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WM Project 10, 11, Docket No. \* PDR = LPDRB N.

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30 December 1986

David Tiktinsky - SS623 U.S. Nuclear Regulatory Commission Division of Waste Management Washington, D.C. 20555

"NRC Technical Assistance for Design Reviews" Contract No. NRC-02-85-002 FIN D1016

Dear David:

Enclosed is Itasca's trip report for the Appendix 7 Site Visit and meeting, 9-11 November, in Las Vegas. Please call me if you have any questions.

Sincerely,

ing for ROH

Roger D. Hart Project Manager

cc: J. Greeves, Engineering Branch Office of the Director, NMSS E. Wiggins, Division of Contracts

DWM Document Control Room

Encl. rdh/ks

D-1016

#### ITASCA TRIP REPORT

DATES:

9-11 December 1986

LOCATION:

U.S. Nuclear Regulatory Commission, NNWSIP Site Office

(Las Vegas, Nevada)

PURPOSE:

Appendix 7 Site Visit, Review of Repository Conceptual

Design in Support of Site Characterization Plan for

NNWSIP)

ATTENDEE: J. Daemen

PREPARED BY: J. Daemen

#### **SUMMARY**

The meeting was an Appendix 7 Site Visit by NRC personnel and attended by representatives of the State of Nevada, the DOE Nevada Operations Office, and NRC consultants from Itasca, Engineers International, and the U.S. Bureau of MInes.

The current status of the NNWSIP conceptual repository design in support of the Site Characterization Plan (SCP) has been reviewed. The review covered the chapters on Conceptual Design Bases, Repository, Design Description, and Closure and Decommissioning. prehensive descriptive overview of the current repository design has been obtained. Primary topics focused on by this reviewer included repository sealing and decommissioning, underground opening design, temperature distribution calculation results, and ventilation designs. Time limitations precluded a detailed study of the supporting data and analyses. It already is clear that a comprehensive detailed design review will be demanding and time consuming.

Two main emplacement options continue to be considered: vertical emplacement, with a single package per hole, and horizontal emplacement, with multiple packages per hole. Considerable progress has been made in the conceptual design for emplacement and retrieval equipment and procedures for the two options, although many details remain to be resolved. Extensive thermal and ventilation analyses have been performed in support of the definition of the operational requirements.

Shaft, ramp, and fault conceptual seal designs have been refined. Extensive discussions on backfill design and emplacement have been reviewed.

In sum, it was a highly productive meeting, providing considerable insight to the NNWSI project conceptual repository design concept.

Respectfully submitted,

Jaak Daemen

For JD

jd/ks

# COST BREAK-OUT

## Labor

Jaak Daemen 24 hrs @ \$57.75/hr \$1,386.00

TOTAL LABOR \$1,386.00

## Actual Expenses

## Travel

Airfare (Tucson-LV-Tucson) \$ 118.00

Miscellaneous Travel Expenses
(limo) \$ 10.00

Lodging

(3 nights @ \$37.45/night) \$ 112.35

Meals

\$ 84.53

TOTAL EXPENSES: \$ 324.88