

## UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

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L. C. Rouse, Chief, Fuel Processing and Fabrication Branch Division of Fuel Cycle and Material Safety, NMSS

HYDROLOGIC ENGINEERING EVALUATION - BEAR CREEK PROJECT - TAR 3033

As part of our continuing review of the Rocky Mountain Energy Company Bear Creek Project, our responses to questions dated June 14, 1976 are hereby provided, based on our review of recently submitted information.

- We conclude that the proposed embankment will not be overtopped by the 100-year and 1/2 PMF precipitation events.
- In the event of dam failure, flood waters will be out of the channel banks for a maximum distance of approximately 3 miles downstream for all precipitation events.
- The Carson Ranch buildings, eight miles downstream, would not be flooded in the event of a dam failure.
- 4. In the event of a dam failure, tailings are assumed to be deposited in those areas where the flood waters are out of the channel banks. Therefore, we estimate that tailings could be deposited as far downscream as 3 miles, to an average width of about 1/4 mile.

This review was performed by T. Johnson. We consider the review requested by the subject TAR to be complete.

L. G. Hulman, Chief Hydrology-Meteorology Branch Division of Site Safety and

Environmental Analysis

cc: W. Gammill

R. Cunningham

J. Rothfleisch

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TABLE 1

Alternative	Description	Cost (x\$1,000)
I	Regrading of the pile. Cover the slimes with 8.9 feet of overburden. Cover the sands with 5.0 feet of overburden. Cover with 1/2 foot of mixed topsoil and overburden, fertilize and revegetate.	\$ 1,315
II	Regrading of the pile. Cover the slimes with 10 feet of adjacent dry sand tailings. Cover the slimes area with 6.4 feet of overburden. Cover the sands area with 4.3 feet of overburden. Cover with 1/2 foot of mixed topsoil and overburden, fertilize and revegetate.	\$ 1,204
III a	Regrading of the pile. Cover entire pile with one foot of clay. Cover slimes area with 4.6 feet of overburden. Cover sands area with 1.0 feet of overburden. Cover with 1/2 foot of mixed topsoil and overburden, fertilize and revegetate.	\$ 1,208
III p	Regrading of the pile. Cover slimes area with 1.0 foot of clay and 5.0 feet of overburden. Cover sands with 5.0 feet of overburden. Cover with 1/2 foot of mixed topsoil and overburden, fertilize and revegetate.	\$ 1,162
IV	Cover with asphalt Cap. Add topsoil overburden mix. Cover with 1/2 foot of mixed topsoil and overburden. fertilize and revegetate. (in excess of)	\$ 8,789
٧.	Dispose to an existing pit. Cover with 4.5 feet of overburden. Cover with 1/2 foot of mixed topsoil and overburden, fertilize and revegetate. (in excess of)	\$10,000