October 20, 2006

- LICENSEE: Omaha Public Power District
- FACILITY: Fort Calhoun Station, Unit No. 1
- SUBJECT: SUMMARY OF SEPTEMBER 21, 2006, MEETING WITH OMAHA PUBLIC POWER DISTRICT (OPPD) (TAC NO. MC5780)

On September 21, 2006, the U.S. Nuclear Regulatory Commission (NRC) staff conducted a meeting with OPPD to discuss its participation in the Water Management Strategies program. OPPD had recently requested, and the NRC staff had approved, an extension to the completion date of the Generic Safety Issue (GSI)-191 efforts. OPPD stated it will complete the actions stated in its request for the fall 2006 refueling outage. However, as the result of some of the chemical effects testing, OPPD is concerned as to whether it will be able to complete the analysis to finalize the final resolution of GSI-191 by the extension date. OPPD is looking at different water management strategies that would allow them to meet its commitment for completion of the GSI-191 effort by April 2008.

OPPD is evaluating two possible water management strategies to limit the load on the strainers: (1) OPPD would change the start logic on the containment spray pumps (CSPs) to start on high containment pressure and low steam generator pressure and (2) OPPD would terminate CSPs at the start of recirculation. In both cases, OPPD proposes to provide core cooling using the high-presure safety injection pump(s) for recirculation. OPPD provided some preliminary results of the transport analysis assuming these water management strategies. The NRC noted that the transport fraction of low density fibers went from 100 percent to 0 percent. OPPD stated this was a result of the transport analysis for these scenarios. The NRC staff agreed the transport would be reduced but felt 0 percent was probably not a realistic number. OPPD agreed but again noted this was a calculated number and that the real number is somewhere between 0 percent and 100 percent. The NRC staff noted that other transport assumptions noted in the OPPD slides were also beyond those approved in the industry guidance report. The NRC staff did note that such a plant-specific approach was allowed but would require specific NRC review and approval.

OPPD provided some discussion on regulatory obstacles. In particular, OPPD discussed the possible effects on the dose consequences and the maximum containment pressure and temperature calculations due to the stoppage of containment spray. Alion provided a closed discussion on a proposed new method to estimate aerosol natural deposition inside the containment as related to the dose calculations. As an alternative, OPPD noted it is pursuing qualifying the containment recirculation system high efficiency particulate air (HEPA) filters to be able to apply credit in the dose calculations for mitigation of the radioactivity release inside the containment. OPPD stated that the preliminary results for not starting the CSPs during a loss-of-coolant accident are that the containment recirculation system HEPA filters can be qualified, it believes the calculated doses will be within regulatory limits. The NRC staff noted that if OPPD wants to qualify the HEPA filters in an expeditious manner, it should not deviate from the American Society for Testing and Materials requirements.

OPPD stated that its goal is to complete the GSI-191 effort by April 2008. However, if it pursues one of the above strategies, OPPD would like to know if the NRC would consider an extension should the ramifications of the water management review result in a need to go beyond April 2008. OPPD notes that the water management strategies would possibly provide them the margin that would allow the use of a smaller strainer than the currently proposed strainer of 3,000 square feet. OPPD stated that it would like to pursue this option and has not started the scheduling pending the result of this meeting. OPPD noted that it understands that because of some of its unique design features, its water management strategies may not apply broadly to the industry. The NRC staff agreed but felt several of the OPPD issues are applicable to other plants seeking to do water management strategies. The NRC staff noted that while OPPD's approach appears to be reasonable, OPPD is proposing something quite complex and different from the rest of the industry. As such, the NRC staff will need to discuss it further internally. The NRC staff stated it would keep OPPD informed of its discussions.

A list of attendees is enclosed. The OPPD and Alion non-proprietary presentation slides are available in the Agencywide Documents Access and Management System (ADAMS) under accession numbers ML062680528 and ML062700272, respectively.

The NRC staff thanked OPPD for the presentation.

Please direct any inquiries to me at 301-415-1445, or <u>abw@nrc.gov</u>.

