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September 7, 2018

Mark L. Johnson
Executive Director and Secretary
Washington Utilities & Transportation Commission
1300 S. Evergreen Park Drive S. W.
P.O. Box 47250
Olympia, Washington 98504-7250

Re: Docket No. U-180525 – Comments of Avista Utilities

Dear Mr. Johnson,

Avista Corporation, dba Avista Utilities (Avista or Company), submits the following comments in accordance with the Washington Utilities and Transportation Commission's ("Commission") Notice of Opportunity to Submit Written Comments ("Notice") issued in Docket U-180525 on July 10, 2018 regarding the Commission's Rulemaking to modify existing consumer protection and meter rules to include Advanced Metering Infrastructure. Pursuant to the Notice, Avista submits the following comments to the questions posed in the Notice:

Data Privacy

1. What information pertaining to customers' energy usage do companies currently collect, retain, or share with third parties?

Avista Response: In Washington, for its residential customers, Avista currently collects monthly kWh reads only. For some of our commercial customers we collect monthly kWh reads in addition to kWh. For our large commercial and industrial customers, Avista collects interval data in 15 minute increments for kWh, kW, and kVAR which accounts for less than 100 customers.

Avista does collect additional information from our customers in our Pullman service area where we deployed a pilot AMI system in 2011 as part of the Smart Grid Demonstration Project. These meters collect similar data to the AMI system that we plan to deploy across

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our Washington service territory. This data includes kWh, KW, voltage, and amps in five minute intervals. These meters also transmit notifications to Avista about the meters performance such as thermal alarms, low and high voltage alarms, and tamper alarms that we currently do not monitor.

Only kWh usage information is provided to our vendor Aclara, to enable web presentment to our customers that have AMI meters.

- a. What incremental or different information will companies collect or retain with the implementation of AMI?

Avista Response: Incremental information will include kW, kWh, voltage, and Amps in five minute intervals, as opposed to our current kWh monthly reads. Additionally, as provided above, AMI meters will also transmit notifications to Avista about the meters' performance.

- b. Under what circumstances would sharing customer information be necessary for companies to provide utility service?

- i. What specific information would it be necessary for companies to share to provide utility service?

- ii. With whom or with what organizations would it be necessary for companies to share such information?

Avista Response: For purposes of providing customers access to their interval kWh and therm usage information, the Company will continue to provide this information to Aclara to enable web presentment.

- c. If not necessary for providing utility service, what information do companies anticipate sharing with third parties for the benefit of customers, and for what specific purpose should the utility share the information with third parties?

Avista Response: If not necessary for providing utility service, Avista does not and will not share customer information with any third-party vendor without the customer's written permission.

2. With respect to the information provided in response to Question #1, please respond to the following:

- a. What kind of historical data, and for what time period, should companies maintain information in order to comply with regulatory reporting needs (load studies, conservation and energy efficiency, reliability)?

Avista Response: Avista currently keeps customer billing data for a period of six years and the Company has no current plans to change that practice. Because of the volume of customer interval data that will be collected with full deployment of AMI, however, we may have to evaluate the option of reducing customer data to billing determinants only after some period of time to reduce data storage costs without compromising the utility of the information (e.g. such as data needs for back billing).

- i. How will companies dispose of customers' energy usage information collected from AMI when it is no longer needed or used?

Avista Response: Avista will eliminate the electronic data automatically at the end of retention period in the same manner we do today.

- b. What rights do or should customers have with respect to their energy use data (co-owners of the data, right to access, right to share with third-parties)?

Avista Response: Avista provides its customers access to their billing data today, both in the form of billing determinants on their bill, as well as interval data on our web portal for our customers already served by an advanced meter. As referred to above, the Company will be providing our customers access to their interval usage data when AMI is fully deployed.

- i. What type of customer notice should be required regarding the collection, storage, use, and disclosure of customer data (within a company and with third-parties)?

Avista Response: Avista believes its current practices are sufficient today and going forward.

- ii. How should the companies be required to obtain customer authorization to share data?

Avista Response: Avista believes its current practices are sufficient today and going forward.

