



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

February 28, 2018

U.S. Nuclear Regulatory Commission Public Meeting Summary

Title: Meeting with Petitioner regarding the Petition Review Board's Recommended Decision on the September 13, 2017, Petition

Meeting Identifier: 20180026

Date of Meeting: January 31, 2018

Location: One White Flint North 11B4
11555 Rockville Pike
Rockville, Maryland 20852

Type of Meeting: Category 3

Purpose of the Meeting: The purpose of this meeting is to permit the petitioner to address the NRC Petition Review Board (PRB) regarding their recommended decision regarding the September 13, 2017, petition.

General Details: The meeting began at 3:10 P.M. EST and ended at 4:20 P.M. EST. Participation in the meeting included in-person attendees and remote attendance by phone (a list of attendees is included in Enclosure 1). As many as 10 people (including individuals from Citizens' Resistance at Fermi 2 (CRAFT) and Nuclear Energy Information Service called in, and 14 people (11 NRC staff, two facilitators, and one member of the public) actively participated in the meeting. Two NRC staff members served as meeting facilitators.

Summary of Presentations:

The purpose of this meeting was to permit the petitioner to provide additional information to the PRB following its initial recommendation to deny the September 13, 2017, petition. No decisions regarding the merits of this petition were made at this meeting. The meeting was transcribed and the transcript can be found in the NRC's Agencywide Document Access and Management System (ADAMS) (ADAMS Accession No. ML18036A031).

After the welcome and introductions, the facilitator provided general background information on the Title 10 of the *Code of Federal Regulations* (10 CFR) Section 2.206 process. Specifically, 10 CFR 2.206 describes the petition process. This process permits anyone to petition the NRC to take enforcement-type action related to NRC licensees or licensed activities. Depending on the results of its evaluation, the NRC could modify, suspend, or revoke an NRC-issued license or take any other appropriate enforcement actions.

During the meeting, the PRB Chair, Joseph Donoghue, summarized the September 13, 2017, petition and the PRB's initial recommendation:

Petition:

The Petitioner requested the NRC to:

1. Suspend licensees' authorizations to operate their plants for any periods beyond their originally licensed plant lifetimes until they demonstrate that their license renewals will not cause a significant increase in the probability of an accident previously evaluated, particularly with respect to Condition III events.
2. Suspend the review of licensees' applications for authorizations to operate their plants for any periods beyond their originally licensed plant lifetimes until they can demonstrate that their license renewals will not cause a significant increase in the probability of an accident previously evaluated, particularly with respect to Condition III events.
3. Allow licensees, who are already operating their plant beyond their originally licensed plant lifetimes, a maximum of one year from the date of the Petition, to submit a plan and schedule that will produce a verifiable demonstration that continued operation of their plants will not cause a significant increase in the probability of an accident previously evaluated, particularly with respect to Condition III events.

The basis for this request is the Petitioner's belief that "an extension of the operating lifetime by 20 years, that is by 50 percent, will cause an increase in the frequency of infrequent incidents (Condition III events) by 50 percent."

PRB's Initial Recommendation:

The PRB initially recommended denial of the Petition because the Petition does not meet the criteria for consideration under 10 CFR 2.206. More specifically, because the issues raised are not fact or constitute the basis for taking the enforcement action specified or that warrant further inquiry.

Mr. Donoghue also reviewed the timeline associated with this petition:

October 5, 2017	Petition Manager offered the Petitioner an opportunity to address the PRB prior to its internal meeting to make the initial recommendation to accept or reject the Petition for review.
October 10, 2017	The Petitioner stated he wanted to address the PRB at a public meeting.
November 17, 2017	The PRB held a public meeting with the Petitioner.
December 5, 2017	The PRB met internally to discuss the petition and the information provided by the Petitioner during the November 17, 2017, public meeting and make an initial recommendation.
January 3, 2018	The Petition Manager informed the Petitioner of the PRB's initial recommended decision and the Petitioner requested the opportunity to provide additional information to the PRB at a public meeting.

The Petitioner used notes during his presentation (ADAMS Accession No. ML18036A077). During his presentation and in a follow-up email, the Petitioner also mentioned a Wall Street Journal article that can found at the following web link: <https://www.wsj.com/articles/SB10001424053111903366504576488553640956660>).