/RA/

Alan B. Wang, Project Manager Plant Licensing Branch IV Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket No. 50-285

Enclosure: List of Meeting Attendees

cc w/encl: See next page

OPPD stated that its goal is to complete the GSI-191 effort by April 2008. However, if it pursues one of the above strategies, OPPD would like to know if the NRC would consider an extension should the ramifications of the water management review result in a need to go beyond April 2008. OPPD notes that the water management strategies would possibly provide them the margin that would allow the use of a smaller strainer than the currently proposed strainer of 3,000 square feet. OPPD stated that it would like to pursue this option and has not started the scheduling pending the result of this meeting. OPPD noted that it understands that because of some of its unique design features, its water management strategies may not apply broadly to the industry. The NRC staff agreed but felt several of the OPPD issues are applicable to other plants seeking to do water management strategies. The NRC staff noted that while OPPD's approach appears to be reasonable, OPPD is proposing something quite complex and different from the rest of the industry. As such, the NRC staff will need to discuss it further internally. The NRC staff stated it would keep OPPD informed of its discussions.

A list of attendees is enclosed. The OPPD and Alion non-proprietary presentation slides are available in the Agencywide Documents Access and Management System (ADAMS) under accession numbers ML062680528 and ML062700272, respectively.

The NRC staff thanked OPPD for the presentation.

Please direct any inquiries to me at 301-415-1445, or <u>abw@nrc.gov</u>.

/RA/

Alan B. Wang, Project Manager Plant Licensing Branch IV Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket No. 50-285

Enclosure: List of Meeting Attendees

cc w/encl: See next page

DISTRIBUTION:		
PUBLIC		MHart, DRA
LPLIV Reading		RArchitzel, DSS
RidsNrrDorl (CHaney/CHolden)		HWagage, DSS
RidsNrrDorlLpl4 (DTerao)	RJasinski, NR	R
RidsNrrPMAWang	RidsNrrDssSs	ib
RidsNrrLALFeizollahi	RDennig, DSS	S
RidsOgcRp	TMartin, DSS	
RidsAcrsAcnwMailCenter	RidsNrrDraAa	db
RidsRegion4MailCenter	RidsNrrDorlDp	or

ACCESSION NO.: ML062700644

OFFICE	NRR/LPL4/PM	NRR/LPL4/LA	NRR/LPL4/BC
NAME	AWang	LFeizollahi	DTerao
DATE	10/20/06	10/20/06	10/20/06

OFFICIAL RECORD COPY

MEETING WITH OMAHA PUBLIC POWER DISTRICT (OPPD)

LIST OF ATTENDEES

SEPTEMBER 21, 2006

<u>NRC</u>

<u>OPPD</u>

ALION

<u>Others</u>

- T. Martin A. Wang R. Dennig
- R. Architzel
- M. Kotzalas
- M. Hart
- H. Wagage

J. Gasper S. Baughn J. Bostleman T. Heames

- D. Vincent
- G. Salamon T. Kendall
- F. Verbos
- J. Butler

Ft. Calhoun Station, Unit 1

cc: Winston & Strawn ATTN: James R. Curtiss, Esq. 1700 K Street, N.W. Washington, DC 20006-3817

Chairman Washington County Board of Supervisors P.O. Box 466 Blair, NE 68008

Mr. John Hanna, Resident Inspector U.S. Nuclear Regulatory Commission P.O. Box 310 Fort Calhoun, NE 68023

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

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. David J. Bannister, Manager Fort Calhoun Station Omaha Public Power District Fort Calhoun Station FC-1-1 Plant P.O. Box 550 Fort Calhoun, NE 68023-0550

Mr. Joe L. McManis Manager - Nuclear Licensing Omaha Public Power District Fort Calhoun Station FC-2-4 Adm. P.O. Box 550 Fort Calhoun, NE 68023-0550

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. R. T. Ridenoure Vice President - Chief Nuclear Officer Omaha Public Power District Fort Calhoun Station FC-2-4 Adm. Post Office Box 550 Fort Calhoun, Nebraska 68023-0550