3. How will companies manage and protect customers' energy usage data generated by AMI technologies?

Avista Response: No different than what it already does today, Avista will protect customers' energy usage data in the same manner we protect all of their systems and data. This starts with an overarching security program to protect the Company. Everyday utilities protect highly sensitive information and systems that support the critical delivery of energy. Customers' interval energy usage data will be protected just like the customer usage data we maintain today. At Avista, we recognize the sensitivity of certain types of data and we protect it accordingly.

On an annual basis, Avista customers in Washington, Idaho and Oregon receive a bill insert outlining Avista's Customer Information Privacy Policy ("Policy"). Each employee at Avista has a responsibility to recognize and participate in the Company's commitment to keeping customer information confidential.

"Customer Information" includes customer name, service address, mailing address, telephone number, a personal identifier (such as, but not limited to, a social security number), as well as identifiable information related to the type of service, quantity of electricity or gas consumed and the customer's payment history.

In addition to Avista's internal commitment to privacy, Avista's handling of customer information, per state laws and regulations, it is imperative that ALL employees comply with this Policy. In particular:

- Customer Information shall be used for internal business purposes only.
- Employees who have been granted access to Customer Information shall only use that access for job related tasks or responsibilities. Viewing Customer Information for reasons not related to a specific company purpose or transaction is prohibited.
- Employees shall not request Customer Information from other employees for personal purposes.
- Employees shall not, under any circumstance access, view or conduct transactions relating to his/her own account or those of friends and family.
- Employees who are requested to disclose Customer Information to any third party must follow all applicable procedures relating to such disclosure (i.e. receive a subpoena or other formal governmental request).

Violations of this Policy are serious and could result in discipline up to, and including termination. This Policy is consistent with Avista's Code of Conduct and other Core Policies, specifically regarding confidentiality and appropriate use of information and records.

Avista also requires Vendors that need access to Customer Information in order to provide certain services (e.g. billing or software hosting platforms like Aclara) to follow data security requirements that are defined by contract, and in some cases Vendors are required to carry cyber insurance. Each new Vendor that may have access to, or store Customer Information is evaluated by the Enterprise Technology department for adequate security controls.

Avista is always seeking to update and enhance our protection of Customer Information, and we are currently in the process of implementing an Enterprise Information System ("EIS") that will help identify data sources, classify the data according the protection level, and track the movement of data. Systems such as the EIS will enhance and strengthen the

existing policies around Confidentiality, Data Security and Privacy, Governance and Records Retention.

a. How should the rules differ for individual customer data and aggregated use data?

Avista Response: We treat individual customer data as Customer Information per our policy and do not disclose this information except: (i) in cases where we are formally requested by federal, state or local government agencies or law enforcement, in response to a subpoena or other operation of law, or to collection agencies in the event of non-payment of utility bills; and (ii) with the customer's consent.

We currently utilize aggregated, de-identified customer data for some of our energy efficiency programs, looking at overall behavior changes and associated energy consumption and reduction in order to effectively shape and evaluate our current and new programs energy conservation programs.

The Company has no current plans for modifying our practices under the full deployment of AMI, except to utilize aggregated, non-identifiable customer data in more complex analytics (such as combining consumption with average daily temperature) in order to provide better recommendations for our customers.

In the case of individualized AMI data, with a customer's consent, we may also provide more specific, actionable data for that customer. However, the data would still be protected as Customer Information, and if a Vendor was required to perform the analytics, the Vendor would be subject to the previously mentioned data security and contractual requirements.

b. What data collected by AMI should be classified as personally identifiable customer information (PII)?

Avista Response: We do not consider data that is collected by AMI as customer personally identifiable information under Washington law RCW 42.56.590. However, we would still consider the information as Customer Information, referred to as "Private Information" under WAC 480-100-153, and protect this per our Customer Information Privacy Policy and procedures mentioned previously.

i. How should the rules differ for Anonymous Personal Usage Information (defined as data not explicitly classified as PII that may reveal details, patterns, or other insights into the personal lives, characteristics, or activities of individual customers)?

Avista Response: The definition above (minus the term "Anonymous") would still fall under our current definition of Customer Information and would be treated in the same manner. Avista does not ever sell Customer Information to third parties. Avista does not disclose Customer Information to third parties except to approved

vendors who are bound by data security and privacy contractual terms and need the information to provide services related to serving our customers consistent with WAC-480-90/100-153 (e.g. our vendor Aclara who hosts customer information on myavista.com).

