September 21, 1998

LICENSEE: Detroit Edison Company (DECo)

FACILITY: Fermi 2 Nuclear Plant

SUBJECT: MEETING WITH THE DETROIT EDISON COMPANY TO DISCUSS THE FERMI 2 IMPROVED STANDARD TECHNICAL SPECIFICATIONS CONVERSION

The NRC staff met with DECo at NRC Headquarters on September 8 and 9, 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 meeting was a review of Section 3.8 of the STS. However, Section 5.0 and some more general issues were also discussed. Enclosure 1 lists the meeting participants.

The participants discussed issues identified by the project manager and the lead reviewer for proposed Section 3.8 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 outstanding proposed amendments to the current technical specifications in this section. In addition, the participants discussed issues related to Section 5.0 of the STS. These issues are included in Enclosure 2.

The participants also discussed general issues related to the staff's review and the schedule for future meetings to discuss other sections of the conversion. The next meeting is scheduled for September 28, 29, and 30, 1998, to discuss Sections 3.5, 3.7, and 3.9 of the conversion.

ORIGINAL SIGNED BY

Andrew J. Kugler, Project Manager Project Directorate III-1 Division of Reactor Projects - III/IV Office of Nuclear Reactor Regulation

Docket No. 50-341

Enclosures: As stated

cc w/encl: See next page

DISTRIBUTION:

E-mail SCollins/FMiraglia (SJC1/FJM) EAdensam (EGA1) ESchweibinz (ERS) THiltz (TGH) ETomlinson (EBT) JArildsen (JAA)

BBoger (BAB2) BBurgess (BLB) TMartin (SLM3) JFoster (JWF) CJamerson (CAJ1) Paper Copy Docket File (50-341) PUBLIC PD3-1 R/F OGC ACRS AKugler

FO

DOCUMENT NAME: G:\WPDOCS\FERMI\FE-STS04.MTS

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy LA:PD31 OFFICE PD:PD3-1 E PM:PD31 E NAME aph CJamerson (CCarpenter (AKugler:db DATE 09/ 18 /98 09/18/98 09/21 /98

OFFICIAL RECORD COPY

NAC FILE CENTER COPY

Detroit Edison Company

Fermi 2

CC:

John Flynn, Esquire Senior Attorney Detroit Edison Company 2000 Second Avenue Detroit, Michigan 48226

Drinking Water and Radiological Protection Division Michigan Department of Environmental Quality 3423 N. Martin Luther King Jr Blvd P. O. Box 30630 CPH Mailroom Lansing, Michigan 48909-8130

U.S. Nuclear Regulatory Commission Resident Inspector's Office 6450 W. Dixie Highway Newport, Michigan 48166

Monroe County Emergency Management Division 963 South Raisinville Monroe, Michigan 48161

Regional Administrator, Region III U.S. Nuclear Regulatory Commission 801 Warrenville Road Lisle, Illinois 60532-4351

Norman K. Peterson Director, Nuclear Licensing Detroit Edison Company Fermi 2 - 280 TAC 6400 North Dixie Highway Newport, Michigan 48166 Mr. Douglas R. Gipson Senior Vice President Nuclear Generation Detroit Edison Company 6400 North Dixie Highway Newport, MI 48166

MEETING ATTENDEES

FOR SEPTEMBER 8 AND 9, 1998, FERMI 2 MEETING ON THE

IMPROVED STANDARD TECHNICAL SPECIFICATIONS CONVERSION

NAME

AFFILIATION

Andrew Kugler
Jack Foster*
Ed Tomlinson*
Jesse Arildsen*
Glenn Ohlemacher
Charles Boyce
Dan Williamson

NRC/NRR/DRPW/PD31, Project Manager NRC/NRR/ADPR/TSB, Conversion Lead Reviewer NRC/NRR/ADPR/TSB, Section 3.8 Lead Reviewer NRC/NRR/DRCH, Operator Licensing Branch Detroit Edison, Licensing Excel Inc. (contractor to Detroit Edison) Excel Inc. (contractor to Detroit Edison)

* Part-time | articipant

ENCLOSURE 1

ITEMS IDENTIFIED FROM THE FERMI-2 TECHNICAL SPECIFICATIONS

CONVERSION SUBMITTAL, SECTIONS 3.8 AND 5.0

 The staff expressed 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. Examples include LA.9 for TS 3.8.1 and LA.9 for TS 5.5.

