



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

February 21, 2019

Minutes of Meeting

The meeting was held at the Energy Generation Facility at 90 Peabody Street Nashville, TN 37210

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

Board Members Present:

Freddie O'Connell
Brian Taylor
Eric Swartz
Ann McGauran
Yuri Cunza
Nicholas Woollen
Laurel Creech (*on behalf of Nancy Whitemore*)
Bob Lackey (*on behalf of Talia Lomax-O'dneal*)
Jim Thiltgen (*on behalf of James E. Harbison*)

Others Present:

Dan Coyle, TEG
Kevin Jacobs, TEG
Randy Pomeroy, PMC
Tim Hestia
Starla Friedmann, Metro Finance
Elizabeth Sykes, Constellation
Adrienne Fancher, MWS

The meeting was called to order by the Chair and began at 10:03 **A.M.**

With no additions, comments or edits to the previous meeting's minutes, a motion was made to approve the minutes and seconded. The Board voted and approved the minutes for the November 15, 2018.

At the request of the Chair, Mr. Jacobs proceeded with the presentation to the Board.

Mr. Jacobs reviewed the Customer Cost Comparison table for the previous twelve month period. On an aggregate basis for the previous twelve (12) months, the steam consumption and chilled water total costs were up. There was a spike in the gas prices during November and December 2018. Overall, the cost is about 3% higher. The unit cost for chilled water increased by 2% and consumption was up by 6%.

Mr. Jacobs reviewed the DES Contractor Performance for FY19, which included the efficiency and performance tables for steam electric consumption, steam gas consumption, steam water consumption, CHW electric consumption, and CHW water consumption. Mr. Jacobs explained the contractor's performance monitoring criteria as identified on the Power Point presentation with the use of the green, yellow and red dots noted on the slides. The green dots indicate excellent performance, the yellow dots indicate satisfactory performance where some improvement may be necessary and the red dots indicate poor performance. Constellation's performance continues to remain excellent in all areas.



Mr. Jacobs reviewed the Water Treatment. There is some weather related temperature variability on the amount of condensate returned. Although it is part of the agreement with customers that they must return their condensate, some customers are unable to return the condensate. Constellation does investigate and assist customers with repairs to leaks that may be in their return lines once they become known. The steam fuel and water guarantees vary each month due to the variability in the amount of condensate returned and its temperature.

Mr. Jacobs reviewed the EGF (Energy Generating Facility) walkthrough and all areas are good. The quarterly physical walkthrough of the plant indicates it is very well maintained. Mr. Coyle reviewed the EDS (Energy Distribution System) walkthrough. The EDS's vaults and tunnels are inspected once yearly by reviewing partial sections quarterly. The areas reviewed in the most recent quarter looked relatively good. There is room for improvement by reducing water infiltration into the vaults and addressing the corrosion of metal components within the vaults. Mr. Coyle discussed options to mitigate water infiltration and the corrosion of metal components in the vaults and tunnels. Progress is being made with new coating on the metal components.

Mr. Jacobs continued with Natural Gas Purchasing review. The Steam Sendout and Sales were higher than what was budgeted. The plant efficiency was at 1.373 mmBTU (million BTU's) per Mlb of steam and the unit cost of fuel was at \$3.938 per mmBTU, which is approximately 11.7% over than budget. The pre-contingency budgeted cost for FY19 was approximately \$3.527 per mmBTU, and approximately \$3.50 per mmBTU is the current price range delivered. The expectation is to remain below budget for FY19. The price contingencies are included in the budget due to any unanticipated fluctuations in the market. The values shown in the presentation do not include contingencies.

Mr. Coyle continued with the Actual and Projected Gas Cost Comparison History. Mr. Jacobs explained there had been a small amount of hedging in FY18 but no hedging is expected in the near future; gas prices have been decreasing. Mr. Jacobs and Mr. Coyle explained the graph in the presentation included propane and transportation costs. The red line on the chart notes market unit prices; the blue line notes actual unit costs in previous months and the expected unit costs in future months. The green line notes the budgeted unit costs without contingencies.

Mr. Jacobs continued with FY19 Costs to Date report. All expenditures appear to be consistent with expectations and within budget. The Fixed Operating Costs (FOC) paid to Constellation was approximately 54.49% of FY19 budget. The non-energy expenditure was approximately 56.87% of the budget. The water expenditure was approximately 44.02% of the budget. The natural gas base expenditure, including the FEA and gas consultant, was approximately 52.02% of the budget. The electric expenditure was approximately 52.04% of the budget. Total expenses were 54.37% of the budget and total revenues were approximately -49.76% of the budget.

