

Advanced Meter Program Policies Package 1 Proposed Changes

Advanced Meter Customer Side Repair Policy Explanatory Comments for Proposed Policy 7/17/2020

Tacoma Public Utilities (TPU) will deploy advanced metering across its entire water and electric service territories, replacing or upgrading all non-communicating power and water meters with advanced two-way communicating technology.

The meter deployment phase of the Advanced Metering Infrastructure (AMI) Project will exchange nearly 180,000 electric meters and 107,000 water meters over the course of 18-24 months. During this period, there is the potential for a small percentage of "Customer Impacts." Customer Impacts result from (1) disruption or damage to infrastructure or customer equipment during the meter exchange or (2) customer equipment being identified as unsafe or to have preexisting damage by the meter installer. The anticipated number of Customer Impacts is relatively low, estimated to only effect approximately 0.5-1.0% of all customers based on advanced meter deployments at similar utilities. Nevertheless, it is essential that these Customer Impacts be handled promptly so that a customer's service is restored as quickly as possible.

To ensure both TPU customers' wellbeing and the success of this critical project, TPU has researched and identified solutions to potential Customer Impacts that may arise throughout the project. To address these impacts, this policy has been developed. This policy outlines Power and Water customer owned infrastructure repairs to be completed by TPU during the Advanced Meter Project.

In addition, TPU intends to develop grant and loan programs specific to customer owned water infrastructure repairs and/or replacement. Since this water specific customer grant and loan resource extends beyond the breadth of the Advanced Metering Infrastructure Project and has a unique nexus with water conservation, it will be addressed in a separate policy.

Lastly, the existing TPU claims process is also available to all customers if damage or claimed Customer Impact is disputed or exceeds the repair criteria listed in this policy.



Tacoma Public Utilities

Advanced Metering Infrastructure (AMI) Customer Side Repair Policy



Month 2020



1. POLICY DURATION:

- 1.1. This policy shall be in effect during the period that the Advanced Metering Infrastructure (AMI) Project is designated as a Special Project of Limited Duration, which is currently through December 31, 2022, as established by Public Utility Board Resolution No. U-11055.
- 1.2. For clarity, if the Advanced Metering Infrastructure Special Project of Limited Duration is extended by the Public Utility Board, the duration of this policy will be extended automatically to match the new Project resolution end date.
- 1.3. During the policy duration, this Policy shall supersede and be controlling over any other conflicting Tacoma Public Utilities (TPU) customer service policies, procedures, and practices. Following the Project, customer owned infrastructure repairs will revert to existing TPU customer service policies, procedures, and practices.



2. BACKGROUND:

- 2.1. Advanced meters are a foundational element of Tacoma Public Utilities' Utility Modernization Strategy and will deliver customers new key benefits over time related to their power and water usage. TPU will deploy advanced metering across its entire water and electric service territories, replacing or upgrading all non-communicating power and water meters with advanced two-way communicating technology. Advanced metering technology will capture interval data, enable two-way communications, include remote capabilities, and provide advanced outage/issue detection, and verification. Advanced metering will modernize utility operations and be a cornerstone to deliver improved services and benefits to customers.
- 2.2. The meter deployment phase of the Advanced Metering Infrastructure Project will exchange nearly 180,000 electric meters and 107,000 water meters over the course of 18-24 months. During this period, there is the potential for a small percentage of "Customer Impacts." Customer Impacts result from (1) disruption or damage to infrastructure or customer equipment during the meter exchange or (2) customer equipment being identified as unsafe or to have preexisting damage by the meter installer. The anticipated number of Customer Impacts is relatively low, estimated to only effect approximately 0.5-1.0% of all customers based on advanced meter deployments at similar utilities. Nevertheless, it is essential that these Customer Impacts -be handled promptly so that a customer's service is restored as quickly as possible.
- 2.3. To ensure both TPU customers' wellbeing and the success of this critical project, TPU has researched and identified solutions to potential Customer Impacts that may arise throughout the project. To address these impacts, criteria is outlined below for Power and Water customer owned infrastructure repairs to be completed by TPU during the Advanced Meter Project.
- 2.4. In addition to this policy, TPU intends to develop grant and loan programs specific to customer owned water infrastructure repairs and/or replacement. Since this water specific customer grant and loan resource extends beyond the breadth of the Advanced Metering Infrastructure Project and has a unique nexus with water conservation, it will be addressed in a separate policy.
- 2.5. Lastly, the existing TPU claims process is available to all customers if damage or claimed Customer Impact is disputed or exceeds the criteria listed.



