



Advanced Metering Infrastructure (AMI) Program Policies Discussion: Opt-Out and Customer Side Repairs

Public Utility Board
Reports of the Director
June 10th, 2020



●●● Agenda

1. Policies Timeline
2. Opt-Out:
 - Policy Review
 - Fee Recommendation
3. Advanced Meter Customer Side Repairs

Upcoming Target Dates

June 10th PUB Meeting

Detailed Policies Discussion

- Opt-Out Review and Fee Recommendation
- Advanced Meter Customer Side Repairs

July (Tentative)

PUB Adoption of Package 1 Policies

August (Tentative)

City Council Adoption

- Adoption of Package 1 TMC Changes
- First and Second Council Readings

●●● Package 1 Policies

<u>Policy/Procedure</u>	<u>Approval Level</u>
1. Customer Services Customer Service Policy	PUB
2. Water Customer Service Policy	PUB
3. Tacoma Municipal Code (TMC) , Title 12 – Utilities	City Council
4. TPU Customer Privacy Policy	PUB
5. *Advanced Meter Customer Side Repairs	PUB
6. Tacoma Power Staff Procedure A-7	Utilities Director

*New policy or procedure



Advanced Metering Infrastructure (AMI) Opt-Out Review and Fee Recommendation



Why an Opt-Out Policy?

- **Purpose:**

- Provide customers an alternative to a standard advanced meter installation
- Anticipate and prepare for a small group of concerned customers' needs

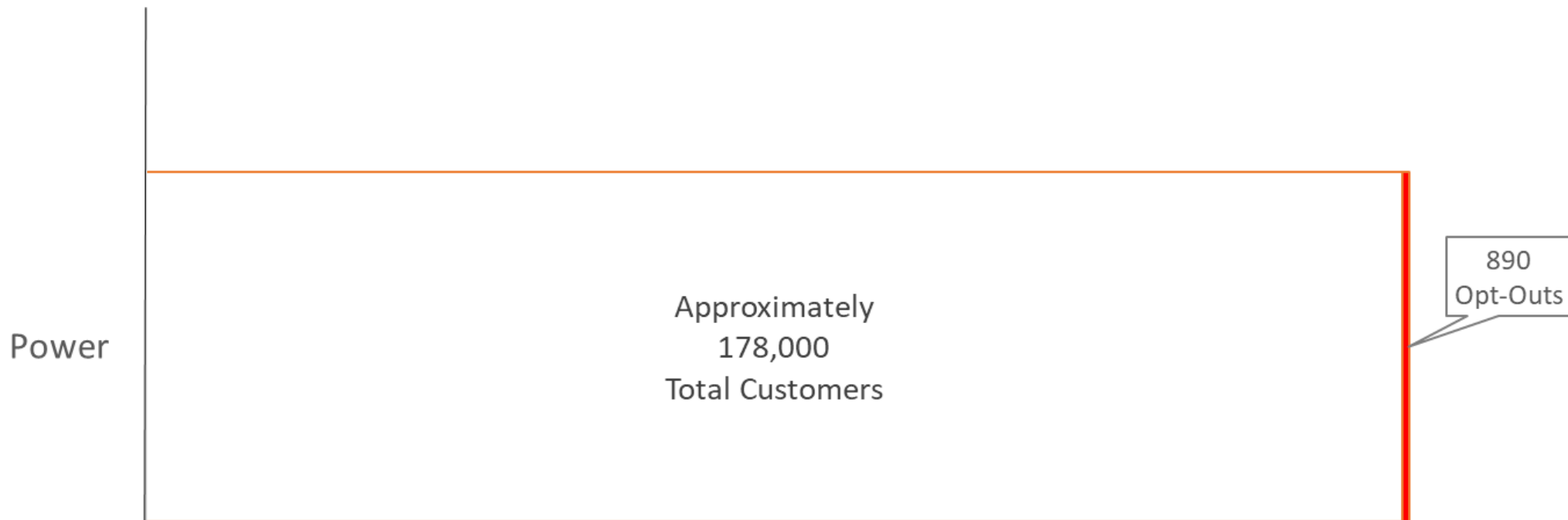
- **Core Principles:**

- Allow customers an equitable choice of service, while meeting utility equipment requirements
- Identify and equitably allocate costs of alternative meter options
- Understand potential policy impacts on each customer class
- Educate customers on the benefits of an advanced meter



Why an Opt-Out Policy?

