## **WUTC Data Request 64**

Following up on Staff Data Request 55:

- (a) Please explain the scenario risks:
  - 1. Are these just financial risks?
  - 2. What is included in these risks?
- (b) Subpart d states, "The term 'least-risk' refers to a combination of the calculated financial risk adjustment related to the Monte Carlo simulation, and historically in some instances, the use of judgement about the practicality of a portfolio as informed by scenario risks. In cases where a higher-cost portfolio has been selected as the preferred portfolio, the cost difference has been small which is explained in the relevant IRP portfolio analysis in the IRP."
  - 1. What does the Company mean by "judgement as informed by scenario risks?"
  - 2. Would these risks from the scenarios already be included into the preferred portfolio?
- (c) Subpart g states, "In work papers supporting the 2023 IRP, the measurement of risk is included in all MT reports on tab "Costs by Sample." The risk-adjustment PVRR is added to the non-risk-adjusted PVRR to calculate a final risk-adjusted PVRR. If the non-risk-adjusted portfolio PVRR is sufficiently low, it may overcome a higher risk-adjustments when compared to other portfolios on a final risk-adjusted basis."
  - 1. So the risk-adjusted PVRR is added to the non-risk adjusted PVRR and this gives you the final total risk-adjusted PVRR. Please show the formula for this calculation.
  - 2. Provide the workpaper file and where to see this formula for this calculation within that file. If the file has been previously provided, please provide the exact file name and how to navigate to the formula in that workpaper.
  - 3. Does this mean that the Company calculates its PVRR for base (non-risk-adjusted) then calculates the PVRR for BASE w/Risk, then those add together?
  - 4. If so, does the Company see this as a double count of PVRR?

## **Response to WUTC Data Request 64**

(a) Scenario risks refer to the work PacifiCorp performs to capture the wide range of future possibilities in resource selection and acquisition. PacifiCorp studies a wide range of variant scenarios in the integrated resource plan (IRP), and tests which variants have the best overall outcomes. Part of evaluating risk is determining which variants have the most positive and negative overall impact on the portfolio (does

project X make the portfolio significantly more resilient or cost effective, and what is the risk related to the successful implementation of that project). Generally, risk is quantified via economics as portfolios are measured based on a differential of their present value of revenue requirements differential (PVRR(d)). These economic risks can contain factors like delays in a project (delay of Boardman to Hemingway (B2H) transmission line) or a project not coming to fruition (No Bridger carbon capture, utilization and storage (CCUS)) as examples.

- (b) To best answer this question, consider an example. Should a model run suggest the least cost scenario is to replace all coal plants with nuclear plants by 2030, PacifiCorp would likely reject that scenario as plausible, using "judgement about the practicality of a portfolio". In this example, it is highly unlikely that permitting for approximately 3 gigawatts (GW) of nuclear plants, and permission to decommission approximately 3 GW of coal plants could be achieved by 2030. It is these types of outcomes that would require PacifiCorp to exercise judgement related to various scenarios. Most outcomes within the model do not venture into this range of implausibility.
- (c) Please refer to the Company's responses to 1. through 4. below:
  - 1. No. The risk adjustment for the 2021 IRP two-year progress report is calculated based on medium term (MT) model stochastic outcomes. The risk adjustment is calculated as 5 percent of the 95<sup>th</sup> percentile upper tail present value of revenue requirements (PVRR) outcome of the stochastic results. This risk adjustment is then added to the short-term (ST) PVRR result to provide a risk-adjusted final PVRR. The formula is: ST PVRR + MT Risk Adjustment = Risk-Adjusted PVRR.
  - 2. The MT Risk Adjustment is provided in all MT Cost Summary Reports, which were filed publicly in docket UE-200420. All MT files using the following beginning naming convention: 200420-PAC-CONF-MT Cost Summary.... Once an MT Cost Summary is accessed, the risk adjustment calculation provided in cell F8 of tab "Costs by Sample".
  - 3. No. As referenced in the Company's response to subpart (c)2. above, cell F8 is added to the PVRR of the ST to generate a final, risk-adjusted PVRR.
  - 4. No. The adjustment is a measure of relative risk among portfolios and this adjustment is only added once to each portfolio's PVRR outcome

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