- c. How have companies evaluated cyber security risks in the planning, design, or implementation of the AMI system?

Avista Response: Avista utilizes nationally recognized frameworks such as the National Institute of Standards and Technology (NIST) Cyber Security Framework and best practices learned from engagements with the Department of Homeland Security (DHS) and the Washington National Guard to help inform decision making with regard to managing cyber security risks during the planning, design, and implementation phases. Avista has conducted extensive security planning and testing of the smart meter system. We have developed comprehensive security processes and procedures based on best practices. All meters, communications, and information management systems are subject to the same security standards that protect our entire energy generation, delivery, and customer systems.

- i. Did your evaluation cause any changes to the plan or procurement of system components? How?

Avista Response: Avista incorporates technical security questions and requirements into its RFP processes. These questions and requirements enable Avista to evaluate vendors not only on their ability to meet business requirements, but also security requirements. In this approach, the vendor that best aligned with Avista's business requirements also best aligned with Avista's security requirements, and thus does not alter our procurements plans.

- ii. If you are using a third-party vendor for any portion of the AMI network, have you evaluated your supply chain for the necessary data security protections? Are there contractual requirements?

Avista Response: During the RFP process, a portion of Avista's questions address supply chain risks. In addition, after the vendor was selected, Avista staff visited the manufacturing facility to understand the manufacturing process and understand how the vendor manages supply chain risks.

- iii. In the event of a cyber security incident that impacts AMI meters or back office systems, what is your plan to mitigate the rate impact to customers?

Avista Response: Avista carries cyber security insurance to help mitigate the rate impact of potential security incidents. In addition, Avista has an incident response retainer with contract response experts that provides for our use of their services at set rates negotiated into the contracts. These rates are lower than the rates we would

pay for a time and material based contract at the time of an incident. The incident response retainer also provides service-level agreements in the event of a security incident. The quicker response will shorten the time to resolve an incident and therefore help mitigate the costs due to shorter incident duration.

1. Are you purchasing (or do you plan to purchase) cyber security insurance for this project? Does this protection extend to third-party vendors in the event the breach of customer data is beyond your firewall?

Avista Response: Avista currently carries insurance coverage for cyber security risks for losses up to \$20 million. This policy extends to 3rd party liability coverage of our customer data that is held a vendor beyond the Company's firewall. Avista's Washington AMI program is included under this coverage.

- d. Should the companies be required to report any breach of customer data to the Commission? If not, what set of parameters or threshold is appropriate to require reporting of a breach?

Avista Response: Avista would follow the reporting requirements under state law for breaches of customer personally identifiable information.

- i. What timeframe should the companies be required to report the breach to the Commission?

Avista Response: Avista would follow the reporting requirements under state law for breaches of customer personally identifiable information.

- e. Should the National Institute of Standards and Technology (NIST) cyber security standards form a basis for keeping customer data secure? If not, why?

Avista Response: The NIST standards are a valuable resource for companies to use when managing security risks. Specifically the NIST Cyber Security Framework is useful for assessing and improving a company's ability to prevent, detect, and respond to cyber-attacks, which includes keeping our customers' data secure.

4. How will customers have access to their energy usage information collected in AMI?

Avista Response: Customers will be able to access their energy usage information collected through AMI via the Company's myavista.com website (<http://www.myavista.com>). Customers with a myavista.com account can log into the website to view their energy usage data in daily, hourly and down to five (5) minute intervals.

- a. What platform will you use for customer data access?

Avista Response: Customers will access their data through their existing personal account on myavista.com. Our customers create a personal account on our web site by establishing a secure login and password.

b. How will you educate customers on viewing and using the platform?

Avista Response: Customers will be made aware of and educated on viewing and using the platform through the Company's AMI Customer Communication & Outreach Plan, which includes three phases of communication:

- **Phase 1:** Set the Context for the project and introduce the technology and customer benefits;
- **Phase 2:** Meter Installation with targeted communication that includes 90, 60 and 21-day prior notifications to let customers know when they'll receive their smart meter and what to expect, and
- **Phase 3:** Reinforce the Value after customers receive their new smart meter. Once the smart meter has been validated, which usually takes several weeks, we will notify customers and introduce the new web enhancements. We will encourage them to access their energy usage information to build awareness and better monitor and manage their energy usage.

i. Will the usage provided to customers be at the same granularity as programmed into the customer's smart meter?

