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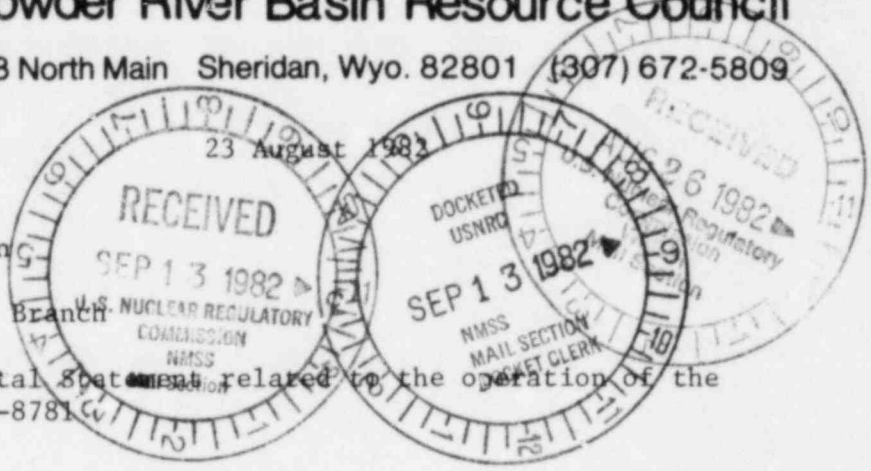
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Powder River Basin Resource Council

48 North Main Sheridan, Wyo. 82801 (307) 672-5809



U.S. Nuclear Regulatory Commission
Washington, D.C. 20555
ATTN: Uranium Recovery Licensing Branch

RE: Comments on Draft Environmental Statement related to the operation of the Teton Project, Docket No. 40-8781

To Whom It May Concern:

The Powder River Basin Resource Council is a non-profit, membership organization dedicated to preservation of Wyoming's agricultural economy and unique way of life. We would like to submit the following comments on the above Draft Environmental Statement.

Section 2.2.1.4 (Uranium fuel requirements, available resources, domestic production capabilities, and comparison of uranium resources and production capabilities with uranium requirements):

Generally, this section overrates the need for uranium and underestimates the potential contributions of renewable sources of energy. On the one hand, the text states that "The considerable uncertainty inherent in forecasting electricity demand, the unpredictable path of government nuclear-related policies and programs (breeder reactors, spent fuel reprocessing, etc.), and the availability and economic competition of alternative conventional and unconventional energy sources preclude rational forecasts past 1988." (p. 2-5). On the other, the text states that "It is evident that there is and will be more production capability for U₃O₈ that will be needed during the 1980 decade." If the need for nuclear generation cannot be accurately predicted past 1988, and it is already known that excess productive capacity for uranium exists, it is something of a leap of faith to assert that additional productive capacity will be needed to meet increasing demand in the 1990s and beyond.

Further, although the DES admits that "timely development" of alternative sources such as solar will require "a favorable market as well as government incentives" (p. 2-11) and that energy conservation is "the cleanest and cheapest way to relieve the energy shortage" (p. 2-14), there is no discussion of the effect of reallocating the government's subsidies of nuclear power to alternative sources. If solar and conservation were given the same amount of federal financial attention as nuclear, it could very well be that a "need" for the Teton Project would not exist.

The NRC staff did not avail itself of the latest materials in discussion projected electrical demand growth (and consequently the need for additional nuclear generation). The statement on page 2-14 that "...in the case of electrical energy, demand is expected to increase (during the next decade) at a rate about twice as great as that for total energy" is taken from the Project Independence document, dated 1974. Since that time, growth in electrical demand has dipped sharply - even rural electric systems, which are the fastest-growing in the nation, experienced their lowest load growth ever last year at 1%.

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Comment 9

The PRBRC questions the statement on page 2-46 - "The pilot test was operated with sodium bicarbonate concentrations, apparently at about 2 g/L, and the commercial plant is expected to operate in the same range." What concentrations did the pilot plant employ? If the commercial plant does not operate in the same range, will that affect the success of restoration efforts?

