

LICENSEE: Detroit Edison Company (DECo)

October 26, 1998

FACILITY: Fermi 2 Nuclear Plant

SUBJECT: MEETINGS WITH THE DETROIT EDISON COMPANY TO DISCUSS THE FERMII 2 IMPROVED STANDARD TECHNICAL SPECIFICATIONS CONVERSION

The NRC staff met with DECo at NRC Headquarters on September 28, 29 and 30, 1998, and on October 7 and 8, 1998, to discuss issues related to the Fermi 2 submittal for the conversion to the improved standard technical specifications (STS). The primary focus of the first meeting was a review of Sections 3.5, 3.7, and 3.9 of the STS. Topics in the second meeting included questions related to Sections 3.0, 3.1, 3.2, 4.0, and parts of 3.3. However, some more general issues were also discussed. Enclosure 1 lists the meeting participants.

In the first meeting, the participants discussed issues identified by the project manager for proposed Sections 3.5, 3.7, and 3.9 of the Fermi 2 conversion to the STS. Some items were raised that will require resolution. The most significant items are listed in Enclosure 2. The licensee and the staff also discussed the proposed and recently approved amendments to the current technical specifications that will affect these sections.

In the second meeting, the participants discussed questions identified by the lead reviewers for Sections 3.0, 3.1, 3.2, and 4.0. Questions that remain for these sections will be forwarded to the licensee in a request for additional information in the near future. In addition, the participants discussed issues identified by the project manager for a portion of proposed Section 3.3 of the Fermi 2 conversion to the STS. Some items were raised that will require resolution. The most significant items are listed in Enclosure 2.

Finally, the participants discussed general issues related to the staff's review, the status of requests for additional information, and the schedule for future meetings to discuss other sections of the conversion.

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Fermi 2

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MEETING ATTENDEES

FOR SEPTEMBER 28, 29, AND 30, 1998, FERMI 2 MEETING ON THE
IMPROVED STANDARD TECHNICAL SPECIFICATIONS CONVERSION

NAME

AFFILIATION

Andrew Kugler	NRC/NRR/DRPW/PD31, Project Manager
Jack Foster*	NRC/NRR/ADPR/TSB, Conversion Lead Reviewer
Nan Gilles*	NRC/NRR/ADPR/TSB, Section 3.5 Lead Reviewer
Clyde Shiraki*	NRC/NRR/ADPR/TSB, Section 3.7 Lead Reviewer
Glenn Ohlemacher	Detroit Edison, Licensing
Charles Boyce	Excel Inc. (contractor to Detroit Edison)
Dan Williamson	Excel Inc. (contractor to Detroit Edison)

* Part-time participant

MEETING ATTENDEES

FOR OCTOBER 7 AND 8, 1998, FERMI 2 MEETING ON THE
IMPROVED STANDARD TECHNICAL SPECIFICATIONS CONVERSION

<u>NAME</u>	<u>AFFILIATION</u>
Andrew Kugler	NRC/NRR/DRPW/PD31, Project Manager
Jack Foster*	NRC/NRR/ADPR/TSB, Conversion Lead Reviewer
Bob Tjader*	NRC/NRR/ADPR/TSB, Section 3.1/3.2 Lead Reviewer
Glenn Ohlemacher	Detroit Edison, Licensing
Charles Boyce*	Excel Inc. (contractor to Detroit Edison)
Dan Williamson	Excel Inc. (contractor to Detroit Edison)

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ITEMS IDENTIFIED FROM THE FERMI-2 TECHNICAL SPECIFICATIONS

CONVERSION SUBMITTAL, SECTIONS 3.5, 3.7, AND 3.9

General

Note: Throughout this document, references to a standard technical specification (STS) mean the standard version of the TS published by the NRC in NUREG-1433, "Standard Technical Specifications, General Electric Plants, BWR/4," Revision 1. References to an improved TS (ITS) mean the proposed converted TS submitted by the licensee.

