



**Metro District Energy System Advisory Board
Regularly Scheduled Meeting of**

May 19, 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
Laurel Creech (*on behalf of Velvet Hunter*)
Heidi Hoeffner (*on behalf of Kelly Flannery*)
Alan Robertson (*on behalf of Ann McGauran*)
Bill McKnight
Yuri Cunza

Others Present:

Dan Coyle, TEG
Kevin Jacobs, TEG
Jon Belcher, TEG
Tim Hestle, Constellation
John Schaffer, Constellation
Mats Bergquist, Constellation
Bill Purcell, Frost Brown Todd LLC
Michael Adcock, Brookline Properties
Adrienne Fancher, MWS
Charda Johnson, Metro ITS (Webex host)

Freddie O'Connell, Board Chair, called the meeting to order at 10:10 a.m. Mr. O'Connell proposed accepting the minutes of the previous meeting. Brian Taylor moved to accept the minutes and Heidi Hoeffner seconded the motion. The minutes were approved unanimously by verbal acceptance. Mr. O'Connell then asked if Constellation's name change [to Constellation Energy Solutions, LLC (CES)] had any impact on DES business. John Schaffer responded there would be no impact on DES operations or Customers. Mr. O'Connell asked TEG to proceed with its presentation.

Kevin Jacobs reviewed the Customer Sales. Mr. Jacobs noted that all sales and costs were up. Steam was up for all, and high costs were due to increased sales. He noted, however, that the rolling 12-month averages will continue to reflect the period of the pandemic [i.e., low consumption months]. Private sector use is up due to the recovered economy. Consumption by the State and Metro is still down likely due to continued remote work. Alan Robertson added that several State buildings are relatively unoccupied due to remote working by staff. The Andrew Jackson Building is still lightly occupied, and the future plan is to continue remote working with this and other buildings to be used as flex spaces for occasional in-office days. Given the warmer temperatures this Spring, Mr. Jacobs stated he expects the chilled water use to be higher than normal and steam use to be lower than normal.



Following its restrictions in response to nCOVID-19, CES relaxed most of the protocols starting in May. CES will continue to meet remotely or at the job sites. All of the COVID deferrals have been paid. There is one Customer in arrears. Mr. Jacobs asked the Board if the COVID response slide needed to be included in future presentations; Mr. O'Connell noted that it would be acceptable to remove this slide from future presentations. Mr. O'Connell asked if the Customer in arrears was COVID-related. Mr. Jacobs responded that they were not, and Mr. O'Connell noted that the economic forecast appears to be good in spite of news regarding another potential community spread.

In reviewing the operator's performance, only one metric was not met in April while meeting the others. The steam electric conversion performance missed in July, which is not unusual when the steam load is low. The steam plant efficiency metric is expected to be met in April, and the rating will be "green" if the positive performance continues. The steam water conversion guarantee was missed by approximately 1% in April – other excursions were likely due to the meter error in August and September. The chilled water electric conversion guarantee performance reflects a significant increase in the chilled water plant performance. The chilled water water conversion was improved with the completed leak repair in January, and the rating will likely be "green" next quarter.

Regarding water treatment, there have been no adverse issues. The sidestream filter installation is expected to happen this Fall. The system will filter the chilled water return to remove solids from the chilled water system to improve heat transfer at the customer buildings. It takes approximately 6 weeks to turn over the water – that is, it will take 6 weeks to see the impact of the filter.

Mr. Jacobs stated that based on the quarterly EGF Walkthrough, Constellation has greatly improved the cleaning of the plant and continues to maintain the EGF equipment well.

Dan Coyle discussed the EDS Walkthrough. Mr. Coyle noted two new line items at the top of the slide to represent the opinion of overall status of the tunnels [needs improvement] and vaults [improved]. Insulation is still a problem – which is not due to CES – because old insulation must be replaced, and the quality of the insulation affects the efficiency of the system. Water infiltration contributes to corrosion. Three new coating projects recently started to address pipe support protection (to minimize replacement). Mr. O'Connell asked for a review of the meaning of the "pluses" and "minuses" in the ratings. Mr. Coyle suggested that the plus/minus indicates performance trends illustrated over the quarters.

Mr. Taylor asked about the housekeeping condition of the tunnels and whether there are any capital projects planned to address tunnel housekeeping. Mr. Coyle described the nature of the projects that will address housekeeping and maintenance.

Mr. Jacobs reviewed the natural gas purchasing. He noted that steam send-out and consumption are below expected levels, and the plant efficiency is up. Table 6 illustrated the unanticipated increased price of natural gas and does not include the use of contingency funds or pre-purchased propane. Because of the higher prices, the budget for gas will be exceeded for the fiscal year. The scale of Figure 6 has been adjusted to accommodate the higher gas price. Approximately 50% of the natural gas for FY23 has been hedged at a price approximately \$3.60. Mr. O'Connell asked if our budget is too conservative and if we are communicating the expected price increase to the Customers. Given the wide fluctuations in prices this Spring, it is difficult to know whether the next budget will be adequate. Mr. Jacobs responded that the budget is sent to the Customers for their information. Mr. Coyle noted that the country is bouncing back faster than was expected by the gas production industry. Prices will be in the range of \$6 until next Spring, and then might go down to \$4.

