

August 24, 2011

MEMORANDUM TO: John R. Jolicoeur, Chief
Licensing Processes Branch
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

FROM: Joseph A. Golla, Project Manager /RA/
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Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF JULY 27, 2011, CATEGORY II PUBLIC MEETING WITH
THE BOILING WATER REACTOR OWNER'S GROUP (BWROG)

On July 27, 2011, U.S. Nuclear Regulatory Commission (NRC) staff met with representatives of the BWROG, in a public meeting at the offices of EXCEL Services Corporation in Rockville, Maryland. The purpose of the meeting was to discuss operations with a potential to drain the reactor vessel (OPDRV). NRC and BWROG briefing materials presented at the meeting are retained and may be accessed on the Agencywide Documents Access and Management System (ADAMS) at Accession No. ML112220018. The enclosure provides a list of those in attendance.

Mr. Robert Elliott, Chief, Technical Specifications Branch (ITSB), Division of Inspection & Regional Support (DIRS), Office of Nuclear Reactor Regulation (NRR), made opening remarks. Mr. Elliott stated that the meeting was intended to be a forum for dialogue in order to permit the industry, the NRC, and the public to express their views on OPDRV. Mr. Elliott further stated that the NRC staff has a safety concern with OPDRV but that no regulatory decisions would be made at the meeting.

Following this, Mr. Tony Browning of NextEra Energy made opening remarks on behalf of the BWROG. Ms. Nichole Glen, meeting facilitator for the NRC, then made remarks regarding rules for the effective and efficient conduct of the meeting.

Presentations were given by both the NRC staff and the BWROG which were similarly structured. Mr. Carl Schulten, ITSB/DIRS, presented the NRC staff briefing slides. Mr. Tony Browning presented the briefing slides for the BWROG. The presentations addressed OPDRV from a historical perspective, the current situation, the underlying safety basis of OPDRVs, and proposed Technical Specification (TS) definitions of OPDRV. Note that OPDRV is not a defined term in Section 1.1, "Definitions of the Standard Technical Specifications (STS)." The ultimate goal of the NRC in beginning a dialogue with industry on OPDRV is to come to an agreed upon STS Section 1.1 definition of OPDRV such that there is reasonable assurance that OPDRVs are carried out safely and that unintentional reactor vessel drain down events are minimized. There was also an open discussion forum at the latter stage of the meeting where path forward was discussed. Comments provided by meeting participants during the briefings on each topic are as follows:

Historical Review of OPDRV and Current Situation

- Mr. Robert Elliott, NRC, inquired if there are drain down events other than those indicated in the NRC staff's presentation that are not being reported.
- Mr. Tony Browning, BWROG, stated that any events that do not cause an automatic actuation are probably the threshold "near-miss" events that are not being officially reported.
- Mr. Tony Browning indicated that going forward, for clarity, we need to "separate [OPDRV] prevention from mitigation."
- Mr. Robert Elliott stated that the final TS Applicability of OPDRV should be clear and not subject to interpretation.

Safety Basis

- Mr. Tony Browning stated that we need to be open minded about what an OPDRV is and "what you do with it once you have it." Mr. Browning also reiterated the need to keep OPDRV prevention separate from mitigation.
- Mr. Robert Elliott noted that TS currently treat OPDRVs "all the same, but they're not."
- Mr. Brian Man, EXCEL Services, stated that we need to "do what's appropriate for the threat."
- Mr. Robert Elliott agreed and added that we need to do what's appropriate because there is some potential threat to the public.
- Mr. Tony Browning commented that operators have had incentive to "avoid calling something an OPDRV because Actions [consequences of following the TS] are Draconian." Mr. Elliott commented that this was not a good mindset. Mr. Browning agreed with this assessment.
- Mr. Troy Pruett, NRC Acting Director of DIRS, commented that Actions promulgated in the TS promote a defense-in-depth concept because we don't have a well defined knowledge base concerning OPDRV risk.
- Mr. Brian Magnuson, member of the public attending by teleconference, stated that an OPDRV is a Mode of Applicability, not an accident, and that it may be accompanied by an increased level of risk but may remain acceptable. Mr. Magnuson further indicated that, that's all the more reason to look at risk, and that OPDRV is an "assumed-acceptable risk."
- Mr. Tony Browning, in response, inquired "how far out do you 'what if'?" and "...you don't want to 'what if' yourself into the ground." Mr. Robert Elliott agreed in principal with Mr. Browning's assessment.

Proposed TS Definition of OPDRV; the staff and the BWROG discussed proposed definitions for the term OPDRV. Specifically:

- Mr. Tony Browning, noted that in placing a definition in Section 1.1 of the TS, there would be no way to provide amplifying information (as opposed to putting the definition elsewhere, such as in the TS Bases, plant procedures, or in the Technical Requirements Manual.)
- Mr. Tony Browning then presented a proposed new approach to OPDRV. The new approach, outlined on slides 29 and 30 of the BWROG's briefing slides is to create a new TS Chapter 3 specification with a limiting condition for operation and Applicability based on defining an OPDRV and providing a graded approach for the Required Actions based on risk significance of each OPDRV. Mr. Browning stated that surveillances

would be applied as necessary to make sure that the systems, structures, and components needed for mitigation would be there.