1. The staff and the licensee again discussed a general concern that some of the LA-type (relocation) discussions of change (DOCs) did not clearly indicate the place to which the information from the current technical specifications (CTSs) would be relocated. The licensee is considering actions to correct this situation. The staff will consider ways to combine questions from various sections related to this issue to avoid duplication of questions and responses.
2. Amendment No. 119 to the CTS, issued on June 2, 1998, added the configuration risk management program (CRMP) to the administrative controls section of the TS. The licensee plans to propose changes to the TS wording that describes the CRMP and to add reference to the particular portion of the TS (in this case TS 3.8.1.1 emergency diesel generator allowed outage time) to which the CRMP applies. The licensee described its proposed changes to the staff. The staff and the licensee will discuss this issue further in the future.

Section 3.5

3. CTS 3.5.1, Action c.1, allows the high pressure coolant injection (HPCI) system to be inoperable for up to 14 days provided the core spray system (CSS), low pressure coolant injection (LPCI) system, automatic depressurization system (ADS), and reactor core isolation cooling (RCIC) system are operable. This action is modified by a footnote that states:

Except one CSS subsystem and one LPCI subsystem may be inoperable due to a lack of EECW [emergency equipment cooling water] provided the ACTIONS of Specification 3.7.1.2 are taken.

This footnote was added by Amendment No. 80, issued on March 9, 1992. CTS 3.7.1.2 allows one EECW subsystem to be out of service for 72 hours provided (1) the safety-related equipment supported by the operable EECW subsystem is operable, (2) ADS is operable, if required, and (3) the safety-related equipment supported by the inoperable EECW subsystem is declared inoperable and the appropriate actions prescribed by the TS are taken.

In its conversion, the licensee proposed several changes related to this portion of the CTS. First, the licensee proposed a new Action C in ITS 3.5.1 which would allow one CSS subsystem and one LPCI subsystem to be inoperable at the same time for up to 72

hours. Reference DOC L.3. The licensee stated that it did not make sense for the TS to allow the system to be inoperable for one reason (lack of EECW) and not for others. Therefore, the licensee believes it is appropriate to expand the 72 hours that the CTS would allow (in relation to HPCI being inoperable) to other cases. With the new Action C in place, the licensee's conversion then makes use of it for cases where HPCI or ADS are inoperable. Specifically, if HPCI, one CSS subsystem, and one LPCI subsystem are inoperable, Action F allows 72 hours to restore one of these systems. Action H is similar if one ADS valve, one CSS subsystem, and one LPCI subsystem are inoperable. Reference DOC L.2.

These changes were identified in the conversion submittal as a beyond-scope issue. It is currently under review by the NRC.

4. DOC LA.3 for CTS 3.5.1 discusses the removal of certain reporting requirements from the TS. Reference also DOC LR.1 to CTS 6.5.1.5.c and d (ITS 5.6.6). It appears that some portions of the removed requirements are "relocated" in the sense that they already exist in 10 CFR 50.73. However, other portions are described as covered by plant procedures. Because the NRC does not give credit for items relocated to procedures, this portion would have to be treated as a deletion. The licensee will review this issue.
5. DOC L.5 for CTS surveillance requirement (SR) 4.8.3.1.2 discusses the addition of note to its ITS counterpart, SR 3.5.1.2, that allows a delay in entering the actions for the inoperability caused by performing this SR. The licensee indicated that duration of this SR is generally less than 1 hour. However, the staff is concerned that the note provides for an indefinite delay in entering the actions if the completion of the SR is delayed. In addition, the STS markup of the associated bases for the SR indicates that the delay has an upper limit of 1 hour. However, the ITS bases do not reflect this limit. This issue also affects ITS SR 3.5.2.4 (reference associated DOC L.2). The licensee will review this issue.
6. DOC LR.2 for CTS SR 4.5.1.d does not reference related DOC M.2. The licensee will review DOC LR.2.
7. CTS 3.5.2 requires two low pressure emergency core cooling subsystems to be operable. If one of the required systems is inoperable, Action a. allows 4 hours to get back to two operable subsystems. Otherwise, it requires the licensee to suspend operations with a potential to drain the reactor vessel (OPDRVs). CTS 3.5.3 requires the suppression pool to be operable but allows the level to be below the limit (including completely drained) in cold shutdown or refueling provided certain conditions are met. One of these conditions is that no OPDRVs are performed.