Mr. Samuel Miranda began by addressing his basis for not agreeing with the PRB initial recommendation provided by the Petition Manager in an email dated January 4, 2018 (see enclosure 2). Mr. Miranda pointed out that the withdrawal of American Nuclear Society (ANS) standards is irrelevant because the licensees have performed accident analysis for Chapter 15 of their Final Safety Analysis Reports (FSARs) according to the categories of events and the accepted criteria that are specified in ANS 18.2, "Nuclear Safety Criteria for the Design of Stationary Pressurized Water Reactor Plants". Therefore, according to Mr. Miranda, the ANS standard is part of the licensing basis.

Mr. Miranda pointed out that 10 CFR Part 54 defines the current licensing basis (CLB), 10 CFR Part 50 is in the CLB, and 10 CFR 50.92 is part of 10 CFR Part 50. Mr. Miranda stated that, based on this definition, 10 CFR 50.92 is part of the current licensing basis. Mr. Miranda also stated that, during and after his employment with the NRC, he was and is concerned that aging management is a rather narrow approach to license renewals. Further, Mr. Miranda stated one thing neglected in reviews for license renewal is the effect on the current licensing basis definition of Condition III events as expressed in ANS N18.2. According to Mr. Miranda, Condition III events are only supposed to occur once or twice during the lifetime of a plant. He also stated that a Condition III event could end the lifetime of a plant as it did for Three Mile Island in 1979.

Mr. Miranda stated Conditions I and II are categories for normal operation. Condition I events are events that happen during the normal operation of the plant, such as maneuvering of the power level of the plant, reducing load, increasing load, or repositioning rods. They are not events that require protective action, but they are tracked. Condition II events are more extreme versions of Condition I events and might result in a reactor trip. Condition II events are events that a plant must be able to accommodate with the plant being able to return to normal operation within a short time. These events are anticipated, managed, and tracked. During a 40-year design lifetime of a plant, the plant is designed to handle numerous reactor trips. Components in the reactor are designed to handle a limited number of thermal transients or pressurization transients before the components are subject to failure.

Mr. Miranda used a paperclip as a simple example. A paperclip can be bent back and forth many times before it breaks. In the example, the paperclip should not be bent more than five times or it could break. Mr. Miranda explained that, in design specification terms, cyclical loading should be limited to no more than five bends of this paperclip. "When five is reached, you stop." Mr. Miranda stated this is called a cumulative usage factor and cumulative usage factors are in the FSAR.

Returning to power plants, Mr. Miranda stated that components in the power plants have cumulative usage factors. When the cumulative usage factor is reached, the component should be removed and not used. Some of these components could be used throughout the lifetime of a plant, however, in some cases, these components may not reach the initial 40 years, let alone reach 60 years.

Mr. Miranda concluded by stating that the NRC review is basically philosophical. He asked what a license renewal has to do with protecting the health and safety of the public, and how it

improves the health and safety of the public. He said it improves the bottom line of the utilities, and at best, the public is protected at the same level at the end of a reactor's life as the public is protected at year one of operations. Mr. Miranda said it is more likely the public is protected less than that.

Mr. Donoghue ended by summarizing the staff's understanding of Mr. Miranda's statements. First, Part 54 of 10 CFR defines the current licensing basis of a plant and there is a connection to Part 50 requirements. Second, Mr. Miranda's viewpoint is that the license renewal review approach that the NRC takes focuses on aging management and "neglects" other considerations – in particular, the frequency of Condition III events. Several examples were provided to illustrate the point.

During the meeting, the staff asked several questions. These questions and responses are summarized below:

Staff question: Are you aware that the NRC's mission is to ensure that there's no adverse impact to the public health and safety, not to improve public health and safety?

Petitioner response: Exactly. Yes. To protect the public health and safety. At best, if you take into consideration every aspect of a license renewal, aging management and everything else, at best you'll be protecting the public health and safety.

Staff question: Regarding the definition of current licensing basis in Part 54, could you clarify why you believe that definition is relevant to your request? How Section 50.92 fits?

Petitioner response: Section 50.92 is part of the licensing basis and the entire licensing basis needs to be considered in license renewal. When a license is renewed, the life of a plant is extended by 50 percent and no requirements are relaxed. The plant will be "just as safe in the 60th year of operation as it was in the first year."

