



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

November 19, 2020

Minutes of Meeting

The meeting was held via Webex teleconference

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

Board Members Present:

Freddie O'Connell
Ann McGauran
Laurel Creech (*on behalf of Nancy Whittemore*)
Jim Thiltgen (*on behalf of James Harbison*)
Brian Taylor
Nick Woollen
Heidi Hoeffner (*on behalf of Kevin Crumbo*)
Eric Schwartz (arrived late and was not included in the rollcall votes)

Others Present:

Dan Coyle, TEG
Kevin Jacobs, TEG
Jon Belcher, TEG
Randy Pomeroy, PMC
Tim Hestle, Constellation
Adrienne Fancher, MWS
Charda Johnson, Metro ITS (host)
John Schaffer, Constellation
Alan Robertson, State Architect

Board Chair, Freddie O'Connell, called the meeting to order at 10:04 a.m. Mr. O'Connell asked for attendees to introduce themselves. This introduction included board members, as well as, members of TEG, MWS and Constellation.

Mr. O'Connell proposed accepting the previous meeting's minutes. Brian Taylor made a motion to accept the minutes, and Laurel Creech seconded the motion. The minutes were approved unanimously. The vote was made by rollcall vote. Mr. O'Connell asked TEG to proceed with the presentation.

Kevin Jacobs of TEG began by discussing the customer sales. The first slide in the presentation showed the rolling twelve-month costs and consumptions. Mr. Jacobs reported that the steam sales are down approximately 10% on the aggregate. Chilled water sales are down 15.6%. Costs are down due to the reduced consumption over the past year. The next two slides show the customer chilled water and steam sales. Mr. Jacobs explained that customer sales are down due to lower-than-normal occupancies and reduced events in downtown. Steam sales are below normal due to reduced hotel occupancies and the reduction in the need for domestic hot water production. The steam sales at some of the office buildings appeared higher than expected in the First Quarter months.



Mr. O'Connell asked if any of the customers have turned off their steam or chilled water. Mr. Jacobs explained that there are customers who turn off their steam in the summer months and greatly reduce their chilled water in the winter months. At the beginning of the pandemic, TEG spoke with several of the customers who were concerned about their DES costs and wanted to know how they could reduce the DES bills. Mr. Jacobs suggested to them ways to reduce their DES usage, including turning off their services from DES (which Constellation could help them do). Mr. O'Connell interjected that his concern was more about controlling biologicals within a customer building. Mr. Jacobs explained that he had conveyed his similar concerns about customers maintaining control of their relative humidity to prevent mold growth. Above 80% relative humidity, mold formation will occur. Between 60% and 80%, there is a potential for mold growth, thus the customers need to ensure that the relative humidity is maintained.

Mr. Jacobs then discussed the DES Covid response and the deferral procedure. The previous policy expired on September 30. There was only one customer in arrears more than 30 days. All other customers have been paying their invoices.

Mr. O'Connell asked at what point the inability for customers to pay their invoices impact Metro or the DES, and if there was a need to extend the previous Covid deferral procedure. Mr. Jacobs explained that the customers are paying their invoices, including the two customers who opted into the Covid deferral. There was only one customer who was currently late in paying their invoice. DES does have a normal procedure for addressing delinquent invoices. Mr. Jacobs explained this policy. None of the customers have asked for any extension of the deferral process.

Mr. O'Connell further asked what would happen if multiple customers failed to pay their invoices. Mr. Jacobs explained that Metro would have to make up the difference between the expenses and revenues and that the failure for the customers to pay would have no bearing on Constellation. Mr. O'Connell asked for discussions from the board regarding late fees. Ms. McGuaran suggested that late fees should continue to be waived. Mr. Taylor stated that he agreed that late fees should be waived as long as the customers are trying to make their payments. Mr. O'Connell asked Ms. Hoeffner if Metro Finance would object to discontinuing late fees. Ms. Hoeffner stated that Metro Finance would agree with waiving the late fees.

Mr. O'Connell stated that he would entertain a motion for the DES to suspend the application of late fees temporarily. Mr. Taylor made the motion to suspend the late fees with a definite time period. Mr. Taylor suggested the period extend to the end of March 2021. Ms. Hoeffner seconded the motion. After additional discussion, the board agreed to suspend late fees until at least the next board meeting and to discuss this issue again at that board meeting. The board agreed unanimously via rollcall vote.

Mr. Jacobs discussed Constellation's performance review. This presentation marks the first time that Constellation's performance was based on the new guarantees included in Amendment 2 to their contract with Metro. Mr. Jacobs explained that due to the low steam sales, the steam electric conversion was higher than normal and that it exceeded the guarantee once during the First Quarter. The actual steam plant efficiency was very close to the guaranteed amount, but the guarantees were met. Constellation continued to meet the steam water conversion guarantee.

Furthermore, Constellation's operation of the chiller plant has improved during the quarter and they were able to meet the new chilled water-electric guarantee during the quarter. Constellation did not meet the chilled water-water conversions any month during the quarter.

Mr. Jacobs discussed the water treatment. A condensate leak was discovered and repaired on Deadrick St. Once repaired, the hardness of the condensate return has been high, thus Constellation is dumping a portion of the condensate return to prevent that hardness from entering the EGF equipment. Constellation continued to monitor the hardness during the quarter.

Mr. Jacobs explained that additional maintenance was needed at the EGF which is noted by the yellow dots on the EGF Walkthrough slide. Constellation is working on these issues.