Avista Response: Yes, we are providing 5 minute, hourly, and daily data. The electric meter is programmed at 5 minute intervals.

ii. What type of outage reporting will you provide?

Avista Response: The Company will be able to populate its Outage Management Center online through myavista.com quicker, with more current outage statistics as a result of AMI. Customers will ultimately be able to choose their choice of notification whether it is via a phone call, text message or an email.

c. What time intervals will you use to send customers their energy usage data (near real-time, sub-hourly, daily)?

Avista Response: At any time the customer chooses they can log into their myavista.com account and access their energy usage data collected through AMI. Electric customers can choose how they want to view their usage data by selecting either daily, hourly or 5-minute intervals. Natural gas customers can view daily and hourly intervals.

Prepaid Service and Customer Deposits

5. What kind of prepaid services will you implement for AMI customers?

Avista Response: The Company does not currently have a plan to offer a prepaid service program.

- a. Will companies keep separate accounting records for prepayment services associated with AMI?
 - b. Will the prepayments accrue interest?
 - c. How do companies anticipate changing deposit calculations based on information available from AMI technology?
 - d. How will you address the issue of customers receiving a double bill for the transition month, which will include both the closing bill for post-read billing and the first month of prepayment?
6. How will prepayment systems comply with notice requirements?

Avista Response: The Company does not currently have a plan to offer a prepaid service program.

7. How will you incorporate energy assistance into prepayment agreements?

Avista Response: The Company does not currently have a plan to offer a prepaid service program.

Remote Disconnection

8. What are the advantages and limitations of remote disconnection?

Avista Response: Remote service disconnection has a range of advantages over the conventional practice of sending a field technician to the premise to manually remove the meter and disconnect service. In all cases where remote disconnect can be performed, this functionality allows the utility to eliminate the labor and transportation expense of field service trips, as well as eliminate the hazards associated with night and winter driving, accessing meters in difficult to reach areas, such as fenced yards and animals, and at times threatening customers. Remote disconnect also allows Avista to cost-effectively disconnect service in certain situations (rental units open between tenants, real estate transactions open between tenants, etc.) and thereby to decrease unbilled usage amounts. These financial benefits were identified and quantified in the Company's AMI business case.

A limitation of this functionality includes its application to only single phase, residential-type meters. Commercial and industrial meters do not have this functionality.

9. If the Commission allows remote disconnections for non-payment, in what circumstances would you remotely disconnect customers?

Avista Response: With fully deployed AMI, the Company expects to maintain its current practices in Washington related to its use of remote service disconnect in credit and collections cases. Customers will continue to receive a past due notice, a final past due notice, and an automated courtesy call prior to having their service disconnected. All of these notices remind customers that they have a remote device and there will not be a serviceperson visit prior to disconnection.

By way of some background, Avista implemented a remote service disconnect program in its Colville and Othello, Washington service areas as a productivity measure in 2008. Remote service connectivity was initially deployed using remote collars on our conventional meters. This effort aimed to address circumstances where employee safety was a concern due to danger from animals or obstructed access to meters, as well as for non-payment.¹ Subsequent to this initial deployment of remote service connectivity, Avista led a Smart Grid Demonstration Project (SGDP) in Pullman, Washington, creating the first “smart community” in the Pacific Northwest. Deployment of an advanced metering system for approximately 14,000 customers was part of the demonstration project, which involved the automation of many parts of the electric distribution system. The Company has been successfully using remote service reconnect/disconnect in Pullman since 2012.

10. What percentage of current disconnection visits result in the customer making a payment to stop the impending disconnection after the service technician makes contact, but before service is disconnected?

Avista Response: The Company’s current rate is approximately 13%.

11. Is it necessary to modify current rules governing disconnection or customer notice rules to allow companies to remotely disconnect and reconnect customers?

