

January 16, 2007

LICENSEE: DUKE POWER COMPANY LLC (DUKE)
FACILITY: OCONEE NUCLEAR STATION, UNITS 1, 2, AND 3 (OCONEE)
SUBJECT: SUMMARY OF DECEMBER 13 AND 14, 2006, MEETING TO DISCUSS
FUTURE LICENSE AMENDMENT REQUEST FOR DIGITAL REACTOR
PROTECTIVE SYSTEM (RPS) AND ENGINEERED SAFEGUARDS
PROTECTIVE SYSTEM (ESPS) (TAC NOS. MD2471, MD2472, AND MD2473)

On December 13 and 14, 2006, the Nuclear Regulatory Commission (NRC) met with Duke (the licensee) to discuss the future license amendment request (LAR) for a digital upgrade to RPS/ESPS that the licensee intends to submit for Oconee. Enclosure 1 is a list of attendees. Enclosure 2 is the handouts provided by the licensee during the meeting and is available in the Agencywide Documents Access and Management System (ADAMS) Accession Number ML070080325. In addition to these handouts, a proprietary handout was provided. The nonproprietary version of this handout is Enclosure 3 and is available under ADAMS Accession Number ML063530433.

The licensee and its contractor, AREVA, presented a detailed description of the proposed Oconee digital RPS/ESPS to demonstrate that it will comply with the requirements of the Institute of Electrical and Electronics Engineers (IEEE), IEEE-603 with respect to interchannel communications and the safety/nonsafety interface.

The NRC staff stated that, based on the information provided during the meeting, it appears that the proposed Oconee digital RPS/ESPS does not need relief from IEEE 603 in the area of interchannel communications. However, the NRC staff requested that the licensee provide (1) a failure modes and effects analysis that includes, among other things, all credible single failures of the micro-processor, and (2) the source code for the second minimum/second maximum function blocks.

The NRC staff stated that, based on the information provided during the meeting, it appears that the proposed Oconee digital RPS/ESPS also does not need relief from IEEE 603 with respect to the safety/nonsafety interface. However, the NRC staff requested that the licensee provide (1) an expanded discussion of Net Optics port C that will help the NRC understand the isolation capabilities that will be used for one-way communication, and (2) a failure modes and effects analysis that includes, among other things, all credible single failures in the non-safety systems.

The licensee provided a discussion of design of the diverse high-pressure injection (HPI) actuation system that the licensee has proposed to install and a discussion of the design criteria that will be used for this system. These design criteria are similar to those used for the design of the diverse low-pressure injection actuation system. The NRC staff stated that, based on the design approach and design criteria that was presented, it appears to provide an acceptable approach for the development of an acceptable diverse HPI actuation system.

The licensee provided an overview of its plan for the preparation and submission of the LAR, including an outline of the contents of the LAR. The NRC staff did not have sufficient time to review this outline of the contents of the LAR, but based on what it saw during the meeting, the NRC staff had no objections to the proposed contents of the LAR.

The licensee stated that the site acceptance test (SAT) plan will not be provided until after the submittal of the LAR, but that it would be provided sometime during the fall of 2007. However, the licensee stated that the SAT procedure would not be submitted until after the expected date of the NRC staff's safety evaluation (SE). The NRC staff stated that it could complete its SE without having reviewed the SAT procedure and that the NRC staff would review the SAT procedure and results when they become available.

The licensee stated that it would like to have additional meetings with the NRC staff prior to submitting the LAR to discuss a number of topics, including the quality management plan, technical specifications, and cyber security. The licensee is planning to submit the LAR sometime during the summer of 2007.

/RA/

Leonard N. Olshan, Project Manager
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-269, 50-270, and 50-287

Enclosures

1. List of Attendees
2. Licensee's Handouts (ML070080325)
3. Nonproprietary Handout (ML063530433)

cc w/encls: See next page

The licensee provided an overview of its plan for the preparation and submission of the LAR, including an outline of the contents of the LAR. The NRC staff did not have sufficient time to review this outline of the contents of the LAR, but based on what it saw during the meeting, the NRC staff had no objections to the proposed contents of the LAR.

The licensee stated that the site acceptance test (SAT) plan will not be provided until after the submittal of the LAR, but that it would be provided sometime during the fall of 2007. However, the licensee stated that the SAT procedure would not be submitted until after the expected date of the NRC staff's safety evaluation (SE). The NRC staff stated that it could complete its SE without having reviewed the SAT procedure and that the NRC staff would review the SAT procedure and results when they become available.

