

**BEFORE THE  
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

In the Matter of the Petition of	)	
	)	
Avista Corporation, d/b/a Avista Utilities	)	Docket No. UE-17_____
	)	Docket No. UG-17_____
For an Order Authorizing Deferred Accounting	)	
Treatment related to the Company’s Investment	)	PETITION OF AVISTA
in Advanced Metering Infrastructure and	)	CORPORATION
Approval of Depreciation Rate	)	
_____	)	

**I. INTRODUCTION**

1           In accordance with WAC 480-07-370, Avista Corporation, doing business as Avista Utilities ("Avista" or "Company"), at 1411 East Mission Avenue, Spokane, Washington, hereby petitions the Commission for an Order authorizing the deferred accounting treatment detailed in this Petition related to the Company’s investment in Advanced Metering Infrastructure (“AMI” or “Project”). In addition, Avista requests approval of a depreciation rate for the software investment portion of the AMI project.

2           Avista is a utility that provides service to approximately 378,000 electric customers and 241,000 natural gas customers in a 26,000 square-mile area in eastern Washington and northern Idaho. Avista Utilities also serves approximately 101,000 natural gas customers in Oregon. The largest community served by Avista is Spokane, Washington, which is the location of its main office. Please direct all correspondence related to this Petition as follows:

David J. Meyer, Esq.  
Vice President and Chief Counsel for  
Regulatory & Governmental Affairs  
Avista Corp.  
P. O. Box 3727  
1411 E. Mission Avenue, MSC 27  
Spokane, Washington 99220-3727  
Telephone: (509) 495-4316  
Facsimile: (509) 495-8851  
E-mail: [david.meyer@avistacorp.com](mailto:david.meyer@avistacorp.com)

Kelly Norwood  
Vice President  
State and Federal Regulation  
Avista Corp.  
P. O. Box 3727  
1411 E. Mission Avenue, MSC 27  
Spokane, Washington 99220-3727  
Telephone: (509) 495-4267  
Facsimile: (509) 495-8851  
E-mail: [kelly.norwood@avistacorp.com](mailto:kelly.norwood@avistacorp.com)

3 Rules and statutes that may be brought at issue in this Petition include RCW 80.01.040,  
RCW 80.28.020, RCW 80.04.350 and WAC 480-100-203(3).

4 A table of contents for this Petition follows:

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## II. BACKGROUND

5 In the Company's 2016 general rate case (Docket Nos. UE-160228 and UG-160229), Avista  
presented its plans related to the deployment of Advanced Metering Infrastructure (AMI) for its  
electric and natural gas customers in Washington.<sup>1</sup> The Project builds on the Company's recent  
experience implementing a range of smart grid technologies, including advanced metering in  
Pullman, Washington, as well as our automated meter reading (AMR) systems in Idaho and

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<sup>1</sup> The Company first presented its plans to install AMI for its electric and natural gas customers in Washington in its  
2015 general rate case (Docket Nos. UE-150204 and UG-150205).

Oregon, to provide a range of customer benefits to all of Avista's Washington operations. The project will deploy AMI to approximately 250,000 electric customers and 160,000 natural gas customers.<sup>2</sup>

6 For Avista's electric operations, AMI includes advanced electric meters that are capable of two-way communication, and which are equipped with the ability to measure the incoming and outgoing flow of electricity from a customer's premise in configurable intervals that range from five-minutes to an hour. This communication capability means the meter can remotely transmit energy-use information to the utility and the customer, and can also receive and respond to signals sent from the utility to the meter. Advanced electric meters and natural gas modules themselves are only part of an integrated metering system. These devices must be connected with specialized communication networks and information management systems in order to deliver value to the consumer. This entire system of meters and modules, communications, and digital hardware and software systems is referred to as advanced metering infrastructure.

7 Avista is committed to achieving a greater degree of customer satisfaction, and offering information and choices that help customers better understand and manage their energy costs. Advanced metering supports these goals by enabling a range of benefits that will improve the quality and cost-effectiveness of services they receive from Avista. These benefits include near real-time energy use information, energy alerts, more accurate billing, improved energy efficiency, theft-loss prevention and outage management, and remote service connectivity. As the industry moves towards time-of-use and demand-based pricing, and with the greater

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<sup>2</sup> Avista is planning to replace all of its existing Washington electric meters, the majority of which are conventional electro-mechanical meters, with a new advanced meter. Existing natural gas meters will be upgraded with a new digital communicating module (Encoder Receiver Transmitter or ERT). The natural gas meter itself will not be replaced.

prevalence of customer-owned distributed generation, Avista will have the technology to effectively evaluate and implement such programs.

