

March 10, 2006

Mr. Randall K. Edington  
Vice President-Nuclear and CNO  
Nebraska Public Power District  
P. O. Box 98  
Brownville, NE 68321

SUBJECT: COOPER NUCLEAR STATION - ISSUANCE OF AMENDMENT RE: REVISE  
TECHNICAL SPECIFICATIONS INSTRUMENTATION DEFINITIONS (TAC  
NO. MC8230)

Dear Mr. Edington:

The Commission has issued the enclosed Amendment No. 217 to Facility Operating License No. DPR-46 for the Cooper Nuclear Station. The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated August 25, 2005.

The amendment would revise selected TS definitions in accordance with the Technical Specifications Task Force Improved Standard Technical Specifications Change Traveler TSTF-205-A, "Revision of Channel Calibration, Channel Functional Test, and Related Definitions," Revision 3, dated July 31, 2003. The amendment would change the definitions of the Channel Calibration, Channel Functional Test, and Logic System Functional Test to ensure that testing performed in accordance with the TS defined terms will include all instrument loop components required to establish channel operability.

A copy of our related Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's next biweekly *Federal Register* notice.

Sincerely,

**/RA/**

Brian Benney, Project Manager  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-298

Enclosures: 1. Amendment No. 217 to DPR-46  
2. Safety Evaluation

cc w/encls: See next page

March 10, 2006

Mr. Randall K. Edington  
Vice President-Nuclear and CNO  
Nebraska Public Power District  
P. O. Box 98  
Brownville, NE 68321

SUBJECT: COOPER NUCLEAR STATION - ISSUANCE OF AMENDMENT RE: REVISE  
TECHNICAL SPECIFICATIONS INSTRUMENTATION DEFINITIONS (TAC  
NO. MC8230)

Dear Mr. Edington:

The Commission has issued the enclosed Amendment No. 217 to Facility Operating License No. DPR-46 for the Cooper Nuclear Station. The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated August 25, 2005.

The amendment would revise selected TS definitions in accordance with the Technical Specifications Task Force Improved Standard Technical Specifications Change Traveler TSTF-205-A, "Revision of Channel Calibration, Channel Functional Test, and Related Definitions," Revision 3, dated July 31, 2003. The amendment would change the definitions of the Channel Calibration, Channel Functional Test, and Logic System Functional Test to ensure that testing performed in accordance with the TS defined terms will include all instrument loop components required to establish channel operability.

A copy of our related Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's next biweekly *Federal Register* notice.

Sincerely,  
**/RA/**  
Brian Benney, Project Manager  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-298

- Enclosures: 1. Amendment No. 217 to DPR-46  
2. Safety Evaluation

cc w/encls: See next page

DISTRIBUTION:

PUBLIC RidsAcrsAcnwMailCenter  
LPLIV r/f RidsOgcRp  
GHill (2) RidsRgn4MailCeneter (KKennedy)  
RidsNrrDorl (CHaney/CHolden) RidsNrrDpr  
RidsNrrDorlLplg (DTerao) CSchulten  
RidsNrrPMBBenney  
RidsNrrLAFeizollahi  
RidsNrrDirsltsb (TBoyce)  
Package accession no. ML060460135  
Amendment accession no. ML060460122

OFFICE	NRR/LPL4/PM	NRR/LPL4/LA	ITSB:DIRS	OGC	NRR/LPL4/BC
NAME	BBenney	LFeizollahi	TBoyce	Mspencer <sub>NLOWC</sub>	DTerao
DATE	2/27/06	2/22/06	01/17/2006	3/2/06	3/10/06

OFFICIAL RECORD COPY

NEBRASKA PUBLIC POWER DISTRICT

DOCKET NO. 50-298

COOPER NUCLEAR STATION

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 217  
License No. DPR-46

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Nebraska Public Power District (the licensee) dated August 25, 2005, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this license amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and Paragraph 2.C.(2) of Facility Operating License No. DPR-46 is hereby amended to read as follows:

- (2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 217 , are hereby incorporated in the license. The Nebraska Public Power District shall operate the facility in accordance with the Technical Specifications.

