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Via Electronic Mail

Steven V. King
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. UG-143616 - Comments of Avista Utilities

Dear Mr. King,

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 UG-143616 – Investigation of Natural Gas Distribution Infrastructure Expansion.

On Monday, November 3, 2014, the Commission held a recessed open meeting and workshop to discuss the need for natural gas distribution infrastructure expansion, and investigate the options available to implement such expansion.

The Commission seeks written comments from interested persons on a number of topics identified below to better inform its work in this docket. The Company appreciates the opportunity to participate in this docket and offers the following responses to the topics identified by the Commission.

1. *Line Extension Tariffs.* Local distribution companies could file revised line extension tariffs to make line extensions more economically viable for new customers to obtain service. Revisions to line extension tariffs could consider different standards for certain underserved areas.

Response: Line extension tariffs provide customers who are interested in taking advantage of natural gas service with some relief from the costs necessary to make the fuel conversion. In the Company's experience, if there is natural gas available in the street adjacent to the customer's premise, and if the natural gas main is on the same side of the street as the premise, then the current line extension tariff generally allows the customer to connect without paying a contribution to the construction. If the natural gas main is on the other side of the street from the customer's premise, however, the added construction cost associated with boring or pavement cutting will likely require a customer contribution. In cases where the natural gas main has not yet been installed in the customer's neighborhood, then the customer will bear the additional cost of installing new main pipe. In addition to these construction costs, the customer also faces the substantial cost of installing new equipment (furnace, water heater, range, etc.) in their home or business. One can easily see how these out of pocket costs can be a significant challenge for a customer considering a conversion to natural gas service, particularly in cases requiring main pipe extensions.

Avista believes that changes in the methodologies used to calculate the utilities' line extension tariffs can be made under the Commission's current authority, that would increase the likelihood that natural gas mains will be more accessible, and that customers will be more inclined to connect to the system. These changes could be effectuated through individual company line extension tariffs.

During the Commission workshop held on November 3, discussion occurred among the parties about current utility line extension tariffs. Avista calculates the allowable distribution system investment based on expected customer revenue. This revenue not only includes the margin revenue associated with natural gas delivery, but

also natural gas supply and transportation costs, as well as other adder rates such as the demand side management tariff rider, low-income rate assistance, and natural gas decoupling. The level of allowance provided to customers for line extensions, therefore, fluctuates based on changes in these costs. Reductions in wholesale natural gas costs in recent years have reduced the level of allowable investment under the current line extension tariff methodology. Although some may question including all costs in the determination of the line extension calculation, there are reasonable arguments to support this approach. For example, now that commodity costs are relatively low compared to prior years, the customer has more of an economic incentive themselves to hook up to natural gas to achieve energy savings, and there is arguably less need for the Company to fund the line extension. On the other hand, when commodity prices are higher, there is less economic incentive for the customer to hook up, and it may make sense for the Company to fund more of the line extension costs. In the broader perspective, it is a much more efficient use of natural gas to use it directly in customers' homes and businesses than to use it to produce electricity through power plants, which is then used in customers' homes and businesses. Avista believes this is a good opportunity to revisit line extension policies so that we are making the appropriate long-term decisions related to the use of natural gas vs electricity.

There are a number of approaches that could be used to determine an appropriate level of Company investment related to natural gas hookups. One such methodology is a perpetual net present value method. As discussed in a report by the National Regulatory Research Institute¹:

The maximum level of "economical" investment equals the annual distribution margin divided by the required rate of return. The assumption is that the recovery period approaches infinity. If, for example, the average new customer contributes \$300 annually to the utility's distribution margin and the utility's required rate of return is 10 percent, the utility would consider spending \$3,000 per new customer to be economical.

¹ "Line Extensions for Natural Gas: Regulatory Considerations," National Regulatory Research Institute, February 2013. <http://www.nrri.org/documents/317330/aa3828ed-bbfa-4fac-b405-c6045dcf580c>, p. 20.

The application of this methodology would be relatively straight-forward. In Avista's recently concluded general rate case the Commission-approved decoupled distribution margin revenue per customer for residential Schedule 101 customers, including the basic charge revenue, was \$388 per year. The rate of return approved in the Docket², for AFUDC and other purposes was 7.32%, which adjusted for income taxes would be approximately 10.2%.³ The allowable line extension investment in this example would be $\$388 / 10.2\%$, which is equal to \$3,803. Under the Company's current revenue-based methodology, the line extension investment allowance would be approximately \$2,360.⁴ Therefore, this methodology would provide a higher line extension allowance than the current methodology. In the actual application of the methodology, the expected distribution margin from the specific customer, based on the appliances and equipment to be installed in the home or business, would be used to determine the line extension allowance.

