



MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO: Commissioners Mital, Schlossberg, Helgeson, Brown and Carlson
FROM: Rod Price, Chief Operating Officer; Simrat Khalsa, AMI Program Manager
DATE: October 6, 2020
SUBJECT: Advanced Meter Infrastructure (AMI) Update
OBJECTIVE: Information Only

Issue

The AMI deployment program has been on an intentional temporary slowdown of meter installations and process review in 2020. This correspondence is intended to update the Board on the current status of EWEB's technological, process, and procurement efforts, and our plans to complete the program.

Background

In the fall of 2018, it was determined that a complete system-wide implementation of AMI would yield significant benefits for our customers, and the Board approved an "opt-out" implementation approach. As smart meters were deployed in 2019, it became clear that the original "opt-in" infrastructure and processes, scaled for 25,000 meters, was not appropriately designed for the full "opt out" implementation. To address this issue, EWEB scaled back the pace of meters installations in 2020 to focus on the Continuous Improvement of our interrelated deployment support projects, and then resume deployment at a rate to meet our full-deployment goal dates.

Discussion

EWEB began deploying both water and electric meters at the beginning of 2019 at a pace to complete the installation of smart meters by early 2022. The plan was to use EWEB labor resources to do the entire deployment. By the end of 2019, 46,000 water and electric smart meters had been successful deployed. However, it was becoming evident that further water and electric meters could not be deployed at the same rates together and that at "opt in" scope our radio communications facilities were not designed to handle more than about 50,000 meters total. Other concerns about EWEB's manual paper/form processes and back-end computer and data systems emerged. As a result, Management decided to intentionally slowdown meter installations in 2020 to address the various challenges, with the goal to complete electric meter installations by the original Q1 2022 date and to extend the water meter install completion date to end of 2024.

At the beginning of 2020, EWEB appointed Simrat Khalsa to act as the Program Manager to complete the smart meter deployment. Four separate interrelated projects have been established to help focus and complete the remaining meter installs and necessary support systems. The following is a brief discussion of each project scope and current status.

1. Facilities/Communications Projects

The scope of this project is to upgrade our radio systems to adequately connect to all our planned 150,000 smart meters. Through good cooperation with the City of Eugene, early delays in zoning

and permitting were overcome and two new sites were installed mid-summer, Spring Creek and Delta Substation. These sites immediately improved our remote billing read success rate, currently at 98%. We are on track to complete three more radio site upgrades by the year end, pending final resource impacts from the pandemic and Holiday Farm fire response.

2. AMI Deployment

The scope of the meter deployment project is to organize the process updates and labor needs to install our remaining 40,000 water smart meters and 60,000 electric meters. Our ability to use EWEB-only labor resources would not be adequate to install electric meters by our target date. Furthermore, the current methods and systems used to plan, install and integrate new meters would not be able to efficiently support a high installation rate needed to meet our target date. Improvements have been made in our processes, as well as add limited time FTE to help manage all of the meter changeout records.

Currently, EWEB is in negotiations with UPA, a Sensus sub-contractor, to procure labor to supplement the installation of the remaining 55,000 single phase electric meters. EWEB labor will continue to install our three-phase meters and other remaining meters that have special conditions. EWEB management has elected to move ahead with a direct negotiation with UPA based on their experience working with Sensus in mass deployment, positive industry references, and price submittals that are on par with our own internal net costs. The approximate historical per meter cost is \$43, including estimated 40% overheads and process support. The total UPA contract will be approximately \$2.5 Million or \$46/meter. We will be submitting this contract to the Board for consideration and potential approval in November.

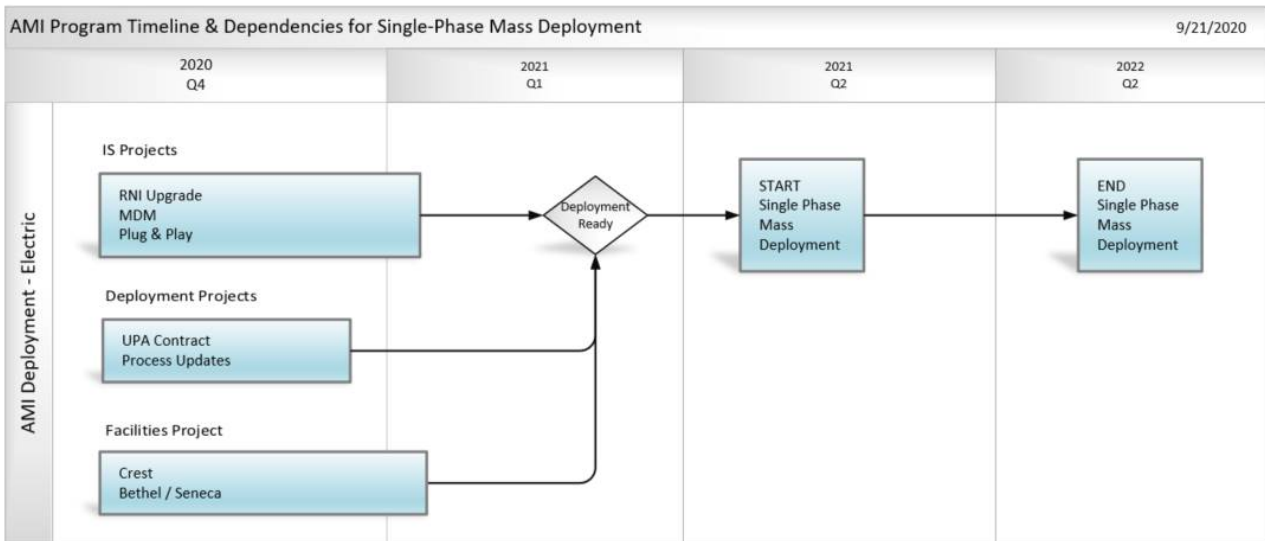
3. Information System Upgrades

The scope of the AMI IS project is to update the major components in the information and network systems that collect, store and transfer the data from the smart meters to our billing system. Most of the work was identified in late 2019, such as standard software updates (RNI (radio-network interface) Upgrade) and building out system architecture to accommodate data for the full meter deployment of 150,000 meters (MDM (meter data management) enhancements). AMI IS project work has progressed to the testing stages with the RNI and will move to completely focus on the MDM updates next. But the pace has also been challenged by COVID-19 and Holiday Fire response and CEI project coordination. To facilitate automated meter installation, EWEB has included “plug and play” functionality in the scope of a Sensus upgrade.

4. Meter-To-Cash Improvements

The scope of this effort is to identify, baseline, and integrate all our water and electric processes that rely on or support metering. EWEB has hired a “lean process” analyst to help us lead this work and support our continuous improvement and change management programs. Examples of processes included in this scope are; meter inventory management, deployment planning, process documentation, addressing business requirement changes, helping with deployment decisions and communicating all the changes to our work force. Work in this project has been steady and productive.

As the following project flow diagram shows, we are expecting the deployment of electric meters to be complete in early 2022. In order to maximize our use of contract labor, UPA will not start installing meters until EWEB is completely ready to handle an accelerated rate of meter change outs. As shown in the flow diagram, we have several critical path items to complete to be ready for contract deployment.



Our overall deployment targets are on track for all water and electric meters. Updates to our progress and schedule are reported on in the Quarterly Reports.

Requested Board Action

This Correspondence is provided for informational purposes only.

Please contact Rod Price at 541-685-7122 or e-mail at Rod.Price@eweb.org with questions.