1.11 HOW DO THE IMPACTS OF THE ALTERNATIVES COMPARE?

The following tables compare of the degree of impacts that can be expected from each of the alternatives on each of the elements in the environment that was evaluated in the Phase 1 Draft EIS. Table 1-2 compares construction impacts. Table 1-3 compares operational impacts.



Table 1-2. Construction Impacts Comparison

	No Action Alternative	Alternative 1: New Substation and 230 kV Transmission Lines			
Element of the Environment	PSE would continue to manage its system as they do at present.	Option A: New Overhead Transmission Lines	Option B: Existing Seattle City Light 230 kV Transmission Corridor	Option C: Underground Transmission Lines	Option D: Underwater Transmission Lines
Earth	Negligible	Minor	Minor	Minor	Minor
Green House Gas Emissions	Negligible	Minor to Significant	Minor	Minor	Minor
Water	Negligible to Minor	Minor to Moderate	Minor to Moderate	Minor to Moderate	Minor to Moderate
Plants and Animals	Minor	Minor to Significant	Minor to Significant	Minor to Significant	Minor to Significant
Energy and Natural Resources	Negligible	Negligible	Negligible	Negligible to Minor	Negligible
Environmental Health	Negligible	Minor	Minor	Minor to Moderate	Minor
Noise	Negligible	Minor to Moderate	Minor to Moderate	Minor to Moderate	Minor to Moderate
Land Use and Housing	Negligible	Negligible	Negligible	Negligible	Negligible
Views and Visual Resources	Negligible	Minor to Moderate	Minor to Moderate	Minor to Moderate	Minor to Moderate
Recreation	Negligible	Minor to Moderate	Minor to Moderate	Moderate	Minor
Historic and Cultural Resources	Minor to Moderate	Minor to Significant	Minor to Significant	Minor to Significant	Minor to Significant
Transportation	Negligible	Minor to Moderate	Minor to Moderate	Minor to Moderate	Minor to Moderate
Public Services	Negligible	Minor	Minor	Minor to Moderate	Minor
Utilities	Negligible	Minor to Moderate	Moderate to Significant	Minor to Moderate	Minor

	Negligible	Impacts, if any, would be inconsequential
	Minor	Noticeable but infrequent and temporary (such as a noise or emission), or limited in extent (such as a small change in appearance); typically not disruptive or destructive
	Moderate	Adverse but limited in scope or effect; within an average range (such as non-impact construction noise like saws and drills, or periods of congestion typical during construction); not exceeding any regulatory standards
	Significant	More than a moderate impact



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Table 1-2. Construction Impacts Comparison (Continued)

	Alternative 2: Integrated Resource Approach				
Element of the Environment	Energy Efficiency Component	Demand Response Component	Distributed Generation Component	Energy Storage Component	Peak Power Generation Component
Earth	Negligible	Negligible	Negligible	Minor	Minor
Green House Gas Emissions	Negligible	Negligible	Negligible	Minor	Minor
Water	Negligible	Negligible	Negligible	Minor	Minor
Plants and Animals	Negligible	Negligible	Minor	Minor to Significant	Minor to Significant
Energy and Natural Resources	Negligible	Negligible	Negligible	Negligible	Negligible
Environmental Health	Negligible	Negligible	Negligible to Minor	Negligible to Minor	Negligible to Minor
Noise	Negligible	Negligible	Minor to Moderate	Minor to Moderate	Minor to Moderate
Land Use and Housing	Negligible	Negligible	Negligible	Negligible	Negligible
Views and Visual Resources	Minor	Minor	Minor	Minor	Minor
Recreation	Negligible	Negligible	Minor	Minor to Moderate	Minor to Moderate
Historic and Cultural Resources	Minor to Significant	Negligible to Minor	Minor to Significant	Minor	Minor
Transportation	Negligible	Negligible	Negligible	Minor	Minor
Public Services	Negligible	Negligible	Negligible	Minor	Minor
Utilities	Negligible	Negligible	Minor	Minor	Minor to Moderate

Impact Categories Negligible Impacts, if any, would be inconsequential Noticeable but infrequent and temporary (such as a noise or emission), or limited in extent Minor (such as a small change in appearance); typically not disruptive or destructive Adverse but limited in scope or effect; within an average range (such as non-impact construction noise like saws and drills, or periods of congestion typical during construction); not exceeding any regulatory standards Moderate Significant More than a moderate impact



Table 1-2. Construction Impacts Comparison (Continued)

	Alternative 3: New 115 kV Lines and Transformers
Element of the Environment	60 miles of 115 kV single circuit lines and 3 new 230 kV to 115 kV transformers installed at existing substations (Lake Tradition, Talbot Hill, and Sammamish).
Earth	Minor
Green House Gas Emissions	Significant
Water	Minor to Moderate
Plants and Animals	Minor to Significant
Energy and Natural Resources	Negligible
Environmental Health	Minor
Noise	Minor to Moderate
Land Use and Housing	Negligible
Views and Visual Resources	Minor to Moderate
Recreation	Minor to Moderate
Historic and Cultural Resources	Minor to Significant
Transportation	Minor to Moderate
Public Services	Minor to Moderate
Utilities	Moderate

