

**EXHIBIT NO. ___(EDH-3)
DOCKET NO. UE-111048/UG-111049
2011 PSE GENERAL RATE CASE
WITNESS: EZRA D. HAUSMAN**

**BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

v.

PUGET SOUND ENERGY, INC.,

Respondent.

**Docket No. UE-111048
Docket No. UG-111049**

**SECOND EXHIBIT TO THE DIRECT TESTIMONY OF
EZRA D. HAUSMAN, PH.D.
ON BEHALF OF THE SIERRA CLUB**

DECEMBER 7, 2011

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

**Docket Nos. UE-111048 and UG-111049
Puget Sound Energy, Inc.'s
2011 General Rate Case**

SIERRA CLUB DATA REQUEST NO. 01.19

SIERRA CLUB DATA REQUEST NO. 01.19:

Please provide any planning studies conducted by the company or contractors that explore compliance alternatives with state or federal statutes, regulations or settlements.

Response:

Puget Sound Energy, Inc. ("PSE") objects to Sierra Club Data Request No. 01.19 as overly broad and unduly burdensome in that the scope of the request is unlimited as to time and because there is no description regarding the type of compliance. PSE further objects to Sierra Club Data Request No. 01.19 because it calls for information that is outside the scope Sierra Club's intervention in this proceeding. PSE further objects to Sierra Club Data Request No. 01.19 to the extent it calls for information protected by the attorney-client privilege or the work product doctrine. PSE will not be providing such information. Without waiving these objections, and subject thereto, PSE responds as follows:

Attached as Attachment A to PSE's Response to Sierra Club Data Request No. 01.19 is a summary study of the potential impacts of proposed federal legislation on PSE thermal generating resources.

Chart - Possible Impacts for PSE for Environmental Regulatory Requirements

				Gas Plant Development	Future of Colstrip	Future of Transalta and Other Coal Merchants	Continued Gas Fleet Operations (Existing PSE Combustion Turbines)	
				Developing 1 to 2 gas plants in the next 10 years, all would require greenfield permits.	Potentially run another 25-35 years, retrofit to keep operating, new shutdown constraints due to tightened air standards & proposed CCR rule, transitional issues & ownership.	State goal is to negotiate shutdown in 15 years, transitional issues, natural gas to fill the gap	High Level Issues: Retrofits to keep plants operating, permitting major upgrades, new controls to meet tighter air standards.	
Proposed rule / regulation	Current status	Implementation specifics & timeframe	Potential impact					
Air related rules	Clean Air Transport Rule (CATR) - replacement for Clean Air Interstate Rule (CAIR)	Proposed 7/6/10, public hearings 8/10, final rule 2011	2012 start with state-specific emissions budgets: 71% SO2 reduction and 54%NOx reduction over 2005 levels by 2014	EPA envisions compliance in conjunction with other rules through fuel switching and pollution control hardware	Not expected to impact states where PSE operates. SO2 and NOx to be considered under different rulemakings (NAAQS)	Not expected to affect Western and Northwestern states.	Not expected to affect Western and Northwestern states.	Not expected to impact states where PSE operates. SO2 and NOx to be considered under different rulemakings (NAAQS)
	Regional Haze Rule & Best Available Retrofit Technology (BART)	Colstrip has submitted analysis to EPA	Within five years after EPA approval of analysis	Reduced emissions of SO2 and NOx	N/A	Only applies to Colstrip 1 & 2. Awaiting response from EPA to analysis of cost and benefits of additional controls. Future capital and O & M costs include increase for some improvement from current controls/emission levels.	Both are subject to rule. This is the issue driving debate on Boardman shutdown vs added controls. Trans Alta Centralia plant ??	N/A
	National Ambient Air Quality Standards (NAAQS)	PM2.5, Ozone, NOx, SO2, all rules proposed. PM2.5 final 10/2011; all others 10/2010 (currently under legal challenge)	PM2.5 - lower NOx/SO2 limits; Ozone - lower NOx limits; NO2 - Lower NOx limits; SO2 - lower SO2 limits	EPA envisions compliance in conjunction with other rules through fuel switching and pollution control hardware	New non-attainment areas in Puget Sound (O3, SO2, NOx or PM) will require more effective control technologies and potential limits on operating flexibility.	Recent Unit 3 & 4 upgrades should satisfy new NOx and ozone standards. PM2.5 standard not expected to affect facility. State needs to run SO2 simulation for attainment, improvements may be needed if modeling shows SO2 cuts are needed. Wildcard: BART/Regional Haze outcome may require lower SO2 level for Colstrip 1 & 2 (still waiting on final determination by EPA)	Unknown	New non-attainment zones in the I-5 corridor may affect how existing plants can operate and by not allowing or severely restricting modifications/upgrades in order to avoid NA NSR.
	Maximum Control Technology (MACT) for Hazardous Air Pollutants (HAPs)	Propose 3/2011, final regulation 11/2011, compliance by 2015	90% or better control of mercury; Acid gas control; Particulate limit for metals; VOC limit for organics	Combination of ESP and filter upgrades with FGD and SCR- seen as potentially the most stringent of the three air rules	Metals not an issue, acid gases most likely to be addressed by NAAQS.	Mercury controls in place and operating to meet Montana Mercury rule. Unit 3 tested and results reported to EPA to meet Information Collection Request (ICR). MACT would require compliance to be based on what top plants are achieving nationwide and could require additional sorbent injection to reduce HAPs..	Unknown	Metals not an issue, acid gases most likely to be addressed by NAAQS.
	Tailoring Rule	Final rule published 6/2010, goes in to effect 1/2/2011	Initially to large utility and industrial sources. Implemented in phases with the first phase beginning 1/2011.	Will impose GHG BACT permitting requirements on existing major sources with major modifications and certain new major sources.	BACT will be required for any new gas plant. BACT status at this point unknown, likely to be based on thermal efficiency performance and improvements.	Not applicable, provided Major Modifications/NSR are not triggered, until renewal of Title V permit in 2015.	Not applicable, provided Major Modifications/NSR are not triggered, until renewal of Title V permit in 2015.	Not applicable provided Major Modifications/NSR are not triggered
Water	Clean Water Act Sec. 316(b) - Protection of aquatic life	Propose 11/2010, final 6/2012	Fine mesh fish screening at inlets, potential closed-loop (cooling tower) systems	Not an issue provided cooling systems are closed-loop.	Discharge permit not necessary at facility (no discharges to surface waters), not expected to impact Colstrip which uses cooling towers.	Unknown	Need to evaluate discharge permits	
Ash & waste water	Coal Combustion Residual Rule (CCR)	Propose 2012, final 2014	Closure of existing ash ponds, conversion to dry bottom ash and fly ash with dry landfill disposal potentially under "special waste" or "hazardous waste" designation	Not applicable	Potential impacts significant. Reconfiguration of ash handling plus potential clean-up of existing ash ponds, would be costly to facility.	Unknown	Not applicable	
	Steam Electric Effluent Guideline & Limitation	Propose 2012, final 2014	Lower effluent limitations for all existing parameters; Potential installation of wastewater treatment facilities and additional water treatment requirements for process water	Not applicable (coal only)	Responded to EPA ICR on effluent guidelines. No discharge permits required at facility, not expected to impact Colstrip. Continuation of current program of groundwater monitoring and water treatment will be required.	Unknown	Not applicable (coal only)	