-Mr. Tony Browning stated that it would be desirable to achieve a balance between safety basis and actions to be taken, and that plants want consistency from the NRC, i.e., not NRC Region I sees it one way, NRC Region II looks at it another way, etc.

-Mr. Brian Mann, EXCEL Services, stated that they would like to explore the possibility of a regulatory structure that would permit a certain amount of time to drain to a certain level with preplanned safety actions without punitive actions. Mr. Robert Elliott stated this is probably consistent with a graded approach but we would need to discuss it with NRC staff of the Containment and Ventilation Branch.

Open Discussion; following the presentations and accompanying discussions there was open discussion:

-Mr. Robert Elliott stated that the NRC staff's reaction to the BWROG newly proposed option is very positive and that the NRC staff would like to explore it and provide feedback afterward and after Mr. Tony Browning vets it with the BWROG. Mr. Elliott indicated this would be a first step.

-Mr. Tony Browning suggested there might be an opportunity to employ some kind of regulatory measures on an interim basis. That is, since coming to and instituting a final resolution on the OPDRV issue, such as creating a new Chapter 3 Specification, would take up to two years, the NRC and the BWROG should explore ways to bridge the regulatory gap such that BWR operators could continue operations without being cited. (Note in August 2010, operators of the Clinton Power Station were cited for a violation of 10 CFR 50.59 related to the plain language definition of OPDRV.)

-Mr. Tony Browning suggested that an interim measure be focused on the "potential" [of an operation to drain the reactor vessel], i.e., define how many barriers have to be in place before an operation could be removed from being a "potential" [to drain the reactor vessel].

-Mr. Robert Elliott stated that an alternative might be for the NRC to put out a generic communication advising what operations would be okay in the interim. Related to this Mr. Elliott also stated that because an operator has mitigated an event doesn't mean it wasn't an OPDRV, and that OPDRV is "forward looking, not backward looking."

-An NRC staff member stated that the issue of whether a BWR operator could change out control rod drives (CRD) in the interim would need to be addressed. This was the subject of the Clinton Power Station violation.

- Mr. Robert Elliott stated that the NRC would take an action to discuss internally what interim measures, e.g., enforcement discretion, generic communication, etc., might be taken.

-A licensee representative suggested as an interim measure that under OPDRVs, a program such as the plant "Shutdown Safety Program" be initiated as this is done at the facility where he is employed.

-Mr. Mark Ring, from NRC Region III participating via telecom, cautioned that the functionality of the SSCs relied upon for compensatory measures would be contingent on other procedures that change liberally.

-Mr. Brian Magnuson, member of the public, stated that CRD replacement involves a hole in the bottom of the reactor vessel and it is difficult not to see that as an OPDRV. Mr. Magnuson stated that if some plants apply OPDRV to CRD replacement and some

don't, then we're not adequately assessing risk (assuming increased risk but accepting it).

-Mr. Mark Ring stated the procedure for CRD change out isn't consistent across the board so risk would be different with different procedures. (A discussion ensued at this point regarding the maintenance rule and its provision for assessing risk).

-A licensee representative stated that imposing more procedural control over operations could potentially cause a safety problem instead of enhance safety. Mr. Mark Ring stated that adherence to the TS would not present a safety issue.

It was agreed that the NRC staff and the BWROG would have a telephone call in the near future to discuss the schedule for path forward. Comments from Mr. Brian Magnuson, a member of the public, were taken as indicated above. Additionally, Mr. Magnuson, provided comments via e-mail. These are retained and can be viewed at ADAMS Accession No. ML112220016. Mr. Magnuson's e-mail contains a suggestion for efficiently dealing with the OPDRV issue. The NRC staff will take Mr. Magnuson's suggestion into consideration when formulating a regulatory position on the matter.

Enclosure: List of Attendees

cc w/encl: See attached page

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OFFICIAL RECORD COPY

BWR Owners Group

Project No. 691

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List of Attendees for the July 27, 2011
Public Meeting with the BWROG

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Deann Raleigh	Scientech
Ron Byrd	Entergy
Emily Maguire	PSEG
Timothy Byam	Exelon
Mitch Stacy	Progress Energy
Steve Benedict	First Energy
Lisa Williams	Energy Northwest
Tony Browning	BWROG/Nextera Energy
Brian Mann	TSTF/EXCEL
Bradley Ferrell	First Energy
Timothy Kolb	NRC
Nichole Glen	NRC
Chuck Norton	NRC
John Jolicoeur	NRC
Joe Golla	NRC
Troy Pruett	NRC
Carl Schulten	NRC
Khadijah Hemphill	NRC
Melana Singletary	NRC
Rob Elliott	NRC
Nicholas DiFrancesco	NRC
Paul Duke*	PSEG
Mark Ring*	NRC Region III
Brian Magnuson*	Public
Darren Zakarain*	Hope Creek

* Indicates participation by telecom

ENCLOSURE