

Advanced Meters will provide our customers with greater control, choice, and convenience. Tacoma Public Utilities (TPU) Products and Services surveys conducted in 2016, 2018, and 2020 showed strong interest from our residential customers for the benefits outlined in this summary. The required capability of each benefit is enabled by advanced metering. By the end of 2022, we will update 180,000 electric and 107,000 water meters with digital technology that provides these new benefits and modern capabilities to all of our customers.

#### **Customer Benefits Over Time**

✓ = Capability meets a customer request

o = Request not met

custom	er benefits over Time		- capability meets a customer i	
	Benefit	Customer	Current Capabilities –	Future Capabilities –
		Request	Prior to Advanced Metering	With Advanced Metering
	1. Monthly Billing	"I want to	Available for Select	Available for All Customers
		pay every	Customers	✓ All customers will receive
		month for	<ul> <li>Most residential</li> </ul>	a bill once every month,
		the actual	customers are on bi-	typically based on multiple
		power and	monthly billing and	meter reads.
	<u> </u>	water I use."	receive a bill once	
			every two months,	✓ Customer feedback has
			based on one meter	indicated most people
			read.	prefer monthly billing
				since billing amounts are
			✓ Most small businesses,	smaller and more
			general class customers,	manageable than larger
			and industrial customers	bills once every two
ν			are billed each month,	months—especially for 5-
efii			based on one meter	service City of Tacoma
en			read.	customers who have
Cost Savings Benefits				larger bills.
ing			<ul> <li>TPU's <u>Budget Billing</u></li> </ul>	
Sav			offers customers the	o Budget Billing will still be
st (			option to pay a	available for interested
ဝိ			consistent,	customers.
			estimated bill each	
			month based on an	
			annual average,	
			recalculated every	
			12 months.	
	2. PrePay	"I want to	Unavailable	Available for Residential
	1 '	pay for the	<ul> <li>TPU previously</li> </ul>	Electric Customers
	l	power I use	piloted a pay-as-	✓ PrePay helps customers
	<b>□</b> □	in advance,	you-go service	with irregular paychecks
	<b>-</b> \$_	when I have	called "PayGo." This	manage their bills by
	l Q. Д	funds	pilot ended in 2019.	empowering them to pay-
	_	available and	,	as-they-go.
		to avoid large		, 5
		bills."		✓ PrePay will be a voluntary
				pay-as-you-go service.
		I	<u> </u>	1 1 0



	Benefit	Customer	Current Capabilities –	Future Capabilities –
		Request		•
Cost Savings Benefits	3. Selectable Bill Due Date  4. Expanded Ways to Save – Detailed Water and Power Usage Data		Prior to Advanced Metering  Partially Available  Customers may select an alternate due date, choosing from:  The existing bill due date or  One other alternative date based on when their meter is read.  Unavailable  Bi-monthly meter reads provide total usage during a twomonth period.	With Advanced Metering  Available for All Customers  ✓ Customers will be able to choose a specific day of the month for their specific bill to be due.  ✓ Selectable bill due dates help customers with fixed incomes by allowing them to choose a bill due date that coincides with their income or payment schedules.  Available for All Customers  ✓ Hourly, daily, and monthly usage information will be provided via a customer web portal, based on more frequent automated
		month.		meter reads.  15 min. and/or 5 min. data will be available for electric customers & select water customers.  Providing detailed usage data increases a customer's ability to save money, water, and energy.
	5. Automated	"I want my	Partially Available	Available for All Customers
Modernization Benefits	Meter Reading	bill to be as accurate as possible."	<ul> <li>Bi-monthly, manual meter reads provide total usage during a two-month period.</li> <li>Billing is most often</li> </ul>	<ul> <li>✓ Billing will be based on multiple automated meter reads with a reduced chance of human error.</li> <li>✓ More accurate, timely bills</li> </ul>
Moderniza			based on a single manual meter read.	are based on near real- time data that show where and when unnecessary usage is taking place.



	Benefit	Customer	Current Capability –	Future Capability –
		Request	Prior to Advanced Metering	
Modernization Benefits	6. Easier Move in, Move Out, Reconnection	"I would like to connect my service without someone visiting my home."	Unavailable:  Connections, disconnections generally require a field visit by TPU staff.	Available for Most Customers  ✓ Remote turn-on and turn- off of residential electric service saves time since it requires no field visits.  ✓ Residential electric reconnections occur almost instantly for customers who are disconnected.  ✓ In some instances, water customers can utilize a virtual disconnection or reconnection, where the billing account is disconnected, and the service remains physically on.  o A minimal number of field visits are still required, depending on the circumstance.
	7. Enhanced Personal Privacy	"I want utility staff visiting my property less often."	<ul> <li>Unavailable         <ul> <li>Meter reading staff are required to physically visit a meter to record a read.</li> </ul> </li> <li>TPU staff may periodically visit the meter for maintenance.</li> </ul>	Available for All Customers  ✓ No need for regular physical access to read a customer meter since meters are read remotely.  ✓ No need for businesses to schedule a meter read due to challenging meter locations.  o TPU staff may periodically visit the meter for maintenance.