3. The license amendment is effective as of its date of issuance and shall be implemented within 30 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

***/RA/***

David Terao, Chief  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical  
Specifications

Date of Issuance: March 10, 2006

ATTACHMENT TO LICENSE AMENDMENT NO. 217

FACILITY OPERATING LICENSE NO. DPR-46

DOCKET NO. 50-298

Replace the following pages of the Appendix A Technical Specifications with the enclosed revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

REMOVE

1.1-1  
1.1-2  
1.1-3

INSERT

1.1-1  
1.1-2  
1.1-3

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 217 TO

FACILITY OPERATING LICENSE NO. DPR-46

NEBRASKA PUBLIC POWER DISTRICT

COOPER NUCLEAR STATION

DOCKET NO. 50-298

1.0 INTRODUCTION

By application dated August 25, 2005, Nebraska Public Power District (the licensee) requested changes to the Technical Specifications (TSs) for the Cooper Nuclear Station (CNS). The proposed changes would revise selected CNS TS definitions in accordance with the Technical Specifications Task Force (TSTF) Improved Standard Technical Specifications (STs) Change Traveler TSTF-205-A, "Revision of Channel Calibration, Channel Functional Test, and Related Definitions," Revision 3, dated July 31, 2003.

The application changes the definitions of Channel Calibration, Channel Functional Test, and Logic System Functional Test to ensure that testing performed in accordance with the TS defined terms includes all instrument loop components required to establish channel operability.

2.0 REGULATORY EVALUATION

In Title 10 of the *Code of Federal Regulations* (10 CFR) 50.36, the Commission established its regulatory requirements related to the content of the TSs. Pursuant to 10 CFR 50.36, TSs are required to include items in the following five specific categories related to plant operation: (1) safety limits, limiting safety system settings, and limiting control settings; (2) limiting conditions for operation (LCOs); (3) surveillance requirements (SRs); (4) design features; and (5) administrative controls. The rule does not, however, specify the particular requirements to be included in a plant's TS.

In 1992, the Nuclear Regulatory Commission (NRC) issued the improved STs to clarify the content and form of requirements necessary to ensure safe operation of nuclear power plants in accordance with 10 CFR 50.36. Major revisions to the STS were published in April 2001 and June 2004. Total adoption of the improved STS will substantially improve the efficiency of the regulatory process, and ensure that licensee and NRC resources are applied to significant safety matters.

As use of the STS matured, necessary improvements were identified. The process used to initiate changes to the STS involves the industry-sponsored TSTF submitting proposed changes (called a traveler) to the NRC for review, approval, and subsequent incorporation into

the next revision of the STS. The NRC staff did not, prior to 2002, prepare a formal safety evaluation describing its safety basis for accepting the associated changes to the STSs. The generic acceptability of the model specifications in the STSs, however, is documented in the much expanded and improved Bases for the STSs.

In general, the licensee cannot justify TS changes solely on the basis of adopting the model STS or industry TSTF travelers. Changes that result in relaxation (less restrictive conditions) of TS requirements require detailed justification. When requirements have been shown to give little or no safety benefit, their relaxation or removal from the TSs may be appropriate. Other changes made to adopt the model STSs are new, more conservative than corresponding requirements in the current TS, or have additional restrictions that are not in the current TSs but are in the STSs. The NRC staff evaluates the additional restrictions on plant operation to ensure that they enhance safety. Additionally, non-technical (administrative) TS changes incorporate human factor principles for the preferred format into the form and structure of the TSs so that plant operations personnel can use them more easily. These changes are editorial in nature or involve the reorganization or reformatting of current TS requirements without affecting technical content or operational restrictions. In order to ensure consistency, the NRC staff use STSs as guidance to reformat and make other administrative changes.

Consequently, licensees applying to incorporate a TSTF into the TSs require plant-specific justification acceptable to the NRC staff. Therefore, the NRC staff made use of applicable regulatory guidance which includes the following:

- Model TSs contained in the improved STS NUREG-1433, "Standard Technical Specifications General Electric Plants," Revision 3.0, dated June 2004, and
- Industry/TSTF Standard Technical Specifications Change Traveler TSTF-205-A, Revision 3, "Revision of Channel Calibration, Channel Functional Test, and Related Definitions."

### 3.0 TECHNICAL EVALUATION

TSTF-205-A, Revision 3, changes revised definitions for Channel Calibration, Channel Functional Test, and Logic System Functional Test in the improved STSs to remove potential ambiguity in what constitutes an acceptable test.

TS Section 1.1 includes definitions for instrumentation testing requirements. In accordance with 10 CFR 50.36(c)(3), "Surveillance requirements," SRs are requirements related to test, calibration, or inspection needed to assure that the necessary quality of systems and components is maintained, facility operation is within limits, and that the TS LCO is met. The definitions of Channel Calibration, Channel Functional Test, and Logic System Functional Test establish requirements for conducting testing including what the test involves, the scope of components that the test encompasses, and instructions on how the test is to be performed. The terms defined in Section 1.1 are referenced throughout instrumentation TS SRs to help assure consistent performance of SRs.

