

May 17, 1999 3F0599-15

U.S. Nuclear Regulatory Commission

Attn: Document Control Desk Washington, DC 20555-0001

Subject:

License Amendment Request #250, Revision 0

Emergency Diesel Generator Loss of Power Start Instrumentation

Dear Sir:

Florida Power Corporation (FPC) hereby submits a request for an amendment to its Facility Operating License No. DPR-72 for Crystal River Unit 3 (CR-3) in accordance with 10 CFR 50.90. The attached License Amendment Request (LAR) #250, Revision 0, proposes changes to the CR-3 Improved Technical Specifications (ITS) Section 3.3.8, "Emergency Diesel Generator (EDG) Loss of Power Start (LOPS)," Surveillance Requirement 3.3.8.1. Conforming ITS Bases changes are also included.

The proposed change is to revise the note for the surveillance and to delete the note for the frequency. The surveillance note is revised to eliminate the delayed entry into the applicable Conditions and Required Actions.

FPC requests NRC approval by June 30, 2000 and an implementation period of thirty days. These changes are not needed to support any required CR-3 modifications or outage activities.

This letter establishes no new regulatory commitments. If you have any questions regarding this submittal, please contact Mr. Sid Powell, Manager, Nuclear Licensing at (352) 563-4883.

Sincerely,

John J. Holden

K/Holde

Vice President and Site Director

JJH/wjl

xc:

9906020155 990517 PDR ADDCK 05000302 PDR

Regional Administrator, Region II

NRR Project Manager Senior Resident Inspector

Attachments:

A. Description of Changes, Reason for Request, and Evaluation of Request

B. Proposed ITS and ITS Bases Change Pages - Strikeout / Shadow Format

C. Proposed ITS and ITS Bases Change Pages - Revision Bar Format

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STATE OF FLORIDA

COUNTY OF CITRUS

John J. Holden states that he is the Vice President and Site Director for Florida Power Corporation; that he is authorized on the part of said company to sign and file with the Nuclear Regulatory Commission the information attached hereto; and that all such statements made and matters set forth therein are true and correct to the best of his knowledge, information, and belief.

John J. Holden

Vice President and Site Director

Sworn to and subscribed before me this _/ Th day of _______, 1999, by John J. Holden.

LISA ANN MCBRIDE Notary Public, State of Florida My Comm. Exp. Oct. 25, 1999 Comm. No. CC 505458

Signature of Notary Public

State of Florida

(Print, type, or stamp Commissioned

Name of Notary Public)

Personally Produced
Known OR- Identification

LISA ANN MEBRIDE

Lisa Jun M Brilo

FLORIDA POWER CORPORATION CRYSTAL RIVER UNIT 3

DOCKET NUMBER 50-302 / LICENSE NUMBER DPR-72

ATTACHMENT A

LICENSE AMENDMENT REQUEST #250, REVISION 0 EMERGENCY DIESEL GENERATOR LOSS OF POWER START INSTRUMENTATION

Description of Changes, Reason for Request, and Evaluation of Request

No Significant Hazards Consideration

Environmental Impact Evaluation

LICENSE AMENDMENT REQUEST #250, REVISION 0 EMERGENCY DIESEL GENERATOR LOSS OF POWER START INSTRUMENTATION

LICENSE DOCUMENT INVOLVED: Improved Technical Specifications (ITS)

PORTIONS: Section 3.3.8, Emergency Diesel Generator (EDG) Loss of Power Start

(LOPS)

CHANGE A - REVISION OF SURVEILLANCE NOTE

DESCRIPTION OF CHANGE:

It is proposed to revise the note in Surveillance Requirement (SR) 3.3.8.1. The note currently states that, when EDG LOPS instrumentation is placed in an inoperable status solely for performance of this surveillance, entry into associated Conditions and Required Actions may be delayed for up to four hours provided the two channels monitoring the Function for the bus are OPERABLE or tripped. The proposed revision to the note states that entry into the Conditions and Required Actions of ITS Section 3.3.8 is not required provided the applicable Conditions and Required Actions of ITS Section 3.8.1, "Electrical Power Systems, AC Sources – Operating," are entered for the EDG being made inoperable.

