AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION

JURISDICTION:	WASHINGTON	DATE PREPARED:	05/28/2016
CASE NO.:	UE-160228 & UG-160229	WITNESS:	Heather L. Rosentrater
REQUESTER:	Public Counsel/Energy Project	RESPONDER:	D. Austin / L. La Bolle
TYPE:	Data Request	DEPT:	State & Federal Regulation
REQUEST NO.:	PC/EP – 058	TELEPHONE:	(509) 495-4710
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REQUEST:

With regard to the persistence of the estimated savings and revenues from theft detection, does Avista agree that AMI meters typically include an alarm function that will alert the utility if the meter is tampered with in any manner? Assuming such an alarm system is reflected in the meter system being purchased by Avista, how can Avista assume that diversion cases will arise over time in a manner that results in any lengthy diversion or significant unbilled revenues over the lifetime of the AMI business case analysis as stated will occur in the response to Public Counsel and The Energy Project Joint Data Request No. 32.

RESPONSE:

The meters selected by Avista for the Washington advanced metering project will be equipped with tamper alarms that will enable the following functionalities:

- Removal from socket
- Inversion
- Service Outage
- Magnetic Tamper Detect (singlephase)
- Magnetic Tamper Cleared (singlephase)
- Reverse Power Flow
- Unauthorized Attempt for Network Access

The tamper alarm will alert the Company to possible cases of meter tampering, which will be integrated with data analytics applications for interpreting the possible significance of any tamper alarm, and to determine whether a site visit is warranted. Since theft of service can be accomplished in multiple ways that do not involve tampering with the meter, such as diverting power upstream of the meter, this highlights the importance of using multiple points of information from the advanced metering system, interpreted through data analytics, to better identify likely cases of energy theft. In this respect, tampering alarms by themselves provide part of the information Avista will use to better determine likely cases of energy theft.

When Avista considers the likely "persistence" of energy theft over the life of the project, we are referring to the expectation that new instances of energy theft will be likely to arise with sufficient frequency or magnitude that the capability of the advanced metering system will continue to be useful in quickly identifying and stopping these cases. The measure of the financial benefit of improved theft detection, however, is not represented by some sustained level of energy theft that occurs on our system through the life of the project. Rather, it's the difference between the financial

impact of theft that we actually experience today[1] and the financial impact of the energy theft we will experience during the lifecycle of the project. In this respect, if the advanced metering system were to be so effective in identifying cases of theft that our losses were eventually reduced to zero, then the true measure of the financial benefit for our customers is the difference between the level of theft losses we experience today (without AMI) and the zero losses we would experience with advanced metering. Accordingly, the financial benefit that the Company has estimated is not based on the persistence of some level of financial impact resulting from energy theft, but on the reduction in energy theft (measured as annual $ impact) over the life of the project.

[1] As described in the Company's response to PC/EP DR-032, Avista explains why its currently-documented rates of theft are likely only a small percentage of the actual theft losses we experience. Avista expects that early in the utilization of the advanced metering system, as described above in this data response, it will be able to develop a much-more accurate estimate of our actual theft losses compared with the limited number of cases we detect today.