

September 20, 2006

LICENSEES: Union Electric Company (UECo)
Wolf Creek Nuclear Operating Corporation (WCNOC)

FACILITIES: Callaway Plant, Unit 1
Wolf Creek Generating Station

SUBJECT: SUMMARY OF AUGUST 16, 2006, MEETING WITH REPRESENTATIVES OF
WOLF CREEK NUCLEAR OPERATING CORPORATION AND UNION
ELECTRIC COMPANY

A meeting was held on Wednesday, August 16, 2006, between the Nuclear Regulatory Commission (NRC) staff and the licensees for the Callaway Plant, Unit 1 (Callaway) and Wolf Creek Generating Station (Wolf Creek). The meeting was held at the request of the licensees for them to present the design of the main steam isolation valves (MSIVs) at their plants, and the requirements in the plant Technical Specifications (TSs) on these valves. This presentation was not part of any license amendment request submitted by the licensees to the NRC. The notice for the meeting was issued on August 4, 2006.

Enclosure 1 is the list of attendees. Enclosure 2 is the meeting handout provided by the licensees; there was no handout from the NRC staff.

Each plant has four steam generators (SGs) with a main steam line from each SG to the steam line header that provides steam to the single high-pressure steam turbine. Each of these main steam lines has a single MSIV to isolate, if needed during an accident, the steam turbine from the SG. Therefore, each plant has four MSIVs. Each MSIV has two actuator trains, each of which can close the valve. Each actuator train alone is capable of closing the valve within the time frame needed for the design-basis accidents. The MSIVs are addressed in TS 3.7.2, "Main Steam Isolation Valves," for both plants.

The NRC staff is in the process of making a determination as to the effect of a single inoperable actuator train on the operability, with respect to the TSs, of the associated MSIV. The licensees' presentations provided information germane to this determination.

The following agenda was presented by WCNOC during the first part of the meeting:

- Introductions (page 1 of Enclosure 2)
- Purpose of Meeting (page 2)
- MSIV/Main feedwater isolation valves (MFIS) Description and Operation (pages 3 through 8)
- Design Bases (pages 9 and 10)
- Safety Analyses (pages 11 through 17)
- TSs (pages 18 through 22)
- Conclusion (pages 23 and 24)

WCNOC addressed both MSIVs and MFIVs because at Wolf Creek Generating Station these valves have two actuator trains, each of which can close the valves. In its presentation on the design bases and safety analyses of the MSIVs, WCNOC stated that (1) the design bases for the MSIVs are that no single failure can prevent any MSIV from performing its required function and (2) the safety function for the MSIVs is to close in an accident within the 5 seconds required by the accident analyses. The Wolf Creek MSIV accident analyses are different from those of Callaway in that only three of the four MSIVs are required to close for Wolf Creek, whereas all the MSIVs are required to close for Callaway.

Following WCNOC's presentation, UECo presented the information provided in its handout, which is the last four pages of Enclosure 2.

UECo's presentation addressed the following: (1) the licensee's initial efforts to address the MSIV actuator inoperability, (2) the licensee's TS interpretation, (3) MSIV actuator operability issue identified in 2005, and (4) subsequent development and current status of this issue.

The NRC staff discussed with the licensees the MSIV design at both plants, the rules and practices of the TSs, and how the existing TS 3.4.15 should be interpreted with respect to the actuator trains on these valves.

The NRC staff did not draw any conclusions about the operability of an MSIV with respect to one of the two actuator trains being out-of-service. The NRC staff completed its discussion of the licensees' presentations, and the meeting was closed.

Please direct any inquiries to me at 301-415-1307, or JND@nrc.gov.

/RA/

Jack Donohew, Senior Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos: 50-482 and 50-483

Enclosures: 1. List of Meeting Attendees
2. Licensees' Handout

cc w/encls: See next page

WCNOC addressed both MSIVs and MFIVs because at Wolf Creek Generating Station these valves have two actuator trains, each of which can close the valves. In its presentation on the design bases and safety analyses of the MSIVs, WCNOC stated that (1) the design bases for the MSIVs are that no single failure can prevent any MSIV from performing its required function and (2) the safety function for the MSIVs is to close in an accident within the 5 seconds required by the accident analyses. The Wolf Creek MSIV accident analyses are different from those of Callaway in that only three of the four MSIVs are required to close for Wolf Creek, whereas all the MSIVs are required to close for Callaway.

Following WCNOC's presentation, UECO presented the information provided in its handout, which is the last four pages of Enclosure 2.

UECO's presentation addressed the following: (1) the licensee's initial efforts to address the MSIV actuator inoperability, (2) the licensee's TS interpretation, (3) MSIV actuator operability issue identified in 2005, and (4) subsequent development and current status of this issue.

The NRC staff discussed with the licensees the MSIV design at both plants, the rules and practices of the TSs, and how the existing TS 3.4.15 should be interpreted with respect to the actuator trains on these valves.

The NRC staff did not draw any conclusions about the operability of an MSIV with respect to one of the two actuator trains being out-of-service. The NRC staff completed its discussion of the licensees' presentations, and the meeting was closed.

Please direct any inquiries to me at 301-415-1307, or JND@nrc.gov.

