February 26, 2008

MEMORANDUM TO: Timothy Kobetz, Chief
Reactor Inspection Branch/***RA***/
Division of Inspection and Regional Support
Office of Nuclear Reactor Regulation

FROM: Steven Garry, Health Physics Team Leader
Reactor Inspection Branch
Division of Inspection and Regional Support
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF FEBRUARY 5, 2008, CATEGORY 2 PUBLIC MEETING WITH ELECTRIC POWER RESEARCH INSTITUTE (EPRI) AND THE NUCLEAR ENERGY INSTITUTE (NEI) TO DISCUSS THE EPRI GROUND WATER PROTECTION GUIDELINES

On February 5, 2008, a public meeting was held between the U.S. Nuclear Regulatory Commission (NRC), and representatives of the Electric Power Research Institute (EPRI), the Nuclear Energy Institute (NEI) and nuclear power industry at the U.S. Nuclear Regulatory Commission Headquarters, 6003 Executive Blvd, Room EBB2B18, Rockville, MD, 20852. The purpose of the meeting was to provide EPRI and NEI an opportunity to present the recently completed EPRI Groundwater Protection Guidelines. The meeting generally followed the agenda. Enclosure 1 contains the meeting minutes, and Enclosure 2 contains the attendee list.

The following documents were provided for discussion during the meeting:

1. Public Meeting Agenda (ADAMS No. ML080040346)
2. EPRI Power Point Presentation (ADAMS No. ML080380147)
3. EPRI Groundwater Protection Guidelines for Nuclear Power Plants – Public Edition (ML080450056)

Enclosures:
As stated

cc: See next page

CONTACT: Steven Garry, NRR/DIRS/IRIB
301-415-2766
smg2@nrc.gov

Enclosure 1

February 26, 2008

MEMORANDUM TO: Timothy Kobetz, Chief
Reactor Inspection Branch/***RA***/
Division of Inspection and Regional Support
Office of Nuclear Reactor Regulation

FROM: Steven Garry, Health Physics Team Leader
Reactor Inspection Branch
Division of Inspection and Regional Support
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF FEBRUARY 5, 2008, CATEGORY 2 PUBLIC MEETING WITH ELECTRIC POWER RESEARCH INSTITUTE (EPRI) AND THE NUCLEAR ENERGY INSTITUTE (NEI) TO DISCUSS THE EPRI GROUND WATER PROTECTION GUIDELINES

On February 5, 2008, a public meeting was held between the U.S. Nuclear Regulatory Commission (NRC), and representatives of the Electric Power Research Institute (EPRI), the Nuclear Energy Institute (NEI) and nuclear power industry at the U.S. Nuclear Regulatory Commission Headquarters, 6003 Executive Blvd, Room EBB2B18, Rockville, MD, 20852. The purpose of the meeting was to provide EPRI and NEI an opportunity to present the recently completed EPRI Groundwater Protection Guidelines. The meeting generally followed the agenda. Enclosure 1 contains the meeting minutes, and Enclosure 2 contains the attendee list.

The following documents were provided for discussion during the meeting:

1. Public Meeting Agenda (ADAMS No. ML080040346)
2. EPRI Power Point Presentation (ADAMS No. ML080380147)
3. EPRI Groundwater Protection Guidelines for Nuclear Power Plants – Public Edition (ML080450056)

Enclosures:
As stated
cc: See next page

CONTACT: Steven Garry, NRR/DIRS/IRIB
301-415-2766
smg2@nrc.gov

DISTRIBUTION: ADAMS Accession No.: ML080380139

IRIB R/F Rids/Nrr/Dirs/Irib Rids/Nrr/Dirs NRR_Dirs_Irib Distribution

OFFICE	NRR/IRIB	NRR/DIRS
NAME	SGarry	TKobetz
DATE	02/13/08	02/26/08

OFFICIAL RECORD COPY

Meeting Minutes

A meeting between NRC, EPRI, NEI, and nuclear power representatives was held on February 5, 2008 to provide EPRI, NEI and representatives of the nuclear industry an opportunity to present the EPRI Groundwater Protection Guidelines for Nuclear Power Plants. The meeting generally followed the agenda proposed in a January 4, 2008, Public Meeting Notice (Agencywide Documents Access and Management System (ADAMS) Accession No. ML080040346). The following is a brief summary of the meeting.