The two TS are related because the suppression pool is the suction source for the LPCI subsystems and one of the possible suction sources for the CSS subsystems. If the suppression pool level is below the limit in CTS 3.5.3.b, the LPCI subsystems would be inoperable and the CSS subsystems would be operable only if there was adequate water in the condensate storage tank (CST) and the CSS subsystems were aligned to take suction from the CST. With both CSS subsystems operable with suction from the CST,

CTS 3.5.2 would not prohibit the licensee from performing OPDRVs. However, CTS 3.5.3.b would prohibit OPDRVs because the suppression pool level is below the limit.

In the STS and ITS 3.5.2, the aspects of CTS 3.5.2 and 3.5.3 related to the operability of the emergency core cooling systems are combined. SR 3.5.2.2 requires the licensee to verify that the suppression pool level is greater than the shutdown limit or that adequate volume is available in the CST. However, a note to this SR indicates that only one CSS subsystem can take credit for the CST as a suction source during OPDRVs. Under these circumstances, the licensee would enter Action A. for one of the two required subsystems inoperable. This would allow 4 hours to restore a second subsystem. If this time is not met (which would happen if the suppression pool is intentionally drained), Action B. requires the licensee to initiate actions to suspend OPDRVs.

The staff considers this application of the 4-hour action time before taking action to suspend OPDRVs as a less restrictive than the CTS for the case in which the suppression pool level is below the limit. However, the licensee discussed the change in DOC A.7, indicating it was an administrative change. The staff and the licensee will review this issue further.

8. DOC LA.1 for CTS 3.5.1 does not clearly indicate the location to which the information will be relocated.

Section 3.7

9. On STS Bases page B 3.7-1, second paragraph, third sentence, states:

Either of the two subsystems is capable of providing the required cooling capacity with one pump operating to maintain safe shutdown conditions.

In the ITS Bases, the licensee deleted the phrase "with one pump operating" and, in other areas of the Bases, indicated that two pumps in a division were necessary to remove the initial heat loads. The staff questioned whether a 30-day allowed outage time for one pump in a subsystem (STS/ITS 3.7.1, Action A.) was appropriate if both pumps were required. The licensee indicated that (1) CTS 3.7.1.1 already allows one pump to be out of service for up to 30 days and (2) with one division inoperable, the other division was still available. The staff will review this issue further.

10. On ITS Bases page B 3.7.2, second paragraph, fourth and fifth sentences, indicate that applicable safety analyses were performed using a combined flow of 9000 gpm for two pumps. However, the Bases discussion of the limiting condition for operation (LCO) indicates that the required flow is greater than or equal to 8250 gpm. The licensee will review this issue.
11. On ITS Bases page B 3.7.5, the bases for Action D.1 mentions the completion time for the residual heat removal system suppression pool spray function. However, in its conversion the licensee removed this function from the TS. The licensee will review this issue.

