

August 23, 2012

MEMORANDUM TO: Doug Weaver, Deputy Director
Division of Spent Fuel Storage and Transportation
Office of Nuclear Material Safety
and Safeguards

FROM: Steve Ruffin, Project Manager **/RA/**
Licensing Branch
Division of Spent Fuel Storage and Transportation
Office of Nuclear Material Safety
and Safeguards

SUBJECT: SUMMARY OF JULY 25, 2012, PUBLIC MEETING WITH THE
NUCLEAR ENERGY INSTITUTE AND INDUSTRY TO DISCUSS
STORAGE OF HIGH BURN-UP FUEL AND COC RENEWAL ISSUES

Background

The Nuclear Energy Institute (NEI) and the NEI Dry Storage Task Force requested a meeting with the U.S. Nuclear Regulatory Commission (NRC) staff by letter dated May 2, 2012 (ML12131A216). The purpose of the meeting request was to discuss concerns for what industry considered to be a new regulatory position emerging through the recent NRC staff review of an application, including request for supplemental information (RSI) and observations, related to the renewal of dry cask storage licenses for high burn-up (>45 GWd/MTU) fuel (ML12046A157). The NEI letter stated that industry believed that current data and practices support the conclusion that there is reasonable assurance that high burn-up fuel can be stored safely and in compliance with the regulations for at least 60-80 years.

NRC staff responded to NEI by letter dated May 16, 2012 (ML12137A409). The NRC letter stated that in the interest of maintaining and promoting good communications, the NRC staff was available to meet with NEI in a public meeting in the July 2012 time frame. The letter also stated that the NRC staff was particularly interested in industry input on the safety case for the long-term storage of high burn-up fuel, as well as any current data or analyses that industry could provide that generically supports the long-term storage of high burn-up spent fuel.

NRC staff held a Category 2 public meeting with NEI and industry participants on July 25, 2012. The purpose of the meeting was to discuss NEI and industry's concerns regarding storage of high burn-up fuel; and to discuss unique issues related to the renewal of certificates of compliance (CoC). No regulatory decisions were requested nor made at the meeting.

Enclosure 1 contains the list of meeting attendees, Enclosure 2 contains the meeting agenda, and Enclosure 3 contains the presentations given by NEI as meeting handouts.

Summary of Meeting

High Burn-up Discussion: On July 25, 2012, 8:30 AM-11:45 AM, NEI and industry participants met with NRC staff to present its concerns regarding storage of high burn-up fuel for what industry considered to be a new regulatory position emerging through the recent NRC staff review of an application. NEI's presentation provided background information relating to CoCs/licenses for high burn-up fuel storage to be renewed over the next few years; outlined relevant requirements and guidance for preventing gross cladding rupture; and discussed safety considerations (e.g. worker dose, handling risks) for opening and inspecting spent nuclear fuel inside a cask. NEI presented its assumptions for why the current regulatory framework does not require industry to monitor, inspect, detect or mitigate cladding integrity and why industry believes that there is reasonable assurance of no degradation mechanism of concern for the storage license terms. NEI stated that use of NRC guidance in ISG-11 and NUREG-1927 provides reasonable assurance of safety and regulatory compliance for cladding. NEI concluded its presentation by stating that if an issue exists for high burnup fuel up to 80 years of storage, NRC should treat it as a generic issue because it affects all licensees and CoC holders and has potentially significant impacts (e.g. repackaging, canning). Additionally, NEI stated that if the current guidance is insufficient it should be revised and that generic communications is needed to address the safety significance and impact on existing casks.

There was extensive dialogue between NRC staff and the NEI and industry participants. The NRC staff questioned NEI on a number of its assumptions and interpretations of the requirements and guidance, particularly related to aging management for fuel cladding integrity. NEI stated that because the statements of consideration for the rulemaking that added aging management requirements to 10 CFR Part 72 stated there are 'no safety concerns for any fuel storage up to 80 years' with no exceptions for high burnup fuel, the NRC staff does not have a basis to address high burnup fuel as part of license renewal." During the discussion, the staff indicated it did not necessarily agree with NEI's position regarding the applicability of the Part 72 regulatory basis for the rulemaking to specific licensing actions. The staff also indicated that the focus on the aging effects of spent fuel was in scope of license renewal. NRC staff stated it plans to develop a generic question related to high burnup information needs to be communicated to CoC/licensees during license renewals. NRC staff plans to continue to dialogue with industry and stakeholders on a generic approach to address future review considerations related to high burnup fuel and what is appropriate for aging management. Both NRC staff and NEI will present any additional data sources and relevant references related to this topic at the annual NRC Spent Fuel Storage and Transportation conference on September 12-13, 2012, in Rockville, Maryland.

