Advanced Electric and Water Meters: Program and Policies Update

Tacoma City Council and Public Utility Board
Joint Study Session
July 21st, 2020
Agenda

1. Program Update
   • Customer Benefits
   • Strategic Program
   • Customer Communications
   • Upcoming Target Dates

2. Advanced Meter Policies
   • Overview
   • Customer Side Repairs
   • Opt-Out
   • PrePay
Advanced Metering Infrastructure (AMI)

- Power & Water Meters
- Communications Network
- Utility Data Management Systems
Advanced Meters: Customer Benefits Timeline

2020-2021

- Automated Meter Reading
- Enhanced Personal Privacy
- Easier Move-In & Move-Out
- Remote Reconnect/Disconnect for Electric
- Abnormal Consumption Notifications
- Emergency Water Leak Notifications
- Monthly Billing
- PrePay for Electric

2022

- Enhanced Customer Web Portal
- Expanded Ways to Save: AMI Data Available on Web Portal
- Enhanced PrePay Via Web Portal for Electric
- Selectable Bill Due Date
- Enhanced Customer Outage Notifications

Advanced Meter Customer Benefits

Benefits Available As Customers Receive New Meters Over Time: 2020-2022

DRAFT: Revised 7/16/2020
Advanced Meters are an essential building block of TPU, have been a strategic focus for the past five years, and will modernize TPU services now and in the future.

Low Customer Cost:
- The current cost to individual customers is relatively low, with costs spread over ten years.
- Costs for advanced meters are factored into current rates.
- Rate Impact: The additional cost each year for the next ten years is about:
  - 8 cents per month for the average residential power customer
  - 11 cents per month for the average residential water customer in the City of Tacoma (13 cents per month outside City)

Benefits support customer cost savings over time, particularly during times of economic uncertainty.
Customer Communications

before, during, and after meter installation.
# Deployment Customer Communications Plan - DRAFT

## General Awareness
- Web Content - Constant
- Web Banner Ads
- U* Article, Jan 2020 issue
- E-newsletter
- U*Article, Q4 2020 Issue

## Initial Meter Deployment Area (IDA)
- Virtual Open House
- Installation Videos
- 45, 30, 14 Days - Install Letter
- 7 Days - Install Reminder Postcard
- 2 Days – Reminder Call
- 2 Days – Reminder Call

## Residential Deployment
- 45, 30, 14 Days - Install Letter
- 2 Days - Auto Dial Call (from MIV)
- Completed Door Hanger
- Reminder Call (as needed)

## Commercial Deployment
- 60 Days - Install Letter
- Scheduling Call from Meter Shop
- 45-7 Days Outreach from Account Executives

Communication materials will be available in multiple languages.

5 specific residential customer communications **before** meter installation.
Upcoming Target Dates

Initial Meter Deployment Area (IDA) Communications Begin: August

IDA Meter Installations: September/October

Mass Meter Communications Begin: November/December

Mass Meter Installations: Q1 2021 - Q3 2022
### Policies in Progress

<table>
<thead>
<tr>
<th>Policy/Procedure</th>
<th>Approval Level</th>
<th>Target Date</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Water</strong> Customer Service Policy</td>
<td>PUB</td>
<td>July 22&lt;sup&gt;nd&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>2. TPU</strong> Customer Privacy Policy</td>
<td>PUB</td>
<td>July 22&lt;sup&gt;nd&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>3. Tacoma Municipal Code (TMC), Title 12 – Utilities</strong></td>
<td>PUB</td>
<td>July 22&lt;sup&gt;nd&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>4. Tacoma Power</strong> Staff Procedure A-7</td>
<td>City Council</td>
<td>Aug. 4&lt;sup&gt;th&lt;/sup&gt; &amp; 11&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>5. Customer Services</strong> Customer Service Policy</td>
<td>Utilities Director</td>
<td>July 31&lt;sup&gt;st&lt;/sup&gt;</td>
</tr>
<tr>
<td>• Incudes PrePay and Advanced Meter Opt-Out</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*<em>6. <em>Advanced Meter</em></em> Customer Side Repair Policy</td>
<td>PUB</td>
<td>Aug. 12&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

*New policy or procedure

Updated: 7/8/2020
Advanced Meter
Customer Side Repairs
Tacoma Public Utilities
Program Objectives