Jon Belcher discussed the Walkthrough of the EDS that he performs each quarter. Mr. Belcher stated that Constellation has been doing a better job at maintaining the vaults and tunnels during the quarter. The insulation repair/replacement category changed from a green dot to a yellow dot during the quarter due to some insulation deterioration caused by water infiltration. Mr. Coyle stated that Constellation is not responsible for preventative maintenance items in the vaults but are responsible for repairing these items. However, the maintenance items in the tunnels and the safety items are Constellation's responsibility. The yellow dots in the maintenance items' category are due to the normal deterioration of the system. Many of these issues are addressed through the capital projects.

Mr. Jacobs explained that the natural gas usage was much less than budgeted due to a reduction in steam sales. The unit cost for natural gas was much less than anticipated, thus the total fuel cost was considerably less than budget. He further explained that natural gas prices are increasing, and that the DES is working toward implementing some price hedging in the coming months.

The comparison of the FY21 costs to date and the budget was discussed by Mr. Jacobs. Most of the expenses and revenues shown were in the 20% range, thus falling near where the costs were expected. However, the actual water costs were approximately 50% of the budget. Mr. Jacobs noted that this high percentage should be anticipated since most of the year's water usage occurs during the summer months due to the high evaporation rate in the cooling towers. One of the quarterly MFA transfers was made.

The Metro Funding Amount for FY21 is considerably lower than in FY20. The expenses and revenues for FY21 are expected to be lower in FY21.

Due to the pandemic, most of the new construction included in the Marketing section has slowed. TEG remains in contact with these potential customers. Typically, the marketing to potential customers occurs early in the design and development of a project, thus none of the potential customers have actually started construction.

Mr. O'Connell asked why the site for the MDHA Development north of Gay St might be too far. Mr. Jacobs explained that normally, the capital cost to connect a customer should be recovered in the rate costs to that customer. Applying that criteria here, however, would force the rates to be cost-prohibitive to the customer. Some of the connection cost could be recovered with this one customer, but additional future customers on the same expansion line could be served resulting in eventually recovering 100% of all of the costs. The decision to expand the service in the area is up to Metro provided the construction of the site moves forward.

Mr. Coyle discussed that TEG is working with Metro Water on developing a general Marketing Plan, but the plan is not yet in place. He further explained some of the details of the Marketing Plan that included expanding the system, installing satellite plants or thermal storage. Adrienne Fancher interjected that DES is working with the Metro Codes and Planning departments to increase the awareness of the DES. Board members discussed this project in particular, but Ms. Creech stated that the development of the building was under General Services and that it was on hold.

Mr. Jacobs continued by discussing the capital expenditures to date. He explained the remaining balances and the sources of the funds.

Mr. Belcher discussed the active construction projects. He briefly explained each project with some details on the particulars of the work. This work included steel coating, corrosion, and structural repairs within the EDS. A twenty-four-hour steam outage was anticipated to make repairs in Manhole L (MH-L). Mr. Jacobs explained that the meter station at the Hyatt Centric had been completed and that chilled water service was currently available to them. Chilled water at the building is available at their leisure. All of DES's work on this project has been completed.



Mr. Belcher continued by discussing the repair of the steel and corrosion mitigation efforts in several of the vaults and tunnel. Ms. McGuaran asked about the status of the repairs that were delayed in MH-E1 on the State system due to the renovation of the John Sevier building. Mr. Belcher stated that the State's contractor did perform some work in the vault, but that work did not agree with the construction documents (per Mr. Belcher). TEG was still waiting to have confirmation from the State if the work was satisfactorily performed, has been completed and if the vault is safe to enter. Ms. McGuaran stated that if TEG does not receive the response from the State that they should let her know.

Mr. Belcher and Mr. Coyle discussed the repairs necessary for the condensate line between MH-3 and 4 on Union St. Ms. Creech asked if this issue was related to the chilled water leak that was repaired last year. Although the condensate line in question is near the previously repaired chilled water leak, these two issues are unrelated. (Ms. Creech left the meeting early.)

A condensate leak was discovered on Deadrick St during the quarter. Mr. Belcher discussed the repairs and that the project had been completed. He continued discussing the remaining corrosion mitigation efforts.

Mr. Jacobs interjected that the chilled water leak exploratory excavation revealed the source of leak on 3rd Ave N. The leak was repaired, and the chilled water make-up dropped to approximately one gallon per minute. Subsequent to the chilled water leak repair, a condensate leak was discovered in the same area on 3rd Ave N. This leak was also repaired.

Mr. Jacobs explained the decline in chilled water make-up subsequent to the repairs. With another suspected leak on 5th Ave, the low make-up is troublesome in that a DES customer was most likely making up the difference to the system. Constellation was investigating and reviewing with the DES customers to see if one of them was adding the water to the system.

Mr. Coyle further explained that the reduction in chilled water make-up helps not only to reduce the cost of the water, but also helps in reducing the cost of the chemical treatment of the water and may allow DES to make further improvements in the water chemistry if the make-up can be held at a relatively low value. Nick Woollen stated that he was grateful for the efforts that DES made in finding this leak and reducing the DES footprint.

Mr. Woollen also asked if there were any capital projects anticipated that would result in equipment upgrades, energy efficiency or technology improvements in the system. Mr. Jacobs explained that the maintenance and replacement of the equipment at the EGF was the responsibility of Constellation, but TEG and Metro Water have discussed making efficiency improvements at the plant through capital investments. Mr. Coyle explained that the current customer contracts do not allow for any capital recovery from the customers for energy savings projects and that the savings associated with any reduction in energy cost at the EGF would pass through to the customers directly. TEG and Metro Water are working on similar projects and the necessary changes to the customer contracts.

Without additional board member items, Mr. O'Connell adjourned the meeting.

The next regular Board Meeting will be held Thursday, February 18, 2021 at 10:00 A.M.

These minutes were approved on 02/18/21.