



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

**February 26, 2020**

**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  
Ann McGauran  
Laurel Creech (*on behalf of Nancy Whittemore*)  
Bob Lackey (*on behalf of Kevin Crumbo*)  
Jim Thiltgen (*on behalf of James Harbison*)  
Brian Taylor  
Eric Swartz

**Others Present:**

Dan Coyle, TEG  
Kevin Jacobs, TEG  
Randy Pomeroy, PMC  
Eddie Wisdom, Constellation  
Adrienne Fancher, MWS  
Elizabeth Sykes, Constellation

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The meeting was called to order by Freddie O'Connell (former Chair) at 9:08 A.M. and asked for everyone in attendance to introduce themselves.

Mr. O'Connell asked Mr. Lackey to provide background on the election of new officers. Upon completion of Mr. Lackey's explanation, Mr. O'Connell asked for nominations for the Chair and Vice-chair for the Board. Mr. O'Connell was nominated by Brian Taylor for Chair and Mr. Taylor was nominated by Mr. O'Connell for Vice-chair. The nominations were seconded. The Board voted and approved Mr. O'Connell as Chair and Mr. Taylor as Vice-chair unanimously without abstention.

Additional discussions were held regarding the Mayor Barry's Executive Order re-affirming the Advisory Board and establishing the rules governing the Board. Mr. Lackey stated that Mayor Cooper was in the process of reviewing the Executive Orders of the previous administrations (Mayors Barry and Briley). However, Mayor Cooper has re-affirmed Mayor Barry's Executive Order for the Board.

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 unanimously and approved the minutes for the August 15, 2019.

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

Mr. Jacobs reviewed the Customer Sales Cost Comparison table for the previous twelve-month period. Due to mild weather over the past year, steam and chilled water consumptions were less than in 2018. The price



for electricity was slightly higher in 2019, but the cost of chilled water was lower. Due to the low natural gas prices, steam costs are also down.

Mr. Jacobs explained that since the Advisory Board did not meet for the First Quarter FY20, the information that would have been covered in that presentation was included in the current presentation.

Mr. Jacobs reviewed the DES Contractor Performance for the previous year. Mr. Jacobs explained that the steam electric conversion was normal relative to the historic values since the Music City Center began using steam. Steam plant efficiency remained between 1.3 and 1.4 Dekatherm per Mlb. The steam plant water conversion factor remained like the historic values. The chiller plant efficiency continued to be less than the three and five-year averages (shown on the chart) but remained below the guarantee value of 1.05 kWhrs per tonhr. The chiller plant efficiency graph showed a "yellow dot", implying a need for improvement from Constellation. The three and five-year averages for the chiller plant water conversion factor were also presented with the actual conversion factor for the previous year. An issue with one of the water meters in the chiller plant could have contributed to some of the increase in the water conversion factor, but this issue occurred in the September/October timeframe and was resolved within a four-week period. The chiller plant water conversion graph also showed a "yellow dot."

Mr. Jacobs reviewed the water treatment slides. Four sets of dots were included on this slide to show the quality metric for the previous four quarters. Mr. O'Connell and Mr. Lackey stated that they wanted to continue including the four sets of dots to reflect the history of the performance. Mr. Jacobs further explained that the water quality remained the same as in the past year. Constellation continues to monitor the presence of the biologicals in the chilled water. All tests that have been performed by taking samples from the water at the plant and from several customer buildings continue to show zero presence of the bacteria.

Mr. Jacobs discussed the EGF (Energy Generating Facility) Walkthrough and explained the new "yellow dots." The yellow dot on the Building and Grounds is due to an issue with the dead trees on the west side of the EGF. Several trees have died and two have fallen. Constellation has not yet addressed this issue and is investing what needs to be done to satisfy the Metro ordinances regarding these trees. The yellow dots on the Equipment Maintenance were due to the maintenance on the cooling towers, which have several issues that Constellation had not addressed until the Third Quarter. Mr. Jacobs stated that he expects these issues to be resolved by the next Advisory Board meeting.

Mr. Coyle reviewed the EDS Walkthrough. There are no significant changes from the previous quarter, but problems remained with water infiltration and corrosion of structural metal components. Several ongoing projects continue to address these issues.

Mr. Jacobs moved onto the Natural Gas Purchasing review. The steam sendout was higher than what was budgeted. Mr. Jacobs explained that this increase was largely due to the steam consumption in the summer months which are hard to predict. Fuel usages were lower than what was budgeted due to the plant efficiency being higher than budgeted. Fuel costs were significantly lower than budgeted, and Mr. Jacobs stated that he did not believe that the prices would use any of the contingency budgeted for fuel. Mr. Jacobs discussed the falling natural gas prices.

