

City of
FRESNO

Residential Meter Implementation Plan

Final Report

January 2008

Prepared by:
HDR Engineering, Inc.

HDR

January 7, 2008

Mr. Mark Hughson
Project Manager
City of Fresno Department of Public Utilities
Water Division- Technical Services
1910 East University
Fresno, California 93703-2988

Subject: Development of the City's Residential Meter Implementation Plan

Dear Mr. Hughson:

HDR Engineering, Inc. (HDR) was retained by the City of Fresno to develop a residential metering plan. The development of this plan is intended to provide a detailed "roadmap" to keep the City moving forward on this important project. This report provides our key findings, conclusions and recommendations as they relate to the residential metering plan.

Assembly Bill 514 legally mandates that the City install water meters on all water services and charge a metered rate to all customers by 2013. The meter implementation plan developed by HDR has reviewed a number of different areas related to the technology, engineering, operational, financial and public outreach aspects of this overall project. This report reviews each of these key areas, provides our observations and conclusions and finally, provides a clear set of recommendations for the City to consider as it moves forward with the program.

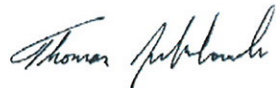
The report was prepared, in part, based upon data and information provided by the City to HDR. In addition, HDR has worked extensively with City management and staff to gain an understanding of their perspectives, issues and concerns associated with the residential metering program. The final plan, presented herein, is a culmination of these efforts. At the conclusion of this study, HDR has provided a summary of "next steps" and detailed time schedule to meet the legislative requirements of AB 514.

HDR appreciates the assistance provided by you, your staff and other City members in the preparation of this report.

Sincerely yours,
HDR ENGINEERING, INC.



Tom Gould
V.P. and Project Manager



Tom Jakubowski
Metering Plan Task Manager

Executive Summary

Introduction

Existing California law states that all residences built after January 1, 1992, must have a water meter installed on all new connections after that date within systems owned or operated by a water purveyor. The continued absence of water meters and billing based on use has prompted the State to pass another law, Assembly Bill 514 (AB 514) to legally mandate all residences to have a water meter installed and be billed based on water usage if they receive water via the Central Valley Project.

As a result of this legislation, the City of Fresno (City) is legally mandated to install water meters on all of their customers. The most challenging aspect of AB 514 for the City of Fresno is the requirement to have all meters installed by January 1, 2013. This includes approximately 105,000 residential customers that are currently flat rate customers. At the same time, the City also has a contract for the water it receives from the Central Valley Project (CVP) through the US Bureau of Reclamation (Bureau). The Bureau also has a timeline for installation that generally matches AB 514.

The metering effort to meet the legal requirements of AB 514 will require a significant effort and financial investment on the part of the City. To assure that sound and prudent decisions are made in this process, and still meet the time requirements for installation, the City, with assistance from HDR Engineering, Inc. (HDR) has developed a residential metering plan.

Current City Metering Program

The City is mandated to install meters on approximately 105,050 residences currently receiving flat rate bills. There are approximately 24,232 residential homes with meters in place which are not read and an additional 10,223 pits and boxes installed with no meter. The City installed some of the existing meters nearly fifteen years ago, while other meters were inherited when County Islands and other private utility districts were annexed. The annexed meters are up to 30 years old and will need to be replaced. Approximately 81,000 additional meters need to be installed and read by 2013 without anticipated growth.

Table ES-1. Current Metering Program.

Meter Reference and Definition	Number of Meters/Homes Affected
Current Flat Rate Bills Sent Out (2007)	105,050
Less: Residences with Meters Installed	24,232
Residences without Meters (2007)	80,818
Less: Current Residences with Pits and Boxes	10,223
Current Residences without Meter, Pit or Box (Complete meter and box needed)	70,595
Total Number of Meters to be Installed (including Growth by 2013)¹	113,265

¹ Growth was assumed at 1.9% annually