Avista Response: As noted above, Avista, both in its own interpretation, and in consultation with the Commission Consumer Affairs Staff, believes the current rules do not prohibit the use of remote technology to disconnect or reconnect service (i.e. they do not require the utility to perform an on-site employee visit at the premises prior to or during the service disconnect). Conversely, the Company believes a Commission decision to prohibit the use of remote service connectivity would require a modification of the current rules.

12. During what time of day should disconnection and reconnections occur (e.g., before noon, 24 hours a day, or during business hours only)?

¹ Since the rules in Washington do not require an on-site final notification before service disconnection (WAC 480-100-128), Avista conferred with UTC Staff to explore any potential issues or barriers before proceeding with deployment of remote service collars. WAC 480-100-128 (6)(d) requires a second notice be provided by one of the three options, delivered notice; mailed notice; and/or telephone notice.

Avista Response: The Company has no current plans to modify its present practice for remote service disconnect and reconnects during and after our broader deployment of AMI in Washington. Currently, Avista schedules remote service disconnects between 8:00 am and 3:15 pm Monday through Friday. Except in cases of danger to life or property, no service disconnects are performed on Saturdays, Sundays, legal holidays or on any other day the Company cannot reestablish service on the same or following day. Where Avista has remote service connectivity we reconnect service twenty-four hours a day, seven days a week, once the customer has satisfied payment.

- a. In the case of a customer disconnected for non-payment, how long will the company take to remotely reconnect service after payment has been received?

Avista Response: The average reconnection time after payment has been satisfied is a matter of minutes.

Meters

13. What meters will the companies be installing in Washington State (brand, make, model)?

Avista Response: Avista is installing Itron Openway RIVA electric meters and natural gas modules.

- a. What are the parameters for measuring and testing the accuracy of the meters?

Avista Response: Avista tests electric meters in accordance with its Tariff Schedule 70 "Rules and Regulations." The tariff outlines the Company's testing process, which is designed in accordance with WAC 480-100-343. Initially, Avista sample tests every shipment of new electric meters using the MIL Standard 414 for random sampling selection and quantities. If all sampled electric meters pass accuracy testing, the entire shipment is considered accurate and ready to be installed in the field. If any single meter fails accuracy testing, the entire shipment is tested and any meters that fail to meet our accuracy standards are excluded from inventory. If an electric meter fails accuracy testing during initial shipment, an investigation is conducted with Avista and the meter vendor to determine root cause. Additionally, Avista conducts an annual meter testing program on electric meters previously installed in the field. This program also follows the MIL Standard 414 to determine the number of meters in each meter family that must be tested. A meter family consists of the meters' manufacturer, manufacture date and type.

- b. What accuracy range do manufacturer(s) guarantee for those meter sets?

Avista Response: Avista's primary meter manufacturer, Itron, follows ANSI Standard C12.20 for meter accuracy. Itron guarantees their meters to be within 0.5% accurate for single phase, self-contained metering, and 0.2% for poly-phase and CT metering. These limits are within Avista's testing policy and in accordance with WAC 480-100-

141, which requires meter accuracy to be within 2%. See Attachment B for vendor accuracy specifications.

14. Are you aware of any health or safety concerns related to AMI?

Avista Response: In determining what is reasonable and safe for our customers, Avista uses its best judgement, relying on the findings, actions and approvals of regulatory bodies (e.g. the Federal Communications Commission – FCC), on codes such as the National Electric Safety Code – NESC, independent standards organizations such as the American National Standards Institute – ANSI, manufacturers’ standards, and industry best practices. Through this network, the Company is not aware of any established link between conventional AMI metering and any health or safety risks. Avista expects that the Commission is similarly reliant on this network of science and regulation in its own determination of the safety of advanced metering technology for Washington customers.

At the same time, Avista is aware that a small subset of citizens may be alarmed about a range of environmental exposures that are considered to be safe for human and animal health by mainstream science, the courts, and legal and regulatory jurisdictions. Such is the case with any health and safety issues posed by AMI metering equipment. While our Company deeply respects the right of every person to choose the exposures of concern to them, and to accommodate them where we can,² we do note that AMI metering equipment has not been determined to pose any threat to human or animal health by any regulatory body. Indeed, these systems are being approved and deployed in virtually every state in the Country and around the world.

- a. What research have you conducted concerning health or safety for the meter sets you will be purchasing?

