Oregon Citizens' Utility Board

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Public Utility Commission
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RE: LC 79 – NW Natural 2022 Integrated Resource Plan – CUB comments on Supplemental Questions

Pursuant to Administrative Law Judge (ALJ) Spruce's February 13, 2023 memorandum, the Oregon Citizens' Utility Board (CUB) submits these supplemental written comments to the questions posed in the ALJ's memo.

1. What should be the objective, or what should be the multiple distinct objectives, for modeling electrification of end uses in NW Natural's future IRPs?

CUB believes modeling electrification end uses in NW Natural's future IRPs may serve multiple distinct objectives.

The primary purpose of the IRP process remains the creation of a least cost, least risk plan to serve the most accurate load forecast. It should include forecasts of energy efficiency, capacity requirements and distribution upgrades or expansions. With the new requirements from the Climate Protection Program, it is important that the IRP demonstrate a reasonable compliance pathway. It is imperative that IRPs seek to establish the most accurate load forecast possible given the current planning environment.

Electrification of various end uses must be modeled in gas utility IRPs. This is important for a variety of reasons, not the least of which is that certain levels of electrification will occur regardless of policy assumptions used by gas utilities in their IRP processes. For example, the City of Eugene has enacted a ban on natural gas infrastructure in certain new residential dwellings and the federal government is providing tax credits and rebates on highly efficient electric home upgrades. Certain levels of electrification will occur completely independent of efforts and planning assumptions used by the gas utilities. To the extent that this electrification can be predicted and modeled, it should be included in the IRP process.

Ignoring electrification in the forecast is the same as forecasting zero electrification, and such a forecast would require that the utility demonstrate that zero electrification is a reasonable assumption.

There is also uncertainty in relationship to electrification. While CUB believes that current climate policies "bake in" a certain level of electrification, policies could be adopted that accelerate electrification. It does make sense for gas utilities to include a baseline that includes the electrification that is currently expected, but to also include additional forecasts of electrification that could reflect additional public policies.

In summary, CUB believes modeling electrification end uses in NW Natural's future IRPs should identify the least cost, least risk portfolio with accurate load forecasts given current planning environment and market trends. The modeling should use the baseline of electrification currently expected and also model forecasts of electrification that reflect public policy trends (federal direction, national trends), including but not limited to:

- **energy efficiency forecasts;**
- **capacity requirements;**
- **distribution upgrades;**
- **distribution expansions; and**
- **the impact of federal tax credits and rebates on households and communities.**

2. Regarding Staff's proposal to develop a proxy cost for electrification:

    a. How might the use of a proxy electrification cost in this IRP improve the ability to evaluate NW Natural's current or future IRPs?

While there is a level of electrification that will happen regardless of actions taken by the utility, there is also additional electrification that could be chosen as part of a preferred portfolio. For example, targeted electrification as a non-pipes solution, or electrification as a CPP compliance strategy. If electrification is seen as a resource that could be chosen for some purposes in the IRP, then there needs to be a forecast of the cost of electrification.

    b. How accurate should a proxy electrification cost be to provide actionable or useful information in an IRP?

Reasonably accurate. For example, if we are comparing electrification as a compliance strategy that we are comparing against the cost of RNG, then we need reasonably accurate forecasts of costs of electrification and RNG.

    c. How might electrification cost estimates be made more accurate and informative now and in future IRPs?

We should look to outside experts to provide good forecasts of electrification costs.

    d. What specific elements of the cost of electrification need to be considered and assumed in such a proxy cost assessment?

No comment at this time.

3. Regarding electrification, what is NW Natural's responsibility to model electrification, as well as the company's capability to model electrification in future IRPs?

In the IRP process, NW Natural's responsibility is to provide an accurate load forecast, or a series of load forecasts, that represent likely potential futures. As indicated earlier, some level of electrification will occur regardless of actions taken by NW Natural. NW Natural's forecasts therefore must accommodate forecasts of this on-system electrification. Since electrification affects the Company's future load/resource balance, they have a responsibility to model it.

It is important to note that NW Natural has a conflict when it comes to modeling electrification. The Company has obvious throughput and capital incentives to keep load on their system. While it is important that the IRP contain reasonably accurate forecasts of electrification, such forecast could be obtained by an independent, unbiased, third party.

4. Should NW Natural's models be limited solely to its costs as a utility or should they incorporate household costs of electrification to some extent?

Generally, an IRP shows the cost to serve load, but does not show the household costs to obtain service. For example, CUB's understanding is that gas utility IRP's routinely assume that when someone's gas furnace breaks, the customer will replace it with a gas furnace. But it does not include the cost of that furnace as a household cost of being served by gas.

While the household cost of electrification could impact the level of electrification, CUB is not sure that the gas utility is in a good place to model the household cost of winter capacity costs associated with electric space heating.

To the degree that the household cost is considered an important element, CUB would advocate using an independent third-party to model those costs.

5. What actions by the Commission, if any, are necessary or helpful to enable appropriate modeling to be done now and in future IRPs?

Current and future IRPs can benefit from clear expectations established by the Commission to govern the information required, forecasts to be made, and outcomes to be predicted. CUB commends Commission Staff for its guidance laid forth in the recent Natural Gas Fact Finding final report, as well as the work conducted to establish a framework for assessing proposed distribution system network investments. A framework to guide gas utility modeling would also be helpful.

To provide examples, CUB believes such a framework should provide parameters for where certain information should come from—should it come from independent third parties or the utility? The framework should clearly identify information needed to create accurate forecasts. CUB believes parties to this and future natural gas planning proceedings can benefit from a third-party providing baseline information to help level set, similar to how E3 provided helpful information in the UM 2011 capacity investigation. This could help

establish, among other issues, a standard timeframe to consider the impacts of various electrification pathways.

6. How should the significant uncertainty about many future conditions, such as load estimates or zero carbon fuel cost and supply availability estimates, be addressed or weighed in the development of the near-term action plan? Is the current guidance for least cost/least risk planning sufficient?

To the extent that uncertainty exists around future conditions—especially in regards to load forecasting or the future carbon regulatory environment—CUB believes that gas utilities should refrain from making investments that are not absolutely essential to maintaining a reliable and safe natural gas system. In other words, low risk and low regrets actions must be prioritized in the development of a near-term action plan. Uncertainty represents a substantial risk that must be assessed in the least cost, least risk framework used in IRP planning process.

As indicated in CUB's response to question 5, the current guidance for least cost, least risk planning may be insufficient. With the advent of the Climate Protection Plan and other carbon regulatory structures, the need for gas utilities to demonstrate a meaningful plan to comply that extends beyond the near-term action plan is paramount. A framework to guide utility forecasting would be incredibly helpful, as would retaining independent, third-party expertise to help establish that framework.

Respectfully submitted,

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