Anticipated Advanced Meter Opt-Out Customers



Based on national and regional statistics, TPU anticipates approximately 0.5% of power customers will want to opt-out (890 of 178,000).









Why an Opt-Out Policy?

- Utilities have seen better acceptance results with a policy that addresses rather than resists opposition.
- A key goal of our customer outreach is to:
 - Educate customers on the benefits of an advanced meter
 - Keep the refusal percentage low to realize maximum customer benefits



Benefits of Advanced Metering



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

General Policy Statements

- **Advanced Metering Participation**

- Unless specifically opting-out:
 - All customers will be upgraded to advanced metering during mass deployment.
 - New accounts will automatically participate in advanced metering.

- **Electric residential customers will be given the opportunity to opt-out.**

- *Before* and *after* their meter upgrade.

- **Opt-Out Participation**

- Customers must sign a form acknowledging fees, terms, and conditions.
- Customers must opt-out at the account level, to be completed by the account holder.
- Opt-out services will be converted to advanced metering upon move-out (or account closing).
- An opt-out customer moving to a new location will be required to opt-out again.
- Residential separately metered, domestic use, detached garages will also be eligible to opt-out if the primary residence is also opting out.



Electric Opt-Out

Electric Meter Options:

Option 1: Existing Legacy Meter



Legacy Meter

- Opt-Out BEFORE Meter Upgrade
- Defer meter upgrade:
 - Customers can temporarily keep their existing legacy meter
 - Upgraded to radio off meter upon:
 - Legacy meter failure
 - Meter maintenance/obsolescence
 - Customer decision to upgrade
 - Meter will be wirelessly set up at the service location before turning the radio off



Radio Off Meter

Option 2: Radio Off Meter

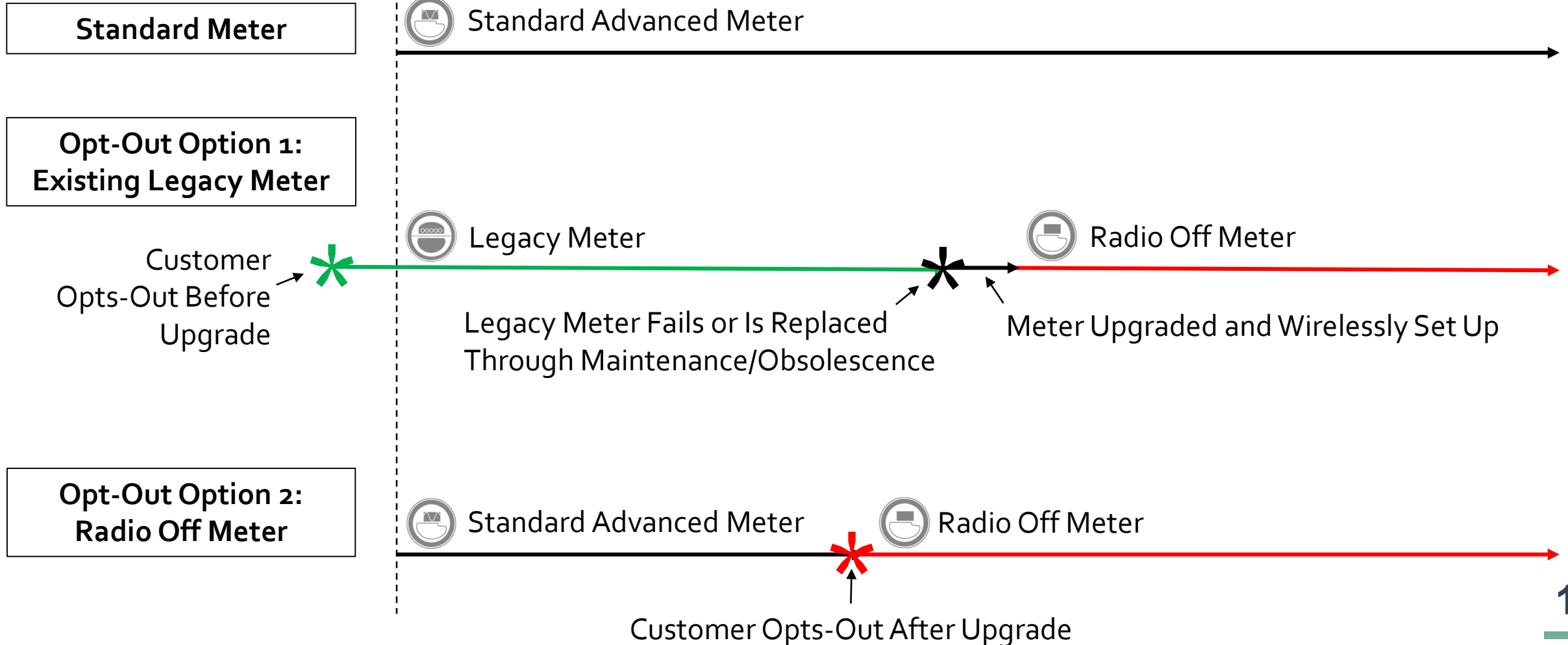
- Opt-Out AFTER Meter Upgrade
- Radio off meter
 - Meter has already been wirelessly set up at the service location
 - Meter will remotely have its radio turned off when initially opting-out



