Cross Exhibit OCS No. 4

Preliminary Selection

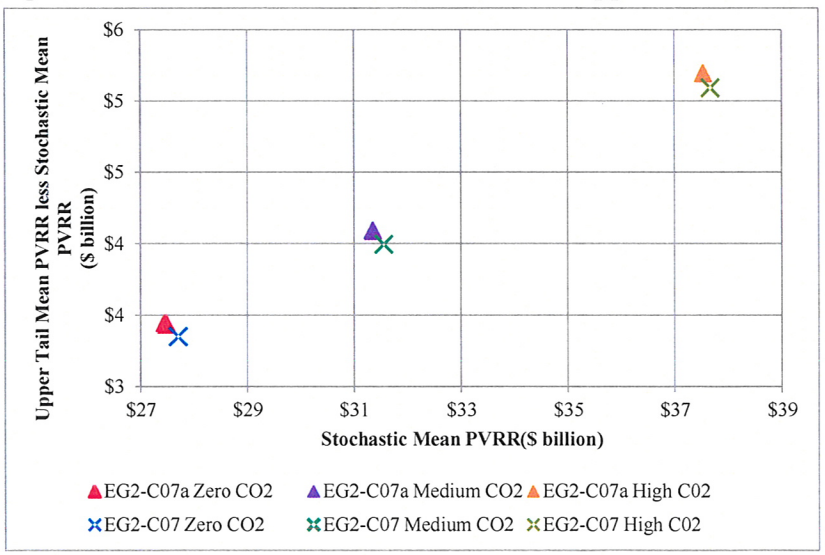
With consideration of the concerns around deliverability of Class 2 DSM resources in portfolios developed under case C15, portfolio C07 under Energy Gateway Scenario 2 ranks highest among the remaining portfolios on a risk-adjusted PVRR basis, and was selected as the preliminary preferred portfolio for the 2013 IRP. Selection of the portfolio developed under case C07 under Energy Gateway Scenario 2 is further supported by preliminary analysis using the SBT, showing net benefits with the addition of the Windstar-Populus project. These benefits would improve in the event the policy and market drivers affecting the addition of cost effective new renewables improve. The current SBT analysis of the Windstar-Populus project would further improve with prospective future additions of other Energy Gateway segments, which would increase the incremental capacity on the new line without any incremental cost.

Final Selection

Incremental wind resources included in the preliminary preferred portfolio prior to 2024 are included solely to meet the RPS compliance requirement in the state of Washington. However, there are potentially lower cost alternatives to meeting the Washington RPS requirement through the use of unbundled renewable energy credits. For this IRP, PacifiCorp performed an analysis that evaluated the use of unbundled renewable energy credits in meeting Washington RPS compliance requirements.

This alternative Washington RPS compliance strategy was performed by first developing an alternative to the EG2-C07 portfolio (EG2-C07a) using the System Optimizer model that excludes 208 MW of wind resources added to the system prior to 2024 that are used entirely for Washington RPS compliance.[77] In developing this portfolio, the System Optimizer model replaced the Washington situs assigned wind generation with alternative resources. The EG2-C07a portfolio was then analyzed in the PaR model under the same three CO_2 price assumptions used in the portfolio screening process described above. Figure 8.26 shows a scatter plot comparing the EG2-C07a portfolio to the EG2-C07 portfolio among the three different CO_2 price assumptions. As shown in the figure, under each CO_2 price scenario, EG2-C07a portfolio costs are lower and the upper tail risk metric is slightly higher.

Figure 8.26 – Stochastic Mean PVRR versus Upper-tail Risk with Zero CO_2 Prices



[77] The 208 MW of wind that was removed spans the period 2016 through 2023.

Using the PaR simulation results, the Company calculated the difference in the stochastic mean PVRR and the difference in the risk-adjusted PVRR per megawatt-hour (MWh) of wind generation removed from the EG2-C07 portfolio. Table 8.6 shows the change in the stochastic mean PVRR between the two portfolios, the change in the risk-adjusted net PVRR between the two portfolios, and the associated first year real levelized change in system costs per megawatt-hour of wind removed. Results are provided for each CO_2 price scenario.

Table 8.6 – Impact of Washington Situs Assigned Wind Generation Resources

	Stochastic Mean PVRR		Risk-Adjusted PVRR	
	Reduction in System PVRR with Removal of Wind ($m)	Real Levelized Reduction System PVRR per MWh of Wind Removed ($/MWh)	Reduction in System PVRR with Removal of Wind ($m)	Real Levelized Reduction System PVRR per MWh of Wind Removed ($/MWh)
Zero CO_2	243	61	232	59
Medium CO_2	200	51	189	48
High CO_2	132	33	116	29

The stochastic mean results above demonstrate that use of unbundled renewable energy credits (REC) at prices at or below the range of $33/MWh to $61/MWh, depending upon the CO_2 price scenario, is a lower cost compliance alternative to adding wind resources to the system as a means to achieve compliance with Washington RPS requirements. When accounting for risk, using the risk-adjusted PVRR metric, the range in unbundled REC prices required to achieve a lower cost compliance alternative to meeting Washington RPS requirements is slightly lower than the stochastic mean results, but still significantly higher than currently observed unbundled REC prices. The results above also suggest that REC prices would need to be in the range of $29/MWh to $61/MWh, depending upon CO_2 price assumptions and risk profile, for wind resources to be cost-effective given current policy and market conditions. With current unbundled REC prices trading at approximately $1/MWh, the Company has selected portfolio EG2-C07a as the 2013 IRP preferred portfolio. Figure 8.27 compares the change in nominal revenue requirement between the EG2-C07a and EG2-C07 portfolios. The spike observed in 2028 is driven by the acceleration of Class 1 DSM resources by one year in the case where wind is removed from the EG2-C07 portfolio.