

Chelan and Jefferson PUD Inquiry – November 2017

Smart Meters

<p>PUD</p>	<ul style="list-style-type: none"> • What kind of electric meters does your utility use (AMR, AMI, analog/electro-mechanical)? • Who is the manufacturer(s) of the meters you use? • How do you read the meter or collect the data for your meters (meter reader, radio signal, power line communication, etc.) • Do you use a 3rd party vendor (meter manufacturer for example) to collect the data and manage the communication system? • If you have AMI meters, do you have an opt out policy for customers? <ul style="list-style-type: none"> ○ What do you charge opt out customers per month? ○ Is there a one-time set up fee and if so how much? ○ What type of meter do you allow/provide in lieu of smart technology? ○ What percentage or number of your customers have opted-out? <p>If you don't have AMI meters, are you considering switching to them?</p>	
<p>Asotin</p>	<p>What kind of electric meters does your utility use (AMR, AMI, analog/electro-mechanical)?</p> <p>Who is the manufacturer(s) of the meters you use?</p> <p>How do you read the meter or collect the data for your meters (meter reader, radio signal, power line communication, etc.)</p> <p>Do you use a 3rd party vendor (meter manufacturer for example) to collect the data and manage the communication system?</p> <p>If you don't have AMI meters, are you considering switching to them?</p>	<p>AMR</p> <p>Sensus Technologies</p> <p>Radio signal using a vehicle and handheld reading unit.</p> <p>We do not use a 3rd party to collect data and manage the communication system.</p> <p>We have not considered switching to AMI meters.</p>
<p>Clallam</p>	<p>What kind of electric meters does your utility use (AMR, AMI, analog/electro-mechanical)?</p> <p>Who is the manufacturer(s) of the meters you use?</p> <p>How do you read the meter or collect the data for your meters (meter reader, radio signal, power line communication, etc.)</p> <p>Do you use a 3rd party vendor (meter manufacturer for example) to collect the data and manage the communication system?</p> <p>If you have AMI meters, do you have an opt out policy for customers?</p> <p>What do you charge opt out customers per month?</p> <p>Is there a one-time set up fee and if so how much?</p> <p>What type of meter do you allow/provide in lieu of smart technology?</p> <p>What percentage or number of your customers have opted-out?</p> <p>If you don't have AMI meters, are you considering switching to them?</p>	<p>We have a mix of meters at our utility. We have about 1/4 RF meters that our meter readers use a handheld to pick up the readings. About half the meter readers manually read. Another ¼ of turtle meters that are read by command center through power line carrier and finally a very small amount of cell based meters we can pick up with our computers.</p> <p>Landys and Gyr for the turtles, Itron for the RF meters, GE for electromechanical and Itron for the Nighthawks. There is a mix between all the types, but those are the main manufacturers.</p> <p>Meter reader manually reads, radio signal, power line carrier and cellular. We have a mix of all.</p> <p>No</p> <p>Yes.</p> <p>\$35, but this is not enforced at this time since our utility is not full AMR / AMI.</p> <p>No</p> <p>Digital with RF device removed.</p> <p>There are about 20.</p> <p>Yes, we are in the process now of looking at options.</p>

Cowlitz	What kind of electric meters does your utility use (AMR, AMI, analog/electro-mechanical)?	We have an AMI system which is comprised of PLC meters and RF meters.
	Who is the manufacturer(s) of the meters you use?	We buy all of our meters from Cooper/Eaton but the meters are manufactured by Itron, L&G and Elster.
	How do you read the meter or collect the data for your meters (meter reader, radio signal, power line communication, etc.)	PLC and RF and when not reading remotely we use meter readers.
	Do you use a 3rd party vendor (meter manufacturer for example) to collect the data and manage the communication system?	No that is all done in-house.
	If you have AMI meters, do you have an opt out policy for customers?	Yes.
	What do you charge opt out customers per month?	\$25.00
	Is there a one-time set up fee and if so how much?	Initial onetime fee of \$135.00 to change out the meter.
	What type of meter do you allow/provide in lieu of smart technology?	We will change out the meter and put a non-AMI electronic meter, we do not install electro-mechanical meters.
	What percentage or number of your customers have opted-out?	Out of 49,000 customers we have only 3 that have opted out.
Douglas	What kind of electric meters does your utility use (AMR, AMI, analog/electro-mechanical)?	AMR
	Who is the manufacturer(s) of the meters you use?	ITron
	How do you read the meter or collect the data for your meters (meter reader, radio signal, power line communication, etc.)	Radio
	Do you use a 3rd party vendor (meter manufacturer for example) to collect the data and manage the communication system?	No
	If you have AMI meters, do you have an opt out policy for customers?	Yes
	What do you charge opt out customers per month?	\$15
	Is there a one-time set up fee and if so how much?	No
	What type of meter do you allow/provide in lieu of smart technology?	Normal digital
	What percentage or number of your customers have opted-out?	Two or three
Ferry	What kind of electric meters does your utility use (AMR, AMI, analog/electro-mechanical)?	Dumb (i.e. non AMI non AMR, non-Smart) w/digital readout.
	Who is the manufacturer(s) of the meters you use?	Primarily GE.
	How do you read the meter or collect the data for your meters (meter reader, radio signal, power line communication, etc.)	Meter reader in town and commercial/industrial, self-read otherwise.
	Do you use a 3rd party vendor (meter manufacturer for example) to collect the data and manage the communication system?	No.
	If you don't have AMI meters, are you considering switching to them?	No.