The Commission's investigation also highlights the customer and societal benefits of natural gas service that go beyond the conventional cost-benefit calculation used to determine the economics of extending natural gas to un-served and under-served areas. As the Company stated in its prior comments, some of these benefits include:

- Electricity Savings - Reduced electric demand and consumption as customers use natural gas for space and water heat instead of electricity.
- Long-run Power Supply Impacts - The incremental resource in our region for base load electric generation is powered by natural gas. A Combined Cycle Combustion Turbine is roughly 50% efficient in its conversion of natural gas to electricity, compared with direct-use efficiencies approaching 90%. It is significantly more efficient to use natural gas directly at the end-use rather than

² Docket Nos. UE-140188 and UG-140189 (consolidated).

³ A 5.32% representative debt cost and a debt component of 52% results in a 2.77% weighted cost of debt. The tax benefit of the weighted debt cost at 35% is 0.97%. The 7.32% rate of return reduced by the tax benefit of interest (0.97%) equals 6.35%. The 6.35% grossed up by the revenue conversion factor of 0.62049 yields a pre-tax cost of capital of 10.23%

⁴ The calculation of the revenue-based allowance is based on customer average usage of 65 therms per month multiplied by the January 1, 2015 billing rates (\$9 basic charge + 65 therms * \$0.86998 = \$787 per year). That annual amount for a three-year period is \$2,360.

generate and transmit electricity to the end user for space and water heat and other uses.

- Environmental benefits - Reduction in greenhouse gas emissions would occur with the switch to natural gas from oil and wood, as well as a reduction in emissions from the end use of natural gas versus generating electricity with natural gas for the end-use.

Although the following items are not generally included in the economic analysis related to natural gas line extensions, they are factors that are likely considered by customers in their decision to adopt natural gas:

- Increased Customer Comfort - Natural gas equipment enhances lifestyle satisfaction in that it provides warm air at the heating registers, even cook top temperatures, faster hot water heat recovery, and one-half of the drying time for clothing, among other benefits.
- Convenience and Reliability - Natural gas is piped directly to the customer so it is available on demand. Customers do not have to worry about running out of fuel or arranging for deliveries. There is no waiting, no storage, and no mess.

The National Regulatory Research Institute stated that:⁵

Commissions and other governmental agencies should realize that line extensions may produce public benefits, justifying subsidies and other inducements to encourage fuel switching. Just as several commissions advocate subsidies for energy efficiency, they could require financial assistance to prospective customers who want to switch to natural gas. In fact, commissions may find that gas utilities' expending a fixed amount of dollars on fuel switching yields a higher societal return than from spending the same dollars on energy efficiency.

Avista believes the Commission's investigation provides the opportunity to re-evaluate the benefits that are appropriate to include in the determination of the overall economics of extending natural gas service. An increase in the line extension allowance,

⁵ "Line Extensions for Natural Gas: Regulatory Considerations," National Regulatory Research Institute, February 2013. <http://www.nrri.org/documents/317330/aa3828ed-bbfa-4fac-b405-c6045dcf580c>, p. 43.

if appropriate, would help mitigate the main extension and connection cost new customers face when considering a conversion to natural gas.

2. *Policy Statement.* The Commission could issue a policy statement clarifying its policy regarding application of prudence and “used and useful” standards for the recovery of costs for gas infrastructure in selected areas. The policy statement could address or include:
 - a. A description of underserved areas in which considerations in the policy statement would apply, perhaps including:
 - i. Whether the area is a non-attainment area;
 - ii. Whether any electric energy conserved will assist the state in meeting its target under EPA rules implementing section 111(d); and
 - iii. The demand for gas service, or the number of potential new customers (residential, commercial, and industrial).
 - b. A suggested process by which a local distribution company may identify the geographic boundaries of underserved areas.
 - c. A description of the criteria by which the Commission would review the prudence of capital additions in underserved areas and whether they are “used and useful.” The Commission issued a policy statement on renewable energy resources in Docket No. UE-100849 (issued January 3, 2011), addressing the application of the “used and useful” standard.

