AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION

JURISDICTION:	WASHINGTON	DATE PREPARED:	09/18/2015
CASE NO.:	UE-150204 & UG-150205	WITNESS:	Larry La Bolle
REQUESTER:	Public Counsel/Energy Project	RESPONDER:	Larry La Bolle
TYPE:	Data Request	DEPT:	State & Federal Regulation
REQUEST NO.:	PC/EP – 080	TELEPHONE:	(509) 495-4710
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REQUEST:

RE: Exhibit No. LDL-1T, p. 9, lines 6-8. If the predicted benefits of Conservation Voltage Reduction associated with Avista's AMI business case were not derived from the Pullman project that included an evaluation of conservation voltage reduction (CVR), please identify the basis for the Company's predicted incremental benefit for CVR associated with AMI deployment. In your response, identify how the Company determined this incremental benefit and provide the evidence showing the predicted benefit from "using readings from the advanced meter to calibrate voltage settings on the feeder, instead of using readings from the "smart" transformer."

RESPONSE:

The amount of the incremental benefit of conservation voltage reduction is based on the source of the voltage information used to set the line voltage on the feeder. In the Pullman advanced metering pilot project, Avista used voltage readings from line devices (such as reclosers and smart transformers) to calibrate a load flow in the Distribution Management System. This information was subsequently used to calculate an estimate of the voltage at the high side of each distribution transformer, based on an electrical model. This conservation voltage operation resulted in a savings that was estimated at 2 percent, which was subsequently verified by the Navigant report.

In Avista's proposed advanced metering system, voltage alarm readings from each advanced meter would be used to "tune" the existing CVR system to gain an additional benefit. The source of this benefit is as follows: Since the powerflow model in the base CVR system only estimates voltage to the high-side of the distribution transformer, Avista had to establish a worst-case voltage drop between the transformer and the customer meter, as a safety buffer, to ensure the 114-volt floor was not breached for any customer. This worst-case buffer was set at a 6-volt drop. On average, the actual voltage drop to the meter is closer to 3 volts, meaning there is additional room to further-reduce the feeder voltage setpoint, based on actual voltage reads from the customer meter. Avista subject matter experts familiar with the results of the Pullman conservation voltage system, have estimated this potential incremental benefit at 0.5 percent, or a reduction in line voltage of 0.68 volts on a 120 volt scale.