Avista Response: As noted in our response directly above, Avista relies on the consensus findings and actions of scientific and regulatory bodies, codes and standards organizations, manufacturers’ standards and industry best practices in determining the reasonable health and safety of metering equipment we install. Avista has concluded that there is no body of evidence undermining the consensus interpretation that AMI metering does not pose an unreasonable health or safety risk to customers.

- b. Please provide copies or electronic links to the research and any studies on which you have relied.

Avista Response: As an example of manufacturers’ standards discussed in our two responses directly above, Avista’s metering vendor, Itron, provides equipment that meets FCC standards for safe operation (in addition to a range of other standards), and follows the literature related to the potential for health and safety issues applicable to

² The basis of the Company’s customer option for non-standard metering (non-communicating meter) is our desire to reasonably accommodate a person’s fear of potential health and safety concerns related to AMI.

AMI metering technology. Through its ongoing monitoring of scientific research, regulatory developments, and standards and policy issues, Itron has assembled a list of reference documents, which it has provided to the Company, and which Avista has listed below.

General Literature

- ["Public Health Evaluation of Radio Frequency Exposure from Electronic Meters," Arizona Department of Health Services, October 2014](#)
- ["A Review of Safety Code 6: Health Canada's Safety Limits for Exposure to Radiofrequency Fields," The Royal Society of Canada, April 2014](#)
- ["SGCC's response to negative smart meter misinformation: 'Take Back Your Power'," Smart Grid Consumer Collaborative, August 2013](#)
- ["An Evaluation of Radio Frequency Fields Produced by Smart Meters Deployed in Vermont," Richard Tell Associates, January 2013](#)
- ["Radio Frequency Exposure Report," Central Maine Power, January 2013](#)
- ["Report on Health and Radiofrequency Electromagnetic Fields from Advanced Meters," Public Utility Commission of Texas, December 2012](#)
- ["Case Study: Measurements of Radio Frequency Exposure from Wi-Fi Devices," Industry Canada, May 2012](#)
- ["Health Impacts of Radio Frequency from Smart Meters," California Council on Science and Technology, April 2011](#)
- ["Review of Health Issues Related to Smart Meters," Monterey County Health Department, March 2011](#)
- ["Smart Meters and Smart Systems: A Metering Industry Perspective," Edison Electric Institute \(EEI\), Association of Edison Illuminating Companies \(AEIC\) and Utilities Telecom Council \(UTC\), March 2011](#)
- ["A Discussion of Smart Meters and RF Exposure Issues," Edison Electric Institute \(EEI\), Association of Edison Illuminating Companies \(AEIC\) and Utilities Telecom Council \(UTC\), March 2011](#)
- ["What consumers need to know about the smart grid and smart meters," Environmental Defense Fund \(EDF\), March 2011](#)
- ["Radio-Frequency Exposure Levels from Smart Meters: A Case Study of One Model," Electric Power Research Institute \(EPRI\), February 2011](#)
- ["An Investigation of Radio Frequency Fields Associated with the Itron Smart Meter," Electric Power Research Institute \(EPRI\), December 2010](#)
- ["A Perspective on Radio-Frequency Exposure Associated With Residential Automatic Meter Reading Technology," Electric Power Research Institute \(EPRI\), February 2010](#)

Federal Communications Commission

- [Radio Frequency Safety](#)
- [Radio Frequency Safety FAQs](#)
- [Q&A about Biological Effects and Potential Hazards of Radiofrequency Electromagnetic Fields Evaluating](#)
- [Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields](#)

Food and Drug Administration (FDA)

- [Radiation Health](#)

Industry Canada and Health Canada

- ["Smart Meters," Health Canada, December 2011](#)
- [Radio Frequency \(RF\) Fields - Signs and Access Control](#)
- [Radio Frequency Exposure Compliance of Radiocommunication Apparatus](#)

Occupational Health & Safety Administration (OHSA)

- [Radio Frequency and Microwave Radiation](#)

The National Institute for Occupational Safety and Health (NIOSH)

- [EMF \(Electric and Magnetic Fields\)](#)

World Health Organization (WHO)

- [Electromagnetic fields and public health](#)