Radio Off Meter

Electric Opt-Out Timeline

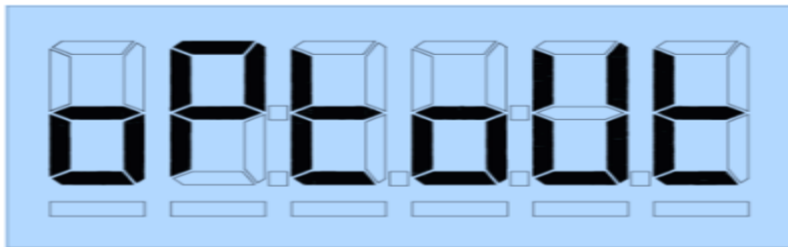
Meter Upgrade



Electric Opt-Out

- **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



Eligible Customers

Customer Type	Eligible to Opt-Out
Residential: Single Family or Multi-unit of 4 units or less	✓ Yes*
Move-in, New Account, New Service	✓ Yes*
Residential: Multi-unit > 4 units	No
Commercial & Industrial	No
Net Metering (solar)	No
Temporary Service	No

• In a tenant-landlord relationship, the utility account holder completes the opt-out application.

***Ineligible to opt-out or opt-out is revoked if customer has record of:**

- Equipment tampering or electric/water diversion
- Service disconnection for lack of payment 2 times in a 12 month period
- Obstructed meter access for meter reading and/or meter maintenance
- Documented threat to utility staff

Recurring Billing Cycle 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, including:**
 - Meter reading time and drive time
 - Meter reading labor and vehicle costs
 - Customer services, data systems, and administrative time
 - Applicable taxes
- **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



Draft Policy Discussion

DRAFT Fee Recommendation

- **\$15.00 recurring billing cycle fee**
 - \$10.50 fee for Discount Rate Customers (30% discount applied)
- Fee assumptions include:
 - **Meter reading time and drive time:** 2 minutes reading a meter and a 5 minute drive to and from a home
 - **Meter reading labor and vehicle rates:** Field Investigator rate of \$58.29/hour* and a vehicle rate of \$8/hour
 - **Applicable taxes:** Public Utility Tax of 3.8734% and Gross Earnings Tax of 7.5%
- Fee will be reviewed periodically to align with Opt-Out cost of service

Following completion of Advanced Meter deployment, existing costs to manually read customer meters will be removed from TPU rates modeling.

