

**BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

In the Matter of the Petition of)	
Avista Corporation, d/b/a Avista Utilities)	Docket No. UG-220476
)	
For an Order Authorizing Temporary Exemption of)	
WAC 480-90-343, WAC 480-90-348 and WN U-29)	PETITION OF AVISTA
Schedule 170, Sec. 24, Para. C., Subsection b.iii.1)	CORPORATION

I. INTRODUCTION

1 In accordance with WAC 480-90-008 and WACs 480-07-110 and 370(3), Avista Corporation, dba Avista Utilities (“Avista” or “Company”), at 1411 East Mission Avenue, Spokane, Washington, hereby petitions the Washington Utilities and Transportation Commission (“Commission”) for an order providing temporary exemption from the provisions of WAC 480-90-343 and WAC 480-90-348(1)(a), through December 31, 2023. Through this Petition, Avista requests temporary exemption from WACs 480-90-343 and 348(1)(a), which set forth the requirements for the periodic testing of customer natural gas meters and standards for natural gas service so that it may provisionally pause its current natural gas meter testing procedures, or Periodic Meter Changeout (PMC) Program (“Program”), due to ongoing meter supply issues. The Company also requests temporary exemption from Section 24, Paragraph C, Subsection b.iii.1 of its own natural gas tariff, WN U-29, Schedule 170, as they pertain to Avista’s meter accuracy and testing procedures.

2 In short, because testing must occur in a controlled environment on Company premises, diaphragm meters must be temporarily removed from service, and there are insufficient replacement meters to temporarily install, due to supply chain issues. Avista will resume testing

of these meters prior to December 31, 2023, if and when sufficient supply of replacement meters is available.

3 Avista is a utility that provides service to approximately 406,000 retail electric and 372,000 retail natural gas customers in a 30,000 square mile service territory covering portions of Washington, Idaho, and Oregon. The largest community served by Avista is Spokane, Washington, which is the location of its corporate headquarters.

4 The Company requests that all correspondence related to this Petition be sent to the following:

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

Patrick Ehrbar
Director of Regulatory Affairs
Avista Corp.
P. O. Box 3727
1411 E. Mission Avenue, MSC 27
Spokane, Washington 99220-3727
Telephone: (509) 495-8620
E-mail: patrick.ehrbar@avistacorp.com

Avista Dockets (Electronic Only) - AvistaDockets@avistacorp.com

5 Rules and statutes that may be brought at issue in this Petition include RCW 80.01.040, RCW 80.28.020, WAC 480-90-343 and WAC 480-90-348.

II. BACKGROUND

6 While WAC 480-90, Part IV, provides broad Gas Metering and Standards Rules for the investor-owned utilities in Washington, including reference to appropriate ANSI/ASQ standards, there are no Federal or State rules that further describe the specific details and nuances of a gas meter testing program. As such, most natural gas local distribution companies (LDCs) in the

industry share best practices and are in alignment with not only one another but with ANSI Z1.9¹ (or its successor, when such standards are updated over time) standards for natural gas meter testing practices. Avista is in-step with such alignment, with the intent of the Company's PMC Program being to ensure Avista maintains a quality control program to verify performance of new and installed meters. Avista utilizes, and in turn tests via its PMC Program, three primary meter types, each with a specific niche or use. These meter types are: 1) diaphragm meters, which are the most commonly used meter type and have a range from residential to medium commercial loads; 2) rotary meters, which are used to serve commercial and industrial loads; and 3) turbine meters, which serve industrial loads. For purposes of this Petition, the Company is only requesting to temporarily pause testing of its diaphragm meters with sizes up to 1,000 cubic feet per hour (cfh). The total population of diaphragm meters eligible for the PMC program in the Company's Washington service territory is approximately 118,983 meters; of these, Avista tests an average of 1,506 meters per year. Additionally, approximately 2,746 meters, on average, are processed as FF.² Please see Tables 2-4 below for more specific estimations of the number of meters potentially needed for both the PMC Program and FF retirements for 2022 and 2023. All rotary and turbine meters will continue to be tested as described in Avista's Schedule 170 and corresponding Gas Standards Manual (GSM) and Standards of Procedure (SOP).

7 The testing process for natural gas diaphragm meters is briefly described in the Company's natural gas tariff Schedule 170, Sec. 24(C). For new meters, this includes the meter manufacturer factory testing and certifying each meter before it leaves the plant, followed by the Company then inspecting each meter shipment for physical damage. Any meters found to be damaged or in

¹ The American National Standards Institute, ANSI, is a non-profit organization that promotes voluntary conformity standards for products, services, processes, or systems in the United States (U.S.) as well as representing the U.S. in international standards organizations, helping to create guidelines that are universally accepted in multiple industries.