8 Customers will experience benefits from the deployment of advanced metering that include improvements in service quality, customer experience and satisfaction, and a range of quantified financial benefits that more than offset the combined capital and operating expenses for the Project. A brief description of some of these customer benefits is provided below:

**1. Improved Customer Service**

- Streamlined billing inquiries;
- More accurate billing;
- Customer text alerts based on parameters they select; and
- Detailed energy usage data, including the opportunity to capture real-time energy use, which allows customers to better understand and manage their energy consumption.

**2. Platform for Future Service Options**

- Time-of-use and capacity-based pricing;
- Demand-Response programs;
- Real-time integration of customer-owned distributed generation at the distribution level;
- Supports micro-grid and Smart Cities initiatives; and
- Creates customer value through added data analytics.

**3. Quantified Financial Benefits**

- Automation of manual meter reading – provides savings by eliminating the costs of manual meter reading.
- Remote service connectivity – provides savings by eliminating field service trips for service disconnects and reconnects, and significantly shortens the time required to reconnect service.
- Customer energy efficiency – when coupled with energy conservation tips, having detailed use data enables the customer to implement cost effective efficiency measures.
- Distribution system efficiency – allows the utility to reduce the amount of electricity required to maintain the required line voltage along each feeder.
- Reduced outage times – integrates with the outage management system to provide earlier notification of outages and greater visibility of overall system outages that enables more efficient outage restoration and shorter

outage duration.

- Reduced energy theft and unbilled usage – helps to identify cases of energy theft and reduce unbilled energy usage.
- Billing accuracy – provides greater accuracy than manual meter reading and eliminates the need to estimate bills.
- More cost-effective utility system studies – provides better data and lowers the cost of performing various system studies.

9           Avista provided its business case report summarizing the Washington Advanced Metering Project with the Company's 2016 general rate case.<sup>3</sup> The report provides an overview of advanced metering infrastructure, detailed estimates of the Project capital costs and lifecycle operating expenses, and the quantified and unquantified customer benefits to be delivered by the Project. A copy of this report is provided as Attachment A.

10           Based on the information, studies, and analysis contained in the Company's business case, Avista has made the decision to move forward with the deployment of advanced metering for our Washington customers. Contracts have been signed and the implementation is now well underway.

11           The Company has executed five vendor contracts supporting the Project, including the development of technical specifications for subsequent requests for proposals (RFP), purchase of the meter data management (MDM) system from Oracle, hiring of the installation contractor for that system, and the execution of contracts supporting the Company's customer engagement, outreach and education initiatives.

12           In September 2016, Avista and the AMI metering systems provider, Itron, reached agreement on contract terms, including the price, for the advanced electric meters, natural gas meter modules, metering communications hardware and software, and the installation of these

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<sup>3</sup> Docket Nos. UE-160228 and UG-160229, Exhibit No. HLR-3.

systems, as well as the head-end<sup>4</sup> system. In early 2017, information was received from Itron with updated software and hardware delivery dates which resulted in a project schedule shift of approximately one year from the original contract schedule. Implementation of the MDM system was revised to the latter half of 2017. The head end system will “go live” in the latter half of 2018. The deployment of digital meters is scheduled to begin immediately following the “go live” of the head end system. The Company plans to complete installation of residential meters in 2020. Final installation of communications infrastructure is also scheduled to be completed in 2020. The plan is to complete the advanced metering project in 2021.

13 The total Project cost will continue to be refined as additional details are known and the various components are completed. However, our current estimate of Washington’s share of the project capital cost of \$165.4 million continues to be in line with the capital project cost included in the business case of \$166.7 million.<sup>5</sup>

### III. REQUEST FOR DEFERRED ACCOUNTING OF INVESTMENT IN AMI

14 In the Commission’s Order No. 06 in Docket Nos. UE-160228 and UG-160229 the WUTC declined to rule on the prudence of Avista’s AMI proposal, and stated the following:<sup>6</sup>

We begin with the observation that Avista can file an accounting petition at any time asking for deferred accounting treatment of the ongoing expenses it continues to incur as it moves toward initial deployment of AMI in Washington. (footnote omitted) Were the Commission to rule favorably on such a petition, these costs could be included in FERC Account No. 182.3 or 186 and the Company’s opportunity to recover prudently incurred costs going forward would be protected until such time as Avista makes a timely request

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<sup>4</sup> The Meter Data Collection System (Head End System) is composed of computer hardware and software applications that control and coordinate the meter communication networks. In addition to this function, the system aggregates the usage data from the advanced meters in the field and routes this data to the Meter Data Management system and other specialized software applications.