Opt-Out Fee Examples

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

Water Opt-Out

- TPU will not be providing a water meter opt-out option
- This decision was previously discussed during the Public Utility Board Study Session on September 11th, 2019
- Considerations regarding this decision include that:
 - 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 researched do not offer an opt-out option
 - This eliminates a one time fee for opting-out of water (a fee would be required to physically remove and then re-install a radio communication module in the field)
 - This does not eliminate all potential customer privacy concerns related to a water advanced meter



Recommendation & Next Steps

Seeking
PUB
Confirmation

1. Fee and fee implementation timing
 - Effective January 1st, 2021 (proposed)
2. Opt-out notification and sign-up process
 - Notification of TPU's opt-out option will be provided through advanced meter deployment customer communications (e.g. customer letter); detailed information will be provided on TPU's website
 - Apply through an application submitted to TPU in person or by mail

TPU intends to map opt-out locations by areas and compare these with City equity index map data. This will indicate if a disproportionate number of opt-out customers are located in different geographic opportunity areas.



Advanced Metering Infrastructure (AMI) Customer Side Repairs Discussion

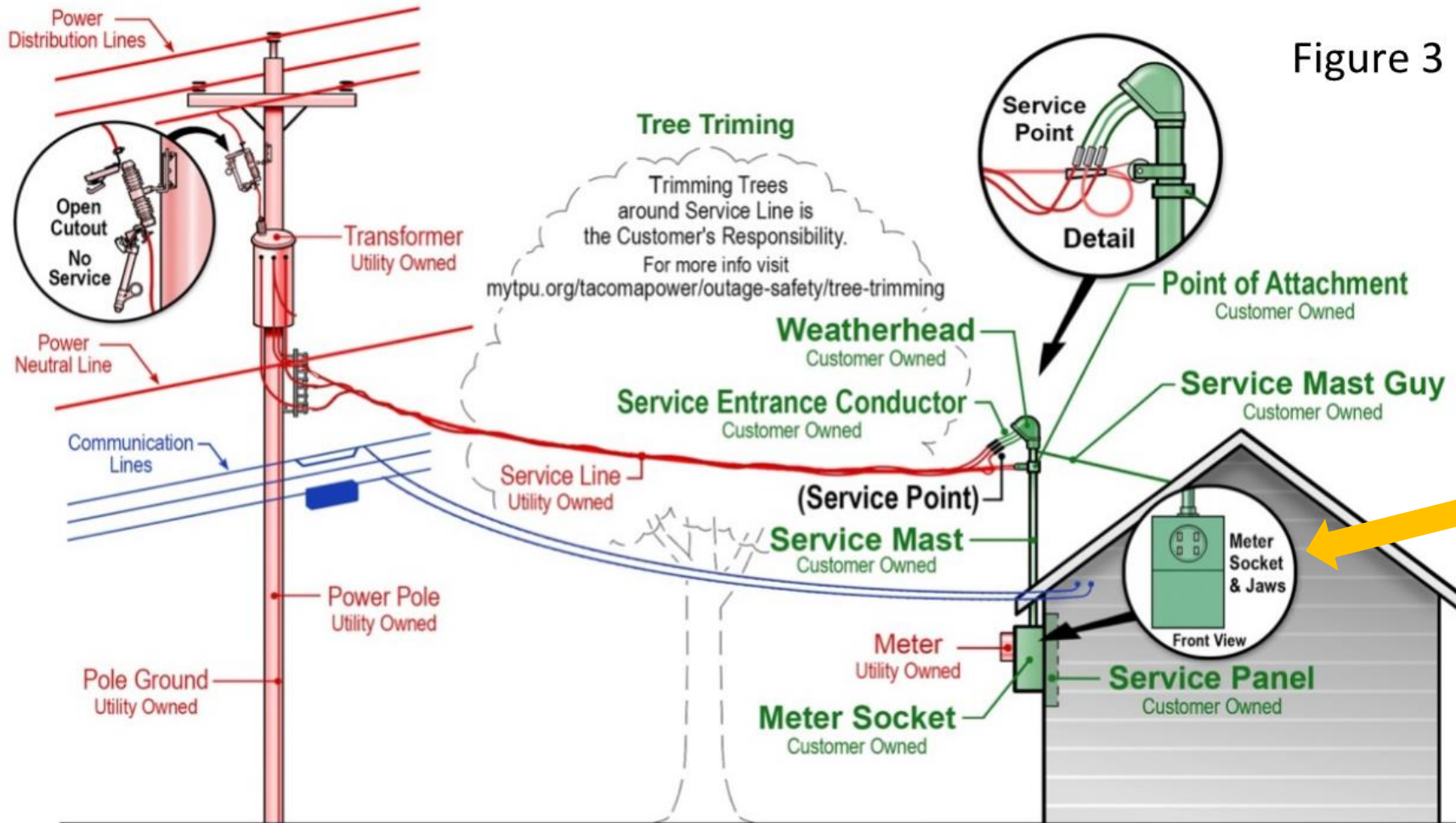


During Advanced Meter implementation, meter installation experts can encounter infrequent issues with specific customer owned equipment located around the meter.

The proposed policies and programs are intended to address the few situations where customer-side equipment may need additional repair for safe service.

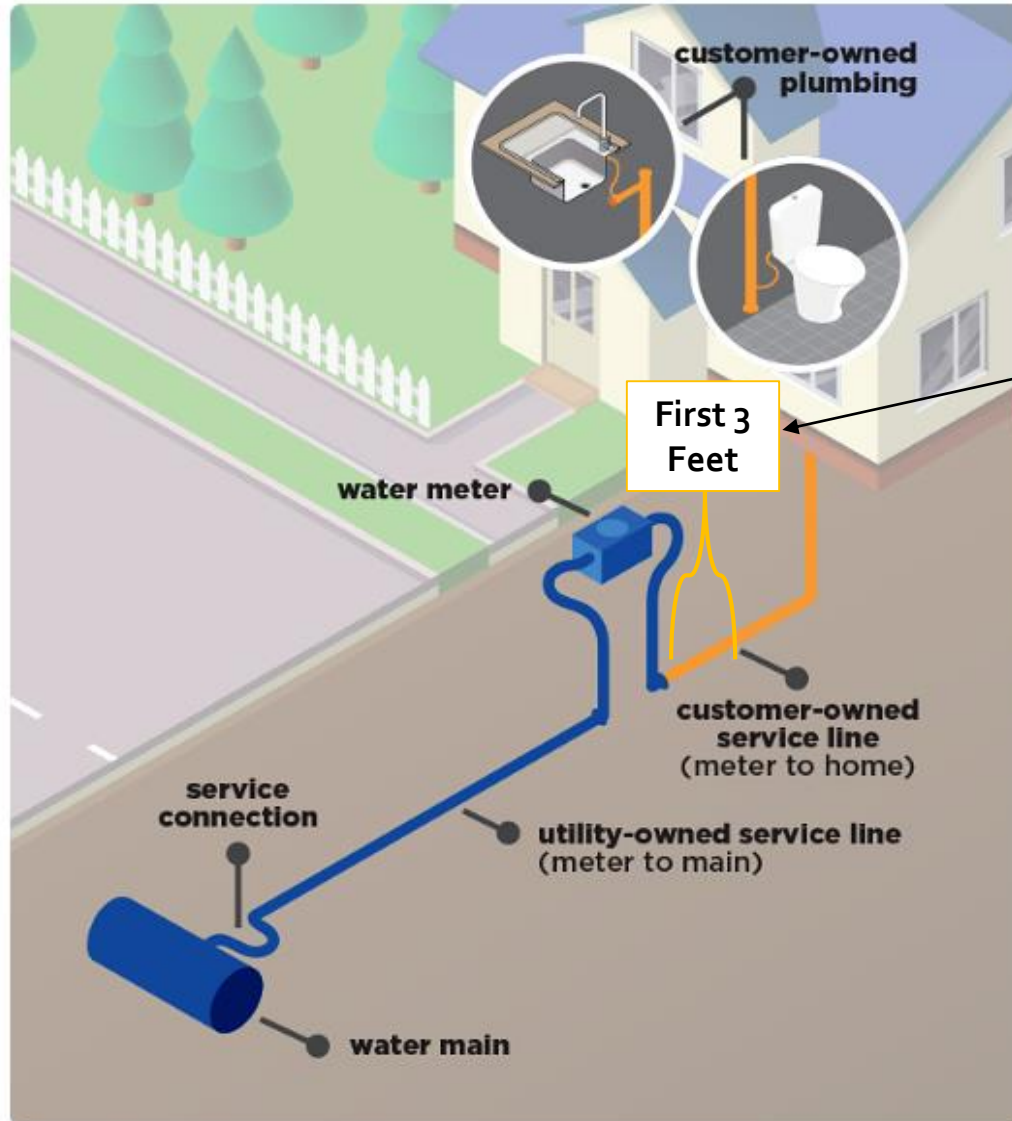
- ✓ **Safety**
- ✓ **Reliability**
- ✓ **Efficiency**
- ✓ **Low Cost**