Mr. Taylor asked if we are notifying the Customers of the savings value provided by hedging purchases. Mr. Coyle noted that we send budget revisions to the Customers, and information regarding the real difference in cost would be valuable to send. Mr. Jacobs commented that when marketing new Customers, we highlight the potential savings in gas prices available to DES.



Mr. Jacobs reviewed the FY2022 Costs to Date, noting that our expenses are at approximately 75% for the fiscal year, given that we are three quarters into the year. The Water/Sewer budget will be exceeded due to the chilled water leak repaired in January plus small condensate leaks/discharges to facilitate repairs. Mr. Jacobs noted that if more erosion of the fuel contingency can be avoided, it may be possible to stay within budget. Electricity is likely to come in well under budget for the year.

Continuing with the FY2022 Budget, Mr. Jacobs noted that the raw price escalator for FY2023 is 9.1%, but CES will be contractually limited to 3%. The escalation of pass-throughs may impact the Customers.

In response to a question about make-up water, Mr. Jacobs explained that it can take months to locate and repair a leak in buried piping. There can be a large loss of water that must be made up.

The MFA budget was the same for FY2021 and FY2022; however, there will be a change in the self-funding debt that may reduce the MFA for FY2023 and rise again for FY2024.

To update the Marketing efforts for Lot K [Peabody Union] located immediately east of the EGF, Mr. Jacobs noted that construction is proceeding. There was a promising development during a recent coordination meeting with the developer that could lead to restarting the discussions of Peabody Union as a Customer. Mr. Jacobs provided updates on additional potential customers around the downtown area, whose projects are in varying stages of development. Adrienne Fancher provided a brief update of proposals to install district energy for the East Bank developments. Ms. Fancher noted that plans for district energy will promote hot water instead of steam, given that most of the current Customers step down the steam to use hot water. Mr. O'Connell asked if we need to consider replacing the current steam service with hot water; Mr. Jacobs responded that to do so would be prohibitively expensive. Mr. O'Connell concluded that we could promote hot water for system expansion rather than attempt to convert existing Customers. Mr. Jacobs added how potential Customers on the Peabody Street extension could be served with hot water.

Mr. O'Connell asked about the capacity to make capital improvements. Ms. Fancher explained the recent evaluation of the capital plan with respect to energy efficiency and operations priorities. Mr. O'Connell asked to see a capital plan for DES to make recommendations to the Mayor's Office. Mr. Coyle added that capital investments in the EGF are not recoverable under the current Customer contract structures – therefore, we should change the contracts as soon as possible. Mr. O'Connell also asked for potential contract changes. He also inquired about potential projects that may qualify for Infrastructure Investment and Jobs Act (IIJA) grants. Mr. Taylor suggested that DES should plan to re-structure the contracts so that it operates self-sufficiently. Mr. O'Connell also asked Laurel Creech if the DES reductions are incorporated in the General Services greenhouse gas inventory. Ms. Creech confirmed that the information is provided by Metro Water Services and DES is included. Mr. O'Connell advised that the DES business model must serve the Customers and the operation. Mr. Coyle noted that we will need to bring the proposed contract for Council approval.

Mr. Jacobs briefly described the capital projects in progress. He noted that the majority of spending shown for Capital Expenditures is for Maintenance and does not include the new sidestream filter. The timing of capital projects is not tied to the fiscal calendar. For Project DES-192, Mr. McKnight asked if the Congress Group was involved with the 2nd & Peabody development. Mr. Jacobs responded that the project was not far enough into the design process to determine potential district energy loads. For Project DES-200, the sidestream filter on the chilled water return system should improve the Customers' heat transfer and result in an energy improvement. Mr. Coyle briefly reviewed capital projects for the EDS.

The System Operator, Constellation Energy Solutions (CES) presented an update for the Advisory Board. John Schaffer noted that the system performance is improving. Regarding the contractual performance guarantees, he highlighted that the performance bonus earned this year is higher than last year. Customers saved approximately \$150,000 this year. In fixing the system leak, Mr. Schaffer noted that make-up water consumption had reduced from 100,000 gallons/day to 6,000 gallons/day. The plant is prepared for the cooling season. Mr. Schaffer also offered congratulations to Tim Hestle, CES General Manager, for his



retirement on June 30th after nearly 40 years with NTTC and DES. Mr. O'Connell added his gratitude for Mr. Hestle's service.

Under Other Board Member Items, Mr. Jacobs noted the successful virtual Customer Meeting. He also noted that Chris Proctor was no longer affiliated with Brookfield Properties, and therefore resigned from the Advisory Board. This vacancy on the Advisory Board is unprecedented, and the DES team is awaiting an opinion from the Mayor's Office regarding a replacement.

With no further concerns from other Board members, Mr. O'Connell encouraged Board members to review the schedule of upcoming meetings. The meeting adjourned at 11:30 a.m.

The next regular Board Meeting will be held Thursday, August 18, 2022, at 10:00 a.m.

These minutes were approved on August 18, 2022.