Mr. Coyle and Mr. Jacobs discussed the trends for the natural gas futures. Mr. Jacobs explained that Metro's natural gas consultant, FC Stone, has indicated that the market shows a relatively low unit cost for natural gas for the next twelve months. 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 began discussing the FY20 Costs to Date report and explained that all expenditures appear to be consistent with the budget. The only costs shown that are not consistent with being 50% of the budget or less is the non-energy costs. Mr. Jacobs explained that this category included costs that are not re-occurring and that the total annual costs should be less than budget. Mr. O'Connell asked if there would be money



remaining if we were under budget for the year that could be used to refund to the customers or re-invest in the DES. Mr. Jacobs explained that all these actual costs were passed through to the customers and that there would not be money remaining if we were under budget in any item.

Mr. Jacobs presented the FY20 Budget report. Most cost categories are lower than FY19 but the budgeted values for electricity and natural gas are higher than in FY19.

Mr. O'Connell stated that he has observed a steady reduction in the MFA. Mr. Lackey explained that the reduction in MFA is in part due to a reduction in the debt service payments that are related to the MFA. The result is a reduction in the MFA. Mr. Jacobs explain that the FY20 budget also includes the revenue associated with the 5<sup>th</sup> and Broadway development beginning to use chilled water for six months. The FY21 budget will have a full year of 5<sup>th</sup> and Broadway and three months of the Hyatt Centric. Each of these customers contribute revenue that helps reduce the MFA.

Mr. Jacobs continued with the Marketing update. An executed CSA with the Hyatt Centric (3<sup>rd</sup> Avenue and Molloy St) is anticipated within the First Quarter of FY20. The agreement will not include steam. Service is expected to occur during construction in the late summer 2020, and the hotel is anticipated to open in April 2021. Service to Lot K is in negotiations and will include a new service east of EGF under the parking lot. DES and the potential customer are in the early stages of communication due to the timing of the building's construction.

Mr. Coyle explained that the remaining capacity to sell was included on the slide. He further explained that any new customers would be served would reduce the MFA. Mr. Jacobs and Mr. Coyle explained that the excess amount of steam was due to a lack of interest from developers in using steam due to the increased up-front cost with having a four-pipe system instead of electric heat.

Mr. Jacobs explained that the proposed new hotels on Peabody St are in the preliminary design phases and will include retail space. Early discussions with this potential customer are favorable. An additional hotel has been proposed further west on Peabody St and TEG has discussed serving them both steam and chilled water. Mr. Coyle explained that serving this customer may require a plant expansion, but this work may be a few years away. Mr. Jacobs explained that the DES has been added to a list of utilities available in Nashville on Metro's website. Recently, TEG has had conversations with a new development north of KVB and south of Molloy between 2<sup>nd</sup> and 3<sup>rd</sup> Ave S.

Mr. Jacobs explained the slide with the change of customer ownership and the two customers who changed management groups.

Mr. Lackey discussed the status for the RFP and sale of the DES. Constellation's appeal remains on hold due to a key player on Constellation's team having passed away. With the mayoral election, the progress with the sale was delayed. Mayor Cooper continues to review the procurement process and weighing the options for proceeding. Mr. Lackey stated that he expected the Mayor to decide soon on how to proceed. Board members continued the discussion with the status of the sale. Mr. O'Connell, Ms. McGauran and other board members discussed having a special meeting to further discuss options for the system, customer notification of the RFP status and potentially making a recommendation to the Mayor regarding the sale. Mr. O'Connell and the board tasked Mr. Lackey with a few action items.

Mr. Jacobs continued with the Capital Expenditure Update report. Mr. Jacobs discussed the projects and the monies spent in the previous year. Most of the work performed had been on maintenance projects within the EDS. DES160 involved the line extension and metering package for the 5<sup>th</sup> and Broadway site. The meter and instrumentation have been purchased is awaiting installation based on the building contractor's schedule. DES162 involved the line extension and metering package for Hyatt Centric. This work is ongoing.

Mr. Jacobs explained that although the project DES135 has been closed, work associated with investigating the sources of the chilled water leak continue. With the repair of the chilled water and city water lines on 5<sup>th</sup>



Ave, the water infiltration in and around the JKP building has greatly diminished. The last test of the water leaking into the JKP did not contain any DES chilled water.

The amount of water make-up to the chilled water system has remained nearly constant for most of the year.

DES is prioritizing the maintenance work.

Without further discussion, and upon a motion, the meeting was adjourned at 10:22 A.M.

The next Board Meeting will be held Thursday, May 21, 2020 at 10:00 A.M.

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**These minutes were approved at the Board Meeting on May 21, 2020.**