| MEMORANDUM TO: | L. Raghavan, Chief, Section 1 Project Directorate III Division of Licensing Project Management Office of Nuclear Reactor Regulation |
|----------------|---|
| FROM: | John G. Lamb, Lead Project Manager, Generic Safety Issue 191 / RA / Project Directorate III Division of Licensing Project Management Office of Nuclear Reactor Regulation |
| SUBJECT: | MEETING BETWEEN THE NUCLEAR REGULATORY COMMISSION STAFF AND STAKEHOLDERS CONCERNING GENERIC SAFETY ISSUE 191. "ASSESSMENT OF DEBRIS ACCUMULATION ON PWR |

The Nuclear Regulatory Commission (NRC) staff met with stakeholders at the University of New Mexico (UNM) on March 5, 2003, concerning Generic Safety Issue (GSI) 191, "Assessment of Debris Accumulation on [Pressurized-Water Reactor] PWR Sump Performance." Attachment 1 lists the meeting participants. A public meeting notice for the subject meeting was issued on February 14, 2003, and a copy of the meeting notice was posted on the NRC's external (public) web page (ADAMS Accession No. ML030430402).

SUMP PERFORMANCE" (TAC NO. MA6454)

The purpose of the meeting was to (1) tour the UNM laboratory, (2) discuss the laboratory's activities, (3) observe sample experiments, and (4) discuss how UNM supports the NRC's efforts related to GSI-191. The meeting consisted of a brief presentation titled "Hydraulic Laboratory Studies on Debris Transport in Nuclear Plants." Ashok Gosh, PhD, from UNM, performed two experiments. The objective of the experiments was to assess whether changes in chemical/temperature have an adverse effect on the generation of head loss in a loss-of-coolant accident. The first experiment consisted of head loss in the small 4 inch setup using NUKON as debris to compare with NUREG-6224, "Parametric Study of the Potential for BWR ECCS Strainer Blockage Due to LOCA Generated Debris," dated October 1995. The NUKON was shredded 4.4 grams (0.5 inch equivalent bed) with a velocity of 0.41 feet per second. The second experiment consisted of head loss by the same amount of NUKON when aluminum salt is added in the water. This experiment was done at a pH value of 7.0 and at room temperature.

Attachment 2 contains the presentation slides discussed by Arup Maji, PhD, from UNM.

The UNM staff fielded numerous questions regarding chemicals, precipitation, water quality, and paint chips.

Attachments: 1. Meeting Attendees

2. Handouts

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| DISTRIBL | ITION: | | | | | | |
|--|------------|-------------|-------------|-----------------------|------------|--|--|
| PUBLIC | | JLamb | | BJain | | | |
| PDIII-1 Reading | | RBouling | | THsia | | | |
| JZwolinski/LMarsh | | SWeerakkody | | MKotzalas | | | |
| WRuland | | JLehning | | | | | |
| LRaghavan | | RArchitzel | | *Concurred via e-mail | | | |
| OFFICE | PDIII-1/PM | | PDIII-1/LA* | | PDIII-1/SC | | |
| NAME | JLamb | | RBouling | | LRaghavan | | |
| DATE | 04/07/03 | | 03/31/03 | | 04/07/03 | | |
| ADAMS Accession No. ML030910060 (Meeting Notice) | | | | | | | |
| ADAMS Accession No. ML030980836 (Attachment 2) | | | | | | | |
| ADAMS Accession No. ML030910075 (Package) | | | | | | | |
| OFFICIAL RECORD COPY | | | | | | | |

LIST OF ATTENDEES

MEETING BETWEEN THE NUCLEAR REGULATORY COMMISSION AND

STAKEHOLDERS REGARDING GENERIC SAFETY ISSUE 191, "ASSESSMENT

OF DEBRIS ACCUMULATION ON PWR SUMP PERFORMANCE"

WEDNESDAY, MARCH 5, 2003

<u>NAME</u>

ORGANIZATION

J. Lamb S. Weerakkody J. Lehning R. Architzel B. Jain T. Hsia J. Brown G. Champion D. DeCroix J. Bleigh G. Quitoriano C. Dougherty G. Hart M. Paderanabhan T. Franch S. Cain G. Zigler J. Gisclom A. Smith D. Boulton J. Cavallo J. Butler D. Cox B. Letellier C. Harrington J. Walker C. Shaffer R. Oakley P. Mabry T. Andreychek

NRC/NRR NRC/NRR NRC/NRR NRC/NRR NRC/RES NRC/RES APS EDF LANL PCI PG&E PG&E PCI Alden Research Lab Framatone Alden Research Lab ITS Corp. **Electric Power Research Institute Enercon Services** Framatone ANP CCC&L Inc. Nuclear Energy Institute Southern California Edison Los Alamos **Texas Utilities** Framatone ANP Ares Corp. Duke Energy **Duke Power** Westinghouse

NRR = Office of Nuclear Reactor Regulation RES = Office of Nuclear Regulatory Research

ATTACHMENT 1