Mr. Jacobs continued with the Marketing update. The Customer Services Agreement and Easement are in place for the 5th and Broadway (601 Commerce) location. The agreement does not include steam. Service connection will be available in the spring of 2019; and anticipated usage during construction in the summer of 2019. Negotiations are ongoing and favorable for Hyatt Centric (3rd Avenue and Molloy). The agreement will not include steam.

Mr. Jacobs continued with the Capital Expenditure Update report (as of 06/30/18). Mr. Jacobs gave \$139,786 as the amount remaining of available funds to date for FY19. The 49109 (2010 Bond Fund) remaining balance has \$80,540. Bond fund 49107 has \$2,221 remaining.



Mr. Pomeroy and Mr. Coyle reviewed the DES Website Changes. The new website targets the commercial development sector. It focuses on technical information and the benefits prospective customers should consider. It includes videos and photographs of the EGF and customer building; and promotes the City of Nashville. The website has an interactive savings calculator that calculates customer savings with DES services based on specific customer inputs.

Mr. Lackey provided an update on the DES RFP process. Round One of the RFP was issued by Metro on November 2, 2018. Nine firms responded to the RFP. The evaluation committee reviewed the RFP's and narrowed the nine firms down to a short list of five for Round Two. The proposals from Round Two are due at 2:00 pm on February 22, 2019. The evaluation committee is scheduled to review and score all proposals and provide a recommendation on Friday, March 1, 2019.

Mr. Jacobs reviewed the Active Capital Projects Review report.

DES 124.4 - CJC Reconnection has been completed and is using both steam and chilled water. Building occupancy is anticipated in the late summer 2019.

DES 133.1 – Metro is gathering information related to a potential recovery of the costs incurred to the tunnel due to the blasting at the 5th and Broadway site.

DES 135 – The CHW leaks 4th and Union and the Nissan Stadium have been repaired. Additional testing for the leaks near JKP on 5th Ave near Union is ongoing. MWS has a known leak on 5th Ave and are in the planning on making repairs soon.

DES 144 – Manhole 6 repair - project in close-out.

DES 149- Repairs to the Hot Spot on 1st and Molloy – project in close-out.

DES 151 - Manhole 23 Repairs – award and work to be completed in 3rd Qtr. FY19.

DES 152 – Manhole A and M Coating Repairs – on hold.

DES 153 – Manhole L Repairs – metal corrosion repairs, concrete repairs, CND piping hammer; in design; anticipated award in 3rd Qtr. FY19.

DES 154 – Manhole K Repairs – metal corrosion repairs; design started; other projects are higher priority; anticipated bidding and award in 1st Qtr. FY20.

DES 155 – 7th and Broadway CND Leak Repair – CND leak in tunnel; work completed; project closed.

DES 156 – Broadway Tunnel Kicker Repair – badly corroded metal brace in Broadway Tunnel replaced; work completed; project closed.

DES 157 – Manhole 9 Repairs – metal corrosion and concrete repairs; in design; anticipated bid and award in late 3rd Qtr. FY19 or early 4th Qtr. FY19.

DES 158 – Manhole 18A Repairs – metal corrosion repairs; bid and award to take place in 3rd Qtr. FY19.

DES 159 – Manhole B2 Repairs – metal corrosion and concrete repairs; in design; anticipated bid and award in late 3rd Qtr. FY19 or early 4th Qtr. FY19.

DES 160 – 5th + Broadway Service Connection – project has been bid and awarded; scheduling work with affected customers for end of February.

DES 162 – Hyatt Centric Service – negotiations with new customer ongoing.

DES 163 – MDHA Parcel K Service – negotiations with new customer in early stages.

DES 164 – Broadway Tunnel Repairs – repairs needed as a result of 5th + Broadway Development blasting; work to be awarded and started in 3rd Qtr. FY19.

DES 165 – AA Birch Tunnel Repairs – repairs needed resulting from groundwater intrusion; work to be awarded and started in 3rd Qtr. FY19.

DES 166 – Miscellaneous Tunnel Repairs – needed remediation and prevention repairs in the 4th and 7th Avenue Tunnels; work to be awarded and started in 3rd Qtr. FY19.

Without further discussion, and upon a motion, the meeting was adjourned at 11:13 A.M.



The next Board Meeting will be held Thursday, May 16, 2019 at 10:00 A.M.

Prepared by Starla Friedmann

**Starla Friedmann, Board Recording Secretary
Board**

Date: 16 May 2019

Approved: Bob Lackey

Bob Lackey, DES Liaison

Date: 16 May 2019

Approved: Freddie O'Connell

**Freddie O'Connell, Chair, DES Advisory
Board**

Date: 16 May 2019