Franklin	What kind of electric meters does your utility use (AMR, AMI, analog/electro-mechanical)?	All of the above
	Who is the manufacturer(s) of the meters you use?	Landis and Gyr, Itron, GE, ABB,
	How do you read the meter or collect the data for your meters (meter reader, radio signal, power line communication, etc.)	We have meter readers for analog/Electro-mechanical, read Landis and Gyr via wireless collectors and fiber backhaul, R-300 meters via a handheld/radio and we still have turtles that are through power line.
	Do you use a 3rd party vendor (meter manufacturer for example) to collect the data and manage the communication system?	No
	If you have AMI meters, do you have an opt out policy for customers?	The plan is that we will but not currently.
	What do you charge opt out customers per month?	To be determined
	Is there a one-time set up fee and if so how much?	To be determined
	What type of meter do you allow/provide in lieu of smart technology?	Electro-mechanical
	What percentage or number of your customers have opted-out?	N/A – have not gone full AMI yet. Still in pilot.
	If you don't have AMI meters, are you considering switching to them?	Pilot close mid-year next year. Implementation if successful over next 5 years.
Grant	A couple quick stats – we are in the initial deployment stage of the project with 90%+ of our communication network installed and 2% of meters installed. The project is scheduled to continue through May 31, 2019. We are using Anixter as our installation partner with Silver Spring Networks as our software.	
	What kind of electric meters does your utility use (AMR, AMI, analog/electro-mechanical)?	Grant is currently replacing our legacy meters with AMI meters.
	Who is the manufacturer(s) of the meters you use?	Aclara (formerly GE)
	How do you read the meter or collect the data for your meters (meter reader, radio signal, power line communication, etc.)	The project includes a communication network that will gather meter reads via radio signals into relays and connect to access points that link to our fiber network and back in to our headend system.
	Do you use a 3rd party vendor (meter manufacturer for example) to collect the data and manage the communication system?	Grant has opted for a SaaS offering that will monitor the system.
	If you have AMI meters, do you have an opt out policy for customers?	Yes.
	What do you charge opt out customers per month?	\$64.34
	Is there a one-time set up fee and if so how much?	Yes. \$250.99
	What type of meter do you allow/provide in lieu of smart technology?	We will be using the same meter, just disable the communication ability.
What percentage or number of your customers have opted-out?	Zero.	
Grays Harbor	What kind of electric meters does your utility use (AMR, AMI, analog/electro-mechanical)?	AMI
	Who is the manufacturer(s) of the meters you use?	We have a large number of ITRON meters installed. However, our current meter manufacturers are Landis & Gyr and Aclara (formerly GE).
	How do you read the meter or collect the data for your meters (meter reader, radio signal, power line communication, etc.)	Power Line Carrier
	Do you use a 3rd party vendor (meter manufacturer for example) to collect the data and manage the communication system?	No. We use the Aclara TWACS system to collect the data and it's deployed locally rather than hosted remotely. The communication system for this is managed internally.