Section 3.8

- 2. Amendment No. 119 to the CTS 3.8.1.1, issued on June 2, 1998, provided an extension of the allowed outage time (AOT) for the emergency diesel generators (EDGs) from 72 hours to 7 days. One of the changes supporting the extension of the AOT involved the addition of a check that the black-start combustion turbine-generator (CTG) was available within 8 hours and at least once per 8 hours thereafter. If, at any time during the EDG outage, the CTG verification could not be met, a new action statement required the licensee to restore the inoperable division within 72 hours (not to exceed 7 days from the time the division became inoperable). There is no similar requirement in the NRC's standard technical specification (STS) 3.8.1. The staff expressed concern about the way in which the licensee incorporated these requirements in the converted TS 3.8.1. Reference DOCs A.11 and LR.4. The licensee indicated the changes to the CTS were necessary in order to make the conversion. This item will require additional review by the NRC staff and may be a beyond-scope issue. The staff also questioned the use of the term "available" in reference to the CTG rather than the term "operable" which is used in the CTS. The licensee will consider either going back to the use of the term "operable" or strengthen the explanation of the term "available" in the bases for TS 3.8.1.
- 3. Surveillance Requirement (SR) 4.8.1.1.2.e.9 in the CTS requires the licensee to verify that the auto-connected loads for each EDG does not exceed the 2000 hour rating of 3100 kW. In DOC LA.9 associated with STS 3.8.1 the licensee indicates that this design detail is not retained in the TS because it is adequately defined and controlled in the updated final safety analysis report (UFSAR). The licensee also indicated that the 10 CFR 50.59 approval process for design and UFSAR changes will ensure that EDG loading is maintained within acceptable design limits. However, the DOC does not discuss the change from a periodic surveillance to a situational review. This change should be addressed.
- 4. In the NRC STS, Note 4 to SR 3.8.1.3 indicates that the SR shall be preceded by and immediately follow, without shutdown, a successful performance of SR 3.8.1.2 or SR 3.8.1.7. In its conversion, the licensee deleted this note, indicating it was inconsistent with the CTS and with the bases in the STS. See justification for differences (JFD) P.1.d. The licensee believes that the note is overly restrictive. The staff will need to review this change further.

ENCLOSURE 2

- 5. CTS SR 4.8.1.1.2 describes both the timed and untimed EDG start tests. A footnote indicates the untimed starts may be preceded by warmup procedures intended to minimize the mechanical stress and wear on the EDG. NRC STS SR 3.8.1.2, Note 3 provides a similar provision but adds a second sentence stating that, if the modified start procedures (i.e., warmup procedures) are not used, the time, voltage, and frequency tolerances of SR 3.8.1.7 must be met. The licensee deleted Note 3 in its entirety. See JFD P.5. The staff acknowledged that CTS does not include the requirement to meet the time, voltage, and frequency tolerances of SR 3.8.1.7. However, the staff is concerned that deleting the entire note eliminates the permissive for the warmup procedures (often referred to as a slow start). The licensee will consider retaining the first sentence in Note 3.
- In its conversion, the licensee deleted NRC STS SR 3.8.1.8. This SR is not in the CTS. The staff requested the licensee to provide some discussion of this deletion in JFD P.1.
- 7. NRC STS SR 3.8.1.13 verifies that selected EDG automatic trips are bypassed on:

[actual or simulated loss of voltage signal on the emergency bus concurrent with an actual or simulated ECCS initiation signal]

In its conversion, the licensee deleted the reference to the actual or simulated loss of voltage signal on the emergency bus. The corresponding CTS SR 4.8.1.1.2.e.7 has this verification performed for an emergency start signal. It is not clear to the staff whether the deletion of the reference to the loss of voltage signal is appropriate. The licensee will look into this issue.