CoC Renewal Discussion: On July 25, 2012, 1:00 PM-4:30 PM, NEI and industry participants (NEI) met with NRC staff to discuss unique issues related to the renewal of CoCs. They presented several generic questions that must be resolved to assure an efficient and effective renewal process. This included six generic CoC renewal questions with recommendations for discussion and five additional questions for NRC staff consideration. NEI discussed that existing renewal experience exists only for site specific licenses. CoC renewals will need generic resolution to address CoC unique aspects (e.g., multiple amendments, multiple licensees).

There was extensive dialogue between NRC staff and NEI. The first CoC renewal application will be submitted in 2012, with several others to follow. NEI requested that a process be established to facilitate timely resolution. NEI will provide proposals for concepts discussed in the meeting for NRC staff consideration.

TAC No.: LA0119

Enclosures:

1. Meeting Attendees
2. Agenda
3. Handouts
 - Cask Storage of High Burn-up Fuel - Industry Perspective
 - Certificate of Compliance Renewal Generic Questions/Issues - Industry Perspective

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Distribution: NRC Attendees

Electronic Distribution: NMSS/SFST

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ADAMS Package No.: ML12237A176

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NAME	SRuffin		WWheatley		MWaters	
DATE	8/21/2012		8/22/2012		8/23/2012	

C=Without attachment/enclosure E=With attachment/enclosure N=No copy **OFFICIAL RECORD COPY**

MEETING ATTENDEES
Meeting Between the Nuclear Regulatory Commission, NEI and Industry

July 25, 2012

Mark Lombard	NRC/SFST
Doug Weaver	NRC/SFST
Mike Waters	NRC/SFST
Eric Benner	NRC/SFST
Meraj Rahimi	NRC/SFST
Michele Sampson	NRC/SFST
David Pstrak	NRC/SFST
Steve Ruffin	NRC/SFST
Robert Einziger	NRC/SFST
Earl Easton	NRC/SFST
David Tang	NRC/SFST
Kim Hardin	NRC/SFST
Pamela Longmire	NRC/SFST
John Vera	NRC/SFST
Bernie White	NRC/SFST
Zhian Li	NRC/SFST
Daniel Huang	NRC/SFST
Elva Bowden-Berry	NRC/OGC
Rod McCullum	NEI
Mark Nichol	NEI
Stefan Anton	Holtec International
Craig Seaman	NAC International
Ray Termini	Exelon
Ron Johnson	Prairie Island Indian Community
Phil Mahowald	Prairie Island Indian Community
Suzanne Leblang	Entergy
Zita Martin	TVA
Jim Wood	Constellation Energy
John Massari	Constellation Energy
S. Lee Sampson	XENuclear
Charles Haughney	Talisman
H. Oley Nelson	XCEL
William Slagle	Bechtel Power Corp.
Miguel Manrique	Transnuclear
Nicole Weimer	Transnuclear
Peter Shih	Transnuclear
Don Shaw	Transnuclear
Glenn Mathews	Transnuclear
<u>By Teleconference:</u>	
Bhasker Tripathi	NRC/SFST
Maureen Conley	
Yi-Ming Pan	SWRI
Carlyn Green	Ux Consulting

Agenda
Public Meeting with Nuclear Energy Institute
On
Storage of High Burn-up Fuel and Certificate of Compliance (CoC) Storage Renewal

July 25, 2012

8:30 AM - 4:30 PM

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|---------------|---|
| 8:30 AM | Call to Order, Introductions and Introductory Remarks |
| 8:45-11:45 AM | Discuss storage of high burn-up fuel
(Morning w/ breaks) |
| 11:45-1:00 PM | Lunch |
| 1:00-4:00 PM | Discuss industry's position on CoC unique renewal issues
(Afternoon w/ breaks) |
| 4:00-4:30 PM | Public Comments / Discuss next milestone(s) / Wrap-up |

PRESENTATION HANDOUTS