	If you have AMI meters, do you have an opt out policy for customers?	No.
Kittitas	What kind of electric meters does your utility use (AMR, AMI, analog/electro-mechanical)?	AMR – RF (Digital solid state)
	Who is the manufacturer(s) of the meters you use?	Itron
	How do you read the meter or collect the data for your meters (meter reader, radio signal, power line communication, etc.)	Itron MVRS Software and MC3 Collector. Normally read by plane outfit with an antennae (1st business day of the month/billing cycle). Use 2 vehicles when flights are grounded due to weather. Flight time for reading the entire system, 2.5 hours. Drive time for reads approximately 1.5-2days.
	Do you use a 3rd party vendor (meter manufacturer for example) to collect the data and manage the communication system?	PUD personnel collects the data using Itron software and collector system
	If you have AMI meters, do you have an opt out policy for customers?	We have an opt out policy for the AMR program, but we just increased fees to discourage the opt out. We are expecting some push back, but the opt out policy affects the overall efficiency of the meter reading program.
	What do you charge opt out customers per month?	It was \$15/month, new fee is \$50/month.
	Is there a one-time set up fee and if so how much?	Yes, \$80
	What type of meter do you allow/provide in lieu of smart technology?	Digital solid state (without “Itron ERTs” radio module to broadcast the readings).
	What percentage or number of your customers have opted-out?	Less than 1%
	If you don’t have AMI meters, are you considering switching to them?	We looked at it in a 2016 business case. For the current cost of our meter reading program we could not justify the cost; not enough return on investment. It would have taken 20 years to pay off, which was beyond the expected depreciable life of the systems we evaluated.
	Lewis	What kind of electric meters does your utility use (AMR, AMI, analog/electro-mechanical)?
Who is the manufacturer(s) of the meters you use?		Itron and L&G
How do you read the meter or collect the data for your meters (meter reader, radio signal, power line communication, etc.)		We have meter readers who use Itron handhelds.
Do you use a 3rd party vendor (meter manufacturer for example) to collect the data and manage the communication system?		We don’t have any 3rd party help with our meters.
If you don’t have AMI meters, are you considering switching to them?		Yes we would love to go to an AMI system but at this point it’s not in the cards.
Mason #1	What kind of electric meters does your utility use (AMR, AMI, analog/electro-mechanical)?	AMR, doing at Tantalus AMI pilot project
	Who is the manufacturer(s) of the meters you use?	Itron
	How do you read the meter or collect the data for your meters (meter reader, radio signal, power line communication, etc.)	Handheld and truck remote reading devices
	Do you use a 3rd party vendor (meter manufacturer for example) to collect the data and manage the communication system?	Itron handles this for us.
	If you have AMI meters, do you have an opt out policy for customers?	Yes.
	What do you charge opt out customers per month?	\$25/month for manual read

	Is there a one-time set up fee and if so how much?	No.
	What type of meter do you allow/provide in lieu of smart technology?	n/a
	What percentage or number of your customers have opted-out?	none
	If you don't have AMI meters, are you considering switching to them?	Eventually.
Mason #3	What kind of electric meters does your utility use (AMR, AMI, analog/electro-mechanical)?	AMI
	Who is the manufacturer(s) of the meters you use?	Landis and Gyr
	How do you read the meter or collect the data for your meters (meter reader, radio signal, power line communication, etc.)	Radio Signal
	Do you use a 3rd party vendor (meter manufacturer for example) to collect the data and manage the communication system?	NISC MDMS
	If you have AMI meters, do you have an opt out policy for customers?	Yes
	What do you charge opt out customers per month?	50.00 / Month
	Is there a one-time set up fee and if so how much?	No
	What type of meter do you allow/provide in lieu of smart technology?	Landis and Gyr Focus Non-Radio digital meter.
	What percentage or number of your customers have opted-out?	We've had 9 customers out of 20,000 opt out. We still have approx. 14000 meters to install.
Skamania	What kind of electric meters does your utility use (AMR, AMI, analog/electro-mechanical)?	
	Who is the manufacturer(s) of the meters you use?	Various
	How do you read the meter or collect the data for your meters (meter reader, radio signal, power line communication, etc.)	
	Do you use a 3rd party vendor (meter manufacturer for example) to collect the data and manage the communication system?	No
	If you don't have AMI meters, are you considering switching to them?	In the distant future
Wahkiakum	What kind of electric meters does your utility use (AMR, AMI, analog/electro-mechanical)?	AMR and analog/electro-mechanical – we are phasing out analog/electro-mechanical meters & going to AMR
	Who is the manufacturer(s) of the meters you use?	Itron electric meters and Badger water meters
	How do you read the meter or collect the data for your meters (meter reader, radio signal, power line communication, etc.)	Radio read for AMR and meter readers for others.
	Do you use a 3rd party vendor (meter manufacturer for example) to collect the data and manage the communication system?	We read with in-house labor.
	If you have AMI meters, do you have an opt out policy for customers?	Yes.
	What do you charge opt out customers per month?	\$15
	Is there a one-time set up fee and if so how much?	\$80
	What type of meter do you allow/provide in lieu of smart technology?	Standard analog/electro-mechanical meter
	What percentage or number of your customers have opted-out?	So far we replaced approximately 800 meters and 1 customer has opted out