



UNITED STATES
NUCLEAR REGULATORY COMMISSION
ADVISORY COMMITTEE ON NUCLEAR WASTE
WASHINGTON, DC 20555 - 0001

April 26, 2007

MEMORANDUM TO: Antonio Dias, ACNW Team Lead

FROM: Neil Coleman, ACNW Senior Staff Scientist /RA/

SUBJECT: REVIEW COMMENTS RECEIVED ON DRAFT ACNW WHITE PAPER -
IGNEOUS ACTIVITY AT YUCCA MOUNTAIN: TECHNICAL BASIS FOR
DECISION MAKING

In December 2006 the Advisory Committee on Nuclear Waste (ACNW) published a draft report titled "Igneous Activity at Yucca Mountain: Technical Basis for Decision Making." The following internet link to this draft was sent to email recipients on the Yucca Mountain mailing list: (<http://adamswebsearch.nrc.gov/idmws/ViewDocByAccession.asp?AccessionNumber=ML063530748>). The draft ACNW report also provided a technical basis for discussions at the ACNW working group on volcanism, held in Rockville, MD in February 2007.

This memorandum submits to the public record various comments received on the draft white paper on igneous activity. Attachment 1 includes a collection of comments received from Dr. William Melson (Smithsonian Institution), Dr. Leon Reiter (retired staff scientist from the U.S. Nuclear Waste Technical Review Board), the U.S. Department of Energy, and from Professor Eugene Smith (University of Nevada at Las Vegas). Attachment 2 was received from Dr. William Melson and consists of a report he previously prepared related to Strombolian eruptions and scoria cones. Attachment 3 was submitted by Dr. Sara Rathburn of Colorado State University, and provides review comments on the report by D. Hooper (2005) titled "Modeling the long-term fluvial redistribution of tephra in Fortymile Wash, Yucca Mountain, Nevada" [ML052910334]. Attachment 4 was provided by the Electric Power Research Institute (EPRI) and includes comments on the draft ACNW volcanism report, a preliminary response to NRC's review of two EPRI reports on volcanism, a conceptual model for defining natural analogs for future Yucca Mountain volcanism (by Dr. Meghan Morrissey, Colorado School of Mines), and a reprint of a paper on natural analogs for future volcanism in the Yucca Mountain region by Dr. Morrissey and Dr. Mick Apted (Monitor Scientific, LLC). Attachment 5 is the newest update of EPRI's conceptual model for defining natural analogs for future Yucca Mountain volcanism and expected consequences.

Two NRC documents relevant to the draft ACNW volcanism report have already been made public. These include the staff's review of two EPRI volcanism reports [ML070190134] and the NRC staff perspectives on the ACNW draft white paper on igneous activity at Yucca Mountain [ML070600793].

Attachments: As stated

cc w/att: ACNW members

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