mr. Jacobs presented a proposed three-step Energy Savings Plan: [Step 1] new customer contracts, [Step 2] energy saving improvements, and [Step 3] new customer expansion. Mr. Jacobs presented a graph of projected future costs and revenues to illustrate the impacts of making no changes [status quo] and making the proposed customer contract changes and equipment investments. The year 2034 is significant to this plan because that is the year when the foundational "2012A Bond" is retired and many of the customer contracts expire. New customer contracts for existing customers should be implemented prior to this date.

(Mr. O'Connell excused himself and turned the meeting over to Mr. Taylor, the Vice Chair, at 11:34 a.m.)

- For Step 1, the Board discussed the impacts of this plan on the MFA and customer rates. Mr. Jacobs recommended a separate meeting to review the plan in detail.
- Mr. Jacobs proceeded with describing the capital improvements associated with Step 2, and he presented a bar chart to illustrate the associated capital outlay.
- For Step 3, Mr. Jacobs described the plans for and benefits of system expansion. As equipment reaches the end of expected useful life, it will be necessary to replace and upgrade parts of the system. New contracts will permit shared energy savings.

After a brief discussion of the need for an in-depth working session on the Energy Savings Plan, and with no further concerns from other Board members, Mr. Taylor adjourned the meeting at 11:49 a.m.

The next regular Board Meeting will be held Thursday, February 16, 2023, at 10:00 a.m.

These minutes were approved on February 16, 2023.