- 8. In DOC LA.2 associated with STS 3.8.2, the licensee indicates that the requirement to suspend crane operations over the spent fuel pool is relocated to the UFSAR based on the administrative controls of heavy loads. The staff indicated that this DOC should discuss the licensee's compliance with the guidelines for heavy load control presented in NUREG-0612, "Control of Heavy Loads at Nuclear Power Plants," July 1980.
- 9. CTS 3.8.2.1, Footnote #, and CTS 3.8.3.1, Footnote #, delays actions otherwise required by those TSs if the components are made inoperable due to the loss of emergency equipment cooling water (EECW) system cooling provided the actions of CTS 3.7.1.2 are taken. NRC STS has no similar provisions. In its conversion, the licensee indicated these footnotes would be addressed in TS 3.7.2 for the EECW system. In TS 3.7.2, the footnotes are deleted. The staff will address this issue during its review of Section 3.7 of the conversion.
- 10. During the discussion of STS 3.8.4, the staff mentioned two issues related to the battery services tests and performance tests. The licensee indicated that it continues to follow the discussion of this issue between the industry and the staff and will revise its submittal, if appropriate, when a decision has been reached. The staff reviewing the Fermi conversion will also continue to monitor these issues.
- 11. The staff noted that the revised wording for SR 3.8.4.3 in the conversion significantly alters the intent of the SR and does not follow the goneric change to the SR that has been approved by the NRC. The licensee will look into this issue.

- 12. CTS SR 4.8.2.1.d contains two options for a battery service test; one using actual emergency loads and the other using a dummy load and a load profile. NRC STS SR 3.8.4.7 requires the licensee to verify the battery capacity is adequate to supply, and maintain in operable status, the required emergency loads. In its conversion, the licensee modified "the required emergency loads" to read "the actual or simulated emergency loads". The STS version is intended to indicate what the SR must accomplish without being prescriptive about how this is done. It does not appear to the staff that the change proposed by the licensee is correct. For example, the proposed version would indicate the test would verify that the simulated loads could be maintained in an operable status. This doesn't make sense. It might be appropriate to include details of test methods (e.g., actual or simulated loads) in the bases.
- 13. In the NRC STS bases, in the Background section on page B 3.8-51, the staff included a discussion of the capability of the battery at 80 percent of the nameplate rating. In its conversion, the licensee replaced this discussion with Insert B 3.8.4-2 which makes no mention of the capacity at 80 percent of the nameplate rating. However, the licensee retained the 80 percent limit in SR 3.8.4.8. The licensee will determine whether the bases discussion should be revised to restore the information related to battery capacity.
- 14. CTS 3.8.2.2 requires one division of D.C. power to be operable. There is no link in the CTS between the D.C. system that is operable and the equipment requiring D.C. power that must be operable. NRC STS 3.8.5 requires D.C. electrical subsystems to be operable to support D.C. subsystems required by STS 3.8.10. STS 3.8.10, in turn, requires subsystems to be operable to support equipment that is required to be operable. In its converted TS 3.8.5, the licensee modified the limiting condition for operation (LCO) to require one division of D.C. power required to support equipment to be operable and, when required, one D.C. subsystem battery or charger in the other division shall be operable. See JFD P.4. The licensee indicated that the proposed TS was more restrictive than the CTS. The licensee also indicated that the STS version was overly restrictive. Therefore, the licensee has proposed an alternative that falls in between the CTS and the STS. The staff will need to review this change further. This may be a beyond-scope issue.
- 15. The licensee modified the LCO to remove the reference to Table 3.8.6-1, part of an NRC-approved generic change to this TS. However, the staff noted that the licensee failed to modify Condition A in accordance with the generic change. The licensee will review its implementation of the generic change and revise the proposed TS if appropriate.
- 16. In NRC STS Table 3.8.6-1, "Battery Cell Parameter Requirements," there is a footnote (c) that applies to the Category A, B, and C specific gravity limits. In its conversion, the licensee modified this footnote to resemble the CTS in which the footnote only applies to Category A and C. The staff pointed out that this arrangement might require the licensee to take potentially unnecessary actions that are not intended in the STS. In addition, the proposed bases indicate that the footnote applies to all three categories. The licensee will review this issue and determine what changes are appropriate.
- 17. CTS 3.8.3.1 includes a list of selected A.C. and D.C. distribution busses. NRC STS 3.8.8 moves these details to the bases. In its conversion, the licensee chose to retain the listing in TS 3.8.7. The staff questioned this and the licensee indicated that it felt that the STS

version could lead to confusion about what busses were required to satisfy the LCO. The staff will consider the licensee's explanation and determine whether additional discussion is necessary.

