



# **Metro Nashville**

## **DISTRICT ENERGY SYSTEM**

### **Metro District Energy System Advisory Board Regularly Scheduled Meeting of August 16, 2012**

#### **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  
Yuri Cunza  
Joy Harris  
Lannie Holland *on behalf of Richard Riebeling*  
Brian Taylor  
Jim Thiltgen *on behalf of Phil Ryan*

#### **Board Members not Present:**

Richard Riebeling  
Phil Ryan  
Tom Thompson  
Tom Turner  
Nancy Whittemore

#### **Others Present:**

Bob Lackey, DES Liaison  
Glenn Mohon, Metro Government, General Services  
Eddie Wisdom, CEPS Operations Manager

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

A motion to approve the minutes of the May 17, 2012 Board Meeting was made, seconded and approved by the Board.

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 (12) months. On an aggregate basis, the steam costs were down 11.73% as fuel prices remain low. Chilled water costs increased 5.55% due to higher energy rates.

Mr. Ragsdale and Mr. Jacobs discussed the customer sales for chilled water and steam for FY12 and the previous five years. Both chilled water and steam sales were down for FY12 due to warmer temperatures.

Mr. Ragsdale and Mr. Jacobs discussed the review of the contractor's performance for the fourth quarter of FY12 and their energy efficiency guarantees. The contractor's performance continues to remain excellent in all areas. The steam and chilled water conversion tables for electricity, water, and plant efficiency were reviewed with the Board. Mr. Jacobs and Mr. Ragsdale discussed the steam plant efficiency and condensate return data since January of 2004. The data shows that the plant operates more efficiently



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when the amount of condensate returned by its customers is higher. The chemistry of the returned condensate affects the amount acceptable for returning to the plant. Mr. Jacobs and Mr. Ragsdale also discussed the chiller plant efficiency and water usage data since January of 2004. There are some seasonal variations that affect the water usage, however make-up water usage for the chilled water is mainly required due to leaks in the chilled water pipes while make-up water to the cooling towers (which is the majority of the make-up) is a normal part of the process for making chilled water.

Mr. Jacobs discussed the water treatment. The contractor's performance on steam and condensate was rated only as satisfactory due to an issue with the condensate return from the Tennessee Tower. The problem was discovered at the Tennessee Tower and currently only approximately 50% of the condensate is now being returned. The contractor's performance is excellent in the remaining areas of water treatment.

Mr. Ragsdale and Mr. Jacobs reviewed the results of the inspections of both the Energy Generating Facility (EGF) and the Energy Distribution System (EDS). Mr. Jacobs indicated that Constellation does a very good job of maintaining the facility and the distribution system. Continuing areas of focus at the underground vaults include: water infiltration, corrosion of the structural metal components, and safety items.

Mr. Ragsdale and Mr. Jacobs provided an update on the natural gas purchasing. Mr. Jacobs discussed the FY12 gas spending and budget comparison. As of the end of the fourth quarter, actual fuel costs were 47% lower than was budgeted due the unit cost of fuel remaining low. Mr. Ragsdale and Mr. Jacobs discussed the actual and projected gas cost comparison history. The actual and projected unit costs and the market unit prices are well below what has been budgeted for the last three years. Mr. Jacobs and Mr. Ragsdale discussed the historic hedging data since July of 2006. As gas market prices have gone down, hedging has decreased.

Mr. Ragsdale and Mr. Jacobs reviewed the FY12 costs to date report. Through the end of this period of operations, approximately 82.12% of the FY12 budget (\$17,054,958) has been expended.

Mr. Ragsdale and Mr. Jacobs reviewed the FY13 submitted budget report. The projected total budget for FY13 is \$20,129,830. This is an increase of .22% from FY12.

Mr. Ragsdale and Mr. Jacobs provided the Board with an update on capital expenditures. Bond fund expenditures and available balances were reported and summarized. The total remaining balance as of 06/30/12 was \$4,198,514.

Mr. Ragsdale and Mr. Jacobs provided the Board with updates on the various active DES capital projects, including the Thermal Storage System. The Board also received updates on capital projects that are closing-out, including the tunnel lighting replacement, various manhole repairs, and the Music City Convention Center.

Mr. Ragsdale discussed hedging practices elsewhere in the United States. Some DES businesses are regulated by their state and will be penalized if they hedged and the actual market prices were lower than the amount they hedged. These businesses don't want to pay the penalties, so they typically don't hedge.

Mr. Ragsdale discussed the condensate replacement return on investment and reviewed an example of how the savings were calculated.

Bob Lackey informed the Board that Metro recently refunded the 2002 DES Construction Revenue Bonds due to lower market rates. These bonds had been secured by the debt service and now the bonds backed by Metro. This is a significant savings for Metro of approximately \$860,000 per year for the remaining life



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of the bonds. As a result of reduced costs associated with the initial 2002 debt, those customer's whose demand charges reflect actual debt service costs will experience a reduction in their unit demand charges.

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

The next Board Meeting will be held Thursday, November 15, 2012 at 10:00 A.M.

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Prepared by: Robin Lamborn

**Robin Lamborn, DES Advisory Board Secretary**

Date: 05-16-13

Approved: Karen Bennett

**Karen Bennett, Chair, DES Advisory Board**

Date: 5/16/13

Approved: Bob Lackey

**Bob Lackey, DES Liaison**

Date: 5-16-13