3. POWER REPAIR CRITERIA:

- 3.1. As specified in the Tacoma Power Customer Service Policy and New Electric Service Handbook, the customer is responsible for maintaining customer owned equipment and compliance with upto-date electrical codes and Tacoma Power policies (Figure 1, attached). This ensures both customer and utility staff safety when working in and around the meter. If customer owned equipment is impacted by a meter exchange, TPU staff will make a reasonable attempt to reestablish the service connection.
- 3.2. Tacoma Power expects minimal customer owned equipment impacts during advanced meter deployment.
- 3.3. During the Advanced Metering Infrastructure Project, TPU may, at its discretion, replace customer owned equipment required to facilitate the meter exchange and safely provide the customer with electrical service. Customer owned equipment related to electrical service is identified in Figure 1. TPU at its discretion may replace or repair items such as:
 - I. The meter socket, jaws, and/or enclosure (including minor related incidental repairs, as determined in the field)
 - II. Miscellaneous nuts/bolts related to the meter socket, jaws, and/or enclosure
 - III. The meter post
- 3.4. Items that TPU will not replace or repair include, but are not limited to the following:
 - I. Service panels
 - II. Tampering
 - III. Code violation repairs

4. WATER REPAIR CRITERIA:

- 4.1. As specified in the Tacoma Water Customer Service Policy, the customer is responsible for the integrity of the water service line (Property Side Pipe) between the meter setter/yoke outlet and the exterior wall of the first structure after the meter (Figure 2 and Figure 3, attached). If the customer owned service line (Property Side Pipe) is impacted by a meter exchange, TPU will make a reasonable attempt to re-establish water service.
- 4.2. Tacoma Water expects minimal customer owned service line impacts during advanced meter deployment. It is rare to impact the customer pipe connection when exchanging a meter, since the meter is typically not directly connected to the customer owned pipe (it is typically connected to the meter setter/yoke within the meter box).
- 4.3. During the Advanced Metering Infrastructure Project, TPU may replace up to approximately 3 feet of customer owned pipe (Property Side Pipe). This is subject to the discretion of the utility and consultation with the property owner. In addition, TPU may at is discretion:
 - I. Perform meter box adjustments
 - II. Perform minor repairs to hard surfaces (concrete, sidewalks, driveways, retaining walls, etc.)
 - III. Perform minor landscaping restoration (lawns, bark, gravel, etc.)
 - IV. Repair or replace a customer owned pressure reducing valve (PRV)
 - V. Install a property side shutoff valve to facilitate a temporary water service installation
 - VI. Install a temporary service line



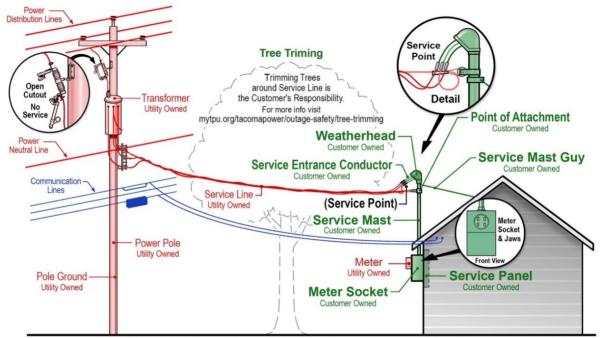
- 4.4. Items that TPU will not replace or repair include, but are not limited to:
 - I. Accessibility of the pipe
 - II. Structures over or near the pipe
 - III. Major repairs to hard surfaces (concrete, sidewalks, driveways, retaining walls, etc.)
 - IV. Major landscaping restoration (plants, trees, gardens, etc.)
 - V. Excessively deep or long runs of pipe
 - VI. Sprinkler system repairs
 - VII. Repair of plumbing fixtures, piping, etc. within a dwelling
 - VIII. Backflow prevention assembly installation or repairs
 - IX. Repair or replacement of an outdoor hose bib

5. TPU DISCRETION AND DISCLAIMER.

- 5.1. Repairs or replacements are strictly at the discretion of TPU. This policy does not require or obligate TPU to make or complete any repairs or replacements. In making said repairs, TPU or its contractors will exercise the degree of skill and care required by good practice and procedure followed in the utility industry. However, TPU cannot warrant or guaranty that replaced equipment will be without defect.
- 5.2. By enacting this policy or making any repairs or replacements, TPU does not assume or offer any ongoing replacement, repair, or maintenance obligation. TPU may make repairs or replacements to the equipment as specified herein solely at its discretion. However, TPU will have no other obligation or duty to make other repairs or to maintain the equipment.
- 6. ATTACHMENTS: Customer Owned Infrastructure Figures, Figures 1-3



Figure 1. Power Owned vs. Customer Owned Equipment (https://www.mytpu.org/wp-content/uploads/new-electric-service-handbook.pdf, page 9) (blue is non-utility owned equipment, typically cable, phone, or internet providers)

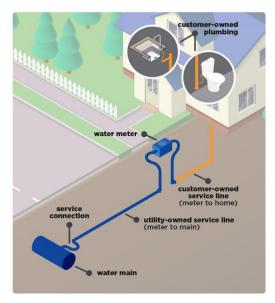


Utility Owned and Customer Owned Equipment



Figure 2. Water Owned vs. Customer Owned Equipment: (https://www.mytpu.org/outages-safety/water-trouble/)

Ever wondered what's underground?



In blue, the water main, service line, and water meter are what we own and maintain. You own the property-side service lines and plumbing, shown above in orange.

Figure 3. Detailed drawing of water service line, meter box, and customer owned pipe:

CUSTOMER CONNECTION POINT TO 3/4-INCH WATER SERVICE

Not to Scale