	Benefit	Customer	Current Capability –	Future Capability –
	Bellefit	Request	Prior to Advanced Metering	With Advanced Metering
	8. Faster Outage	"I would like	Partially Available	Available for All Customers
	and Leak	to know if I	✓ Tacoma Power's outage	✓ Leak and outage
	Detection	have a water	portal allows customers	information can be
		leak or	to easily report a power	detected by the meter,
		power	outage online or via text	verified, and provided
	<b>6(2)</b> a	outage."	message. Customers can	directly to the impacted
		_	choose to receive	customer.
	<u>V</u>		updates on their phone	
			or via email.	✓ Locating and fixing issues
				speeds service restoration,
			<ul> <li>Outage information</li> </ul>	whether it's a power
			is based on	outage or a water leak at a
			customer reporting	customer location.
			or regional outage event correlation.	Tagana Paucaria autara
			event correlation.	<ul> <li>✓ Tacoma Power's <u>outage</u></li> <li>portal will continue to be</li> </ul>
fits			Water leaks can	available.
ene			take months or	available.
B.			years to identify.	
tio			, conc so no con,	
iza	9. Improved Safety	"I want to	Partially Available	Available for All Customers
ı.				
<u> </u>		know and	✓ Meter reading staff	√ New electric meters will
/lode		know and prevent any	perform routine	provide high-temperature
Modernization Benefits			perform routine observations of	provide high-temperature alarms and automated
Mode		prevent any safety concerns	perform routine observations of metering equipment for	provide high-temperature alarms and automated disconnect switches to
Mode		prevent any safety concerns related to my	perform routine observations of metering equipment for customer and employee	provide high-temperature alarms and automated disconnect switches to help prevent fires and
Mode		prevent any safety concerns related to my utility	perform routine observations of metering equipment for	provide high-temperature alarms and automated disconnect switches to
Mode		prevent any safety concerns related to my	perform routine observations of metering equipment for customer and employee safety.	provide high-temperature alarms and automated disconnect switches to help prevent fires and improve safety.
Mode		prevent any safety concerns related to my utility	perform routine observations of metering equipment for customer and employee safety.   Meter reading staff	provide high-temperature alarms and automated disconnect switches to help prevent fires and improve safety.  ✓ Installing advanced meters
Mode		prevent any safety concerns related to my utility	perform routine observations of metering equipment for customer and employee safety.  Meter reading staff must physically visit	provide high-temperature alarms and automated disconnect switches to help prevent fires and improve safety.  ✓ Installing advanced meters will allow the utility to
Mode		prevent any safety concerns related to my utility	perform routine observations of metering equipment for customer and employee safety.  Meter reading staff must physically visit a meter to record a	provide high-temperature alarms and automated disconnect switches to help prevent fires and improve safety.  ✓ Installing advanced meters will allow the utility to inspect every meter for
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Mode		prevent any safety concerns related to my utility	perform routine observations of metering equipment for customer and employee safety.  Meter reading staff must physically visit a meter to record a read, which increases unnecessary customer exposure	provide high-temperature alarms and automated disconnect switches to help prevent fires and improve safety.  ✓ Installing advanced meters will allow the utility to inspect every meter for customer and employee safety.  ✓ In the long term,
Mode		prevent any safety concerns related to my utility	perform routine observations of metering equipment for customer and employee safety.  Meter reading staff must physically visit a meter to record a read, which increases unnecessary customer exposure to staff and vice-	provide high-temperature alarms and automated disconnect switches to help prevent fires and improve safety.  ✓ Installing advanced meters will allow the utility to inspect every meter for customer and employee safety.  ✓ In the long term, Advanced Metering
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Mode		prevent any safety concerns related to my utility	perform routine observations of metering equipment for customer and employee safety.  Meter reading staff must physically visit a meter to record a read, which increases unnecessary customer exposure to staff and vice- versa (e.g., dog	provide high-temperature alarms and automated disconnect switches to help prevent fires and improve safety.  ✓ Installing advanced meters will allow the utility to inspect every meter for customer and employee safety.  ✓ In the long term, Advanced Metering reduces unnecessary customer exposure to



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		Request	Prior to Advanced Metering	With Advanced Metering
	10. Reduced	"I want to	Partially Available	Available for All Customers
	Environmental	minimize my	<ul> <li>In-person meter</li> </ul>	✓ Less in-person meter
S	Impact	impact on the	reads and rereads	reads and rereads, plus
efii		environment."	require vehicles	leak and outage
3en			with associated	detection, mean fewer
Ē			emissions and	vehicles on the road
Modernization Benefits			costs.	resulting in reduced
niza	CO			emissions and associated
eri			✓ TPU makes every effort	costs.
٥٥			to reduce its carbon	
2			footprint through fuel-	✓ TPU makes every effort
			efficient vehicles and	to reduce its carbon
			processes.	footprint through fuel-
				efficient vehicles and
				processes.

Advanced Meters are a foundational modernization project. Modernization projects typically build on one another over time. Some customer benefits or data are enabled by advanced metering and delivered/enhanced through related projects (e.g., Customer Engagement Portal).