

Agenda Date: December 13, 2018
Item Number: A4

Docket: UG-180920
Company: Avista Corporation

Staff: Joanna Huang, Regulatory Analyst
Chris McGuire, Assistant Director – Energy Regulation

Recommendation

Issue an order in Docket UG-180920 (1) approving Avista’s petition as revised on December 5, 2018, and (2) requiring Avista to file a final report due by October 31, 2021, wherein it will evaluate the effectiveness of LEAP in attaining public policy objectives.

Staff further recommends that the commission consider whether the public policy purpose of LEAP is now to provide support to low income customers.

Background

On October 2, 2014, the commission opened Docket UG-143616 to investigate the need for expanding natural gas distribution infrastructure and to investigate options available to implement such expansion.¹ Over the next year the commission issued three notices for comment and held two workshops at recessed open meetings.^{2,3,4} Through those comments and workshops, there was a clear indication that companies may be able to address some of the issues raised in Docket UG-143616 through revisions to their line extension tariffs,⁵ and that the commission was interested in exploring that possibility.⁶

As an outgrowth of the policy discussions in Docket UG-143616, on December 16, 2015, Avista Corporation (Avista or company) filed a Petition for an Order authorizing approval of changes to the company’s Natural Gas Line Extension Tariff, in Docket UG-152394. Avista’s proposed Line Extension Allowance Program (LEAP) included two main components:

1. A modification to the methodology for calculating line extension allowances; and
2. A proposal to use excess line extension allowances⁷ to provide rebates to customers for high efficiency natural gas space heating and water heating equipment.⁸

¹ See Docket UG-143616, Notice of Recessed Open Meeting and Notice of Opportunity to File Written Comments, (October 6, 2014).

² *Id.*

³ Docket UG-143616, Notice of Opportunity to File Written Comments (November 25, 2014).

⁴ Docket UG-143616, Notice of Recessed Open Meeting and Workshop and Notice to File Written Comments (August 20, 2015).

⁵ See *i.d.* at 1-2.

⁶ Docket UG-143616, Notice of Recessed Open Meeting and Workshop and Notice to File Written Comments at 2 (August 20, 2015).

⁷ “Excess” line extension allowance refers to the amount of the allowance in excess of the cost of the line extension.

⁸ The proposal included accounting treatment for deferral of excess allowance rebates for later recovery.

On February 25, 2016, the commission approved Avista's modifications to its LEAP tariff schedule (Schedule 151), on a temporary basis, for a pilot period of three years.⁹ The commission also required Avista to file semi-annual reports showing the impact of the pilot.¹⁰

On November 9, 2018, in Docket UG-180920, as revised on December 5, 2018, Avista filed a Petition requesting to (1) make permanent the perpetual net present value (PNPV) method for calculating line extension allowances, and (2) extend the pilot allowing accounting treatment for the use of excess line extension allowances to fund rebates for appliances for another three years. With its petition, the company also provided a Report on the LEAP Pilot, the purpose of which is to present the company's evaluation of how well the LEAP Pilot addressed certain public policy goals discussed in the line extension investigation, Docket UG-143616.

Program Overview

Over the last three years, Avista has been allowed to provide rebates to single family, residential customers for natural gas space heating and water heating equipment in an amount up to the unused portion of the line extension allowance. The rationale for using the excess allowance in this manner is (1) the total ratepayer population should be indifferent to the company providing the full allowance to new customers, regardless of what the allowance is used for, and (2) providing rebates for end use appliances helps to make conversion to natural gas economical for a larger number of customers. Currently, as of August 31, 2018, the line extension allowance is \$4,678 while the average cost of a residential line extension is \$2,435. Therefore, on average, the excess allowance available to provide rebates to customers for natural gas space heating and water heating equipment is \$2,243.

From an accounting perspective, Avista defers the expenses associated with these rebates, holds those dollars in a regulatory asset account, and seeks recovery of deferred balance through general rate proceedings. As of August 31, 2018, the accumulated deferred amount is \$9.1 million, \$2.9 million of which was authorized for recovery in Avista's 2017 general rate case.

Avista's Evaluation of LEAP

As required in commission Order 01 of Docket UG-152394, Avista has filed five semi-annual reports showing the impact of the increased allowance and rebates.¹¹ With its petition, Avista also filed the final Report on the LEAP Pilot.¹² The company's report indicates that natural gas hook-ups have increased substantially over the last few years. Table 1, below, shows the historical Washington residential Schedule 101 hook-ups per year as well as the number of excess allowance rebates provided as part of LEAP.