Response: In its response to item #1 on line extension tariffs, Avista explained potential modifications to line extension tariffs that would improve the economics of natural gas main extensions and hookups for new customers. The new tariff for determining the customer allowance would apply to all new customer connections and would provide a basis for determining the economics of any new natural gas main extension project. As such, we believe there would be no need to identify un-served or under-served areas since the economics of all potential projects would be determined in the same manner. And, we believe there would be no need to modify the Commission’s application of its standards of prudence and used and useful.

3. *Discounted Rates for Low Income Consumers.* RCW 80.28.068 authorizes the Commission to set discounted rates for low-income consumers of electric and natural gas companies. The companies and the Commission could review current low-income tariffs for the local distribution companies and, if appropriate, authorize further discounts for low income consumers. These rates then could serve as part of a strategy for recruiting customers to switch to gas from oil furnaces or woodstoves.

Response: Recruiting low income customers to switch to natural gas from other fuels has its challenges. For example, in the 2013/2014 heating season: customers renting their residences constituted 72% of the total; 63% of Low Income Rate Assistance Program (LIRAP) participants had household average incomes less than \$15,000; and approximately 24% of the grant recipients had annual household incomes less than \$8,000. The high rental rate and annual income levels are significant hurdles to the expansion of natural gas service among this customer group.

A collaborative regarding low-income issues will be conducted per Commission Order No. 05 in Docket Nos. UE-140188 and UG-140189. The Company will file an agreed-upon proposal for modifications *and additions* to its LIRAP by June 1, 2015. Avista proposes that any additional provisions for low income customers to increase their opportunity to connect to natural gas be addressed in the aforementioned collaborative, as well as in discussions with interested parties related to our low income energy efficiency programs.

4. *Advertising Rule Changes.* Current rules prohibit cost recovery of promotional advertising by local distribution companies (WAC 480-90-223). The Commission could consider revising this rule to permit cost recovery of such advertising when it is directed toward encouraging connection to gas in under and unserved areas.

Response: Avista believes that all its natural gas and electric customers, as well as society in general, benefit from having more natural gas customers connected to the Company's system. These benefits, which are described in the Company's response to item #1 above, accrue whether the new customer is already adjacent to existing natural gas main or is located in an area that is currently un-served. It is also the case that Avista does not benefit from the added throughput associated with new natural gas customers since its revenues through the current decoupling mechanism are adjusted to reflect revenues based on the number of customers rather than therm sales volumes. For these reasons, the Company believes that the costs of promotional advertising encouraging customers to convert to natural gas service should be recoverable in rates. Avista has suggested language changes to the applicable rule as provided in Attachment A.

5. *On-Bill Financing.* RCW 80.28.065 authorizes local distribution companies to offer on-bill financing for energy conservation measures. The Commission seeks comments on whether local distribution companies are interested in pursuing on-bill financing as an option for customers to finance line extensions over a longer period of time than current tariffs allow.

Response: Avista has a history of helping customers meet a variety of personal energy and convenience needs by supporting them through arranging financing for the costs associated with the purchase and installation of energy services, conservation investment and home and business HVAC equipment. Most recently, we have helped customers receive commercial loans for energy efficiency measures by buying down the interest rate and providing a loan loss reserve program. This effort, provided through a local lending institution, was paid for using the American Recovery and Reinvestment Act (ARRA) funds that were disbursed by the Washington Department of Commerce.

As our customers consider making an investment in their home for energy efficiency or HVAC equipment, they frequently ask if Avista has the option of providing them (or arranging for them) financing that would be part of their monthly bill. Customers often cite the ease and simplicity of on-bill financing as a reason for their interest. Avista currently lacks the capability to provide on-bill financing due to the limitations of its legacy customer information system. Though Avista will not have the immediate capability to provide on-bill financing when its new customer information system is launched in the first quarter of 2015, it does expect that capability to be enabled, possibly as early as 2016.

The Company is supportive of the Commission providing energy service companies with the authority to provide customers on-bill financing for a range of energy services, including the costs of converting to natural gas service. Avista views on-bill financing as a potentially important tool that could be used to help customers spread the costs of their contribution to main and line extensions, as well as the purchase and installation of end-use equipment, in a way that makes natural gas conversion more affordable. Having the flexibility to finance these connection and conversion costs over a

term that makes sense to the customer would also be of value. Avista believes the Commission currently has the authority to implement these changes.