Staff question: As part of rulemaking for 10 CFR Part 54, active versus passive components were considered. Were you aware that the statements of consideration for Part 54 identified that active components are managed through the maintenance rule and that passive components will be managed through license renewal? This is explained in the statements of consideration in the license renewal rule.

Petitioner response: Yes. Active components like valves are always surveilled and tested and operated once in a while to demonstrate they are working, but this leaves a lot of other things that are not considered in license renewal, including the definition of Condition III events.

Staff question: So is there something specific in that standard or in any of the current licensing basis for any of the plants that have been renewed or are going through license renewal that indicate that

the probability or occurrence of Conditions I, II, III, and IV events would increase as a result of the license renewal?

Petitioner response: Whether a licensee refers to the ANS standard or not is irrelevant as long as those categorization of events and the acceptance criteria for each of these categories of events is in Chapter 15 of the licensee's FSAR. The FSAR states that no Condition II event is going to cause fuel damage and licensees have to do an analysis to show that no Condition II event is going to cause fuel damage. Whether that requirement comes from ANS 18.2 or whether it comes from 10 CFR part 50, Appendix A, it doesn't matter.

Public Participation Themes: One member of the public provided a comment at the end of the meeting:

Jessie Collins, CRAFT, stated that she believes Mr. Miranda knows the laws better than any of those in the room and the staff would have a hard time dismissing the Petition.

Action Items/Next Steps: The PRB plans to meet internally within a week to discuss the information provided in the petition, as supplemented, and to make its final recommendation on the petition. Following that meeting, the petition manager will inform the petitioner of the PRB's final recommendation to either accept or reject the 2.206 petition for review, in accordance with the criteria in Management Directive 8.11, "Review Process for 10 CFR 2.206 Petitions," and issue a closure or response letter.

Enclosures:

- Meeting Attendance List
- E-Mails Between Petitioner and Petition Manager Regarding Follow up meeting with 2.206 Petition Re: Enforcement Petition (10 CFR §2.206) Regarding Plant Lifetime Extension

Attachments:

- Incoming Petition: ML17256B257
- Public meeting agenda: ML18010A698
- Petitioner's meeting notes: ML18036A077
- Transcript of meeting: ML18036A031
- Public meeting summary ML18044A509

SUBJECT: Meeting with Petitioner regarding the Petition Review Board's Recommended Decision on the September 13, 2017, Petition

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Samuel Miranda, sm973@caa.columbia.edu

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Barbara Warren, warrenba@msn.com

ADAMS Accession Nos:

(Package) ML18044A508

(Meeting Summary) ML18044A509

(Transcript) ML18036A031

***concurrence via email**

OFFICE	PM:MRPB:DMLR	LA:MRPB:DMLR	ARCB:DRA	SRXB:DSS
NAME	LJames	YEdmonds	JDozier	RBeaton
DATE	2/22/2018	2/22/2018	2/25/2018	2/23/2018
OFFICE	BC:MRPB:DMLR	DD:DMLR	PM:MRPB:DMLR	
NAME	EOesterle	JDonoghue	LJames	
DATE	2/26/2018	2/27/2018	2/28/2018	

OFFICIAL RECORD COPY

MEETING WITH THE NRC STAFF AND THE PETITIONER REGARDING THE PETITION
REVIEW BOARD'S RECOMMENDED DECISION REGARDING THE 10 CFR 2.206 PETITION
DATED SEPTEMBER 13, 2017, FOR ALL RENEWED LICENSE OPERATING LICENSEES
AND APPLICANTS FOR REACTOR RENEWED OPERATING LICENSES
ROCKVILLE, MARYLAND