Negligible	Impacts, if any, would be inconsequential
Minor	Noticeable but infrequent and temporary (such as a noise or emission), or limited in extent (such as a small change in appearance); typically not disruptive or destructive
Moderate	Adverse but limited in scope or effect; within an average range (such as non-impact construction noise like saws and drills, or periods of congestion typical during construction); not exceeding any regulatory standards
Significant	More than a moderate impact

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Table 1-3. Operation Impacts Comparison

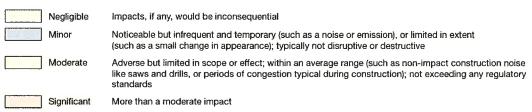
	No Action Alternative 1: Alternative New Substation and 230 kV Transmission Lines				Lines
Element of the Environment	PSE would continue to manage its system as they do at present.	Option A: New Overhead Transmission Lines	Option B: Existing Seattle City Light 230 kV Transmission Corridor	Option C: Underground Transmission Lines	Option D: Underwater Transmission Lines
Earth Earth	Negligible	Minor	Minor	Minor	Minor
Green House Gas Emissions	Negligible	Minor	Minor	Minor	Minor
 Water	Minor	Minor	Minor	Minor	Minor
Plants and Animals	Minor	Minor to Significant	Minor to Significant	Minor	Minor to Significant
Energy and Natural Resources	Negligible	Negligible	Negligible	Negligible	Negligible
Environmental Health	Negligible to Minor	Negligible to Minor	Negligible to Minor	Negligible to Minor	Negligible to Minor
Noise	Negligible	Negligible to Minor	Negligible to Minor	Negligible to Minor	Negligible to Minor
Land Use and Housing	Moderate to Significant	Moderate to Significant	Minor	Minor	Minor to Significant
Views and Visual Resources	Minor	Minor to Significant	Minor to Significant	Minor to Moderate	Minor to Significant
Recreation	Negligible	Minor to Significant	Minor to Significant	Negligible to Significant	Minor to Moderate
Historic and Cultural Resources	Minor to Moderate	Minor to Significant	Minor	Negligible	Negligible
Transportation	Negligible to Moderate	Negligible to Minor	Negligible to Minor	Negligible to Minor	Negligible to Minor
Public Services	Minor	Minor	Minor	Minor	Minor
Utilities	Moderate to Significant	Minor	Minor	Minor	Minor

Negligible	Impacts, if any, would be inconsequential
Minor	Noticeable but infrequent and temporary (such as a noise or emission), or limited in extent (such as a small change in appearance); typically not disruptive or destructive
Moderate	Adverse but limited in scope or effect; within an average range (such as non-impact construction noise like saws and drills, or periods of congestion typical during construction); not exceeding any regulatory standards
Significant	More than a moderate impact



Table 1-3. Operation Impacts Comparison (Continued)

	Alternative 2: Integrated Resource Approach				
Element of the Environment	Energy Efficiency Component	Demand Response Component	Distributed Generation Component	Energy Storage Component	Peak Power Generation Component
Earth	Negligible	Negligible	Minor	Minor	Minor
Green House Gas Emissions	Negligible	Negligible	Negligible to Moderate	Minor	Moderate
Water	Minor	Minor	Minor	Minor	Minor
Plants and Animals	Negligible	Negligible	Negligible	Minor to Significant	Minor to Significant
Energy and Natural Resources	Negligible	Negligible	Negligible	Negligible	Negligible
Environmental Health	Negligible	Negligible	Negligible to Minor	Negligible to Minor	Negligible to Minor
Noise	Negligible	Negligible	Minor to Moderate	Negligible	Moderate
Land Use and Housing	Negligible	Negligible	Negligible	Minor to Moderate	Minor to Moderate
Views and Visual Resources	Negligible	Negligible	Minor to Moderate	Minor to Significant	Minor to Moderate
Recreation	Minor to Significant	Minor to Significant	Minor to Significant	Minor to Significant	Minor to Significant
Historic and Cultural Resources	Minor to Moderate	Minor	Minor	Minor	Minor
Transportation	Negligible	Negligible	Negligible	Minor	Minor
Public Services	Negligible	Negligbile	Negligible	Moderate	Moderate
Utilitles	Moderate to Significant	Moderate to Significant	Moderate to Significant	Moderate to Significant	Moderate to Significant



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Table 1-3. Operation Impacts Comparison (Continued)

	Alternative 3: New 115 kV Lines and Transformers
Element of the Environment	60 miles of 115 kV single circuit lines and 3 new 230 kV to 115 kV transformers installed at existing substations (Lake Tradition, Talbot Hill, and Sammamish).
Earth	Minor
Green House Gas Emissions	Minor
Water	Minor
Plants and Animals	Minor to Significant
Energy and Natural Resources	Negligible
Environmental Health	Negligible to Minor
Noise	Minor
Land Use and Housing	Minor to Moderate
Views and Visual Resources	Minor to Significant
Recreation	Minor to Significant
Historic and Cultural Resources	Minor to Moderate
東京 Transportation	Negligible
Public Services	Minor
Utilities	Minor

Negligible	Impacts, if any, would be inconsequential
Minor	Noticeable but infrequent and temporary (such as a noise or emission), or limited in extent (such as a small change in appearance); typically not disruptive or destructive
Moderate	Adverse but limited in scope or effect; within an average range (such as non-impact construction noise like saws and drills, or periods of congestion typical during construction); not exceeding any regulatory standards
Significant	More than a moderate impact