REASON FOR REQUEST:

The note, as currently stated, is not consistent with the method for performing SR 3.3.8.1. The Crystal River Unit 3 (CR-3) design and testing configuration does not permit application of the current note, which allows delayed entry into the Conditions and Required Actions of ITS Section 3.3.8. Rather, the CR-3 design and testing configuration requires that the Conditions and Required Actions of Section 3.3.8 be entered when performance of the procedure for SR 3.3.8.1 is started. The proposed change will make the note consistent with the method of performing SR 3.3.8.1.

SR 3.3.8.1 is performed concurrently with SR 3.8.1.2 and SR 3.8.1.3. Each of these surveillances is required every 31 days. Performing these surveillances requires that the EDGs be declared inoperable. During SR 3.3.8.1, the EDGs are made inoperable to prevent automatic start. Performing SR 3.3.8.1 requires placing two channels of either the degraded voltage instrumentation or the loss of voltage channels in the trip blocked condition. In this condition the channels are not operable, nor are they tripped. Because the channels cannot be made operable and cannot be tripped as stated in the current note, the note as currently written cannot be applied. Because CR-3 cannot use the relief provided by the note in SR 3.3.8.1, Condition B of Section 3.3.8 is entered when performance of the surveillance is started. The Required Action time for Condition B is one hour. Because the average time period for performing the channel functional test of SR 3.3.8.1 is approximately four hours, Condition C is entered. The resulting condition is that two channels of degraded voltage or loss of voltage

instrumentation are not operable. As a result, the associated EDG would have to be declared inoperable and the Conditions and Required Actions of ITS Section 3.8.1 would have to be entered if the EDGs had not already been declared inoperable.

The proposed revised note would allow direct entry into ITS Section 3.8.1 Conditions and Required Actions. Such direct entry will eliminate the administrative burden related to tracking and logging time periods.

EVALUATION OF REQUEST:

ITS Section 3.3.8 was added with the conversion to the Improved Technical Specifications, issued by Amendment No. 149. SR 3.3.8.1 included the current note regarding the delayed entry into the Conditions and Required Actions.

The safety evaluation (SE) accompanying Amendment No. 149 discussed the new Section 3.3.8. The SE discussed that accident analysis assumptions are based on maintaining at least one train of onsite AC and DC power sources and associated distribution systems operable. The SE discusses the channels for detecting degraded voltage and complete loss of voltage on the 4160 Volt Engineered Safeguards (ES) buses, and notes that these channels will detect such a condition and will cause an automatic start of the EDG associated with the affected bus. This function of detecting degraded or loss of voltage and causing the start of the EDGs is the safety function of the instrument channels.

The SE does not present any basis for delaying entry into the Conditions and Required Actions of ITS Section 3.3.8. Revising the note will not impact the performance of the surveillance requirement. Likewise, revising the note will not impact the ability of the degraded voltage and loss of voltage instrument channels to perform their safety function. Based on this, FPC concludes that ITS Section 3.3.8, with the proposed revised note, will remain consistent with the NRC staff conclusions documented in the SE.

CHANGE B - DELETION OF FREQUENCY NOTE

DESCRIPTION OF CHANGE:

It is proposed to delete the provision in SR 3.3.8.1 Frequency for a 60 day surveillance frequency, and the associated note that the 60 day frequency is not effective after November 23, 1997.

REASON FOR REQUEST:

The note in SR 3.3.8.1 Frequency states that it is not effective after November 23, 1997. Because the note is no longer effective, deletion of the note is appropriate.

EVALUATION OF REQUEST:

The provision to allow 60 days as the frequency for performing SR 3.3.8.1 was added to the ITS column titled "Frequency" to allow certain modification work on the EDGs during the 1997 design outage at CR-3. The modification work was the installation of new radiators on the EDGs. The new radiators were needed to increase the rating of the EDGs. The installation of the radiators was projected to require longer than the 31 day frequency specified in SR 3.3.8.1.

The practice at CR-3 is to place the affected EDG in an inoperable status during the performance of SR 3.3.8.1. This would have meant that, if EDG "A" were inoperable for the required radiator replacement and if EDG "B" were been placed in an inoperable status during SR 3.3.8.1 performance, there would have been no operable EDGs at CR-3. This condition had been expected to occur because the radiator replacement work was projected to require more than the 31-day frequency of SR 3.3.8.1. FPC personnel at CR-3 decided that the extended frequency, and any resulting insignificant decrease in EDG start reliability, would have had less risk to safety than a condition in which CR-3 had no operable EDG. Based on that decision, FPC proposed the extension of the interval as a one-time change (i.e., only one 31 day surveillance would be missed).

