

Avista Corp.

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Public Utility Commission, Oregon 201 High St. SE, Suite 100 Salem, OR 97301

Attention: Filing Center

RE: Updated Action Plan to Avista Utilities 2018 Natural Gas Integrated Resource Plan (IRP)

Filing Center:

Per the discussion this morning in the Commission's Public Meeting, Avista Utilities submits an Updated Action Plan to its 2018 Natural Gas IRP. Please direct any questions regarding the IRP to Tom Pardee at (509) 495-2159 or myself at (509)-495-4975.

Sincerely,

/s/Linda Gervais

Linda Gervais Senior Manager, Regulatory Policy Regulatory Affairs linda.gervais@avistacorp.com

Attachment

9: Action Plan

The purpose of an action plan is to position Avista to provide the best cost/risk resource portfolio and to support and improve IRP planning. The Action Plan identifies needed supply and demand side resources and highlights key analytical needs in the near term. It also highlights essential ongoing planning initiatives and natural gas industry trends Avista will monitor as a part of its planning processes.

2017-2018 Action Plan Review

- The price of natural gas has dropped significantly since the 2014 IRP. This is primarily due to the amount of economically extractable natural gas in shale formations, more efficient drilling techniques, and warmer than normal weather. Wells have been drilled, but left uncompleted due to the poor market economics. This is depressing natural gas prices and forcing many oil and natural gas companies into bankruptcy. Due to historically low prices Avista will research market opportunities including procuring a derivative based contract, 10-year forward strip, and natural gas reserves.
 - <u>Result:</u> After exploring the opportunity of some type of reserves ownership, it was determined the price as compared to risk of ownership was inappropriate to go forward with at this time. As an ongoing aspect of managing the business, Avista will continue to look for opportunities to help stabilize rates and/or reduce risk to our customers.
- Avista's 2018 IRP will contain a dynamic DSM program structure in its analytics. In prior IRP's, it was a deterministic method based on Expected Case assumptions. In the 2018 IRP, each portfolio will have the ability to select conservation to meet unserved customer demand. Avista will explore methods to enable a dynamic analytical process for the evaluation of conservation potential within individual portfolios.
 - Result: After attempting to get dynamic dsm into the Sendout model we determined an alternate method will be necessary. Some reasons for this are:
 - 1 The total dsm measures has a maximum of 999 measures. If we were to model our areas as is combined with 400 measures by area we would come up with a total need of 4400 measures.
 - 2 If we were able to group them by dollars or efficiency levels it takes away the desired approach of measure by measure.

- 3 We have every bit of data both ETO and AEG can provide and the model is not acting appropriately and cannot determine a stopping point for taking a single measure. This means it would take the maximum, if cheaper than gas, to fill the entire demand.
- 4 The output data from ETO and AEG is very different and we need to understand it better before modeling.
- Monitor actual demand for accelerated growth to address resource deficiencies arising from exposure to "flat demand" risk. This will include providing Commission Staff with IRP demand forecast-to-actual variance analysis on customer growth and use-percustomer at least bi-annually.
 - <u>Result:</u> actual demand was closely tracked and shared with Commissions in semi-annual or quarterly meetings and trended closely to the IRP forecast per customer. No new resources were necessary during this timeframe.
- In the 2018 IRP, include a section in the IRP that discusses the specific impacts of the new Clean Air Rule in Washington (WAC 173-441 and 173-442).
 - <u>Result:</u> Carbon Policy including the Clean Power Plan and Clean Air Rule were both reviewed and included in TAC 2 Meeting materials on 2/22/2018. An indicator of where Avista's carbon reduction requirements under the CAR was also included. Since the CAR was invalidated on 12/15/2017 in Thurston County Superior Court this analysis is intended to meet the action item in addition to showing the potential impacts of similar policies.
- In the 2018 IRP, provide more detail on Avista's natural gas hedging strategy, including information on upper and lower pricing points, transactions with counterparties, and how diversification of the portfolio is achieved.
 - Result: Avista's natural gas hedging strategy was discussed during the TAC 2 Meeting on 2/22/2018. The upper and lower pricing points in Avista's programmatic hedges is controlled by taking into consideration the volatility over the past year for the specific hedging period. This volatility is weighted toward the more recent volatility. The window length and quantity of windows is also a part of the equation. Avista transacts on ICE with counterparties meeting our credit rating criteria. The diversification of the portfolio is achieved through the following methods:
 - Components: The plan utilizes a mix of index, fixed price, and storage transactions.
 - **Transaction Dates:** Hedge windows are developed to distribute the transactions throughout the plan.

