

Wayne H. Jens  
Vice President  
Nuclear Operations

Detroit  
Edison

Fermi-2  
8400 North Dixie Highway  
Newport, Michigan 48166  
(313) 586-4150

March 9, 1985  
NE-85-C455

Director of Nuclear Reactor Regulation  
Attention: Mr. B. J. Youngblood, Chief  
Licensing Branch No. 1  
Division of Licensing  
U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Mr. Youngblood:

Reference: (1) Fermi 2  
NRC Docket No. 50-341

(2) Detroit Edison to NRC Letter, "Request to  
Revise Draft Fermi 2 Technical Specifica-  
tions", NE-85-0329, February 14, 1985

Subject: Additional Change to Draft Fermi 2 Technical  
Specification for Diesel Generators

The reference (2) letter requested certain modifications to draft Technical Specification 3/4.8.1. Based on a telephone conference on March 8, 1985 with Mr. A. Ungaro of your Power Systems Branch, attached please find a revised change to one page of that specification. The remaining pages are requested to be revised as forwarded to you in the reference (2) letter. Additional justification for the attached change is given below.

The attached mark up of Technical Specification 3.8.1.1 action statements a and b address the Fermi 2 specific requirements to verify operability of the remaining Emergency Diesel Generators (EDGs). The existing action statements do not require that the EDGs be loaded, but the vendors recommendation for operating the EDGs includes a load period anytime the EDGs are started. The vendor recommended starting, loading and shutdown of the EDGs cannot be accomplished within one hour for the remaining EDGs as required by the current action statements. The vendor recommended slow start and load of an EDG brings the EDG to a low idle, then gradually increases speed, gradually loads the EDG and finally shuts down the EDG in a prescribed manner. These actions, summarized below, take approximately 4 hours per EDG.

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Mr. B. J. Youngblood  
March 9, 1985  
NE-85-0455  
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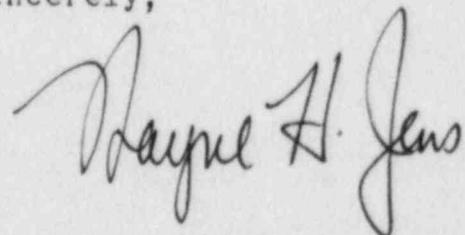
A slow start will be the normal method of starting each EDG with the exception of the once per 184 day demonstration of fast start capability per Technical Specifications. The EDG slow start is accomplished by bringing the EDG to a low speed idle (approximately 500 RPM) while the engine auxiliary systems are warming. The engine speed is then gradually increased to the synchronous speed of 900 RPM. This portion of the starting sequence takes approximately 15 minutes and is without engine load.

The loading of the engine is also gradual and involves applying load in a series of steps and recording engine parameters. The EDG output breaker is closed which ties the EDG to the grid after completion of the slow start sequence. The initial loading of the EDG is approximately 700 kilowatts (KW). This load is applied only briefly. The load is then increased to between 60 and 100% of EDG continuous rating as recommended by the vendor. Fermi 2 procedures require increasing the load to approximately 60% of the continuous rating and maintaining this load for one (1) hour after stabilization of engine temperatures and pressures (requires about 15 minutes). During this one hour the vendor recommends that more than 30 engine parameters be recorded at least twice. Subsequently the EDG load is increased to 100% of continuous rating (2850 KW). After temperatures and pressures have stabilized the EDG is run at this load for one hour. The EDG load is then reduced to approximately 60% and the engine is run at this load for about five minutes. The load is then gradually reduced to less than 500 KW at which point the output breaker is opened. The EDG is then operated without load for about five minutes for cooldown. The EDG is then shutdown and placed in standby condition.

I hereby certify that this proposed additional change reflects the plant, the Final Safety Analysis Report, and the staff's Safety Evaluation Report in all material aspects. Minor changes may be necessary to the FSAR and SER if the proposed change is approved.

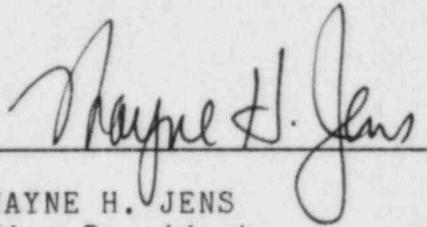
Please direct any question to Mr. O. K. Earle at (313) 586-4211.

Sincerely,



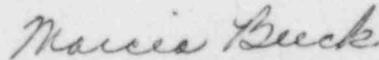
Attachment  
cc: Mr. P. M. Byron  
Mr. M. D. Lynch  
Mr. R. L. Perch  
Mr. A. R. Ungaro  
USNRC Document Control Desk  
Washington, D.C. 20555

I, WAYNE H. JENS, do hereby affirm that the foregoing statements are based on facts and circumstances which are true and accurate to the best of my knowledge and belief.



WAYNE H. JENS  
Vice President  
Nuclear Operations

On this 9<sup>th</sup> day of March, 1985  
before me personally appeared Wayne H. Jens, being first  
duly sworn and says that he executed the foregoing as his  
free act and deed.



Notary Public

MARCIA BUCK  
Notary Public, Washtenaw County, MI  
My Commission Expires Dec. 28, 1987

*Acting in Monroe County, MI*

### 3/4.8 ELECTRICAL POWER SYSTEMS

REVISIONS

#### 3/4.8.1 A.C. SOURCES

##### A.C. SOURCES - OPERATING

##### LIMITING CONDITION FOR OPERATION

3.8.1.1 As a minimum, the following A.C. electrical power sources shall be OPERABLE:

- a. Two physically independent circuits between the offsite transmission network and the onsite Class 1E distribution system, and
- b. Two separate and independent onsite A.C. electrical power sources, Division I and Division II, each consisting of two emergency diesel generators, each diesel generator with:
  1. A separate day fuel tank containing a minimum of 210 gallons of fuel,
  2. A separate fuel storage system containing a minimum of 35,280 gallons of fuel, and
  3. A separate fuel transfer pump.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.

##### ACTION:

- a. With one or both offsite circuits of the above required A.C. electrical power sources inoperable, be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours; demonstrate the OPERABILITY of the remaining A.C. sources by performing Surveillance Requirement ~~4.8.1.1.1x and 4.8.1.1.2.a.4x~~ for one diesel generator at a time within one hour and at least once per 8 hours thereafter, and by performing Surveillance Requirement ~~4.8.1.1.2.a.4~~, for one diesel generator at a time, within 24 hours and at least once per 24 hours thereafter.
- b. With one or both diesel generators in one of the above required onsite A.C. electrical power divisions inoperable, demonstrate the OPERABILITY of the remaining A.C. sources by performing Surveillance Requirement ~~4.8.1.1.1x and 4.8.1.1.2.a.4x~~ for one diesel generator at a time within one hour and at least once per 8 hours thereafter; restore the inoperable division to OPERABLE status within 72 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

and by performing Surveillance Requirement 4.8.1.1.2.a.4, for one diesel generator at a time, within 24 hours and at least once per 24 hours thereafter.