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VIA ELECTRONIC FILING

Public Utility Commission of Oregon
201 High Street SE Suite 100
Post Office Box 1088
Salem, Oregon 97308-1088

Attn: Filing Center

Re: **LC 64: NW Natural's 2016 Integrated Resource Plan Final Comments**

Northwest Natural Gas Company, dba NW Natural (NW Natural or Company), files herewith its Final Comments on NW Natural's 2016 Integrated Resource Plan.

Please contact me at (503) 226-4211, extension 5865, if you have questions.

Sincerely,

/s/ Gail Hammer

Gail Hammer
Rates and Regulatory Affairs

enclosure

**Before the Public Utility Commission of Oregon
LC 64**

In the Matter of
NW Natural's
2016 Integrated Resource Plan

NW Natural's Final Comments

Introduction

Northwest Natural Gas Company (NW Natural or Company) files these Final Comments in response to the Public Utility Commission of Oregon Staff's (Staff) Final Comments submitted in the subject docket. NW Natural is pleased that Staff is generally supportive of the 2016 IRP and looks forward to continuing to collaborate on working to modify our current action plan.

Staff Recommendation No. 1

With regard to NW Natural's peak day load forecast methodology, Staff comments:

*"NWN argues in support of its assumption in the IRP that the peak day in the planning horizon will not be a holiday and that it will be a day between Monday and Thursday. Staff believes that this assumption may overstate the Company's resource needs. Specifically, the Company is creating a hypothetical case that has never occurred in at least the last 30 years."*¹

Staff later includes in Final Recommendation No. 1:

*"Staff recommends that NWN use a weather scenario based upon the Company's actual highest heating requirement day in 30 years for its peak day analysis."*²

NW Natural continues to be concerned that Staff's approach would lead to an unacceptably high risk of NW Natural being unable to serve its load on a future peak day. NW Natural takes its duty to reliably serve customers seriously and makes plans to be able to serve its load, but is also careful to not overstate its gas needs so that it is over-resourced. For its 2016 IRP, NW Natural made several improvements to its peak day modeling which has greatly increased the precision and accuracy of the peak day

¹ Page 4 of Staff Final Comments

² Page 4 of Staff Final Comments

forecast.³ Nearly all of these methodological changes are not being questioned by Staff or other parties, though NW Natural and Staff do not see eye to eye on a single assumption related to how to apply the Company's peak day planning standard. NW Natural believes it is prudent to plan for peak weather (inclusive of the new factors of wind, precipitation, solar gain, and other) and also to account for the fact that peak weather can occur on any day. Staff believes it is prudent to plan for peak day weather under the assumption that it will again occur on Friday because peak weather happened to occur on Friday last time.

NW Natural reiterates that if the Company adopted the Staff recommendation, it would be *expected* that the Company could not serve all customers during a peak weather event if it fell on a Monday, Tuesday, Wednesday, or Thursday. Since weather is not correlated with day of the week, there is more than a 50% chance (4/7) that if peak weather is experienced, it will occur between Monday and Thursday. The Company believes it has an obligation to plan for peak day weather on any day of the week, and that it cannot count on an assumption that it would occur on a specific day of the week, per Staff's recommendation.

NW Natural respectfully reiterates its position that its peak day forecast is appropriate, and also refers back to its reply comments, where this issue was previously discussed in response to Staff's initial comments.⁴

NW Natural is of course open to discussing assumptions regarding the peak day load forecast as part of the 2018 IRP. However, due to the implications of changing the peak day load forecast, NW Natural requests that if Staff's recommendation is adopted it not be required as part of this IRP or subsequent uses of the load forecast before the next IRP.

Staff Recommendation No. 2

Staff states in its Final Comments⁵ that NW Natural "*...generally concurs with Staff's recommendation⁶ to explore the use of load center specific data for its customer forecasts.*" NW Natural wants to again provide the context of the Company's general concurrence with this recommendation from Staff; *i.e.*, that the Company will undertake

³ NW Natural 2016 Integrated Resource Plan, Chapter 2, pp. 2.35 – 2.44 and Appendix 2, pp. 2A.34 – 2A.56

⁴ See Section II of NW Natural's Reply Comments, pp. 1-2

⁵ Page 5 of Staff Final Comments.

⁶ Page 3 of Staff Comments.

such an exploration "... in the course of developing its next IRP..."⁷ NW Natural anticipates filing its next IRP in 2018.

NW Natural did explore forecasting components of customer change at the load center level in the course of developing its 2016 IRP. This exploration resulted in econometric models generally having much more limited explanatory power compared to state-level models. Given those results, the Company chose to use the state-level forecasts of customer components, and then allocate the state-level forecasts to individual load centers using load center-specific historical data.

Staff Recommendation No. 3

There were two distinct parts to Staff Recommendation Number 3.