/RA/

Jack Donohew, Senior Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos: 50-482 and 50-483

Enclosures: 1. List of Meeting Attendees
2. Licensees' Handout

cc w/encls: See next page

DISTRIBUTION:

PUBLIC	CSchulten, ITSB	JLamb, RIV EDO
LPLIV Reading	TKobetz, ITSB	
RidsNrrDorl (CHaney/CHolden)	MZobler, OGC	
RidsNrrDorlLp4 (DTerao)	WJones, RIV	
RidsNrrPMJDonohew	RidsAcrsAcnwMailCenter	
RidsNrrLAMLFfeizollahi	RidsOgcRp	

Package No.: ML062410381

ADAMS ACCESSION NO. ML062410484 Meeting Handouts: ML062280437

OFFICE	LPLIV/PM	LPLIV/LA	ITSB/SC	LPLIV/BC
NAME	JDonohew	LFeizollahi	TKobetz	DTerao
DATE	9/18/06	9/20/06	9/19/06	9/20/06

LIST OF ATTENDEES AT MEETING OF AUGUST 16, 2006

WITH REPRESENTATIVES OF UNION ELECTRIC COMPANY AND

WOLF CREEK NUCLEAR OPERATING CORPORATION

<u>NAME</u>	<u>AFFILIATION</u>
J. Donohew	NRC/NRR/LPLIV
D. Terao	NRC/NRR/LPIV
T. Kobetz	NRC/NRR/ITSB
C. Schulten	NRC/NRR/ITSB
M. Zobler	NRC/OGC
W. Jones	NRC/RIV
S. Wideman	WCNOC
T. Garrett	WCONC
F. Laflin	WCNOC
G. Clarkson	WCNOC
D. Shafer	UEC
T. Elwood	UEC
M. Reidmeyer	UEC
E. Hiruo	Platts Nuclear Publications

Where:

- ITSB = Technical Specification Branch
- LPLIV = Plant Licensing Branch IV
- NRC = Nuclear Regulatory Commission
- NRR = Office of Nuclear Reactor Regulation
- OGC = Office of the General Counsel
- RIV = Region IV
- UECo = Union Electric Company
- WCNOC = Wolf Creek Nuclear Operating Corporation

LICENSEES' HANDOUT FOR AUGUST 16, 2006, MEETING

The licensees' handout (ADAMS* Accession No. ML062280437) consists of the following:

1. Handout (24 pages) by Wolf Creek Nuclear Operating Corporation (WCNOC)
2. Handout (4 pages) by Union Electric Company (UECo)

* = Agencywide Documents Access and Management System

Callaway Plant, Unit 1

cc:

Professional Nuclear Consulting, Inc.
19041 Raines Drive
Derwood, MD 20855

John O'Neill, Esq.
Pillsbury Winthrop Shaw Pittman LLP
2300 N. Street, N.W.
Washington, D.C. 20037

Mr. Keith A. Mills, Supervising Engineer
Regional Regulatory Affairs/Safety Analysis
AmerenUE
P.O. Box 620
Fulton, MO 65251

U.S. Nuclear Regulatory Commission
Resident Inspector Office
8201 NRC Road
Steedman, MO 65077-1302

Mr. Les H. Kanuckel
Manager, Quality Assurance
AmerenUE
P.O. Box 620
Fulton, MO 65251

Missouri Public Service Commission
Governor Office Building
200 Madison Street
Jefferson City, MO 65102-0360

Regional Administrator, Region IV
U.S. Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-4005

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

Mr. Rick A. Muench
President and Chief Executive Officer
Wolf Creek Nuclear Operating Corporation
P.O. Box 411
Burlington, KA 66839

Mr. Dan I. Bolef, President
Kay Drey, Representative
Board of Directors Coalition for the
Environment
6267 Delmar Boulevard
University City, MO 63130

Mr. Lee Fritz, Presiding Commissioner
Callaway County Court House
10 East Fifth Street
Fulton, MO 65151

Mr. David E. Shafer
Superintendent, Licensing
Regulatory Affairs
AmerenUE
P.O. Box 66149, MC 470
St. Louis, MO 63166-6149

Mr. Keith D. Young
Manager, Regulatory Affairs
AmerenUE
P.O. Box 620
Fulton, MO 65251

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

Certrec Corporation
4200 South Hulen, Suite 630
Fort Worth, TX 76109

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

Mr. Charles D. Naslund
Senior Vice President and Chief Nuclear
Officer
Union Electric Company
Post Office Box 620
Fulton, MO 65251

Wolf Creek Generating Station

cc:

Jay Silberg, Esq.
Pillsbury Winthrop Shaw Pittman LLP
2300 N Street, NW
Washington, D.C. 20037

Regional Administrator, Region IV
U.S. Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011

Senior Resident Inspector
U.S. Nuclear Regulatory Commission
P.O. Box 311
Burlington, KS 66839

Chief Engineer, Utilities Division
Kansas Corporation Commission
1500 SW Arrowhead Road
Topeka, KS 66604-4027

Office of the Governor
State of Kansas
Topeka, KS 66612

Attorney General
120 S.W. 10th Avenue, 2nd Floor
Topeka, KS 66612-1597

County Clerk
Coffey County Courthouse
110 South 6th Street
Burlington, KS 66839

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

Vice President Operations/Plant Manager
Wolf Creek Nuclear Operating Corporation
P.O. Box 411
Burlington, KS 66839

Supervisor Licensing
Wolf Creek Nuclear Operating Corporation
P.O. Box 411
Burlington, KS 66839

U.S. Nuclear Regulatory Commission
Resident Inspectors Office/Callaway Plant
8201 NRC Road
Steedman, MO 65077-1032

Mr. Rick A. Muench
President and Chief Executive Officer
Wolf Creek Nuclear Operating Corporation
Post Office Box 411
Burlington, KS 66839

February 2006