Customer Side Repair Policy



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

Advanced Meter Customer Side Repair Policy & Program Objectives



Draft Policy Discussion

The Customer Side Repair Policy will:

- 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
- Provide safe and reliable water and power services

Our goal is to make sure every customer is covered with an option if an issue arises during meter implementation.

How Many?

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.

What Other Utilities Do to Assist Customers During Implementation



Draft Policy Discussion

Water/Power for Advanced Meter Deployment

- Nearly all utilities provide a break-fix policy at the location of meter installation

Water Customer Service Line Insurance Coverage

- Certain regions of the US have adopted a customer side insurance program
- Costs to customers include out of pocket expenses for premiums and/or deductibles (~\$60+ per year)
- Mixed results from customers

Water Customer Service Line Grant/Loan

- No water utilities in the Puget Sound Area appear to be offering this service, including larger water utilities from Bellingham to Olympia

EWEB Water Customer Service Line Grant/Loan (Eugene Water & Electric Board)

- Oregon electric/water utility has had grant/loan program for last 10 years

TPU Proposes



3 Ways to Assist Customers



Draft Policy Discussion

1. Advanced Meter Implementation Break-Fix Policy
2. Water Customer Grant Program
3. Water Customer Loan Program

TPU Proposes an Advanced Meter Repair Policy and Grant & Loan Programs to Assist Customers