First, Staff recommends Commission acknowledgement of NW Natural's Action Item proposing to *"Replace or repair, depending on relative cost-effectiveness, the large dehydrator at Mist's Miller Station. Replacement is currently estimated to cost between \$6 million and \$7 million based on estimates obtained from a third-party engineering consulting firm engaged by NWN."*⁸ Staff notes that Commission consideration regarding the prudence of any cost recovery potentially sought by the Company would only be considered in the context of a rate filing and understands Commission acknowledgement of an Action Item does not equate to preapproval of that Item for rate recovery.

NW Natural appreciates Staff's understanding of the importance of ensuring Mist Storage continues to be a valuable and least cost resource for customers.⁹ The Company recognizes Staff's point regarding the appropriate context in which the Commission will consider the prudence of expenditures related to this Action Item and understands Commission approval of an Action Item does not equate to preapproval of that Action Item.

The second part of Staff Recommendation Number 3 was a response to comments received by the Commission from Columbia Riverkeeper with questions and concerns regarding a potential Methanol Project Resource Sharing Agreement. Staff proposed the following:

⁷ Page 2 of NW Natural's Reply Comments.

⁸ Page 6 of Staff Final Comments.

⁹ Page 5 of Staff Final Comments.

“Staff also recommends that NWN update the IRP stakeholders regarding potential regional pipeline projects and associated cost analysis as information becomes available.”

NW Natural interprets this recommendation as meaning the updates would occur within the context of the normal IRP cycle, including IRP updates, and pertain to only those regional pipeline projects that could be potentially used to serve the Company's gas sales customers. The Company is supportive of this recommendation if correctly interpreted in this manner.

Staff Recommendation No. 4

Staff Recommendation Number 4 recommends that Staff and NW Natural discuss the Action Item regarding the Company's work to develop a pilot project to test methods of reducing upstream methane emissions.

NW Natural appreciates Staff's support of the Company's work to “invest resources to explore, identify and study possible ways to reduce its carbon liability.”¹⁰ The Company is concerned about climate change and is interested in doing its part to curb its effects. The Company believes it is in the long-term interests of our customers to find and implement methods to cost-effectively reduce overall greenhouse gas emissions. More specifically, regarding the work underway on upstream emissions, Staff has expressed support that there is “merit in NWN taking steps with ICF to investigate the technical potential and possible costs of going upstream to achieve methane leakage reduction.”¹¹ We interpret Staff's comments as indicating that exploring a pilot project designed to reduce emissions in the supply sector, while theoretically linked to emissions that are outside the Company's control, is promising and merits analysis and review by the Commission.

Staff's general support of the Company's effort to analyze and evaluate potential pilot project frameworks is meaningful as the work necessary to bring this pilot forward may be significant. We look forward to continuing to engage with Staff and other stakeholders.

Despite Staff's general support of the work that NW Natural is proposing to undertake, Staff has continued to express some concerns about including NW Natural's plans as an action item at this time. In light of these concerns, and with appreciation for the comments of support that Staff provided, NW Natural would like to remove this specific item from our list of Action Items. NW Natural will continue to pursue the development

¹⁰ Page 7 Staff Final Comments

¹¹ Page 6 Staff Final Comments

of a detailed pilot project, and bring that forward for review at an appropriate time in the future.

Staff Recommendation No. 5

NW Natural appreciates Staff's recommendation that the Commission acknowledge the Company's action items related to a targeted DSM pilot and tracking peak day savings from Energy Trust's energy efficiency work.

In its final comments Staff mentions that it understood the Company's use of the word "verify" to mean that a new goal and/or performance metric for the Energy Trust be created to measure and report on peak day savings. NW Natural notes that "verify" was removed from the language in its 2016 IRP. This wording appeared in the Company's draft IRP, but it was removed in the filed IRP in response to Staff's comments on the draft IRP.

Staff furthermore states that "it is important that signals to the Energy Trust regarding verification come from the Commission." NW Natural concurs and notes that even though the Company's action item does not include wording about verification the Company is not looking to impose its own standards on the Energy Trust without Commission direction. The Company has included an action item on the topic of tracking peak day savings from EE in the IRP for the specific purpose of receiving formal feedback from the Commission.

Staff Recommendation No. 6

Staff Recommendation Number 6 recommends that NWN work with Staff to revise the Company's Action Plan to include the revised savings goals.

NWN agrees to work with Staff and Energy Trust of Oregon to complete these revisions prior to the Commission public meeting in February 2017.

Staff Recommendation No. 7

Staff Recommendation Number 7 recommends Commission acknowledgement of NW Natural's Action Item proposing to "Proceed with the SE Eugene Reinforcement

project to be in service for the 2018/2019 heating season and at a preliminary estimated cost of \$4 million to \$6 million.”¹²

NW Natural appreciates Staff's finding the Company's overall distribution system planning to be reasonable and Staff's support regarding this Action Item.

