



CITY OF BEVERLY HILLS STAFF REPORT

Meeting Date: February 17, 2009
To: Honorable Mayor & City Council
From: Shana Epstein, Environmental Utilities Manager 
Subject: Smart Automatic Water Meter Project Update
Attachments: 1. Letter to Customers

INTRODUCTION

On January 29, 2008, the City Council approved the Smart Automatic Water Meter Project. The original expected completion of the project was June 2009. At this point staff does not expect to meet that goal, but we are over 80% complete and the last 20% requires more time and attention. The purpose of this memorandum is to share with the City Council the progress of the project.

DISCUSSION

Beginning on February 4, 2008, the data collection units (DCU) that transport the data from the meter back to the City were sited and installed. This part of the project was completed and tested on April 21, 2008. At that time, staff began measuring the meter box and lid sizes in order to make new lids that could transmit radio frequency. That was completed on May 30, 2008. The procurement and delivery of the water meters began March 3, 2008 and continues to this day with the majority received by July 7, 2008. The first customers were notified that they would be receiving a new meter May 3, 2008, to be installed two days later.

Currently, this is the status of the project as of February 1, 2009:

Item	Remaining	Total	Explanation
Small Meters (2 inches or less)	1,390 ¹	10,564 ²	These meters require more than a simple replacement, for example, broken curbstop ³ , meter too far under box, obstructions, concrete around spuds and leaks on customer side.

¹ This information is as of January 27, 2009.

² This total reflects number of meters replaced and not new installations that are requested from customers throughout the year.

³ A curbstop is a service valve on the City's service line before the meter.

Meeting Date: February 17, 2009

Item	Remaining	Total	Explanation
Large Meters (3 inches or greater)	96 ⁴	231	These meters require significant preparation and customized lids before considered completely installed.
Unsuccessful Radio Reads on 2/1/09	1,958	9,253 ⁵	Majority of those unsuccessful reads are under steel lids that need to be replaced. RF interference is suspected as well. In addition, 90 of these radio reads are indicating a broken register or cut wire.
Lid Replacement	2,225	10,795	495 of these lids will be replaced with lids in stock.
Billing Cycles Up to Date	None	31	See below

The delay in billing is anywhere from two to four months. To understand the reason for these delays below is the flow of how information is transmitted from the meters:

- The meters transmit through plastic lids or portions of the lid to a DCU and back to the City.
- The software that collects the data then had to be integrated with the City's financial system in order to bill.

The reasons for the delay in billing are a culmination of the following:

- Not all the meters are transmitting because of the backlog in replacing lids;
- The integration to upload the data from the meter system to the existing financial system took longer to program than the vendor anticipated
- Some old meters still have not been replaced.

By the end of February, staff and the vendor anticipate to have completed the patchwork fixes that are being done to keep billing on track until the entire project is complete. Attached is a letter that will be sent to customers when they receive the last catch-up bill that will come soon after their previous bill.

Originally, staff only thought this billing problem would last for three billing routes out of 31 and reported so to the City Council last fall. Ever since that time staff and the vendor have been grappling with when the fixes would be in place to maintain regular billing. We are at that point with this report.

FISCAL IMPACT

The vendor for this project is Measurement Controls Systems (MCS). The purchase order that was made to this vendor was in the amount of \$ 7,679,731. As of January 29, 2009, the City has expended \$6,007,465 and has not utilized any of the contingency (\$365,701).

Regarding revenue projections, the City expects to recover costs that were never accounted for with the new large meters. The large meters are being replaced with

⁴ This information is as of January 27, 2009.

⁵ Number of total installed radios at each meter.

Meeting Date: February 17, 2009

compound meters so the low and high flows are being read by two meters in one. With the previous meters the low flow was not always measured. Customer service is experiencing large meter customers calling about higher bills due more consumption being measured.

RECOMMENDATION

This staff report is informational only.

 David Gustavson
Approved By



Shana Epstein, Environmental Utilities Manager
Public Works & Transportation Department

Date

Dear Customer,

You are receiving this letter because the enclosed utility bill has been mailed just 10 days after your previous utility bill. The reason this bill has been sent on such a short time frame is that material delivery and technical complications during the installation of the new automatic smart water meter has caused delays in the City's normal billing cycles. As these issues are being addressed, the billing process has been delayed because City staff and the contractor are manually reading meters and calculating your usage on a prorated basis to adjust longer reading intervals to a normal 60-day cycle. This is being done to assure that you are billed at the correct usage level.

City staff is working to ensure that these delays will no longer occur and that your utility bill will come on a regular basis. That does not mean that all the technical difficulties have been solved, but staff has compensated enough for the complications to keep the billing timely.

Staff is already able to use some of this smart technology to better serve you. The leak detection element of the new meters has allowed staff to notify customers that they have a leak on their property, which helps the whole community conserve water. It could also have an impact on saving you money, given that leaks are identified much more quickly.

In the future, as this technology is fully implemented, City staff will be working towards moving the utility billing cycle from its current 60 period to a monthly (30 day) billing cycle. We believe that this will allow our customers to better plan their budgets and reduce the impact of bi-monthly bills on the average family.

If you have any concerns about your bill please call 310.285.2436.

Sincerely,

Shana Epstein
Environmental Utilities Manager