² Information provided for both PMC and FF are based on 2018-2021 averages.

damaged packaging upon arrival will be tested, repaired and/or calibrated, or returned to the manufacturer if the Company is unable to fix the meter. After physical inspection, a sampling of the meters are tested before the meter order is made available for use. The sample size for each delivery varies, as it is driven by the number of meters in the order. If the meters pass the test, they are put into inventory and made available for use by Avista. If the tests fail, the Company works with the meter manufacturer to determine the best course to remedy the situation.

8 For existing meters already in-service, formal meter evaluations begin when a meter reaches 10 years old. As previously noted, ANSI Z1.9 provides the basis of Avista's PMC Program. The PMC Program is based on calendar year, with sample meters required to be pulled and tested within a given calendar year, then test results are analyzed to drive the protocol for the following year. A meter family (defined as a meter size, model, and manufactured year) automatically defaults to "normal" inspection levels when it enters into the Program. The sample size utilized for each family's testing is dictated by the overall size of the family and the family's historical testing results. For example, if a family of meters has been performing accurately for 10 years, the sample size can be changed to "reduced" in subsequent years, thus allowing fewer meters to be pulled from that family for purposes of the PMC Program. Conversely, if a family has not been performing well in two out of the last five years, the sample size changes to "tightened" and more samples are required for the following year's evaluation. A meter family is considered "failed" when a population under tightened inspection has encountered 1) three consecutive yearly inspections that are not accepted, *and/or* 2) two consecutive yearly inspections that are not accepted, and the meters are testing fast (i.e., the indicated volume is greater than actual volume through the meter). Once a specified meter family has been deemed as "failed", they are referred to as a "Failed Family" (FF) and removed from service or their Installation Constant updated in

the Company’s Meter Data Management (MDM) system. The Installation Constant solution is only suitable for meter families that are experiencing a consistent drift in accuracy; these families will continue to be tested in the PMC Program.

9 It is important to note that while Avista’s electric meters can undergo such testing in the field, natural gas meters are tested using specialized equipment that is only available in a shop setting. Therefore, removal of meters from service is the only way to test these meters. Additionally, it is essential that these meters are tested in a temperature-controlled environment, again making field testing impractical.

III. NEED FOR TEMPORARY EXEMPTION

10 As experienced by many industries across the nation, the supply chain issues that continue to plague the country as a result of the COVID-19 pandemic have proven to be a detriment to Avista’s natural gas meter supply. Over the past two years, orders for meters have had increasingly lengthened lead times. Moreover, as shown in Table No. 1 below, the pace at which these lead times changed—from anticipated delivery in less than two months after order date, increasing to over a year before delivery can be expected for some meter types—has made appropriate management of inventory levels nearly impossible.

Table No. 1 – Meter Lead Times, 2020-2022

Meter Lead Time (weeks)										
	2020				2021				2022	
Meter Size	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
AC250	7	7	7	7	16	16	41	41	54	52
AL425	8	8	8	8	16	16	41	41	31	39
AC630	8	8	8	8	16	16	41	41	31	39

11 Avista has sought to mitigate these supply chain issues in many ways, some even prior to the pandemic. In 2019, throughout the course of typical business practice improvements and diversification (unrelated to, and prior to, COVID-19), Avista explored potentially ordering meters from a second meter manufacturer. After having investigated the process, including aligning meter specifications, badging, and system integrations—in addition to an on-site visit to the vendor’s manufacturing facility to ensure their QA/QC processes were acceptable to the Company—Avista decided that its current meter vendor was still the best possible option for the Company to procure its natural gas meters.³ As the supply issues became increasingly prevalent throughout the pandemic, Avista encountered many barriers when adapting to the new lead times. For example, the idea of borrowing or buying meters from other utilities, though considered, was found to be not feasible due in part to the unique badging system required for each utility’s meters. This system, pursuant to WAC 480-90-328, requires that Company-specific information be present on all utility meters, including the Company’s name and a unique series of serial numbers and/or letters. Further, Avista’s Encoder Receiver Transmitter (ERT) modules, which are attached to the meters by the meter manufacturer and used to transmit meter reading data to a hand-held receiver carried by a meter reader, are even more unique to Avista as they necessitate exclusive electronic security to be installed to ensure that the communication path used is applicable to only the Company’s system. Because this unique communication technology is specific to a particular vendor, Avista’s ERT modules are sole-sourced. The lead times for these ERT modules is currently roughly 24 weeks. Like the lead times for the meters themselves, the ERT timing has varied over the last two years and, at times, has been the primary issue (longest lead time) in the meter ordering process.

³ Comparatively, this second manufacturer has seen similar increases in lead time through the past two years and is currently experiencing lead times up to 70 weeks.

12 As an alternative to diaphragm meters, Avista has also been examining a different type of metering technology called ultrasonic metering. This technology is not as widespread as the existing diaphragm meters and is being used by only a handful of other utilities. The lead time is improved with these meters; however, this approach requires much further scrutiny before the Company can be confident that the new technology will guarantee safe and accurate measurement of natural gas services for its customers.