The licensee stated that it would like to have additional meetings with the NRC staff prior to submitting the LAR to discuss a number of topics, including the quality management plan, technical specifications, and cyber security. The licensee is planning to submit the LAR sometime during the summer of 2007.

Leonard N. Olshan, Project Manager
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-269, 50-270, and 50-287

Enclosures

1. List of Attendees
2. Licensee's Handouts (ML070080325)
3. Nonproprietary Handout (ML063530433)

cc w/encls: See next page

Distribution:

PUBLIC	RidsOgcRp
LPL2-1 R/F	RidsAcrcAcnwMailCenter
RidsNrrDorlLpl2-1 (Emarinos)	R. Jasinski, NRR
RidsNrrPMLOlshan (hardcopy)	S. Lee, EDO Rgn II
RidsNrrLAMO'Brien (hardcopy)	RidsRgn2MailCenter (MErnstes)

Accession Number: ML070040110 - Package:ML070080389 - TS:ML070080325

OFFICE	LPL2-1/PM	LPL2-1/LA	BC/EICA	LPL2-1/BC
NAME	LOlshan:nc	MO'Brien	AHowe	EMarinos
DATE	1 /09 /2007	1 /08 /2007	1 /12 /2007	1 / 16 /2007

OFFICIAL RECORD COPY

MEETING ATTENDEES

MEETING TO DISCUSS FUTURE LICENSE AMENDMENT REQUEST FOR DIGITAL
REACTOR PROTECTIVE SYSTEM AND ENGINEERED SAFEGUARDS PROTECTIVE
SYSTEM

DECEMBER 13 AND 14, 2006

NRC

N. Carte
E. Marinos
M. Waterman
A. Howe
P. Rebstock
I. Jung
P. Hiland
W. Kemper
S. Arndt
L. Olshan
M. Chiramal
R. Shaffer
T. McGinty
K. O'Brien

DUKE

R. Gill
B. Shingleton
M. Miller
B. Thomas
M. Bailey

OTHER

M. Burzynski, AREVA
S. Kelley, AREVA
S. Richter, AREVA
J. Mullens, Oak Ridge National Laboratory

Oconee Nuclear Station, Units 1, 2, and 3

cc:

Mr. Bruce H. Hamilton
Vice President, Oconee Site
Duke Power Company LLC
7800 Rochester Highway
Seneca, SC 29672

Ms. Lisa F. Vaughn
Associate General Counsel and Managing
Attorney
Duke Energy Carolinas, LLC
526 South Church Street - EC07H
Charlotte, North Carolina 28202

Manager, LIS
NUS Corporation
2650 McCormick Dr., 3rd Floor
Clearwater, FL 34619-1035

Senior Resident Inspector
U.S. Nuclear Regulatory Commission
7812B Rochester Highway
Seneca, SC 29672

Mr. Henry Porter, Director
Division of Radioactive Waste Management
Bureau of Land and Waste Management
Dept. of Health and Env. Control
2600 Bull St.
Columbia, SC 29201-1708

Mr. Michael A. Schoppman
Framatome ANP
1911 North Ft. Myer Dr.
Suite 705
Rosslyn, VA 22209

Mr. B. G. Davenport
Regulatory Compliance Manager
Oconee Nuclear Site
Duke Energy Corporation
ON03RC
7800 Rochester Highway
Seneca, SC 29672

Mr. Leonard G. Green
Assistant Attorney General
NC Department of Justice
P.O. Box 629
Raleigh, NC 27602

Mr. R. L. Gill, Jr.
Manager - Nuclear Regulatory
Issues and Industry Affairs
Duke Power Company LLC
526 S. Church St.
Mail Stop EC05P
Charlotte, NC 28202

Division of Radiation Protection
NC Dept of Environment, Health, & Natural
Resources
3825 Barrett Dr.
Raleigh, NC 27609-7721

Mr. Peter R. Harden, IV
VP-Customer Relations and Sales
Westinghouse Electric Company
6000 Fairview Road
12th Floor
Charlotte, NC 28210

Mr. Henry Barron
Group Vice President, Nuclear Generation
and Chief Nuclear Officer
P.O. Box 1006-EC07H
Charlotte, NC 28201-1006

Mr. Charles Brinkman
Director, Washington Operations
Westinghouse Electric Company
12300 Twinbrook Parkway, Suite 330
Rockville, MD 20852

Ms. Kathryn B. Nolan
Senior Counsel
Duke Energy Carolinas, LLC
526 South Church Street - EC07H
Charlotte, NC 28202