### 3.1 TSTF-205-A, Revision 3

In its application, the licensee proposed to adopt TSTF-205-A, Revision 3, TS changes to the definitions of the Channel Calibration, Channel Functional Test, and Logic System Functional Test to eliminate current ambiguity and possible misinterpretations of testing requirements. In addition, conforming Bases changes were made to provide an appropriate basis for these revised terms.

The current definitions for instrumentation Channel Calibration, Channel Functional Test, and Logic System Functional Test use phrases "required sensor, alarm, interlock, display, and trip functions, and channel failure trips," and "all required relays and contacts, trip units, solid state logic elements, etc." to describe those instrument channel devices required to be included for specified tests. There is ambiguity in the use of the word "required" and whether the list is inclusive of all devices that must be tested or whether the list is representative of devices to be tested. Thus, the licensee adopted proposed changes from TSTF-205-A, Revision 3, which replace the string of required instrument channel devices in the definitions discussed above with "all devices in the channel required for channel OPERABILITY."

The revised channel functional test definition does not address the method for conducting testing of all required channel devices. The NRC staff position is that a successful test of the required contact(s) of a channel relay may be performed by the verification of the change of state of a single contact of the relay. This clarifies what is an acceptable channel functional test of a relay. This is acceptable because all of the other required contacts of the relay are verified by other TS and non-TS tests at least once per refueling interval with applicable extensions. This NRC staff position is incorporated into the TSTF-205-A, Revision 3, Bases for channel functional tests. The licensee chose to adopt the approved TSTF-205-A, Revision 3, Bases to clarify testing requirements by modifying the Bases of applicable surveillances to provide acceptable methods of testing.

In addition, the current TS definition for Channel Calibration specifies that testing may be "performed by means of any series of sequential, overlapping or total channel steps so that the entire channel is calibrated" and the definition for Channel Functional Test specifies that testing may be "performed by means of any series of sequential, overlapping or total channel steps so that the entire channel is tested." The proposed TS changes delete the phrase "so that the entire channel is calibrated" from the definition of channel calibration and "so that the entire channel is tested" from the definition of channel functional test to eliminate a verbatim conflict between the definition and the TSTF-205-A, Revision 3, Bases, which state a successful test to be the verification of the change of state of a single contact of the relay.

The NRC staff reviewed all of the administrative changes proposed by the licensee and finds them acceptable because they are compatible with the STSs, do not result in any substantive change in operating requirements, and are consistent with the Commission's regulations. These changes will provide for a consistent application of the definitions, tests, and calibrations.

### 4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Nebraska State official was notified of the proposed issuance of the amendment. The State official had no comments.

## 5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes surveillance requirements. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding published October 11, 2005 (70 FR 59086). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

## 6.0 CONCLUSIONS

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner; (2) such activities will be conducted in compliance with the Commission's regulations; and, (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: C. Schulten

Date: March 10, 2006

Cooper Nuclear Station

cc:

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

Mr. Gene Mace  
Nuclear Asset Manager  
Nebraska Public Power District  
P.O. Box 98  
Brownville, NE 68321

Mr. John C. McClure  
Vice President and 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. Julia Schmitt, Manager  
Radiation Control Program  
Nebraska Health & Human Services R & L  
Public Health Assurance  
301 Centennial Mall, South  
P.O. Box 95007  
Lincoln, NE 68509-5007

Mr. H. Floyd Gilzow  
Deputy Director for Policy  
Missouri Department of Natural Resources  
P. O. Box 176  
Jefferson City, MO 65102-0176

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 400  
Arlington, TX 76011

Director, Missouri State Emergency  
Management Agency  
P. O. Box 116  
Jefferson City, MO 65102-0116

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  
Lucas State Office Building, 5th Floor  
321 East 12th Street  
Des Moines, IA 50319

Mr. Keith G. Henke, Planner  
Division of Community and Public Health  
Office of Emergency Coordination  
930 Wildwood P.O. Box 570  
Jefferson City, MO 65102

Jerry C. Roberts, Director of Nuclear  
Safety Assurance  
Nebraska Public Power District  
P.O. Box 98  
Brownville, NE 68321

Mr. John F. McCann, Director  
Licensing, Entergy Nuclear Northeast  
Entergy Nuclear Operations, Inc.  
440 Hamilton Avenue  
White Plains, NY 10601-1813

February 2006