13 Table Nos. 2 and 3 below provide data for both 2022 and 2023, respectively, regarding the Company's existing meter supply count, as well as a forecast of the number of meters needed to support general natural gas customer growth for 2022-23, the number of meters that would be needed for the PMC Program to continue at its usual cadence,⁴ and the number of meters needed to support replacement of any FFs during the given year. For 2022, these numbers are inclusive of the following anticipated meter shipments:

- AC250: October (480) and December (6,320)
- AL425: September (144)
- AC630: June (252), October (36)
- AL1000: August (18), October (252), and December (150)

14 For 2023, the expected delivery schedule is as follows:

- AC250: February (3,620), May (960), and June (1,440)
- AL425: January (360), February (252), March (324)
- AC630: January (160), February (36), March (36)
- AL1000: February (18) and March (18)

All data provided in Table Nos. 2-5 is the best-known information as of June 9, 2022.

⁴ PMC Program forecasts include a 40% "overpull" assumption for Washington; a comparable assumption is included by the Company in all of its jurisdictions.

Table No. 2 – 2022 Projected Meter Supply Need (All Programs Included)

2022						
	Currently In Stock	Qty Needed Growth	Qty Needed PMC	Qty Needed FF	Expected to Deliver	Meter Totals
Meter Type						
AC250	1,416	1,847	1,622	3,138	6,800	1,609
AL425	413	143	207	294	144	-87
AC630	23	63	97	334	288	-183
AL1000	263	22	125	459	420	77

Table No. 3 – 2023 Projected Meter Supply Need (All Programs Included)

2023						
	Estimated Stock At Beginning of Year	Qty Needed Growth	Qty Needed PMC	Qty Needed FF	On Order	Meter Totals
Meter Type						
AC250	1,609	2,501	1,622	1,765	6,020	1,741
AL425	-87	206	207	248	936	188
AC630	-183	93	97	73	232	-214
AL1000	77	33	125	0	36	-45

For comparison purposes, Table Nos. 4 and 5 show the same information but assumes the temporary suspension of the PMC Program, and associated FF replacements, for 2022.

Table No. 4 – 2022 Projected Meter Supply Need (PMC and FF Excluded)

2022						
	Currently In Stock	Qty Needed Growth	Qty Needed PMC	Qty Needed FF	Expected to Deliver	Meter Totals
Meter Type						
AC250	1,416	1,847	0	0	6,800	6,369
AL425	413	143	0	0	144	414
AC630	23	63	0	0	288	248
AL1000	263	22	0	0	420	661

Table No. 5 – 2023 Projected Meter Supply Need (PMC and FF Excluded for 2022)

2023						
	Estimated Stock At Beginning of Year	Qty Needed Growth	Qty Needed PMC	Qty Needed FF	On Order	Meter Totals
Meter Type						
AC250	6,369	2,501	1,622	4,903	6,020	3,363
AL425	414	206	207	542	936	395
AC630	248	93	97	407	232	-117
AL1000	661	33	125	459	36	80

15 It is crucial to consider the above-referenced timeline for anticipated meter shipments when viewing Table Nos. 2 – 5, as the month in which these deliveries are expected (and, if such deliveries are delayed, as they have been frequently over the past two years) is paramount in considering whether the Company will incur a meter deficit or not in a given year. For example, until the anticipated October and December 2022 deliveries of AC250 meters is received, Avista will actually be experiencing a meter shortage of approximately 5,191 meters rather than the surplus of 1,609 meters illustrated in Table No. 2. Likewise, even with the temporary pause of the PMC Program and FF replacements for 2022, as shown in Table No. 4, receipt of these shipments is imperative to reach the 6,369 total reflected—without it, the Company faces a deficit of approximately 431 meters. Notably, Table No. 5 assumes resumption of the PMC Program in 2023, which, if all anticipated deliveries are received on schedule, will be when the Company aims to resume its Program. Avista’s exemption request contained within this Petition, which is proposed through December 31, 2023, is being made in an abundance of caution to accommodate the possibility that anticipated meter delivery dates will remain unreliable. If, at any time, the Company is able to supply enough natural gas meters to resume the Program with confidence that such supply can be consistently maintained prior to December 31, 2023, it will certainly do so.

16 In accordance with WAC 480-07-110(1), Avista believes its request to be in the public interest as pausing its PMC Program will allow the Company to bridge the supply issues stemming from the economic crises of 2020-2022, thereby providing security in the Company’s ability to maintain its commitment to providing service to any customers requesting natural gas within its Washington service territory, while also continuing to provide safe and reliable natural gas services to its existing customers. Further, pausing the PMC Program will have not have any negative effects on customers, as the Company will correct any potential underbilling or overbilling due to