Draft Policy Discussion

1. Advanced Meter Implementation Break-Fix 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

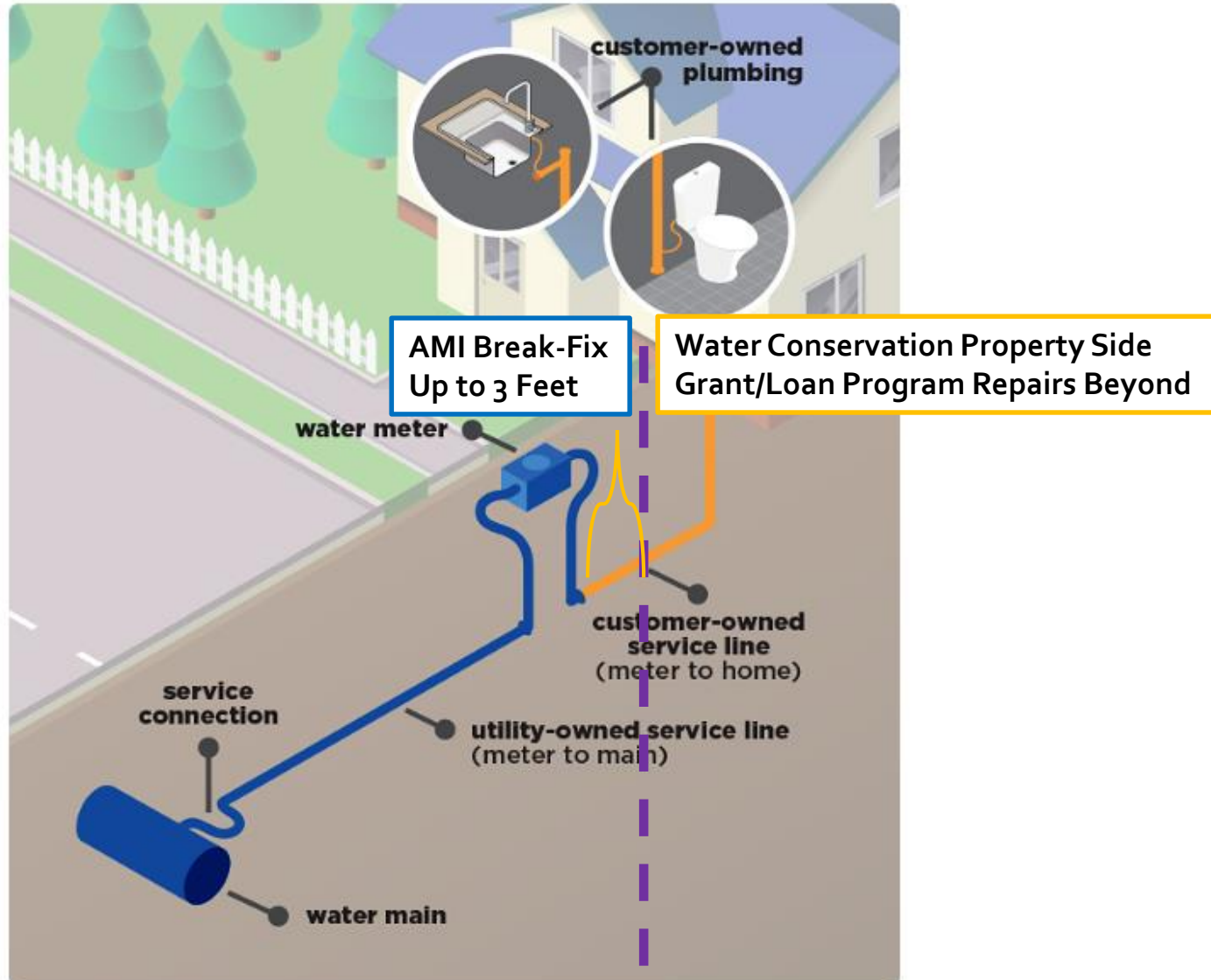
2. Water Customer Grant Program

- Income based qualification for up to 200% of Federal Poverty Level
- \$5,000 grant limit [amount shown is for reference; recommended grant limit to be determined]
- If repair costs exceeds grant limit, then exceptions process for review and/or deferred loan
- Program continues for Tacoma Water after AMI as a conservation offer

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 as a conservation offer

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

Tacoma Water Loan Program Considerations



Draft Policy Discussion

- Creates a nexus with conservation programs based on leak alerts from Advanced Metering
 - Therefore, program would be housed under the Tacoma Water Customer Experience/Conservation Program
- 0.5 FTE needed to oversee the admin & servicing of loans
- Approved network of contractors needed for repairs
- Loans would require a promissory note and legal agreement, similar to Tacoma Power conservation loans
- TPU Customer Solutions would handle income verification

Infrastructure Data Analysis

Purpose:

- I. Assessing historical water pipe installation practices and possible areas of customer vulnerability
- II. Reviewing historical and present day equity concerns to inform mass meter deployment

City of Tacoma (estimated*):