Staff Recommendation No. 8

Staff recommended acknowledgement of NW Natural's Action Item proposing to “Plan to recall 30,000 Dth/day of Mist storage capacity from the interstate storage account effective May 2019 to serve the core customer needs, subject to a review based on an update of the annual load forecast in the summer of 2018.”

One of NW Natural's existing firm peak day resources is known as the “PGE Alternative Ratchet Agreement,” which is available only during the 2018-19 heating season. Subsequent to the filing of the IRP, PGE provided a notice to proceed with the North Mist storage expansion project. The PGE Alternative Ratchet Agreement will be void assuming the North Mist project is in service prior to the 2018-19 heating season. While this does not change the total amount of Mist recall required by NW Natural over the next two years, it will affect the timing of Mist recall. NW Natural anticipates recalling 15,000 Dth/day of Mist storage capacity effective May 2018 and recalling 15,000 Dth/day effective May 2019. Accordingly, NW Natural proposes the following revised Action Item:

Plan to recall 15,000 Dth/day of Mist storage capacity from the interstate storage account effective May 2018 to serve core customer needs, subject to a review based on an update of the annual load forecast in the summer of 2017. Plan to recall 15,000 Dth/day of Mist storage capacity from the interstate storage account effective May 2019 to serve core customer needs, subject to a review based on an update of the annual load forecast in the summer of 2018.

Staff Recommendation No. 9

NW Natural appreciates Staff's engagement on its stochastic risk analysis and will use Staff's recommendation to improve upon the risk analysis chapter in the next IRP.

Including Carbon Prices in Avoided Costs

While this is not directly tied to any specific recommendation, NW Natural has a

¹² Page 10 of Staff Final Comments.

concern about the Staff characterization of its avoided costs (AC) in its IRP and is seeking clarification for how to proceed on an important issue regarding what should be included in AC. The Company would again like to thank Staff for its engagement on its avoided cost methodology. However, NW Natural is concerned about Staff reiterating its concern from its opening comments that it believes NW Natural is setting precedent by including a carbon price in its AC and may be double-counting carbon compliance costs.

NW Natural's position is that by including its expected costs of carbon compliance forecast in its avoided costs it is:

1. Appropriately including expected environmental compliance costs that would be avoided through energy savings in its AC
2. Not setting precedent among utilities in Oregon
3. Following the Commission's IRP guidelines and orders that require inclusion of expected environmental compliance costs in resource planning analysis and require that supply-and demand-side resources be evaluated on a comparable and consistent basis
4. Is not double-counting its carbon costs in its avoided costs or elsewhere in its IRP

NW Natural believes that it follows that expected environmental compliance costs, like carbon policy, should be included in avoided costs. This is because as energy is saved, there are emissions savings that come with it. NW Natural's carbon price is a forecast of expected state greenhouse gas compliance costs. Consequently, the expected compliance costs associated with greenhouse gas emissions would be avoided through energy savings.

Additionally, NW Natural does not feel it is setting precedent by including its carbon price forecast in its avoided costs forecast in its IRP. NW Natural has confirmed, for example, that both Avista and Portland General Electric include their base case carbon price (expected cost of carbon compliance) in both supply and demand resource decision making in their current IRPs. Therefore, like NW Natural, an explicit carbon price would be included in their avoided costs upon IRP acknowledgment.

The Company notes that OPUC Order No. 94-590 states "avoided cost calculations should be based on the marginal costs of a fully-integrated resource stack, which includes both supply- and demand-side resources" and IRP guideline 1(a) that "all resources must be evaluated on a consistent and comparable basis" and "consistent assumptions and methods should be used for evaluation of all resources." Therefore, if NW Natural includes a carbon price in its supply-side resource decisions it is the Company's interpretation it must include the same carbon price in its demand-side resources decisions (i.e. include it in its avoided costs) to comply with Commission

guidelines.

Additionally, Staff's comments appear to suggest the Company is double-counting carbon costs, which is not the case. NW Natural has pointed out that price forecasts for natural gas already generally incorporate many existing and known carbon policies from various local, state, and federal jurisdictions (like state RPSs across the country and the Clean Power Plan). However, such third-party forecasts typically omit expected regulatory costs specific to a given jurisdiction or utility. Thus, the Company (like other utilities) must consider expected compliance costs that are not embedded in underlying price forecasts. This is true generally of natural gas price forecasts and does not mean the Company has included its expected incremental costs of carbon compliance in the state of Oregon in its natural gas price forecast twice. Rather, the Company is considering its own expected Oregon specific compliance costs alongside those already incorporated into the underlying natural gas price forecast.

Again, NW Natural thanks Staff for its engagement on the issue of avoided costs and looks forward to working with Staff to determine what should and should not be included in avoided costs going forward.

Conclusion

NW Natural's 2016 IRP complies with the guidelines established for IRPs and the Company requests the Commission's acknowledgement of its Plan as filed, subject to the modifications and clarifications identified in these comments.