The Customer Side Repair Policy will:
• Provide safe and reliable water and power services
• Ensure a smooth meter implementation that does not disrupt customer lives or create undue burden
• Assist low income customers if issues arise
• Provide all customers access to resources if needed

Our goal is to make sure every customer is covered with an option if an issue arises during meter implementation.
Based off advanced meter deployments at similar utilities, TPU estimates typical (statistically most likely):

**Power** customer side repairs to total:
- Approx. 0.5% - 1.0% of meter replacements
  or to potentially impact 800-1,600 residential customers

**Water** customer side repairs to total:
- Approx. 0.5% - 1.0% of meter replacements
  or to potentially impact 480-960 residential customers

Instances of more extensive repairs (statistically least likely) related to advanced meter installations are anticipated to be minimal – a fraction of percentages shown.
TPU Proposes 3 Ways to Assist Customers

1. Advanced Meter Customer Side Repair Policy
2. Water Customer Grant Program
3. Water Customer Loan Program
Infrastructure Data Analysis

Purpose:
I. Assess historical water pipe installation practices and possible areas of customer vulnerability
II. Review historical and present day equity concerns to inform mass meter deployment

Impacts - Understand potential impacts to:
• Areas of low historical infrastructure investment
• Low income homeowners
• Low income senior homeowners

Apply Results - Shape grant/loan program development:
• Consider use of funds for areas of infrastructure vulnerability
• Inform education and outreach opportunities related to grants/loans

*Grant program will be limited to customers who qualify for low income assistance programs
Advanced Meter Opt-Out Policy
Tacoma Public Utilities
## Benefits of Advanced Metering

<table>
<thead>
<tr>
<th>Customer Benefits (over time)</th>
<th>Standard Advanced Meter</th>
<th>Opt-Out Meter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequent usage data and expanded ways to save money</td>
<td>✓ Yes</td>
<td>No</td>
</tr>
<tr>
<td>Easier move in, out, and reconnection</td>
<td>✓ Yes</td>
<td>No</td>
</tr>
<tr>
<td>Faster outage and leak detection</td>
<td>✓ Yes</td>
<td>No</td>
</tr>
<tr>
<td>Flexible payment options (including PrePay and selectable bill date)</td>
<td>✓ Yes</td>
<td>No</td>
</tr>
<tr>
<td>Budget billing</td>
<td>✓ Yes</td>
<td>✓ Yes</td>
</tr>
<tr>
<td>Monthly billing</td>
<td>✓ Yes</td>
<td>✓ Yes</td>
</tr>
<tr>
<td>Automated meter reading</td>
<td>✓ Yes</td>
<td>No</td>
</tr>
<tr>
<td>Reduced environmental impact</td>
<td>✓ Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
Electric Opt-Out

- TPU has developed two opt-out options for customer who do not wish to participate in advanced metering for electric:

  - Option #1: Existing Legacy Meter
    - Opt-out before meter upgrade
    - Customers may temporarily keep their existing legacy meter (defer upgrade)

  - Option #2: Radio Off Meter
    - Opt-out after meter upgrade
    - The advanced meter’s radio transmission communications will be turned off

- Availability & Application
  - Available for residential electric customers: single family or multi-unit of 4 units or less
  - Customers must sign a form acknowledging fees, terms, and conditions.
Radio Off Meter

- The meter’s radio transmission communications will be turned off (opt-out mode).
- Communications can be enabled and disabled remotely.

“Opt-Out” periodically displayed on meter
Opt-Out Fee

Recurring Billing Cycle Fee
(recurring cost to manually read and process meters)

• A recurring fee will be charged each billing cycle based on TPU’s costs to provide the opt-out service
  Effective no sooner than January 1st, 2021

• Fee to begin on the billing cycle following meter installation

• Fee will follow TPU’s existing Discount Rate Program and eligibility requirements
  Discount Rate Program = 30% Discount

• Customers can opt-in at any time for no charge
# Opt-Out Fee: Proposed & Examples