- 18. In CTS 3.8.3.1, there is an LCO and action associated with the swing bus that powers selected residual heat removal system equipment. In its conversion, the licensee relocated this information to TS 3.5.1. However, the staff noted that there is no mention of the swing bus in the TS 3.5.1 LCO. The licensee indicated that new SR 3.5.1.1 and SR 3.5.1.2 verify that the swing bus is capable of performing its safety function. If these SRs are not satisfied, the license would enter TS 3.5.1, Action J. The staff will review this approach further.
- 19. In its conversion, the licensee added Insert B 3.8.8-1 to the STS LCO discussion on bases page B 3.8-90. This insert states that in the shutdown conditions applicable to the LCO, cross-tie breakers between redundant safety-related power distribution systems may be closed. The staff questioned the source of this addition. It does not appear to be in the CTS. The licensee pointed out that a similar discussion exists in NRC STS 3.8.9 (converted TS 3.8.7) in the bases for the LCO. However, in its conversion the licensee removed the discussion from the TS 3.8.7 bases because the Fermi design does not support the use of the cross-ties during Modes 1, 2, and 3. The licensee indicated that the use of the cross-ties is permissible in the modes associated with converted TS 3.8.8. The staff indicated that additional information would be required in order for the change to be reviewed.

Section 5.0

- 20. CTS 6.3.1 refers to American National Standards Institute (ANSI) N18.1-1971 in reference to unit staff qualifications. NRC STS 5.3.1 refers to Regulatory Guide 1.8, Revision 2, 1987, or more recent revisions or an ANSI standard acceptable to the NRC staff (e.g., ANSI/ANS 3.1-1981). In its conversion the licensee retained the reference to ANSI N18.1-1971. The staff is concerned that the reference to the 1971 standard could cause confusion with respect to programmatic requirements. NRC approval of a TS referring to the older standard might exacerbate this problem. The staff requested the licensee to consider revising the reference in TS 5.3.1.
- 21. CTS 6.8.1.b refers to NUREG-0737, "Clarification of TMI Action Plan Requirements," November 1980. NRC STS 5.4.1.b adds reference to NUREG-0737, Supplement 1. In its conversion, the licensee chose not to add the reference to Supplement 1 to TS 5.4.1.b. The staff recommended adding this reference since the actions described in both the NUREG and its supplement are required.
- 22. In DOC A.3 for converted TS 5.2 the licensee discusses the modification of the CTS 6.2.2.c footnote. In the last sentence the licensee also mentions that references to "health physics" are being changed to "radiation protection." However, these latter changes are being made in CTS 6.2.1.c and CTS 6.8.6. The DOC should be revised to indicate this.

- 23. The staff questioned whether DOC A.9 for converted TS 5.5 should have been an "M-DOC", i.e., a discussion of a more restrictive change. The licensee indicated that it felt that this change, which is related to the Safety Function Determination Program and to STS 3.0.6, was administrative in nature because it clarified existing guidance. This issue also affects DOC A.6 for Section 3.0 of the conversion. The staff will consider the licensee's explanation and determine whether further discussion is necessary.
- 24. DOC LR.1 for converted TS 5.6 indicates that CTS 6.9.1.5.c and CTS 6.9.1.5.d were removed from the TS. However, later in the same DOC it indicates that they were relocated. This conflict needs to be resolved by the licensee. In addition, the licensee may want to add some discussion of how the reporting requirements contained in 10 CFR 50.73 relate to the removal of CTS 6.9.1.5.c.