- Supply Basins: Plan to primarily utilize AECO, execute at lowest price basis at the time.
- Delivery Periods: Hedges are completed in annual and/or seasonal timeframes. Long-term hedges may be executed.

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- Carbon Policy including federal and state regulations specifically those surrounding the clean air rule and clean power plan.
 - <u>Result:</u> Carbon Policy including the Clean Power Plan and Clean Air Rule were both reviewed and included in TAC 2 Meeting materials on 2/22/2018. An indicator of where Avista's carbon reduction requirements under the CAR was also included. Since the CAR was invalidated on 12/15/2017 in Thurston County Superior Court this analysis is intended to meet the action item in addition to showing the potential impacts of similar policies.
- Weather analysis specific to Avista's service territories.
 - Result: A weather analysis was included and reviewed in TAC 2 meeting materials on 2/22/2018 and can be found in Chapter 2 Demand Forecasts.
- Stochastic Modeling and supply resources.
 - Result: This was shown in detail and with risk and cost in TAC 4 on 5/10/2018. Regional pipelines were discussed in TAC 2 meeting on 2/22/2018. Potential resources were 4 types of RNG, Plymouth LNG, additional Kingsgate to Spokane and an upsized compressor on GTN's Medford lateral. A list of these resources modeled can be found in Chapter 7 Alternate Scenarios Portfolios Stochastic Analysis along with the results.
- Updated DSM methodology including the integration of ETO.
 - Result: See chapter 3 Demand Side Resources and action item
- In the 2018 IRP, ensure that the entity performing the Conservation Potential Assessment (CPA) evaluates and includes the following information:
 - All conservation measures excluded from the CPA, including those excluded prior to technical potential determination;
 - Result: Very few measures were excluded from the current CPA prior to estimation of technical potential. Those explicitly excluded were highly custom commercial and industrial controls/process measures that were instead captured under a retrocommissioning or strategic energy management program.
 - Rationale for excluding any measure;

- Result: Measures that did not pass the economic screen were still counted within achievable technical potential, allowing Avista to review for inclusion in programs if portfolio-level cost-effectiveness allows.
- Description of Unit Energy Savings (UES) for each measure included in the CPA; specify how it was derived and the source of the data; and
 - Result: The measure list developed during the CPA includes descriptions of each measure included. AEG will provide this as an appendix to the final report. Source documentation for assumptions, including UES, lifetime, and costs (including NEIs) may be found in the "Measure Summary" spreadsheet delivered as an appendix to the final report. This will include the name of the source and version (if applicable)
- Explain the efforts to create a fully-balanced TRC cost effectiveness metric
 within the planning horizon. Additionally, while evaluating the effort to
 eventually revert back to the TRC, Avista should consult the DSM Advisory
 Group and discuss appropriate non-energy benefits to include in the CPA.
 - Result: TRC potential was estimated alongside UCT for each measure analyzed. In this study, we expanded the scope of non-energy/non-gas impacts to include the following:
 - 10% Conservation Credit in Washington
 - Quantified and monetized non-energy impacts (e.g. water, detergent, wood)
 - Projected cost of carbon in Washington
 - Heating calibration credit for secondary fuels (12% for space heating, 6% for secondary heating)
 - Electric benefits for applicable measures (e.g. cooling savings for smart thermostats, lighting and refrigeration savings for retrocommissioning)
- Staff believes public participation could be further enhanced through "bill stuffers, public flyers, local media, individual invitations, and other methods."
 - Result: Avista utilized it's Regional Business Managers in addition to digital communications and newsletters in all states in order to try and gain more public participation in addition to an eCommunity newsletter was distributed January 15, 2018.