⁹ *In the Matter of the Petition of Avista Corporation for an Order Authorizing Approval of Changes to the Company's Natural Gas Line Extension Tariff and Accounting Ratemaking Treatment*, Docket UG-152394, Order 01 at ¶15 (February 25, 2016).

¹⁰ *Id.* at ¶17.

¹¹ *Id.*

¹² *Petition of Avista Corporation for an Order Authorizing Approval of Changes to the Company's Natural Gas Line Extension Tariff and Associated Accounting and Ratemaking Treatment*, Docket UG-180920, Attachment A.

Table 1 – Excess Line Extension Allowance Rebates and Year-over-year Increases in Residential Natural Gas Hook-ups

Calendar Year	Cost of Gas	Residential hook-ups*	% Increase (compared to 2015)	Number of Excess Allowance Rebates	Total Cost of Rebates
2015	0.38497	2174			
2016	0.25031	3075	41.44%	531	\$ 1,444,044
2017	0.23860	4116	89.33%	1761	\$ 5,144,980
2018 – YTD	0.21817	2698	86.15%**	1005	\$ 2,549,506
			Total	3297	\$ 9,138,530

* Natural gas conversions represent roughly half of all natural gas hook-ups, with new developments and new construction representing the other half.

** Extrapolated to full year.

Avista’s Report on the LEAP pilot also provides commentary on the impact of the increase in natural gas conversions in terms of the promotion of certain public policy objectives. In terms of greenhouse gas emissions, Avista states that conversions to gas can reduce carbon emissions by 37 percent per participating customer. Avista also claims that LEAP has been effective in lowering the energy burden and increasing energy efficiency for low income customers.

Discussion

Change in Allowance Methodology

Avista has proposed to continue using, on a permanent basis, the Perpetual Net Present Value (PNPV) method¹³ for calculating residential line extension allowances. The commission has already approved the PNPV methodology for Cascade and PSE, and has previously stated that the methodology is appropriate for Avista.¹⁴ Staff continues to support this method as being both based on economic principles and easy to understand and administer. Staff supports Avista’s proposal to use the PNPV method on a permanent basis.

Excess Residential Allowance for Customer Equipment

Additional data collection and analysis of this program is warranted prior to determining whether it should be discontinued or allowed to continue permanently. Additionally, as described on October 26, 2018,¹⁵ Avista has decided to discontinue its Fuel Conversation Program, previously offered as part of its conservation efforts. It is reasonable to allow LEAP to continue for another

¹³ The PNPV method calculates the line extension allowance using the stream of all future incremental revenues associated with the addition of a new customer, discounted to present. The simplified calculation is the annual incremental revenue divided by the authorized rate of return.

¹⁴ *In the Matter of the Petition of Avista Corporation for an Order Authorizing Approval of Changes to the Company’s Natural Gas Line Extension Tariff and Accounting Ratemaking Treatment*, Docket UG-152394, Order 01 at ¶16.

¹⁵ Docket UE-170485/UG-170486, Compliance filing for Fuel Conversion Transition Plan, page 3.

three years to bridge the phase-out of the Fuel Conversion Program, and to collect additional data on the efficacy of the program.

Policy Purpose

It is important to understand the public policy purpose of LEAP for two reasons. First, LEAP as an appliance subsidy for new natural gas customers should be justified only to the extent that it relates to an identified public policy purpose. Second, evaluating LEAP's effectiveness at fulfilling certain public policy purposes requires identifying policy purposes first. Over the last few years, four public policy purposes have been identified as a potential rationale for promoting the expansion of natural gas distribution infrastructure:

Policy 1: Reducing greenhouse gas emissions.¹⁶

Policy 2: Addressing environmental concerns associated with emissions from oil furnaces and wood burning stoves.¹⁷

Policy 3: Promoting economic development by expanding service to areas not currently served by natural gas.¹⁸

Policy 4: Promoting energy efficiency.¹⁹

In Avista's current petition, the company seeks to link LEAP to a new public policy purpose: lowering the energy burden for low income customers and increasing their energy efficiency.²⁰ Although the company discusses other public policy benefits of LEAP, the company is pivoting to cast low income support as the primary public policy purpose of LEAP.

Staff's Concerns

The increase in residential natural gas hook-ups could indicate that connecting to natural gas service has become more popular since the inception of the LEAP pilot. However, Staff has two concerns regarding this assertion:

¹⁶ This has gone through something of an evolution over the last few years. Until relatively recently, conversion to natural gas was seen as a way to reduce greenhouse gas emissions in the energy sector, with onsite burning of natural gas being markedly more efficient and markedly less carbon intensive than taking electricity generated from the combustion of fossil fuels. That rationale has eroded somewhat as the phase-out of coal and the expanded build-out of renewable resources has begun to decarbonize the electricity sector. The trend of decarbonization appears likely to continue, calling into question whether conversions to natural gas will continue to be more efficient from a greenhouse gas emissions perspective.