<sup>5</sup> Since the meter data management system will support metering and billing for both electric and natural gas service in all of the Company’s jurisdictions, the costs for this system will be allocated accordingly. The costs included in the business case and this filing represent Washington’s allocated share.

<sup>6</sup> Docket Nos. UE-160228 and UG-160229, Order No. 5, ¶ 85.

for rate recovery of all, or a portion of, its costs. The Commission discussed this very point in its final order in Dockets UE-150204 and UG-150205, Avista's 2015 general rate case. (footnote omitted)

15 The purpose of this accounting petition is to request such an order from the Commission, to establish a regulatory asset for the AMI investment. The prudence and recovery of the costs associated with the AMI Project would be addressed in future regulatory proceedings.

16 Through this Petition, Avista is not requesting a prudence determination for the electric meters and natural gas modules to be installed, or the meter data collection, head end system, and other components of this multi-year complex project. Instead, as described below, Avista is proposing to address prudence determinations and recovery of costs in "chunks" following the time that capital is deployed and meters are installed, in future regulatory proceedings.

17 AMI is a major, multi-year project, but the dollars invested in the project will be transferred to plant-in-service as certain components are completed along the way. For example, when the MDM system is completed in 2017, it will be transferred to plant-in-service and will be used immediately to manage meter usage data. And as new AMI meters are installed they will transfer to plant-in-service on a month-to-month basis. Once the investment is transferred to plant-in-service, allowance for funds used during construction (AFUDC) stops, and depreciation begins on the investment. Unless the depreciation and other costs are included in retail rates on a timely basis, or the costs are deferred for later recovery, the Company will not recover the costs, and will suffer negative financial impacts.

18 Again, Avista is not requesting prudence at this time of the investments and operating costs associated with AMI. As the Company continues to deploy AMI in future years it will request recovery of the incremental investments and costs in future proceedings, and the Commission will have the opportunity to review those costs and make a determination of the prudence of

those specific costs. With deferred accounting the Commission will have the opportunity to review the costs after-the-fact, and make a prudence determination prior to the Company receiving recovery of the prudently incurred costs through retail rates.

19 This is consistent with the Commission's Order described below granting Avista deferred accounting for retired electric meters, where the Commission stated the following:

Further, our decision in no way constitutes a preapproval of the Company's AMI investment, and the Commission makes no finding regarding the prudence of the investment. Avista recognizes that a determination of prudence and the eligibility for recovery of any costs associated with the Company's AMI investment will be addressed in a future regulatory proceeding.

20 Avista requests the Commission approve deferred accounting treatment for the AMI project as described in this Petition. With deferred accounting, the revenue requirement associated with the AMI costs that are transferred to plant-in-service would be set aside for the opportunity for future recovery.

21 The revenue requirement associated with the actual investment in AMI that transfers to plant-in-service beginning in 2017, would be deferred to preserve the opportunity for recovery in a future proceeding. This includes the depreciation expense and property taxes on the plant that is in service, the financing costs associated with the investment, and the related state and federal taxes. By deferring all costs, including the financing costs on the investment, the amount recognized by the Company is the same amount that is recognized when the investment is included in base rates.<sup>7</sup> The Company is not requesting the deferral of any related increases or reductions in O&M expenses. The deferral of the revenue requirement would begin in the month

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<sup>7</sup> As shown on Lines 35 through 38 of Attachment B, approximately 55% of the annual costs (revenue requirement) are related to depreciation expense and property taxes, and 45% is related to the financing costs and state and federal taxes.



that the first transfers to plant of AMI investment occurs and would continue monthly until such plant is included in retail rates in a future proceeding.

22 The annual revenue requirement associated with the MDM system that is planned to transfer to plant-in-service in the latter half 2017 is provided in Attachment B. This method of calculating the revenue requirement would be used for all other components of the AMI system when they transfer to plant-in-service.

23 In a future proceeding, Avista would address the prudence of the costs incurred and request recovery of the deferred costs, including a carrying charge on the deferral at the authorized rate of return. At that time, the Company would also propose an amortization period to recover the costs from Washington customers over a future period.

