



**Metro District Energy System Advisory Board
Regularly Scheduled Meeting of
May 21, 2015
Minutes of Meeting**

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

Facilitators: Harry Ragsdale, DES Project Contract Administrator and Kevin Jacobs, Thermal Engineering Group

Board Members Present:

Karen Bennett
Alan Robertson
Jim Thiltgen (*on behalf of James Harbison*)
Tom Eddlemon (*on behalf of Richard Riebeling*)

Board Members not Present:

Yuri Cunza
James Harbison
Tom Turner
Richard Riebeling
Tom Turner
Nancy Whittemore
Richard Fletcher
Brian Taylor

Others Present:

Eddie Wisdom, CNE
Kevin Jacobs, TEG
Bob Lackey, DES Liaison
Seretha Nobbins, DES Advisory Board Secretary
Harry Ragsdale, TEG

The meeting was called to order by the Chair and began at 10:05 A.M.

The minutes of the March 5, 2015 Board Meeting were not approved since a quorum was not present.

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

Mr. Ragsdale reviewed the customer cost comparison table for the previous twelve months. On an aggregate basis for the previous twelve (12) months, the steam costs and consumptions were down with the unit price 3.8% higher. This was a cooler quarter than the same quarter of the previous year. The reason the unit price change appears so significant is because our gas cost was lower than last year. The chilled water cost increase is primarily related to the cost of electricity. In this case the electric cost has been going up regularly about 12-15 % per year.

Kevin Jacobs reported consumption is down in chilled water for all customers and proceeded to talk about the Historic Customer TIFS (Thermal Inefficiency Fuel Surcharge). This is a surcharge that all the customers pay if their chilled water Delta T is less than their contract Delta T. The Board had asked at the previous meeting to present the most significant customer buildings incurring TIFS. Mr. Jacobs presented and discussed the graphs and tables showing the customer TIFS and average Delta T's from July 2013 through March 2015. The customers were ranked based on most dollars paid in TIFS and greatest Delta T variance. The customers with the best average Delta T's were also discussed. Mr. Jacobs explained that sometimes a high Delta T was not indicative that a building was performing well but that the building age, maintenance and installed equipment may be insufficient to actually provide adequate cooling.



Mr. Ragsdale and Mr. Jacobs discussed the contractor's performance for the previous quarter relative to their contract performance guarantees for electricity, water, and plant efficiency. The contractor's performance remains very good except for the chilled water electric usage which had been high during previous quarters but did show improvement during the third quarter.

Mr. Jacobs discussed the contractor's performance for the water treatment. The chilled water chemistry is showing signs of bacteriological growth and therefore gets a yellow dot (meaning it could be a problem and needs continued monitoring) and is mostly tied to some of the Delta-T Issues that the system is experiencing.

Mr. Jacobs reported this quarter's EGF walkthrough found the facility in very good condition. The EDS walkthrough continues to recognize water infiltration issues at a number of our underground vaults. They are being addressed as is the corrosion of the steel components.

Mr. Jacobs reviewed actual gas spending relative to the budget. Fuel consumption was higher than budgeted (without contingency) as a result of high steam sales due to colder weather; however, the plant efficiency was improved. Fuel costs were generally on budget for the fiscal when the price and consumption contingencies are included. We expect to continue to be within the fuel budget.

Mr. Jacobs discussed the current expenditures to date and compared them to the budgeted values. All costs are expected to be within the budget.

Mr. Ragsdale and Mr. Jacobs reviewed the Active Capital Projects. Manhole & Tunnel Steel Corrosion Repair & Prevention is ongoing. Time of Use (TOU) billing remains a goal and they continue to research methodology for making TOU invoicing. West Riverfront Park Manhole repairs are commencing. EGF Alternate Fuels Evaluation is nearly complete. The EGF Combined heat and power project is still under evaluation and it remains a viable opportunity to reduce operating cost and improve system reliability and capacity. The modifications to the Metro Courthouse chilled water piping were also discussed.

Without further discussion, and upon a motion, the meeting was adjourned by the Chair.

The next Board Meeting will be held Thursday, August 20, 2015 at 10:00 A.M.

Prepared by: *Seretha Nobbin* Approved: _____

Seretha Nobbin, DES Advisory Board Secretary

Date: 8/20/15

Approved: _____

Bob Lackey, DES Liaison *Bob Lackey*

Date: 8-20-15

Karen Bennett, Chair, DES Advisory Board

Date: 8/20/15

Karen Bennett