<table>
<thead>
<tr>
<th>Utility</th>
<th>One Time Fee</th>
<th>Monthly Fee</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tacoma Public Utilities (PROPOSED)</td>
<td>None</td>
<td>$15</td>
<td>-Existing Discount Rate Program applies (e.g. 30% discount)</td>
</tr>
<tr>
<td>Seattle City Light</td>
<td>$124.43 (admin)</td>
<td>$15.87</td>
<td>-One-time install fee waived if opting-out two weeks before mass installation.</td>
</tr>
<tr>
<td></td>
<td>$84.21 (install)</td>
<td></td>
<td>-60% discount for rate assistance customers.</td>
</tr>
<tr>
<td></td>
<td>$208.64 (total)</td>
<td></td>
<td>-Net metering is not eligible.</td>
</tr>
<tr>
<td>Puget Sound Energy</td>
<td>$90 electric $50 gas</td>
<td>$15 per meter*</td>
<td>-One-time fee waived if notified before mass installation.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>*Billing cycle fee is every other month.</td>
</tr>
<tr>
<td>Avista</td>
<td>$75</td>
<td>$10*</td>
<td>-One-time fee waived if within 31 days of install.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Recurring fee waived for income assistance customers.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>*$10 tariff is currently proposed to the Washington Utilities and Transportation Commission; current fee is $15</td>
</tr>
<tr>
<td>ComEd</td>
<td>$77.47</td>
<td>$21.53</td>
<td>-One-time fee charged if after installation.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Monthly fee begins four billing periods after installation.</td>
</tr>
<tr>
<td>Con Edison</td>
<td>$104.74 electric $93.91 gas</td>
<td>$9.50</td>
<td>-One-time fee only charged if after installation.</td>
</tr>
<tr>
<td>Grant PUD</td>
<td>$250.99</td>
<td>$64.34</td>
<td>-Rural.</td>
</tr>
</tbody>
</table>

Comparison utility details updated 4/30/2020
Water Opt-Out

• TPU will not be providing a water meter opt-out option

• Considerations supporting this decision include:
  • Water meters are typically located in the public right of way, not on private property
  • Peer utilities have seen the most opposition to electric meters, not water or gas meters
  • Many large water utilities TPU researched do not offer an opt-out option
TPU PrePay Program
Tacoma Public Utilities
PrePay History – PayGo

PayGo: Pay as you go electric service

• 2005: Internal employee pilot
• 2006: Offered pilot to external customers
• 2019: PayGo pilot system was decommissioned

• TPU was one of the first utilities to offer remote pay programs (IVR – interactive voice response, Pay Boxes, mail, online, etc.)

• PayGo had over 1,400 customers at its peak

• Available for residential electric customers

• Disconnections only occurred 8am-8pm M-F, no disconnections on holidays
  • Customer could set alert levels for notification of funds
PrePay Benefits & Timing

- No security deposit
- Zero interest installment plan – automatic debt repayment
- Tools to manage energy and bills
  - Monitor usage
  - Alerts
  - Identify malfunctioning appliances/equipment
- Benefits from pledge assistance
  - Internal
  - External (community partners valued lower bill amounts)
- Energy education for the whole family

**Timing: First Available Mid-2021**
Questions?
MyTPU.org/AdvancedMeters
Reference Slides
Customer Side Repair Policy

Figure 3

Power
Specific focus on Meter Socket & Jaws as statistically most likely area for TPU repair on customer owned equipment if needed
Customer Side Repair Policy

Water
Specific focus on first 3 feet of customer owned line as statistically most likely area for TPU repair if needed.
Proposed Ways to Assist Customers

1. Advanced Meter Customer Side Repair Policy
   • Funded by Advanced Meter Program & exists for duration of mass meter implementation
   • Focus on statistically highest type of equipment prone to problems in the immediate location of the meter
     ▪ Power: Electric meter socket & jaws focus; exceptions process for additional work (e.g. service mast)
     ▪ Water: Up to 3 feet of customer side water line

2. Water Customer Grant Program
   ▪ Income based qualification for up to 200% of Federal Poverty Level
   ▪ $5,000 grant limit [amount shown is for reference; grant limit to be determined]
   ▪ If repair costs exceed grant limit, then exceptions process for review and/or deferred loan
   ▪ Program continues for Tacoma Water after AMI mass meter implementation as a conservation offering

3. Water Customer Loan Program: deferred loan or zero interest loan
   ▪ Modeled after TPU’s existing Power Conservation loan program
   ▪ Deferred loan for those who need additional financial support as well as a zero interest loan for other customers
   ▪ Dollar cap with exception upon management review & approval
   ▪ Deferred loan lasts until property transfers; 48-60 month loan payback for zero interest loan
   ▪ Program continues for Tacoma Water after AMI mass meter implementation as a conservation offering