I. Administrative

II. Presentation and Discussion of EPRI Ground Water Protection Guidelines

EPRI stated that their objective was to develop industry guidelines based on an industry consensus that would serve as best practices for ground water protection for its nuclear utility members. The guidelines were prepared by EPRI members consisting of a working group of nuclear power industry representatives. The guidelines were prepared in conjunction with international nuclear plant organizations, and included nuclear industry experiences with tritium leaks from heavy water moderated CANDU reactors.

The objective of the guidelines is to provide best practices that can be used to control leaks and spills of radioactive licensed material, minimize potential unplanned, unmonitored releases to the environment, and minimize long-term costs associated with potential ground water and subsurface contamination. Utilities can use the guidance to develop site specific implementation plans to optimize resources and minimize the time needed to prepare plans to protect ground water near their nuclear plants.

The guidelines use a flow-chart format to describe the major elements of a ground water protection program. The major elements are: 1) an evaluation of historical spills and leaks, 2) an evaluation of systems, structures and components and work practices, 3) a prioritization of potential systems, structures, and components (SSCs) and work practices that could lead to leaks or spills, 4) implementation of mitigating actions to reduce the potential for leaks and spills, 5) development of a site conceptual model for ground water movement, and 6) other follow up actions that can be taken to provide independent program assessment, review and improvement.

Discussion was held between EPRI/NEI and NRC on various topics of interest, including:

- non-destructive examination methods to identify potential leakage locations (e.g., spent fuel pool liner welds and concrete integrity)
- draft ANSI standard ANS-2.17
- decision making for potential remediation of saturated and unsaturated zones
- potential impact of leaks and spills on decommissioning
- programs for new reactors and the certified designs that were already in place
- the review of SSCs performed under the ground water protection guidelines does not replace the maintenance programs and inspections of SSCs
- risk informed approach under the maintenance rule may not incorporate inspections of (e.g., radwaste) systems that have a potential for leakage

- regulations under 10 CFR 20.1406 for applicants for licenses, other than license renewal and the proposed rulemaking under 10 CFR 20.1406 to include existing plants
- NUREG/CR-6948, "Integrated Ground-Water Monitoring Strategy for NRC-Licensed Facilities and Sites"
- use of fate and transport modeling
- dose assessment using results of the ground water monitoring is performed under the ODCM and not under the EPRI Guidelines
- use of the EPA drinking water standards as a point of reference or perspective for the members of the public, rather than as an NRC limit (NRC limits are primarily dose based)
- NEI 07-07, "Ground Water Protection Initiative" and its relationship to the EPRI Ground Water Protection Guidelines

III. Public Participation

A representative from the State of South Carolina requested information on whether any additional fact sheets would be prepared by NEI or the NRC to provide the public with a better understanding of the groundwater tritium issues. NEI responded that this was seen by the nuclear industry as a program that would be conducted by the local nuclear power plant. NEI also stated that they have fact sheets available on their public web site that can be used. NRC representatives stated that the NRC also provides educational type materials and information on its web site.

NRC staff noted that there is an upcoming NRC sponsored Regulatory Information Conference, with a groundwater session to be held on March 13th from 10:00 – 12:00. This is a public forum without cost to the public.

Public Meeting Feedback 659 Forms were available but no completed forms were received.

IV. Adjourn

February 5, 2008 NRC, EPRI, NEI, Nuclear Industry, Public
Attendance List

Name	Company
Steve Garry	NRC (Meeting Leader)
Ralph Andersen	NEI
Sean Bushart	EPRI
Karen Kim	EPRI
Mark Fuhmann	NRC
Tom Nicholson	NRC
Stephen Saloman	NRC
Mark McBride	NRC
Steven Dolley	PLATTS
Edward Roach	NRC
Kevin O'Sulllivan	NRC
Elaine Keegan	NRC
Nebiyu Tirunch	NRC
Ralph Cady	NRC
Mike Payne (teleconference)	TVA
John White (teleconference)	NRC
Barry Mullinak (teleconference)	State of South Carolina – Bureau of Land and Water Management
Jane Cooke (teleconference)	State of South Carolina – Bureau of Land and Water Management
Steve Burdick (teleconference)	State of South Carolina – Bureau of Land & Water Management