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Copy to: Golder Associates
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Executive Director,
NATURAL RESOURCES

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Director

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March 13, 1978

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MAR 23 1978
DIVISION OF OIL, GAS, & MINING

RECEIVED
MAR 15 1977
A.E.P. SERVICE CORP.
HELPER, UTAH

Mr. Lee McCloskey
American Electric Power
P.O. Box 629
Helper, UT. 84526

Dear Mr. McCloskey:

We are presently reviewing the plans and specifications for the refuse disposal area in School House Canyon. In general, we are satisfied with the design, but we do have some important concerns with portions of the plans.

The main diversion channel above the dump and the perimeter diversion channels around the dumps must be maintained so as to have non-erosive surfaces. It appears that due to the anticipated flow velocities the channels will have to be compacted and lined with rip-rap or pavement.

The discharge from the main diversion ditch apparently will cascade down the south slope of Barn Canyon. We are concerned about the erosion involved in this concentrated flow and slope stability considerations. If the natural surfaces involved are largely rock there may be no problem, but we will have to inspect the surfaces in the field.

We are concerned that the design of the cut slopes above the diversion ditch, haul road and spillway will provide for adequate slope stability. Has Golder addressed this?

We realize that final geotechnical design of the dump may not be possible until the nature of the new plant refuse is known. We do insist that the minimum static safety factor for the dump slope be 1.3 and the minimum dynamic safety factor be 1.0. This is in line with MESA recommendations.

Due to the fine grained nature of the refuse and its moisture content, we strongly endorse the incorporation of an interior core drain in the dump. It should be made of durable rock, sized and placed so as to be very permeable and non-clogging. This may involve using material other that breaker refuse.

We feel that the dump slope and the sediment control dam should be designed in light of a seismic risk analysis and incorporating the appropriate dynamic response parameters. Perhaps this has been done by Golder, but we are not aware of it.

We would like to see Golder's calculations showing that the dam will have a minimum static safety factor of 1.5 and a minimum dynamic safety factor of 1.0.

We are continuing our review of the refuse facility and may have further comments in the near future.

Sincerely,

Brian W. Buck

BRIAN W. BUCK
ENGINEERING GEOLOGIST

/tlb