13. DOC LA.1 for CTS 3.7.1.2, 3.7.1.3, and 3.7.1.5 and DOC LA.4 for CTS SR 4.7.1.5.c (ITS 3.7.2) do not clearly indicate the location to which the information will be relocated. Similar problems exist for DOCs LA.1 for CTS 3.7.2 (ITS 3.7.3), LA.2 for CTS 3.7.2 (ITS 3.7.4), LA.1 for CTS SR 4.11.2.7.2.b (ITS 3.7.5), LA.1 for CTS SR 4.7.9.b.1 and LA.3 for CTS 3.2.3 (ITS 3.7.6), and LA.2 for CTS 3.9.9 (ITS 3.7.7). The licensee will review this issue.
14. CTS 3.8.2.1 and 3.8.3.1 allow a 16-hour delay in declaring affected battery chargers and onsite power distribution systems, respectively, inoperable due to an inoperable division of the EECW system. CTS 3.7.1.2 allows one division of the EECW system to be inoperable for up to 72 hours. However, after the 16-hour delay in CTS 3.8.2.1 and 3.8.3.1, the inoperable battery charger or onsite power distribution system would require a shutdown of the plant before the 72 hours allowed for EECW had expired. In the ITS, the 16-hour delays in the battery charger and onsite power distribution system TSs are removed. In keeping with the STS approach of not cascading actions, the ITS is written such that the 72-hour limit for an inoperable division of EECW would apply. Reference DOC L.1. The staff has some concerns with the adequacy of the argument in L.1 and will review this issue further.
15. In the Background section of the ITS 3.7.2 Bases for the EECW system, second paragraph, it indicates that EECW initiates, among other things, on a loss-of-coolant accident (LOCA) signal. This is only partially correct. One of the EECW initiation signals is high drywell pressure, which is also a LOCA signal. However, there are other LOCA signals that do not initiate the EECW system, most notably low-low reactor vessel water level. The licensee will review this issue.
16. ITS SR 3.7.6.1 frequency is given as once after each entry into Mode 4. The staff questioned whether this might be interpreted to mean entries into Mode 4 from Mode 3 and Mode 5 as opposed to the intent of entries into Mode 4 from Mode 3. The licensee will consider whether to clarify this in the bases.

Section 3.9

17. DOC L.1 for CTS 3.9.3 (ITS 3.9.4), in the first paragraph, includes the phrase:

either all or no more than one control rod is fully inserted.

The intent was to say that all control rods are fully inserted or no more than one control rod is withdrawn. The licensee will correct this error.
18. DOC LA.1 for CTS 3.9.8 (ITS 3.9.6) does not clearly indicate the location to which the information will be relocated. The licensee will review this issue.
19. DOC LA.3 for CTS 3.9.11.2 (ITS 3.9.8) discusses the removal of a reactor water level limitation of greater than or equal to 214 inches from the TS. It would be helpful to the reviewers to understand the original basis for including this limitation. The licensee will consider adding more information to the DOC.

Specification 3.3.1.1

20. DOC M.5 for CTS Table 4.3.1.1-1, footnote (b) and justification for difference (JFD) P.5 for STS SR 3.3.1.1.6 discuss the surveillance requirement for overlap between the source range monitor (SRM) and the intermediate range monitor (IRM). In DOC M.5 the licensee indicates it will adopt a more restrictive requirement that the SRMs will not be fully withdrawn while obtaining overlap. By this, the licensee indicates that the CTS would allow the SRM to be fully withdrawn while obtaining overlap. In JFD P.5 the licensee states that the SRMs can be upscale, initiating a rod block, before overlap with the IRMs is established. Therefore, the licensee modified the STS SR 3.3.1.1.6, which required that the overlap be obtained with the SRMs fully inserted. In ITS SR 3.3.1.1.6, the surveillance is to be performed prior to fully withdrawing the SRMs. The staff will review this change to determine whether further discussion is needed. Note that the Fermi 2 updated final safety analysis report, Section 7.6.2.13.1.1, indicates that the IRMs will be on scale before the SRMs reach full scale and that partial retraction of the SRMs provides additional overlap (emphasis added).
21. DOC LC.1 for CTS 3.3.1 (ITS 3.3.1.1) does not appear to provide sufficient information concerning the applicability of report NEDO-30851-P-A, "Technical Specification Improvement Analyses for BWR Reactor Protection System," March 1988, to Fermi 2. The licensee and the staff will discuss this issue further.
22. In the STS markup, the reference for changes to SR 3.3.1.1.16 is JFD P.2. However, this JFD is for changes to the Bases. The licensee will determine whether the correct reference should have been JFD P.1.
23. The STS markup for SR 3.3.1.1.3 does not make sense as written. The ITS text for this SR differs from the STS markup and appears to correct the problem. The licensee will determine what changes should be made to the STS markup.