

Date: June 6, 2016 Subject: Engineering Committee Meeting
Minutes Tuesday, May 31, 2016

To: Board of Directors From: Engineering Committee and
Arthur G. Simonian, Executive Director

AGS

**Engineering Committee
May 31, 2016 Meeting Minutes**

The Engineering Committee met Tuesday, May 31, 2016 at The District Offices at 245 Main Street, Cromwell, Connecticut.

Executive Director, Art Simonian, called the meeting to order at 5:17 PM. Present was the Chair, John Dunham and Committee Members - Bonnie Anderson, David Bauer and Paul Catanzaro. There was a quorum. Also present were Michelle Ryan-District Engineer, David Stille-Incinerator Manager and George Berntsen, Irene Corea, Michael Palmer, Ben Toby and Derek Phelps, all from FuelCell Energy Co.

1) Sludge Management

The Executive Director discussed the production rates on the new incinerator. He provided a spreadsheet that listed the dry tons available for merchants depending on how many dry tons are processed per hour (1.1 – 1.5). The Executive Director provided a second handout (draft only) that gave the cost to run the incinerator, factoring labor, chemicals, O&M costs and capital expenses. It was \$249,666.00 for the month of March. The percentage of our sludge versus the merchants is about \$119,000. Ours is about a little less than half of the outside sludge. The sludge income for the month of March (includes grease and septage) is about \$103,000. The estimate profit/loss for the month of March is a loss of \$17,000.00. This information can be reviewed to determine if a price increase will be necessary going forward. The Executive Director will further refine the spreadsheet and review with operations before presenting again.

2) Increase in Water Consumption

The Executive Director discussed the increase in water consumption from the Odor Control Unit. A document was provided that listed the number of gallons per month processed from the Odor Control Unit. There are 4 flow meters that control the water usage. They have a rate ranging from 1-5 gallons per minute. They are set at 2gpm. That calculates to about 345,000 gallons per month. He compared that to our utility bill which increased to about 374,000 gallons per month since the inception of the Odor Control Unit. This confirms the water increase is due to the Odor Control Unit. He stated the Odor Control Unit is working very well right now and lowering the rate may save a little bit of money but it could result in an increase of odor complaints and/or an increase in chemical usage. The increase cost in water will be about \$14,000 per year. The

Executive Director stated the unit was selected based on the footprint that would fit into that area as well as being the most efficient for removing odors.

Action Item: Board member David Bauer asked what happens to the water after it goes through the Odor Control Unit. David Stille stated it goes back into the plant. Mr. Bauer asked if the plant recycled water can be used for the Odor Control Unit. The Executive Director stated he would look into the cost of a filtration system if it is available and if it would meet the requirements of the Odor Control Unit.

Action Item: Board member Mr. Catanzaro asked if the town of Cromwell offers a better water rate for large users. The Executive Director will look into it.

3) Energy Sources

The Executive Director discussed a new energy source called Fuel Cell Energy. A Fuel Cell is another energy source that can generate electricity with the use of natural gas and water and offset electricity costs with Eversource, both from a generation and distribution standpoint. They provide an on-sight energy source. They meet the requirements for state LREC programs so they qualify for rebates that help offset some of the construction cost as well as the operating costs. The biggest cost would be an increase in natural gas and water consumption. There would have to be an extra gas and water line, which would be installed by FuelCell Energy. There would not be any capital money used. This would be paid out of the operating budget for electricity.

The FuelCell Company provided a presentation. It is a Connecticut based company. They would handle everything from start to finish including coordination with the utility companies, zoning permits, as well as installation of the water and gas mains. They also handle all service calls for maintenance and operations for the fuel cell for the duration of the 20 year contract period.

They would like to investigate the use of the plant's water supply for the fuel cell as well as coordinate with the Town of Cromwell to bring in the additional water line. The Executive Director stated they will have to look at the plant's water supply to see if there will be enough quantity.

The Executive Director asked if they reviewed the current contract The Mattabassett District has with Direct Energy to see if any penalties would apply due to lower energy usage. They stated they have not looked at it but it is an action item for them.

THE MATTABASSETT DISTRICT

Memorandum

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Art Simonian exited the meeting at 6:15pm. Further discussion continued with fuel.

Adjournment:

Mr. Bauer moved, Mr. Catanzaro seconded, and the committee approved unanimously to adjourn at 7:00 PM.