¹⁷ Docket UG-143616, Notice of Opportunity to File Written Comments at 1 (November 25, 2014).

¹⁸ *Id.*

¹⁹ Docket UG-143616, Notice of Recessed Open Meeting and Workshop and Notice to File Written Comments at 1 (August 20, 2015).

²⁰ Petition of Avista Corporation for an Order Authorizing Approval of Changes to the Company's Natural Gas Line Extension Tariff and Associated Accounting and Ratemaking Treatment, Docket UG-180920, at ¶8.

1. **It is difficult to isolate the effect of the excess line extension allowances on increasing gas conversions.** While the company is correct that natural gas hook-ups have increased significantly since the inception of the LEAP, many other confounding factors were present over that same time period. First, as shown in Table 1, above, the cost of gas declined significantly over that time period, suggesting gas service was simply more economical for customers. Second, the excess line extension allowance program was implemented concurrently with the change to the PNPV method for calculating line extensions. This provided larger allowances and likely contributed to an increase in line extensions. Third, the company was operating an aggressive fuel conversion program through its conservation activities, generating additional conversions to gas. To say that LEAP is responsible for the increase in gas conversions may be an overstatement because other factors probably influence customer decisions to use natural gas. Stated differently, the incremental effectiveness of LEAP to promote the attainment of commission-stated policy goals is difficult to ascertain.
2. **The policy purpose of promoting expansion of natural gas infrastructure appears to be a moving target.** The case for greenhouse gas emissions reductions related to gas conversions continues to weaken, and Avista indicates there is no prospect of definitive data attributing the implementation of LEAP to a change in Avista's fuel mix.²¹ Energy efficiency continues to be supported through its own commission-authorized funding mechanism. Reductions in emissions from wood burning stoves and oil furnaces are not discussed in Avista's report, and where Avista discusses economic development it states that additional data collection is necessary.²² Avista now presents the primary public policy purpose as supporting low income customers.

From the analysis above, it is difficult to isolate the impact of LEAP on natural gas hook-ups, let alone the attainment of certain public policy goals. Further, Avista now proposes the commission accept a new public policy purpose of LEAP: supporting low income customers. Whether this program continues would seem to depend on the commission accepting low income support as the primary rationale for promoting gas infrastructure build-out. Moreover, the excess allowance program may be more expensive than is necessary to promote the stated public policy objectives. If this is truly a low income program, it seems unnecessary to provide excess allowance rebates to customers that do not qualify as low income.

In short, Staff is concerned that the program in its current form is more expensive than it should be and that its contribution to policy attainment is uncertain.

Conclusion

Staff supports permanent use of the PNPV method for calculating line extension allowances. However, Staff concludes that LEAP needs further review before the commission allows the program to continue indefinitely or orders the program be terminated. Therefore, Staff supports Avista's proposal for a three-year extension of the pilot. An extension of the pilot will allow for (1) additional data collection and analysis related to separating the effect of using the excess line

²¹ Avista LEAP report, Attachment A to the Petition, at 12.

²² *Id.* at 9.

extension allowance from other confounding factors, (2) a refinement of our understanding of the program's incremental contribution to meeting the commission's stated policy goals, and (3) a more thorough examination of how much the program should cost ratepayers. Additionally, given that Avista's Fuel Conversion Program is being discontinued, it is appropriate to allow LEAP to continue during the transition.

It would also be helpful for the commission to weigh in on the public policy purpose of promoting natural gas infrastructure development. With the originally discussed public policy purposes of gas conversions going out of focus (namely, greenhouse gas emissions reductions, the promotion of energy efficiency, the reduction of emissions from wood burning stoves and oil furnaces, and economic development) we are left with a proposal that low income support be used as the primary public policy rationale for this program and its associated subsidies.

The commission should consider the following questions before allowing LEAP to continue indefinitely:

1. What public policy purpose(s) is LEAP (and in particular, the use of excess line extension allowances to fund residential appliances) seeking to promote?
2. How well is LEAP working to promote that identified public policy purpose?
3. Does the promotion of that public policy purpose justify continued subsidization of appliances?

Recommendation

Approve Avista's petition as revised on December 5, 2018, and require Avista to file a final report due by October 31, 2021, wherein it will evaluate the effectiveness of LEAP in addressing certain public policy objectives.