24 The monthly accounting entries for the electric deferral would be as follows:

<b><u>Accounting Entry to Record the Deferral of Revenue Requirement - Recorded Monthly - Electric</u></b>				
<b><u>Account Description</u></b>	<b><u>FERC Account</u></b>		<b><u>Debit</u></b>	<b><u>Credit</u></b>
Regulatory Asset - Deferred Costs	182.3XX	ED.WA	xxx	
Regulatory Credit - Deferred Costs	407.4XX	ED.WA		xxx
Regulatory Liability - Equity Return on Investment (1)	254.XXX	ED.WA		xxx

The Company's monthly accounting entries will include the standard calculations, including adjusting for revenue-related expenses (i.e. uncollectible customer accounts, excise taxes, and commission fees) and deferred federal income taxes.

(1) In accordance with FASB ASC 980-340, Avista would capitalize the deferred revenue requirement of the AMI project in FERC Account No. 182.3. The portion that represents incurred costs that would otherwise be charged to expense (i.e. depreciation expense and interest) would be recorded in FERC Account No. 407.4. The portion that represents the earnings on shareholders' investment would be recorded in a regulatory liability (FERC Account No. 254) until recovery occurs in future years.

25 The monthly accounting entries to record the electric amortization would be as follows:

<b><u>Accounting Entries to Record Amortization of Deferral - Recorded Monthly - Electric</u></b>				
<b><u>Account Description</u></b>	<b><u>FERC Account</u></b>		<b><u>Debit</u></b>	<b><u>Credit</u></b>
Customer Accounts Receivable	142.100	ED.WA	xxx	
Customer Revenue	44X.XXX	ED.WA		xxx
Regulatory Debit - Amortization of Costs	407.3XX	ED.WA	xxx	
Regulatory Debit - Amortization of Equity Return on Investment	254.XXX	ED.WA	xxx	
Regulatory Asset - Deferred Costs	182.3XX	ED.WA		xxx

The Company's monthly accounting entries will include the standard calculations, including adjusting for revenue-related expenses (i.e. uncollectible customer accounts, excise taxes, and commission fees) and deferred federal income taxes.

26 The accounting entries for natural gas would be consistent with the entries described above for electric service.

**IV. REQUEST FOR DEFERRED ACCOUNTING OF UNDEPRECIATED NET BOOK VALUE OF EXISTING NATURAL GAS ENCODER RECEIVER TRANSMITTERS (ERTs)**

27 With the AMI project, all existing electric meters will be retired from service and replaced with new advanced meters. In Docket No, UE-160100, Avista obtained approval of accounting treatment to reflect deferral of the investment in existing electric meters to a regulatory asset account as they are removed from service.<sup>8</sup> The prudence and the recovery of these meter costs will be addressed in a future regulatory proceeding.

28 Existing natural gas meters will be upgraded with a new digital communicating module. The natural gas meter itself will not be replaced. There are approximately 70,000 older digital communicating modules on natural gas meters in Washington, at an estimated net book value

<sup>8</sup> Docket No. UE-160100, Order 01, dated March 15, 2016.

of approximately \$3.7 million, that will need to be removed and retired and replaced with a new module as part of the AMI project.

29 Consistent with the accounting treatment that Avista obtained on the existing electric meters that will be retired as part of the AMI project, Avista requests approval of the following accounting treatment of the existing natural gas communicating modules:

- a. As the natural gas communicating modules are removed from service during calendar years 2018 through 2021, the Company would transfer the undepreciated balance (investment less accumulated depreciation) of those modules to a regulatory asset account, FERC Account No. 182.3.
- b. The calculation of the proper amount to record in FERC Account No. 182.3 would involve a continuation of depreciation for those modules that remain in place during the 2018-2021 change-out period, net of accumulated depreciation, e.g., for those modules that are not changed out until Year 3, the calculation of the amount moved to the regulatory asset would reflect a continuation of depreciation for those meters until Year 3.
- c. The prudence and ultimate recovery of dollars recorded in the regulatory asset account (FERC Account No. 182.3) would be addressed in a future regulatory proceeding.

## **V. REQUEST FOR APPROVAL OF DEPRECIATION RATE**

30 Under RCW 80.04.350, which authorizes the Commission to determine the proper and adequate rates of depreciation of property used by a public service company, the Commission may ascertain and by order fix the proper and adequate rates of depreciation of utility property. Each utility must conform its depreciation accounts to the rates ordered by the Commission.

