

Portfolio sensitivities for consideration: electric

	Sensitivities	Alternatives	Scenario
A	Colstrip retirement	<i>Baseline – Allow for economic retirement of all units</i> 1. Retire units 1 and 2 at the end of 2019 2. Retire units 3 and 4 at the end of 2025 3. Retire units 1 through 4 at the end of 2019	Base + CO ₂ Fee Base + No CO ₂ Price
B	Clean Energy Standard	<i>Baseline</i> 4. Net zero a. Adequate carbon free resources to fully cover PSE load at meter (sales) under normal hydro conditions by 2035 b. Thermal resources available for reliability c. Market reliance unaffected 5. No fossil fuel plants a. Must have non-emitting resources to meet all reliability needs by 2035 b. PSE thermal plants fully retired c. Eliminate market reliance since region would no longer be surplus	Base + No CO ₂ (subject to change pending election) Examine direct impact of policy; if I-1631, passes, will use Base + CO ₂ Fee Price
D	Stakeholder-requested alternative resource costs	<i>Baseline – PSE cost estimate for generic supply-side resources as provided by HDR</i> 6. Lower renewable resource costs than HDR report 7. New CCCT plants have 20-year life	Base + CO ₂ Fee
E	Demand-side resources	<i>Baseline</i> 8. Alternative residential discount rate a. Use Northwest Power and Conservation Council's residential cost of money from the Seventh Power Plan 9. Value of conservation – cost and carbon savings from cost effective conservation 10. Extended DSR potential – assume future DSR measures will extend conservation benefits following the 10-year ramp	Base + CO ₂ Fee
F	Social cost of carbon planning adder	<i>Baseline</i> 11. Take least cost portfolio from the Base + Social CO ₂ and then dispatch in the Base + No CO ₂ scenario	Base + No CO ₂ Price
G	Carbon abatement curve	<i>Baseline</i> 12. Examine the cost of reducing CO ₂ emissions	Base + CO ₂ Fee
H	Declining market reliance	<i>Baseline</i> 13. Reduction in reliance on the short-term market to meet peak capacity	Base + CO ₂ Fee

Portfolio sensitivities for consideration: combined electric and natural gas

	Sensitivities	Alternatives	Scenario
A	CO ₂ emission reduction	<i>Baseline</i> 14. Portfolio emissions must be 50 percent lower than 2016 levels by 2040 <ul style="list-style-type: none"> a. Linear glide path b. Glide path that hits 25 percent by 2025 15. Portfolio emissions must be 80 percent below 2005 levels by 2035 <ul style="list-style-type: none"> c. Linear glide path d. Glide path that hits 25 percent by 2025 	Base + CO ₂ Fee

Portfolio sensitivities for consideration: natural gas

	Sensitivities	Alternatives	Scenario
B	Liquefied Natural Gas (LNG)	<i>Baseline</i> 1. Examine potential effects if the Tacoma LNG facility does not go into service.	Base + CO ₂ Fee
C	Demand-side resources	<i>Baseline</i> 2. Alternative residential discount rate a. Use Northwest Power and Conservation Council's residential cost of money from the Seventh Power Plan 3. Value of conservation – cost and carbon savings from cost effective conservation 4. Extended DSR potential – assume future DSR measures will extend conservation benefits following the 10-year ramp	Base + CO ₂ Fee