Low Income Homeowners: 1,900

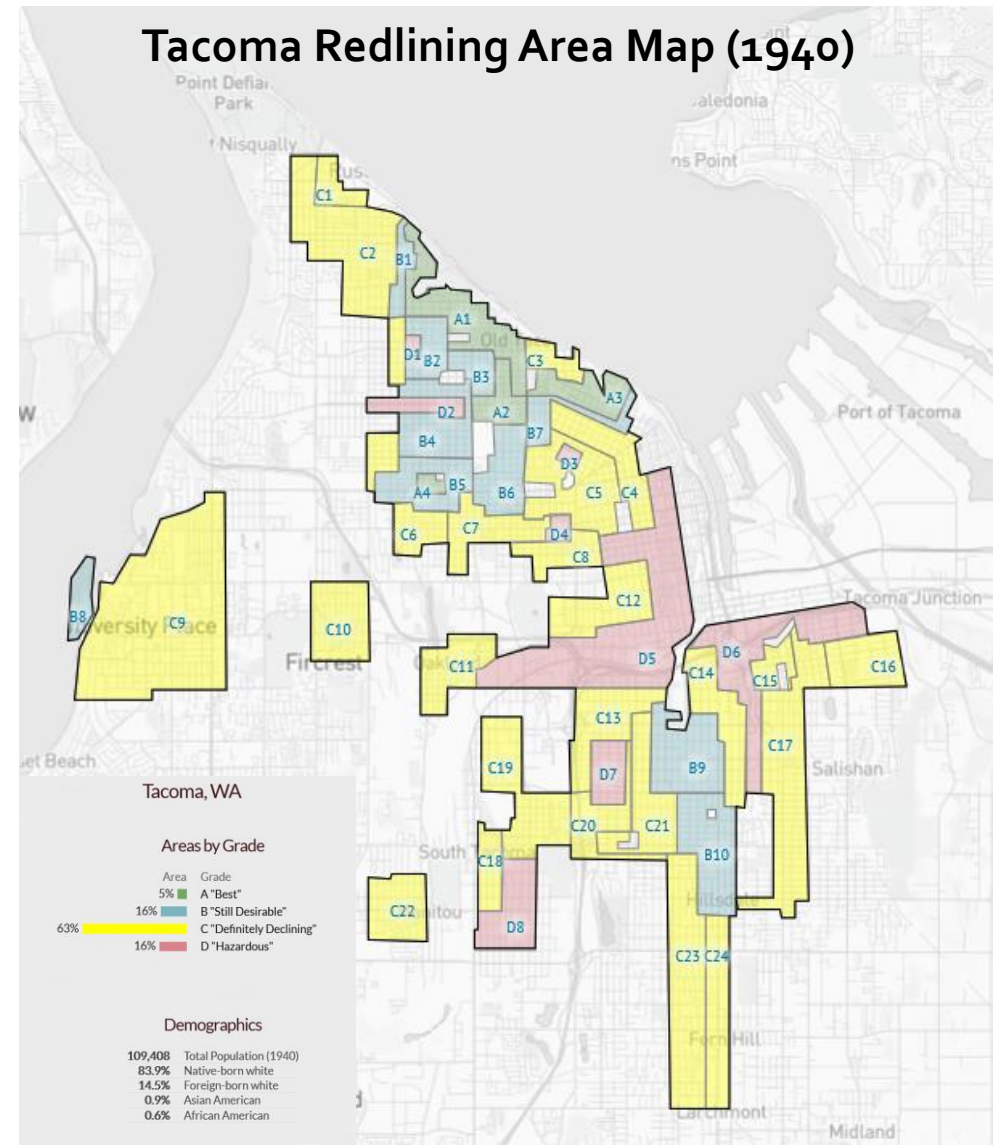
Low Income Senior Homeowners: 400

TPU Service Area (estimated*, including City of Tacoma):

Low Income Homeowners: 3,100

Low Income Senior Homeowners: 650

*Estimates reference City of Tacoma 2018 census data, poverty status in the past 12 months, assume owner occupied as homeowner, assume 200% of federal poverty guidelines as low income, and over age 65 as a senior homeowner; assumptions are projected from City of Tacoma data to all TPU Service Area estimates.



Recommendation & Next Steps *Draft Policy Discussion*

Seeking
PUB
Confirmation

1. Proceed with an Advanced Meter Break-Fix policy
2. Continue development of Tacoma Water grant and loan programs to assist customers, with the intent of becoming conservation programs

Further work to be done on proposed programs following PUB

*Have received support/input from the following TPU internal stakeholders:
Customer Solutions, Power T&D, Power Conservation, AMI Program, Water
Customer Experience & Conservation, Market Development, Community & Gov't
Relations, Office of Equity and Human Rights (OEHR), Legal, TPU Director &
Executive Leadership Team (ELT) members*