31           Currently, the Commission has approved a depreciable life of five years for both software and hardware, with a depreciation rate of 20 percent. For the AMI project, the current estimates indicate that of the \$165.4 million of total Washington cost, approximately \$28.4 million is for hardware, approximately \$100.5 million is for meters, and approximately \$36.5 million is for software. The Washington share of the MDM system represents approximately \$3.4 million of hardware and approximately \$12.9 million of software.

32           The Company installed a new Customer Service Information System (CIS) in February 2015. Based in large part on the trend of other utilities that installed the same type of system, the Company estimated the useful life of that system as 15 years. Avista proposed a depreciable life of 15 years for the software component<sup>9</sup> of the CIS system, with a depreciation rate of 6.6 percent, which the Commissions in all three states in which Avista operates, approved.<sup>10</sup>

33           The Company plans to replace the CIS in February 2030 which would be at the end of its 15 year life. The Company believes the software component of the MDM system of the AMI project will be replaced at that same time. Since the Company plans to implement the MDM system in the latter half of 2017, the life of the software would be 12.5 years, to ensure it is fully depreciated by February 2030. Therefore, the Company is requesting the Commission approve a depreciable life of 12.5 years for the software component of the MDM system, with a depreciation rate of 8.0 percent. Once the MDM system is placed into service, the Company

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<sup>9</sup> The hardware component of the CIS system was maintained at a depreciable life of five years and a depreciation rate of 20%.

<sup>10</sup> The Company's last depreciation study was conducted in 2011. Avista hired Gannett Fleming, Inc., to undertake a depreciation study of its depreciable electric, gas and common plant-in-service as of December 31, 2010. The Washington Commission approved the depreciation rates, including the rate proposed by Avista for the software component of the CIS system, in Docket Nos. UE-120436 and UG-120437 with rates effective January 1, 2013. The depreciation rates were also effective in Idaho and Oregon January 1, 2013.

will begin depreciation on the investment. Therefore, an approved depreciation rate is necessary to have in the August 2017 timeframe.

34 In discussions with the depreciation consultant, Gannet Fleming, Inc. they indicated support of a 12.5 year life on the MDM software. Avista will use its currently approved five-year life, or 20% depreciation rate, on the hardware component of the MDM system.

35 For administrative and economic efficiencies, the Company prefers to maintain uniform utility accounts, including depreciation rates, across its three state service territories. To maintain consistent depreciation rates across all states, the Company will also be requesting to use a depreciable life of 12.5 years in Oregon and Idaho, and anticipates receiving approval for this rate from the states for the software component of the MDM system which is system-allocated plant. Maintaining consistent depreciation rates across all states is critical to avoid multiple sets of depreciation accounts and records that would impose a costly administrative burden on the Company and unnecessary expense for the Company's customers.

## **VI. REQUEST FOR RELIEF**

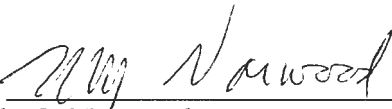
36 WHEREFORE, Avista respectfully requests that the Commission issue an Order for the following:

- a. Authorize the deferred accounting treatment detailed in this Petition related to the Company's investment in AMI. The revenue requirement associated with the actual investment in AMI that transfers to plant-in-service, would be deferred to preserve the opportunity in a future proceeding to address the prudence of the investment and recovery of the costs.
- b. Authorize the deferred accounting treatment detailed in this Petition related to the undepreciated net book value of the Company's existing natural gas communicating

modules. The transfer of the investment in existing natural gas modules, net of accumulated depreciation, to a regulatory asset account would occur as the modules are removed from service.

- c. Authorize a depreciable life of 12.5 years, with a depreciation rate of 8.0%, for the software component of the MDM system of the AMI project.

DATED this 1<sup>st</sup> day of May 2017

By:   
\_\_\_\_\_  
Kelly O. Norwood  
Vice President, State & Federal Regulation

VERIFICATION

STATE OF WASHINGTON )  
 )  
County of Spokane )

Kelly O. Norwood, being first duly sworn on oath, deposes and says: That he is a Vice President of Avista Corporation and makes this verification for and on behalf of said corporation, being thereto duly authorized;

That he has read the foregoing Petition, knows the contents thereof, and believes the same to be true.

Kelly O. Norwood

SIGNED AND SWORN to before me on this 1<sup>st</sup> day of May 2017.



Patty L. Hanson

NOTARY PUBLIC in and for the State of Washington, residing at Spokane.

Commission Expires: 11/23/2017