

October 2, 2003

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

SUBJECT: COOPER NUCLEAR STATION - REQUEST FOR ADDITIONAL INFORMATION
REGARDING MODIFICATION OF THE MAIN STEAM ISOLATION VALVE
LEAKAGE PATHWAY AND LICENSE CONDITION 2.C.(6) (MB7376)

Dear Mr. Warren:

Nebraska Public Power District (NPPD or the licensee) requested the NRC staff approve changes related to the main steam line isolation valve (MSIV) leakage pathway seismic evaluation and License Condition 2.C.(6). A meeting was held on July 23, 2003, between the licensee and the NRC staff to discuss the issues related to the MSIV leakage pathway seismic adequacy for iodine plate-out credit in radiological dose assessment of design basis accidents.

The staff has reviewed the information provided during the July 23, 2003, meeting with NPPD and determined that additional information is required in order to complete the review and approval of the changes. The request for additional information is enclosed. Based upon discussions with NPPD staff, a mutually agreeable date for your response is within 60 days of receipt of this letter.

Sincerely,

/RA/

Michelle C. Honcharik, Project Manager, Section 1
Project Directorate IV
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-298

Enclosure: As stated

cc w/enclosure: See next page

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

October 2, 2003

SUBJECT: COOPER NUCLEAR STATION - REQUEST FOR ADDITIONAL INFORMATION
REGARDING MODIFICATION OF THE MAIN STEAM ISOLATION VALVE
LEAKAGE PATHWAY AND LICENSE CONDITION 2.C.(6) (MB7376)

Dear Mr. Warren:

Nebraska Public Power District (NPPD or the licensee) requested the NRC staff approve changes related to the main steam line isolation valve (MSIV) leakage pathway seismic evaluation and License Condition 2.C.(6). A meeting was held on July 23, 2003, between the licensee and the NRC staff to discuss the issues related to the MSIV leakage pathway seismic adequacy for iodine plate-out credit in radiological dose assessment of design basis accidents.

The staff has reviewed the information provided during the July 23, 2003, meeting with NPPD and determined that additional information is required in order to complete the review and approval of the changes. The request for additional information is enclosed. Based upon discussions with NPPD staff, a mutually agreeable date for your response is within 60 days of receipt of this letter.

Sincerely,

/RA/

Michelle C. Honcharik, Project Manager, Section 1
Project Directorate IV
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-298

Enclosure: As stated

cc w/enclosure: See next page

DISTRIBUTION:

PUBLIC

PDIV-1 r/f

RidsNrrDlpmLpdiv (H. Berkow)

RidsNrrDlpmLpdiv-1 (R. Gramm)

RidsNrrPMMHoncharik

RidsNrrLAMMcAllister

RidsAcrcAcnwMailCenter

RidsOgcRp

RidsRgn4MailCenter (K. Kennedy)

Devender Reddy (DSSA/SPLB)

Yong Kim (DE/EMEB)

James Bongarra (DIPM/IROB)

ACCESSION NO: ML032770006

OFFICE	PDIV-1/PM	PDIV-1/LA	PDIV-1/SC
NAME	MHoncharik	MMcAllister	RGramm
DATE	10/1/03	10/1/03	10/1/03

OFFICIAL RECORD COPY

REQUEST FOR ADDITIONAL INFORMATION
ISSUES RELATED TO MAIN STEAM LINE ISOLATION (MSIV)
LEAKAGE PATHWAY SEISMIC EVALUATION
COOPER NUCLEAR STATION (CNS)

1. Describe and justify any exceptions that are proposed to the flowpath criteria that are included in Appendix C to NEDC-31858P, Rev. 2.
2. With respect to the turnbuckle device, explain what role/purpose the device serves and why it is needed relative to the guidance specified in NEDC-31858P, Rev. 2, and confirm that the fraction of MSIV leakage to the high pressure turbine (i.e., ratio of flow areas) satisfies the criteria specified in Appendix C of NEDC-31858P, Rev. 2.
3. 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:
 - (a) Explanation as to how those five manual isolation valves will be seismically qualified.
 - (b) Provide a comparison between the CNS MSIV leakage path proposed manual isolation valves and the earthquake experience database concerning seismic performance of this class of equipment.
 - (c) 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.
 - (d) Indicate whether the five manual valves will be part of the CNS Inservice Testing (IST) program. If they are not, provide justification as to why they should not be part of the IST program.
4. 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 of Coolant Accident manual action..." The NRC staff requests responses to the following:
 - (a) Explanation as to how the mechanically adjusted Stop Valve actuator/control shaft with a special pre-staged tool will be seismically robust.
 - (b) 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.

Enclosure

- (c) Explain how the post-Loss of Coolant Accident (post-LOCA) manual action is accomplished. Supplemental information, such as diagrams/photos/illustrations of the pre-staged tool, Stop Valve actuator, location of task to be performed, etc., will be beneficial to include in the response. At a minimum, the following questions should be addressed in the explanation:
1. What step(s) is/are involved in performing the action(s), i.e., how much physical and mental effort does the task require? How many Stop Valves will require manual adjustment? If more than one valve is involved, where are the valves located in relation to one another?
 2. Is the action taken locally or from the control room?
 3. How much time is required to successfully accomplish the task (including time that may be required to access the location from where the task is performed)? How much time is available to take the action(s) before adverse consequences occur?
 4. What are the consequences of failing to perform the task?
 5. How does the operator know when to perform the task, e.g., are there specific alarms, cues, directions, instructions, etc.?
 6. What are the conditions under which the task will be performed (e.g., lighting, noise, temperature, humidity, radiation levels expected, smoke, toxic gas, etc.)?
 7. What is the pre-staged tool?
 8. In addition to the pre-staged tool, are there any other special tools/equipment required to successfully accomplish the task?
 9. How has it been determined that the required manual action(s) can be successfully completed in the time allowed, especially considering other tasks required to be performed under post-LOCA conditions?
 10. What procedure(s) is/are involved in performing the task and how have the operators been trained to use the procedures?

References

1. 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.
2. Seismic Qualification Utility Group, "Generic Implementation Procedure (GIP) for Seismic Verification of Nuclear Power Plant Equipment," Revision 2, corrected February 14, 1992.

3. 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