

August 21, 2003

LICENSEE: Nebraska Public Power District

FACILITY: Cooper Nuclear Station

SUBJECT: SUMMARY OF MEETING WITH NEBRASKA PUBLIC POWER DISTRICT TO DISCUSS ISSUES RELATED TO MAIN STEAM LINE ISOLATION LEAKAGE PATHWAY SEISMIC EVALUATION (TAC NO. MB7376)

On July 23, 2003, the Nebraska Public Power District (the licensee), met with the U. S. Nuclear Regulatory Commission (NRC) staff at the NRC Headquarters. The purpose of the meeting was to discuss the issues related to main steam line isolation valve (MSIV) leakage pathway seismic adequacy for iodine plate-out credit in radiological dose assessment of design basis accidents. Enclosure 1 is a list of meeting attendees. Enclosure 2 contains the licensee's view-graphs. Enclosure 3 is a drawing that the licensee used to discuss the modifications to ensure seismic ruggedness of the leakage pathway. Enclosure 4 is a list of the NRC staff's questions related to seismic concerns that were discussed at the meeting

The licensee outlined the history of the issue since 1994, summarizing the sequence of actions related to seismic considerations of the MSIV leakage pathway during the NRC staff reviews related to four successive license amendments. The amendments were issued to support the Cooper Nuclear Station (CNS) control room emergency filtration system fan capacity increase, and approve revisions to design basis dose assessment calculations methodologies. During each amendment review process the NRC staff raised concerns regarding the licensee's assumptions and the licensee partially addressed the NRC staff's concerns. In each case the NRC staff did not approve all the changes requested and permitted continued operation of CNS for one successive operating cycle. The staff required the licensee to maintain potassium iodide (KI) supplements in the control room to mitigate potential accident radiological dose consequences.

The licensee stated that, with the exception of one, all concerns raised in the NRC staff reviews have been addressed. The remaining issue relates to demonstration of seismic ruggedness of MSIV pathway to justify iodine depletion credit due to plate-out in MSIV pathway. This credit is assumed in the licensee's revised dose assessment methodology. The licensee went on to describe the design and function of the MSIV pathway that would provide adequate seismic ruggedness.

The licensee described the modifications that have already been made to ensure seismic ruggedness. New valves have been installed to isolate the vulnerable segments of the MSIV pathway. Structural improvements have been installed and emergency lighting provisions have been made to permit the operators to align the MSIV leakage to a seismically rugged pathway. Procedures have been revised and validated. Implementation has been deferred pending the NRC staff's approval of the changes. The licensee stated that when the changes are accepted

by the staff, the licensee will submit an application for the staff to approve the final loss-of-coolant accident dose assessment methodology, and removal of the license condition 2.C.(6) which requires the licensee to maintain KI in the CNS control room.

The NRC staff stated that it plans to submit a request for additional information (RAI) addressing the remaining seismic, design, and human performance considerations of the proposed modifications as well as operator actions and operating procedures. The NRC staff requested that the licensee provide the responses expeditiously after the receipt of the RAI. The licensee requested that the NRC staff should submit all RAI in writing.

There were no public comments or questions and the meeting was adjourned.

/RA/

Mohan C. Thadani, Senior Project Manager, Section 1
Project Directorate IV
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-298

Enclosures: As stated

cc w/encls: See next page

by the staff, the licensee will submit an application for the staff to approve the final loss-of-assessment methodology, and removal of the license condition 2.C.(6) which requires the licensee to maintain KI in the CNS control room.

The NRC staff stated that it plans to submit a request for additional information (RAI) addressing the remaining seismic, design, and human performance considerations of the proposed modifications as well as operator actions and operating procedures. The NRC staff requested that the licensee provide the responses expeditiously after the receipt of the RAI. The licensee requested that the NRC staff should submit all RAI in writing.

There were no public comments or questions and the meeting was adjourned.

/RA/

Mohan C. Thadani, Senior Project Manager, Section 1
Project Directorate IV
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-298

Enclosures: As stated

cc w/encls: See next page

DISTRIBUTION:

PUBLIC

PDIV-1 R/F

RidsNrrDlpm (LMarsh/ELeeds)

RidsNrrDlpmLpdiv (HBerkow)

RidsNrrDlpmLpdiv1 (RGramm)

RidsNrrPMMThadani

RidsNrrLAMMcAllister

KManoly

JTatum

RidsRgn4MailCenter (AHowell/KKennedy)

TMensah

RidsOgcRp

RidsAcrsAcnwMailCenter

JClark, EDO

YKim

Package No.: ML032340020

Enclosure 2: ML032340733

Enclosure 3: ML032340735

ADAMS Accession No.: ML032340014

NRC-001

OFFICE	PDIV-1/PM	PDIV-1/LA	PDIV-1/SC
NAME	MThadani:sab	MMcAllister	RGramm
DATE	8/21/03	8/21/03	8/21/03

OFFICIAL RECORD COPY

MEETING WITH NEBRASKA PUBLIC POWER DISTRICT (NPPD)

