

# Advanced Metering Infrastructure (AMI)

Project Update – November 19, 2018



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CHELAN COUNTY

# Purpose

Provide background on a request for proposals (RFP) authorizing staff to publish notice inviting sealed proposals for Advanced Metering Infrastructure (AMI) system as the preferred alternative for future customer metering and to be assumed as a part of the Oracle C2M system that includes the new customer information system (CIS) and meter data management system (MDMS).

# Background

Actively researched the customer and operational benefits of AMI since 2005

Identified industry best practices in discussion and site visits with other utilities

Installed one-way/drive-by automated meter read (AMR) system for all water meters

Established a meter reading service contract and reduced meter reader positions from 13 to 2



# Background

Expanded to one-way drive by electric AMR at >16,000 homes as the preferred meter

Sought the expertise of Utiliworks, a leading AMI consultant, to help develop the business case

Presented the original business case in July 2015 and an update in January 2017

Researched/reviewed extensively the literature for health and privacy impacts

District committed to offering an opt-put option



# Background

Board approved resolution to proceed with AMI in December , 2017 (*resolution #17-14201*)

Finalized selection of CIS/MDMS (*Oracle C2M*) in support of Board direction and initiated project

Extended the engagement with UtiliWorks for their expertise, to help develop the AMI-RFP

Established District-wide working team to develop AMI-RFP requirements & preferences

Currently finalizing AMI-RFP language & content



# Projected Next Steps

**Dec 3, 2018** - Request Board approval to issue AMI-RFP

~**Q1 '19** - Issue AMI-RFP notification

~**Q2-Q3 '19** - Review & select preferred proposal

~**Q3 '19** - Oracle C2M (CIS/MDMS) goes live

~**Q3-Q4 '19** - Negotiate AMI contract & Board approval \*

~**Q1 '20** - AMI Proof of concept initiated

~**2020-21** - AMI system fully deployed (18-24 months)

***\* - Following contract approval, customer “opt-out” policy options will be presented to the Board for selection and approval***



# Questions

# Appendix

*(supporting details form prior presentations)*



# Business Case Results

|                                  |                |
|----------------------------------|----------------|
| Net Present Value                | \$ 1.1 Million |
| Capital Costs                    | \$13.2 Million |
| Benefits Estimate (20-year life) | \$32.9 Million |
| Internal Rate of Return          | 8.1%           |
| Payback Period                   | 14 Years       |

# AMI Customer-owner Benefits

Better management of energy use

Ways to determine if conservation/energy efficiency programs can save money

More timely and accurate outage notifications & restoration

Quicker response to bill inquiries

Remote account access & ability to initiate service calls

Increased billing accuracy & reduction in estimated bills

Reduced need for utility worker access on customer property

# AMI Efficiencies and Cost Savings Customer-owners

Reduced operational costs for meter reading and various other types of service calls

Reduced customer service costs related to bill handling

Reduced cost for outage restoration and management

Increased meter accuracy

Greater information to support asset management strategies

Improvements in safety

Carbon footprint reduction

# Customer Feedback

Many favorable comments, some concerns raised centering on:

Radio frequency (RF) and electromagnetic fields (EMF)

Meter safety

Data privacy and security

Opt-out options

# 2017 Customer-owner AMI Outreach

## Focused effort during April and May

- 450 people reached “face to face”
- More than 18 community meetings
- More than 45,000 post cards to encourage feedback
- 33,000 emails
- Separate website landing page dedicated to AMI  
[www.chelanpud.org/advanced-meters](http://www.chelanpud.org/advanced-meters)
- May 22<sup>nd</sup> and June 5<sup>th</sup> Board updates in public session
- Aug. 8 Chelan City Council Presentation

# AMI Customer Feedback

Staff listened to community members and conducted extensive research around the country and internationally looking at the best science available to address the concerns. That information is available on the District's website at:

**[www.chelanpud.org/advanced-meters](http://www.chelanpud.org/advanced-meters)**

# Response to Customer Feedback

## Key points:

- AMI meters emit very infrequent pulses of RF and there is not a significant increase in health risk due to the use of RF associated with AMI meters
- Meters must meet safety requirements and standards per the National Electric Safety Code
- The District is committed to protecting individual customer information consistent with state and federal consumer protection laws
- The District is committed to offering an opt-out option