

Engineering and Operations Committee Meeting

Minutes

March 27, 2013

The meeting was convened at 3:00 P.M. by the Vice Chairman, Wednesday, March 27, 2013, at the Lakeway Municipal Utility District's office located at 1097 Lohmans Crossing, Lakeway, Texas 78734-4459.

The following Engineering and Operations (E&O) Committee members, GM, and Board Liaison were in attendance:

Don Walden, *Chairman*,
Carl English, *Committee Member*,
Earl Foster, *General Manager (GM), Lakeway M.U.D.*,
Harvey Harrison, *Committee Member (Vice Chairman)*,
Jerry Hietpas, *Board Member and Board Liaison to Committee*,
Bob Rives, *Committee Member (Secretary)*,
Pat Rossmiller, *Committee Member*.

The meeting's agenda had been distributed to all Committee members by Mr. Foster on March 25, 2013. The primary designated Agenda for the meeting was:

Review CIP Options for Bond Submittal.

Mr. Foster began the meeting by handing out a sheet to compare bond issue options along with a detailed financial sheet labeled: "2008-2017 CIP Project List for Bond Financing." The comparison was between Bond Options A and B. Option A contained a two-project portion and a three-project portion for 2013. The A-Bond issue for five projects totaled \$7,430,000 (the 2-project portion was \$5,895,980, and the 3-project portion was \$1,534,020). These five projects consisted of 1). A Scrubber System – Chlorine Gas Safety - \$539,770, 2). One MG Clearwell plus the West Upper Pressure Plane High Service Pumps - \$3,339,270, 3). Lift Station #1 Improvements (replace existing pumps and controls) - \$145,420, 4). Chlorine Gas Safety (at I-4) - \$548,790, and 5). Reuse-Water System Improvements with revised length and diameter of pipe (15,300 feet of 10 inch pipe) - \$2,539,570. He noted that the Reuse-Water System, if approved. We would hire another Engineer to start the project immediately while our Engineer would be working on the Clear-well Engineering. Option B totaled \$7,593,920 and was for two projects in 2013 and three projects in 2015 (\$5,895,980 and \$1,534,020, respectively). Option B required additional cash for the three remaining projects of \$163,920 based on potential increase in interest for bond issuance in 2015.

A long discussion ensued when Mr. Foster was asked if the Reuse-Water System was really a priority at this time and that perhaps it should be considered at a later date. Mr. Foster

gave reasons that if we initiated the Reuse now we would have the potential for more treated-water sales because of the flexibility of moving treated water to paying customers. Over all, it would have little impact on the golf customers but would provide more assurances to the Yaupon Golf course area during the drought. The new line would help to relocate the 60 Acre Cedar Tract to an area adjacent to S-5 and position LMUD for the potential future sale of the cedar track. Also there was discussion about the possibility of the Highland Lake Rule being rescinded, which has a low probability. Such sale would allow for a potential payback. The committee members noted that Reuse system now calls for 15,300 feet of 10-inch pipe which is a significant increase from the earlier Bond project proposal and this has skewed the costs. The members felt the downside of the Reuse system was simply that it had no economic justification at this time to the M.U.D. All the other projects related directly to the safety or to enhancing the immediate reliability of Lakeway M.U.D. and the Reuse System was not deemed a high priority for the pending Bond financing. The Committee asked Mr. Foster that the Bond issue options should, therefore, be reduced to only four projects.

Mr. Foster then had the 2008-2017 CIP Project List for Bond Financing re-drawn to omit the costs of the Reuse system, and this new sheet was distributed to the Committee. This revised the 2013 total estimated projects cost to \$5,487,900, which included an engineering, testing and inspection cost of \$914,650.

At the last meeting the Committee had asked the General Manager to look at other options to reduce costs such as looking into a glass-fused bolted steel tank versus a prestressed concrete tank at the new W-3 Clearwell site. Today Mr. Foster produced a sheet consisting of the "Life-Cycle Cost Analysis" comparison of the two tanks. It compared a one-million gallon prestressed concrete tank against a glass-fused bolted steel tank. Basically, it showed that both tanks had about the same initial costs with the steel tank being about \$27,000 (3%) cheaper at conception; however, the 45-year life cycle cost analysis indicated that in ten years the costs would equal out and thereafter the steel-tank maintenance costs would balloon exponentially. When asked about welded-steel tanks the answer was about the same but that rust and chlorine levels in the water would add to the problem of the welded seams leading to even more maintenance problems. The concrete tank's long-term stable maintenance and low costs made it the preferred choice of the Committee. The Committee decided to go with the concrete tanks although they have a slightly higher initial cost but were, however, far cheaper to maintain during their expected life cycle. The Committee agreed that the request for bids should state that any viable tank alternatives would also be considered if they meet the intent of the specifications. It was reasoned, however, that M.U.D. should use concrete tank prices in regard to Bond financing.

Mr. Foster then introduced the subject of I-4 Disinfection System Alternatives with information on the estimated whole-life cost comparison for the I-4 Pond and Pump Station disinfection system improvements. The information showed the prices of capital cost of the Severn Trent Services ClorTec OSHG - \$539,600, a chlorine Gas (disinfection safety-scrubber) - \$530,700, and a 12% bulk sodium hypochlorite - \$269,600. The estimated costs over a 20-year period showed that 12% sodium hypochlorite was the most expensive and that chlorine gas and OSHG (On-Site Hypochlorite Gas) were about the same with OSHG being somewhat cheaper over the 20-year life cost of the system by a couple of hundred thousand dollars. There were

also certain safety aspects of chlorine being used within a populated area and the OSHG is the safer method to use. It would, therefore, seem reasonable to replace chlorine with OSHG.

Mr. Foster asked that M.U.D. move forward with the L-1 lift station improvements as they have issues with the pumps. He said the necessary money is available for the approximately \$145,420 work needed. A motion was made for Mr. Foster to move forward with the engineering and to proceed to the execution of the project with Board's approval. The motion was approved by all the Committee members.

Mr. Foster said he needs authority to install a fifth pump on the B-4 Barge. An early start is needed to hire an engineer to start the process by seeing that the electrical and pump specifications are adequate and can be installed before peak season this summer. It was noted that because of the low lake levels and the continuing drought this could become a critical matter. A redundancy or spare pump is needed since running pumps in hot weather and under stress will cause pumps to breakdown more readily; furthermore, the efficiency of pumps are known to drop with the lower lake levels. Right now we have four pumps but will only operate four even with the redundancy pump in place. The fifth pump will become an installed spare and help provide downtime for general maintenance for the other pumps. There is already a \$120,000 escrow from the Barge group for the project, of which \$88,000 was allotted for Lakeway M.U.D. Mr. Foster said he needed authority to proceed with the project so that he could get it installed before August. The Committee noted that if the pump couldn't be installed before August then we should wait until next winter. A motion to proceed was made and the Committee was fully in favor for Mr. Foster to proceed as soon as possible with the project. The project will go to the Board for approval.

It was motioned that the Bond Financing not include the Reuse System; however, the other four projects in the Bond Option A be recommended to the Board of Directors. Mr. Foster stated that the next step would be to take the recommendation to the Finance Committee for their review prior to going to the Board. The motion was carried by all the Committee members.

Business was completed and the meeting was adjourned at 4:45 P.M. The next meeting date was not scheduled.

The minutes have been read and approved by e-mail:

These minutes approved this 1st day of April, 2013.

Yeas 5, Nays 0, Abstain 0.

Robert Rives, Secretary, E&O Committee, Lakeway MUD