- Avista forecast its number of customers using at least two different methods and to compare the accuracy of the different methods using actual data as a future task in its next IRP.
 - Result: Avista analyzed the data, but there was nothing material discovered the come up with a meaningful forecast alternative.

2019-2020 Action Plan

Avista's 2019-2020 Action Plan outlines activities for study, development and preparation for the 2020 IRP.

New Activities for the 2020 IRP

- 1. Avista's 2020 IRP will contain an individual measure level for dynamic DSM program structure in its analytics. In prior IRP's, it was a deterministic method based on based on Expected Case assumptions. In the 2020 IRP, each portfolio will have the ability to select conservation to meet unserved customer demand. Avista will explore methods to enable a dynamic analytical process for the evaluation of conservation potential within individual portfolios.
- 2. Work with Staff to get clarification on types of natural gas distribution system analyses for possible inclusion in the 2020 IRP.
- 3. Work with Staff to clarify types of distribution system costs for possible inclusion in our avoided cost calculation.
- 4. Revisit coldest on record planning standard and discuss with TAC for prudency.
- 5. Provide additional information on resource optimization benefits and analyze risk exposure.
- 6. DSM—Integration of ETO and AEG/CPA data. Discuss the integration of ETO and AEG/CPA data as well as past program(s) experience, knowledge of current and developing markets, and future codes and standards.
- 7. Carbon Costs consult Washington State Commission's Acknowledgement Letter Attachment in its 2017 Electric IRP (Docket UE-161036), where emissions price modeling is discussed, including the cost of risk of future greenhouse gas regulation, in addition to known regulations.
- 8. Avista will ensure Energy Trust (ETO) has sufficient funding to acquire therm savings of the amount identified and approved by the Energy Trust Board.
- Regarding high pressure distribution or city gate station capital work, Avista does
 not expect any supply side or distribution resource additions to be needed in our
 Oregon territory for the next four years, based on current projections. However,

should conditions warrant that capital work is needed on a high pressure distribution line or city gate station in order to deliver safe and reliable services to our customers, the Company is not precluded from doing such work. Examples of these necessary capital investments include the following:

- Natural gas infrastructure investment not included as discrete projects in IRP
 - Consistent with the preceding update, these could include system investment to respond to mandates, safety needs, and/or maintenance of system associated with reliability
 - Including, but not limited to Aldyl A replacement, capacity reinforcements, cathodic protection, isolated steel replacement, etc.
 - Anticipated PHMSA guidance or rules related to 49 CFR Part §192 that will likely requires additional capital to comply
 - Officials from both PHMSA and the AGA have indicated it is not prudent for operators to wait for the federal rules to become final before improving their systems to address these expected rules.
 - Construction of gas infrastructure associated with growth
 - Other special contract projects not known at the time the IRP was published
- Other non-IRP investments common to all jurisdictions that are ongoing, for example:
 - Enterprise technology projects & programs
 - Corporate facilities capital maintenance and improvements

An updated table 8.4 for those distribution projects in Oregon:

Location	Gate Station	Project to Remediate	Cost	Year
Klamath Falls, OR	Klamath Falls #2703	TBD	-	2023+
Sutherlin, OR	Sutherlin #2626	TBD	-	2023+

10. Avista will work with members of the OPUC to determine an alternative stochastic approach to Monte Carlo analysis prior to Avista's 2020 IRP and share any recommendations with the TAC members.

Ongoing Activities

- Continue to monitor supply resource trends including the availability and price of natural gas to the region, LNG exports, methanol plants, supply and market dynamics and pipeline and storage infrastructure availability.
- Monitor availability of resource options and assess new resource lead-time requirements relative to resource need to preserve flexibility.
- Meet regularly with Commission Staff to provide information on market activities and significant changes in assumptions and/or status of Avista activities related to the IRP or natural gas procurement practices.
- Appropriate management of existing resources including optimizing underutilized resources to help reduce costs to customers.