JULY 23, 2003

LIST OF ATTENDEES

<u>NAME</u>	<u>AFFILIATION</u>
Mohan Thadani	NRC
Kamal Manoly	NRC
Yong Kim	NRC
Gary Kline	NPPD
Dan Buman	NPPD
Paul Fleming	NPPD
Bill Victor	NPPD
Robert Gramm	NRC
James Tatum	NRC

Viewgraphs of the Licensee's Presentation

ADAMS Accession No.: ML032340733

Modification Drawing

ADAMS Accession No.: ML032340735

QUESTIONS PROVIDED TO NEBRASKA PUBLIC POWER DISTRICT
AT JULY 23, 2003 PUBLIC MEETING

REQUEST FOR ADDITIONAL INFORMATION ON THE SUPPLEMENTAL INFORMATION
SUBMITTED BY NEBRASKA PUBLIC POWER DISTRICT FOR
COOPER NUCLEAR STATION LICENSE CONDITION 2.C.(6)
DOCKET NO.: 50-298, DPR-46

1. You stated in Reference 1 that "... Five manual isolation valves to be installed on Main Steam branch lines in order to limit the amount of piping to be credited for the MSIV leakage flowpath (and hence, maintained as seismically robust). Post-accident Operator action will be required to close these valves (which will be located in the Turbine Building)..." We request your responses to the following:
 - Explanation as to how those five manual isolation valves will be seismically qualified.
 - Provide a comparison between the Cooper's MSIV leakage path proposed manual isolation valves and the earthquake experience database concerning seismic performance of this class of equipment.
 - Indicate whether the leakage path with the manual isolation valves installed meets the provisions in the SQUG-GIP 2 (Reference 2). If it does not, identify how the outlier conditions were resolved.
 - Indicate whether the five manual valves will be part of the Cooper's in-service testing (IST) program. If they are not, provide justification as to why they should not be part of the IST program.
2. You stated in Reference 3 that "... The cross-sectional leakage area is being reduced by mechanically adjusting the Stop Valve actuator/control shaft positions through use of a special pre-staged tool, applied as a post-Loss Coolant Accident manual action..." We request your response to the following:
 - Explanation as to how the mechanically adjusted Stop Valve actuator/control shaft with a special pre-staged tool will be seismically robust.
 - Provide a comparison between the MSIV leakage path Stop Valve actuator with the proposed adjustment and the earthquake experience database concerning seismic performance of the equipment class that encompasses the reconfigured Stop Valve.

References

- Letter, Nebraska Public Power District to U.S. NRC, "License Condition 2.C.(6) Seismic Evaluation, Cooper Nuclear Station, NRC Docket No. 50-298, DPR-46," dated February 26, 2002.

- Seismic Qualification Utility Group, "Generic Implementation Procedure (GIP) for Seismic Verification of Nuclear Power Plant Equipment," Revision 2, corrected February 14, 1992.
- Letter, Nebraska Public Power District to U.S. NRC, "Additional Information Related to License Condition 2.C.(6) Seismic Evaluation, Cooper Nuclear Station, NRC Docket No. 50-298, DPR-46," dated December 19, 2002.

Cooper Nuclear Station

cc:

Mr. William J. Fehrman
President and Chief Executive Officer
Nebraska Public Power District
1414 15th Street
Columbus, NE 68601

Mr. Thomas J. Palmisano
Site Vice President
Nebraska Public Power District
P. O. Box 98
Brownville, NE 68321

Mr. John R. McPhail, General Counsel
Nebraska Public Power District
P. O. Box 499
Columbus, NE 68602-0499

Mr. Paul V. Fleming, Licensing Manager
Nebraska Public Power District
P.O. Box 98
Brownville, NE 68321

Mr. Michael J. Linder, Director
Nebraska Department of Environmental
Quality
P. O. Box 98922
Lincoln, NE 68509-8922

Chairman
Nemaha County Board of Commissioners
Nemaha County Courthouse
1824 N Street
Auburn, NE 68305

Ms. Cheryl K. Rogers, Program Manager
Nebraska Health & Human Services
System
Division of Public Health Assurance
Consumer Services Section
301 Centennial Mall, South
P. O. Box 95007
Lincoln, NE 68509-5007

Mr. Ronald A. Kucera, Director
of Intergovernmental Cooperation
Department of Natural Resources
P.O. Box 176
Jefferson City, MO 65102

Senior Resident Inspector
U.S. Nuclear Regulatory Commission
P. O. Box 218
Brownville, NE 68321

Regional Administrator, Region IV
U.S. Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 1000
Arlington, TX 76011

Jerry Uhlmann, Director
State Emergency Management Agency
P. O. Box 116
Jefferson City, MO 65101

Chief, Radiation and Asbestos
Control Section
Kansas Department of Health
and Environment
Bureau of Air and Radiation
1000 SW Jackson
Suite 310
Topeka, KS 66612-1366

Mr. Daniel K. McGhee
Bureau of Radiological Health
Iowa Department of Public Health
401 SW 7th Street
Suite D
Des Moines, IA 50309

Mr. Scott Clardy, Director
Section for Environmental Public Health
P.O. Box 570
Jefferson City, MO 65102-0570

Mr. Clay C. Warren
Chief Nuclear Officer
Nebraska Public Power District
P. O. Box 98
Brownville, NE 68321