



August 16, 2013

Mr. Steven V. King,
Executive Director and Secretary
Washington Utilities and Transportation Commission
1300 S. Evergreen Park Drive S.W.
Olympia, WA 98504-7250

RE: Puget Sound Energy's Integrated Resource Plan, Docket Nos. UE-120767 and UG-120768

Dear Mr. King:

These comments on behalf of Montana Environmental Information Center ("MEIC") and Sierra Club regarding Puget Sound Energy's ("PSE") 2013 Integrated Resource Plan are to highlight environmental contamination and financial risks associated with coal-ash waste disposal from PSE's Colstrip coal-fired power plant in eastern Montana. Washington law requires "[e]ach electric utility regulated by the commission ... to meet its system demand with a least cost mix of energy supply resources and conservation." Wash. Admin. Code § 480-100-238(1). The integrated resource planning process enables utilities to meet this responsibility by identifying a mix of energy supply resources and conservation that have the lowest reasonable costs, taking into consideration, among other things "the cost of risks associated with environmental effects." *Id.* § 480-100-238(2). PSE's risk due to ground and surface water contamination caused by Colstrip's leaking coal-ash impoundments are substantial, and potentially growing with each day of Colstrip operation.

Operation of the Colstrip plant generates approximately 1.6 million tons of pollutant-laden coal ash annually. The coal combustion process concentrates the coal's impurities, and the resulting coal ash contains carcinogens, neurotoxins, and other poisons including arsenic, cadmium, lead, and selenium. Colstrip's coal ash and other wet and dry waste streams are dumped in impoundments that collectively cover hundreds of acres.

The Montana Department of Environmental Quality ("Montana DEQ") has acknowledged that Colstrip's coal-ash impoundments have been leaking contaminants into groundwater for decades. Over the years, Colstrip's operator has drilled hundreds of wells in an attempt to capture and return the polluted groundwater back into the containment system (or put it to use in plant operations). However, despite ongoing expansion of this groundwater-capture effort, the contamination has continued to spread.

In August 2012, Montana DEQ and Colstrip's operator finalized an Administrative Order on Consent Regarding Impacts Related to Wastewater Facilities Comprising the Closed-Loop System at Colstrip Steam Electric Station, Colstrip, Montana ("AOC"). See Final AOC, at <http://deq.mt.gov/mfs/ColstripSteamElectricStation/default.mcp> (last visited Aug. 16, 2013).

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The AOC established a process through which Montana DEQ intends to finally identify a solution to Colstrip's groundwater contamination problem. Under the first step of that process, Colstrip is to submit a "site report" for each of the three areas around the Colstrip plant where impoundments are currently polluting groundwater. Final AOC, at 18. These reports are to include the results of water modeling and assess the effectiveness of completed and ongoing remedial actions. Id. Colstrip has submitted two of the three required site reports, both of which identified data gaps and additional necessary site characterization. See <http://deq.mt.gov/mfs/ColstripSteamElectricStation/default.mcp>x (last visited Aug. 16, 2013).

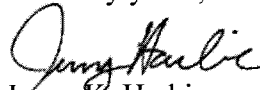
MEIC and Sierra Club, through Earthjustice, contracted with Geo-Hydro, Inc., a Colorado hydrogeologic consulting firm, to evaluate the Colstrip AOC site reports and associated data. Geo-Hydro's July 24, 2013 assessment of one such site report is attached to this letter. This expert assessment identifies the following conclusions and concerns about Colstrip's water modeling and remedial assessment:

- "The apparent size of the groundwater plumes continues to expand. Monitoring and modeling results continue to drive expanded characterization and remediation activities in area not previously known to be impacted by process water." Geo-Hydro Report, at 1; see also id. at 4.
- "The location of the leading edge and concentration gradients within the plumes are not identified. The concentration of contaminants in pumping wells says nothing about the location or movement of the leading edge or changes in plume footprint area." Id.
- It appears that Colstrip has selectively identified a pollutant indicator parameter that does not consistently or fairly reflect contamination due to other pollutants, which appears to remain high. Id. at 2-5.
- "[L]ong-term data records [for certain wells] show that even though the most recent analyses are below the highest concentrations ever recorded at these locations, concentrations of all process water indicator parameters remain very high and in most cases are several times the concentrations measured before operation of the ponds was initiated." Id. at 5.
- Colstrip's assessment of remedial effectiveness is incomplete and misleading because it evaluates only the water quality of capture wells, and improperly omits discussion of water quality in monitoring wells between extraction points. Id. at 3-4

Overall, these concerns suggest that the *status quo* of Colstrip's groundwater pumping efforts have not even effectively contained, let alone reduced, the extent and severity of Colstrip's groundwater contamination. Later phases of the AOC process will require Colstrip to propose, and Montana DEQ to select, further remedial action. Whether through the AOC process or through pending litigation designed to achieve more expeditious and effective remediation, MEIC and Sierra Club will continue to demand that Colstrip implement measures to actually stop the ongoing contamination and clean up the currently fouled groundwater in the Colstrip vicinity.

We strongly encourage the Washington Utilities and Transportation Commission to require PSE to fully account for the “cost of risks” associated with the complex and growing problem of groundwater contamination from Colstrip’s leaking coal-ash impoundments. Wash. Admin. Code § 480-100-238(2)(b).

Sincerely yours,



Jenny R. Harbine