6. *Infrastructure Fund.* To the extent that installation of new infrastructure would result in incremental tax revenues (such as public utility taxes), the incremental revenues could be used to secure bond financing for some of the infrastructure.

Response: The Company believes that the mix of other options for expanding natural gas service that are being discussed in this current round of comments provides ample opportunity for the Commission, within its own authority, to achieve this objective without the establishment of some form of infrastructure fund.

7. *Pilot Rules.* To the extent it may be necessary to develop different policies for different geographic locations, or to experiment with one or more methods or strategies discussed in this notice, it may be useful to adopt “pilot rules” under the Administrative Procedure Act, which authorizes such rules. RCW 34.05.310(2)(b); 34.05.313.

Response: Avista believes that, depending on the policies that might ultimately be adopted by the Commission to promote the expansion of natural gas service, it would be appropriate to allow local distribution companies to propose and implement pilot programs to test how best to achieve this objective. The Company believes the Commission currently has the authority to authorize utility pilot programs.

8. *Local Construction Costs and Impact Fees.* The Commission seeks data or specific examples from local distribution companies concerning the specific costs companies or their customers have experienced when constructing or expanding gas distribution infrastructure including impact fees and the costs of other local requirements.

Response: The cost of installing natural gas facilities in new developments (i.e. raw land being developed for housing or commercial stock) is far less than the cost associated with installing facilities in areas that have already been fully developed. In new developments, there are no paved streets to cut, no existing underground facilities, or sidewalks and landscaping to work around. In addition to the ease of construction, natural gas facilities can often be installed along with other underground facilities in a joint ditch.

When installing natural gas infrastructure in communities that are already fully developed, Avista has experienced a wide range in costs. This range in costs depends on many project variables such as the density of development in an area, the existence of other underground facilities, the need for traffic control, whether pavement has to be cut, the underlying soil conditions, the size of main pipe being installed, and the requirements of local jurisdictions for pavement cutting and restoration practices. Of these variables, a primary driver is whether the installation requires the cutting and restoration of pavement, particularly in well established streets such as arterials. In circumstances where pipe can be installed in uncapped soil, the unit cost of installation of main pipe can be as low as \$40 per foot. When the installation must be performed in paved areas, the unit costs rise substantially. This is particularly the case in recent years where Avista has experienced a broad trend among jurisdictions to establish more restrictive moratoria on pavement cutting in newer arterials and streets, and more costly requirements for the backfilling, patching and repaving of streets cut for pipe replacement. In addition to the added direct cost, these policies also add costs by impacting project scheduling and logistics. In circumstances where restrictive policies are in place, the unit installation cost for main pipe can exceed \$100 per foot.

This cost pressure has prompted the Company to undertake measures, where possible, to install facilities in ways that minimize pavement cutting and restoration. This work has focused on optimizing specialized construction techniques such as horizontal directional drilling, in combination with keyhole technology for utility spotting, and pipe split and pull. The Company also works with local authorities to explore street repair solutions that are less costly than current requirements, and also looks carefully for opportunities to coordinate the installation of pipe in streets where other utility construction is already planned. Using these approaches, Avista may reduce pavement restoration costs by as much as 20 to 25 percent of the overall installation cost.

9. *Concurrent Construction Projects.* The Commission seeks comments on how it might assess the economic feasibility of expanding natural gas service concurrently with other utility infrastructure or construction projects.

Response: Avista is always cognizant of opportunities to install underground facilities in conjunction with the construction projects of other utilities. This is particularly the case for the Company's Aldyl A pipe replacement program where the activities are conducted in fully developed neighborhoods and communities. With the exception of new developments, it is rare that another utility and Avista will have the need to install underground facilities in the same vicinity and in the same construction period. In Avista's experience, though it makes sense to always pursue opportunities to share construction costs with other utilities, the circumstances where it can be effectively accomplished are too infrequent to meaningfully reduce the overall cost of installing natural gas facilities.

10. *Other Strategies and Methods.* Interested parties should submit comments to the Commission concerning any other strategies or methods that would be useful to consider in taking action or developing rules to expand natural gas infrastructure to unserved and underserved areas in Washington.

Response: The Company has no additional comments at this time.

Avista appreciates the opportunity to participate in this docket and to provide these comments. If you have any questions regarding these comments, please contact me at 509-495-4975 or at linda.gervais@avistacorp.com.

Sincerely,
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