

## PMFermiCOLPEm Resource

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**From:** Misenhimer, David  
**Sent:** Thursday, October 09, 2014 10:06 AM  
**To:** Keegan, Michael  
**Cc:** Muniz, Adrian; FermiCOL Resource; Misenhimer, David  
**Subject:** RE: Fermi OI Teleconference Agenda for October 9, 2014  
**Attachments:** Fermi agenda for OI call 10-09-14 r.pdf

Please use the attached file for the call today.

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**From:** Misenhimer, David  
**Sent:** Wednesday, October 08, 2014 4:50 PM  
**To:** Keegan, Michael  
**Cc:** Misenhimer, David; Muniz, Adrian; FermiCOL Resource  
**Subject:** Fermi OI Teleconference Agenda for October 9, 2014

Fermi OI call (Public Teleconference)

Thursday, October 9, 2014

This meeting is scheduled for the NRC to discuss with DTE Electric Company the open items that remain in the review of their Fermi 3 COL application.

NRC staff are asked to convene in the designated NRC room.

Applicant and the Public are requested to use the following call-in:

Teleconference number: **888-560-4208**  
Participant passcode: **58682**

Agenda Items\*:

1. NRC staff to discuss with applicant Section 1.5.1.1.1 of the FSAR suggested changes to align with the applicant's presentation the ACRS on September 4, 2014.

**Suggested changes to Section 1.5.1.1.1 of the FSAR (ML14055A079):**

### 1.5.1.1.1 **Recommendation 4.2, Mitigating Strategies for Beyond Design-Basis External Events**

Following the March 2011 events in Japan at the Fukushima Dai-ichi nuclear power plant, the NRC issued to licensees Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events" (Reference 1.5-202). This Order was for implementing Recommendation 4.2 of the NRC Near-Term Task Force Report (Reference 1.5-201).

Order EA-12-049 specifies a three-phase approach for mitigating beyond-design-basis external events. The initial phase requires the use of installed equipment and resources to maintain or restore core, containment, and spent fuel pool cooling capabilities. The transition phase requires providing sufficient, portable, onsite equipment and consumables to maintain or restore these functions until they can be accomplished with resources brought from off site. The final phase requires obtaining sufficient offsite resources to sustain those functions indefinitely. Interim Staff Guidance JLD-ISG-2012-01, "Compliance

with Order EA-12-049, Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events" (Reference 1.5-203), endorses, with clarifications, the methodologies described in Nuclear Energy Institute (NEI) 12-06, "Diverse and Flexible Coping Strategies (FLEX) implementation Guide, (Reference 1.5-204). Although the guidance does not specifically address the ESBWR design, which employs passive design features, this subsection describes how ESBWR design features for beyond-design-basis external events meet the intent of the guidance.

For the ESBWR, the underlying strategies for coping with extended loss of AC power events involve a three-phase approach as follows:

- I. Initial Phase: Initial coping is implemented through installed plant equipment, without any AC power or makeup to the ultimate heat sink (i.e., safety-related Isolation Condenser System [ICS] and Passive Containment Cooling System [PCCS] pools or Gravity Driven Cooling System [GDCS]). For the ESBWR, this phase is covered by the existing licensing basis (i.e., 72-hr period for passive systems performance for core, containment, and spent fuel storage pools cooling).

Following the 72-hr passive system coping time, support is required to continue passive system cooling and makeup to the Isolation Condenser/Passive Containment Cooling System (IC/PCCS) pools and spent fuel storage pools. This support could be provided by installed plant ancillary equipment. The installed ancillary equipment is designed with the capacity to support passive system cooling from 3 to 7 days. As described in DCD Section 9.1.3 and Section 19A.3.1, makeup water can be provided through installed safety-related connections to the Fire Protection System (FPS) or spent fuel storage pool. Between 72 hours and seven days, the resources for performing these safety functions are available onsite.

- III. Final Phase: In order to extend the passive system cooling and IC/PCCS pools and spent fuel storage pools cooling time to beyond the initial phase (to an indefinite time), some offsite assistance is required. Specifically, for the ESBWR design, diesel fuel for the ancillary diesel generator or diesel fire pump must be replenished. Also, mitigation strategies including procedures, guidance, training, and acquisition, staging, or installation of equipment needed for the strategies to maintain core, containment, and spent fuel storage pools cooling for an extended period of time will be fully implemented prior to initial fuel load.

2. NRC staff to discuss with applicant revisions to the license conditions proposed by DTE in Chapter 13 of the FSAR Section 13.3 (ML14055A119).

Current wording for license condition [COM 13.4-031]:

The licensee shall submit a fully developed set of site-specific Emergency Action Levels (EALs) to the NRC in accordance with the NRC-endorsed version of NEI 07-01, Revision 0, with no deviations. The fully developed site-specific EAL scheme shall be submitted to the NRC for confirmation at least 180 days prior to initial fuel load.

Revised wording for license condition [COM 13.4-031]:

The licensee shall submit a fully developed set of site-specific Emergency Action Levels (EALs) to the NRC in accordance with the NRC-endorsed version of NEI 07-01, Revision 0, with no deviations. ~~The fully developed site-specific EAL scheme shall be submitted to the NRC for confirmation at least 180 days prior to initial fuel load.~~ **The fully developed EALs schemes shall have been discussed and agreed upon with State and local officials. These fully developed site-specific EAL schemes shall be submitted to the NRC at least 180 days before the date scheduled for initial fuel load as set forth in the notification submitted in accordance with 10 CFR 52.103(a).**

NOTE: This license condition is also presented by DTE in Part 10 Section 3.7.1 of their application (ML14055A140).

3. NRC staff to discuss with applicant revisions to the license conditions proposed by DTE in Part 10 Section 3.7 of their application (ML14055A140).

Current wording for license condition in Section 3.7.2:

The applicant shall submit a detailed analysis of on-shift staffing, in accordance with the NRC endorsed version of NEI 10-05, "Assessment of On-Shift Emergency Response Organization Staffing and Capabilities," and the licensee shall incorporate any changes to the EP needed to bring staff to the required levels, prior to or concurrent with completion of EP ITAAC 2.0 of EP ITAAC Table 2.3.1, and no less than 180 days prior to initial fuel load.

Revised wording for license condition in Section 3.7.1:

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\*These agenda items will be updated, as needed, prior to the teleconference.

**David Misenhimer, P.E.**

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**From:** Misenhimer, David

**Created By:** David.Misenhimer@nrc.gov

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