Itron Documentation

- ["RF Safety Compliance and Duty Cycle for OpenWay CENTRON 4G-LTE Meters," December 2015](#)
- ["RF Safety Compliance of OpenWay® Smart Meters and the CG-Mesh IPv6 Network," October 2015](#)
- ["ChoiceConnect Radio Frequency FAQ," February 2015](#)
- ["The Facts on RF Exposure from Meter Banks," August 2012](#)
- ["Itron Products and Radio Frequency Regulations," June 2017](#)
- ["RF Interference Fact Sheet: Water Communications Modules," December 2011](#)
- ["Pulsed RF vs. OpenWay® Smart Meter Communications," August 2011](#)
- ["Analysis of Radio Frequency Exposure Associated with Itron OpenWay® Communications Equipment," March 2011](#)
- ["Wireless Transmissions: An Examination of OpenWay® Smart Meter Transmissions in 24-Hour Duty Cycle," March 2011](#)

15. Please explain your current tampering and theft detection process.

Avista Response: Avista currently detects meter tampering and theft of service through several means, most commonly a report showing meters reported as disconnected but that are still registering usage. This report is typically developed through field activities where our serviceman or meterman see anomalies while they are out on an unrelated order or reading a meter. When theft is identified or reported, a trained meter technician is dispatched to the location to conduct a field inspection. Depending on the degree and method of theft, the meter technician will remove the equipment used for diversion, to include replacing the meter and conducting a safety inspection on the meter socket. Once the diversion is removed and the associated metering equipment is deemed safe, the customer's service is reconnected. The theft of service is reported to our Billing Department where energy loss calculations and estimation of the financial magnitude of the theft is conducted.

a. How might AMI technology alter that process?

Avista Response: AMI technology will provide substantially-improved information and data, rather than relying principally on the inadvertent discovery of issues through field visits. The metering system will provide data that includes five minute interval readings for KW, KWh, voltage, and current, one hour intervals for therms, along with tamper and other alarms. Theft can be detected when adjacent meters connected to the same transformer do not experience a similar impedance change as the meter in question. Once a likely case of theft is identified in the application, a field technician will be dispatched to investigate.

Billing Requirements

16. In what circumstances do you believe estimating a customer's bill will be required with AMI?

Avista Response: Very rarely – estimating could occur in the case of an infrastructure failure, meter failure or catastrophic failure uploading reads.

17. Generally, what type of reporting will be available on customer bills as it relates to usage? More specifically:

a. What mechanism in customers' bills will display customer-elected load curtailment and control?

Avista Response: The bill will display an energy graph showing the customer's current month of usage, plus for historical purposes, each of the previous 12 months.

b. What type of reporting will you provide as it relates to tamper and theft detection?

Avista Response: Avista does not have a current plan to report theft or tamper statistics on customer bills.

c. What type of reporting will you provide as it relates to voltage reduction?

Avista Response: Avista does not have a current plan to report voltage reduction statistics on customer bills.

18. Will the AMI system give customers the ability to program budget billing and conservation goals?

Avista Response: Customers currently have the ability to select budget billing (also known as comfort level billing), this will continue with AMI. The ability to program conservation goals will not be available during the initial installation of AMI meters.

19. Explain the rate and bill flexibilities you will offer customers in conjunction with AMI deployment.

Avista Response: The Company is still reviewing options for customer choice related to rate and bill flexibilities, however will not propose new options until after total implementation of the AMI system.

Customer Education

20. Please identify the policies and education programs will you use to inform customers about the following:
- a. How to report suspected equipment malfunction.
 - b. How to get help reading usage, voltage reduction reports, and outage reports.
 - c. How to use the AMI technologies to curtail electricity use, and the potential to help control peak demand for all customer classes.

Avista Response: The primary approach to educate customers about AMI includes direct mail prior to installation and through Avista's website myavista.com. In addition, customers can get questions about usage reports and equipment malfunction answered via an Avista Customer Service representative or through the FAQ on the website. At this time, Avista does not have plans to curtail usage or offer peak pricing options using AMI technology. If and when that changes, education about this will be handled the same way via the customer service representative or through FAQ on the website.

Avista appreciates the opportunity to provide these comments, please direct any questions regarding these comments to me at 509-495-4975.

Sincerely,

/s/Linda Gervais

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Regulatory Affairs
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Avista Utilities