MEETING ATTENDANCE LIST
JANUARY 31, 2018

PARTICIPANTS

AFFILIATIONS

Lois James, Sr. Project Manager and Petition Manager	Division of Materials and License Renewal (DMLR) Office of Nuclear Reactor Regulation (NRR) U.S. Nuclear Regulatory Commission (NRC)
Joseph Donoghue, Deputy Director and PRB Chair	DMLR, NRR, NRC
Marcia Simon, Senior Attorney	Office of General Counsel (OGC), NRC
Jerry Dozier, Senior Reliability and Risk Analyst	Division of Risk Assessment, NRR, NRC
Merrilee Banic, Project Manager for the 2.206 Process	Division of Operating Reactor Licensing (DORL), NRR, NRC
Douglas Broaddus, Chief	DORL, NRR, NRC
Robert Beaton, Reactor Systems Engineer	Division of Safety Systems (DSS), NRR, NRC
Eric Oesterle, Chief	DMLR, NRR, NRC (previously DSS, NRR, NRC)
Cris Brown, Facilitator	Office of Chief Information Officer
Meg Gold, Facilitator	Office of Administration
David Jones, Enforcement Specialist	Office of Enforcement (OE)
Samuel Miranda	Petitioner, Public
Jessie Collins	Citizens' Resistance at Fermi 2 (CRAFT)
Jan Boudart	Nuclear Energy Information Service
David Gullott	Exelon Generation

MEETING WITH THE NRC STAFF AND THE PETITIONER REGARDING THE PETITION
REVIEW BOARD'S RECOMMENDED DECISION REGARDING THE 10 CFR 2.206 PETITION
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ROCKVILLE, MARYLAND

E-MAILS BETWEEN PETITIONER AND PETITION MANAGER REGARDING FOLLOW UP
MEETING WITH 2.206 PETITION RE: ENFORCEMENT PETITION (10 CFR §2.206)
REGARDING PLANT LIFETIME EXTENSION

From: [James, Lois](#)
To: "[Samuel Miranda](#)"
Subject: RE: Re: Follow up meeting with 2.206 Petition Re: Enforcement Petition (10 CFR §2.206) Regarding Plant Lifetime Exten
Date: Tuesday, January 09, 2018 12:22:00 PM

Mr. Miranda,

I am drawing a blank on the statement "opportunity to intervene on the renewal docket for each plant." Did I say this on our call? Or at the last meeting?

I have submitted a request to the Inspector General for their participation and copied you on the email to the OIG Hotline.

Respectfully,

Lois James, Senior Project Manager
Division of Materials and License Renewal
Office of Nuclear Reactor Regulations

From: Samuel Miranda [mailto:sm973@caa.columbia.edu]
Sent: Thursday, January 04, 2018 8:28 AM
To: James, Lois <Lois.James@nrc.gov>
Subject: [External_Sender] Re: Follow up meeting with 2.206 Petition Re: Enforcement Petition (10 CFR §2.206) Regarding Plant Lifetime Exten

Ms. Lois,

I recall something, from your reading of the PRB's preliminary findings, about the opportunity to intervene on the renewal docket for each plant. Do you want to withdraw that?

The time and date for the meeting are OK for me. I will take this opportunity to state my expectations for the meeting, while there is still time to make the arrangements.

1. The meeting will be adequately noticed, and conducted, according to the requirements of MD 3.5.
2. The meeting will not take place outside One White Flint North (OWFN). OWFN11B4 is OK.
3. There will be representatives from DSS, OIG, IG, and Enforcement in attendance. (A former DSS member doesn't necessarily represent DSS.)
4. Minutes of the meeting and transcript will be issued and entered into publicly available ADAMS, as soon as possible.

Thank you,
Sam Miranda

 Virus-free. www.avg.com

On Thu, Jan 4, 2018 at 7:19 AM, James, Lois <Lois.James@nrc.gov> wrote:

Mr. Miranda,

Does this time work for you?

Here is the information you requested:

From a legal standpoint, this is not a credible basis for considering the petition, as follows:

- The NRC does not consider the no significant hazards consideration (NSHC) criteria (in 10 CFR 50.92(c)) in determining whether to issue a renewed license. Standards for renewing a license are found in 10 CFR 54.29.
- Furthermore, the NSHC criteria are not safety requirements or standards. NSHC is a procedural standard that governs whether an opportunity for a hearing must be provided before issuing certain license amendments (see 10 CFR 50.91)

In addition, the petitioner asserted that all power plants must follow the ANS standards cited above. From a safety perspective, this is not a credible basis, as follows:

- There is no regulatory requirement in either Part 50 or Part 54 for applicants or licensees to comply with ANSI N18.2-1973. Some licenses reference the standard in their licensing basis and some do not, yet every licensee includes a discussion of categorization of events based on expected frequency of occurrence.

Respectfully,

Lois James, Senior Project Manager
NRC/NRR/DMLR