On page 2-55, it is noted that the applicant may "run out of pond capacity by the ninth year of operation," and that an area has been designated for construction of "contingency ponds." It might be a good idea to require the construction of at least one contingency pond well before the ninth year, to avoid any problems that may occur if adequate pond capacity is not available (for example, if an excursion occurs and pumping is recommended as a control method, and there is not sufficient pond capacity available, the applicant might be forced to discharge contaminated groundwater into a surface drainage.)

On page 3-31, the DES states that potentiometric elevations in wells penetrating the O₂, N, and M aquifers were monitored "periodically" since the autumn of 1979. How often is "periodically"? Since this information was apparently used to construct the potentiometric maps which in turn indicate the direction of groundwater flow - and, to some degree, the separation of the aquifers involved - it would be interesting to know how much data the maps are based on.

The determination of pre-mining groundwater quality is critical to the evaluation of restoration success. On page 3-36, it says that "Groundwater in the M and N ore zone sand of mining unit I does not meet drinking water standards because of its high radium-226 levels, which exceed the drinking water standard of 5 pCi/L. However, baseline averages for the other indicator parameters are within or very close to meeting drinking water standards." On page 4-4, it says that "At the Leuenberger site, groundwater (as determined from average concentrations in mining unit 1 wells and the R&D restoration baseline data) within this zone naturally contains concentrations of radium-226 that exceed drinking water standards (186 vs 5 pCi/L). The quality of the groundwater in the N and M aquifers is such that the water does not meet either domestic or livestock standards; however, with the exception of radium-226, the groundwater quality meets or exceeds livestock-use criteria."

Does the water meet drinking water standards, or not? If it doesn't, how close is it? Will the NRC require restoration to drinking standards? On page 2-15, the text states that "Individual groundwater parameters than can not be returned to baseline by reasonable efforts will at least be returned to levels commensurate with the groundwater's highest potential premining use based on Wyoming drinking water and livestock standards." What constitutes a "reasonable effort"?

Monitor wells will be placed in the ore zone not being mined while mining is occurring in the other zone (page 4-18). Will a migration into the inactive ore zone be considered an excursion?

The PRBRC prefers the stricter UCLs advocated by the NRC on pp. 4-19 and 4-20.

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Comments on DES related to the Teton Project
Powder River Basin Resource Council
23 August 1982

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Please check the statement on page 4-20, "If its UCL alone is exceeded, if the UCL of any single indicator parameter is exceeded by more than 20%, or if the UCLs are exceeded for any two indicator parameters after routine and confirmation sampling, an excursion will have been detected." Should the second mention of the term "UCL" actually be the word "baseline"?

Some definitive standard should be established for surface reclamation. The assurance that the applicant "will attempt" to restore the land to good-quality range gives little guidance for reclamation evaluation purposes.

It would be a good idea to require the applicant to monitor offsite radioactivity concentrations at the nearest residence to ensure that these concentrations are maintained below permissible limits where it most matters (p. 4-35).

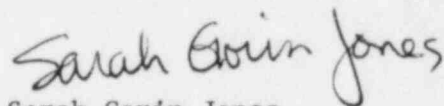
a maximum dose of

The statement that/77.6 millirems/year to the bronchial epithelium is less than 14% of the estimated dose to individuals from natural background radiation says nothing about the consequence to a particular individual of increasing his/her exposure by this amount. More information should be provided as to the potential health effects of this exposure and on protecting affected individuals (p. 4-39).

Generally, the PRBRC takes a dim view of the NRC's "test-as-you-go" attitude for issuing mining permits. The NRC's evaluation of the applicant's aquifer tests (p. B-5) indicates that the applicant has not always conducted quality work, and in fact there is some doubt as to the confinement of the N and M ore zones ("...the test results are, to some degree, inconclusive with respect to ore zone confinement..." - p. B-6). The NRC plans to remedy this deficiency by requiring the applicant to perform additional aquifer tests in each mining unit before actual mining takes place. Why not obtain that information prior to issuing a permit? Once the applicant establishes a mining operation, it will be difficult to terminate operations if additional tests reveal conditions unsuitable for in situ mining. It would be better to take every possible step to anticipate problems and establish the facts prior to mining than to discover them after excursions or other difficulties occur.

Thank you for this opportunity to comment.

Sincerely,



Sarah Gorin Jones
staff, for the
Powder River Basin Resource Council

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