The radiator replacement work at CR-3 was completed during the 1997 design outage. Therefore, the provision for a 60 day frequency is no longer needed and the note should be deleted from SR 3.3.8.1. Deleting the note is an editorial change.

NO SIGNIFICANT HAZARDS CONSIDERATION:

Florida Power Corporation (FPC) has reviewed the requirements of 10 CFR 50.92 as they apply to the proposed License Amendment. FPC considers the changes do not involve a significant hazards consideration. In support of this conclusion, the following analysis is provided.

1. Involve a significant increase in the probability or consequences of an accident previously evaluated?

Proposed Improved Technical Specifications (ITS) Change A - Revision of Surveillance Note

The note in Surveillance Requirement (SR) 3.3.8.1 involves the timing for placing Crystal River Unit 3 (CR-3) into the applicable Conditions and Required Actions when performing the surveillance. The proposed revision will make the note consistent with the actual method of performing the surveillance at CR-3. The design and testing configuration does not allow CR-3 to use the relief provided by the note. As a result, the Conditions and Required Actions of ITS Section 3.3.8 are entered at the start of the surveillance performance. The design and testing configuration requires entry into ITS Section 3.8.1 Conditions prior to performing SR 3.3.8.1. The revised note would require entering the

applicable Conditions and Required Actions of ITS Section 3.8.1 for one Emergency Diesel Generator (EDG) being inoperable. This approach and the proposed note are conservative relative to the current note. The proposed note results in no changes to the method or to the timing of performing SR 3.3.8.1. Direct entry into ITS Section 3.8.1 Conditions will achieve the same final ITS condition as if Section 3.3.8 Conditions and Required Actions were entered. Therefore, the probability of occurrence and the consequences of any accident previously evaluated are unaffected by this change.

Proposed iTS Change B - Deletion of Frequency Note

The note under Frequency in SR 3.3.8.1 involves the period of time that the 60 day surveillance frequency would be in effect. The 60 day frequency was a temporary extension that was needed to implement modifications to the EDG during the 1997 CR-3 design outage. This was a one-time extension of the frequency. The note indicates this temporary nature of the 60 day frequency. Deleting the note is an editorial change since the surveillance has reverted back to its 31 day frequency and the note is no longer effective. Because the proposed deletion of the note is an editorial change, and no change is proposed to the current 31 day frequency, the probability of occurrence and the consequences of any accident previously evaluated are unaffected by this change.

2. Create the possibility of a new or different kind of accident from previously evaluated accidents?

Proposed ITS Change A - Revision of Surveillance Note

The proposed revision of the note in SR 3.3.8.1 involves only the timing of entry into associated ITS Conditions and Required Actions. No changes are proposed to the existing ITS Conditions and Required Actions. The proposed change is conservative since it will require entering the appropriate Conditions and Required Actions immediately upon starting SR 3.3.8.1. Changing the timing for entry into ITS Conditions and Required Actions does not create the possibility of a new or different kind of accident from those evaluated previously.

Proposed ITS Change B - Deletion of Frequency Note

Delction of the note under SR 3.3.8.1 Frequency is an editorial change since the note is no longer effective. The current frequency for performing SR 3.3.8.1 is 31 days. This is the same frequency that was in effect prior to the one-time, temporary change of the frequency to 60 days. The editorial change of deleting the note that is no longer effective does not create the possibility of a new or different kind of accident from those evaluated previously.

3. Involve a significant reduction in a margin of safety?

Proposed ITS Change A - Revision of Surveillance Note

One manner in which a margin of safety related to a Surveillance Requirement might be affected would be if entry into a Limiting Condition for Operation (LCO) were delayed. The result of a delay in entering an LCO would be an increase in the time before a Required Action was taken, such as commencing a plant shutdown. Generally, such allowed times reflected in ITS Required Actions are based on some margin. Increasing the time allowed before starting a certain Required Action might result in a reduction of a margin of safety. However, the proposed ITS change allows entry into Section 3.8.1 Conditions immediately rather than after a delay. The proposed ITS change does not change the final plant condition required by the ITS. Therefore, the proposed ITS change does not result in a reduction in a margin of safety.

Proposed ITS Change B - Deletion of Frequency Note

Another manner in which a margin of safety related to a surveillance requirement might be affected would be if the frequency of performance were changed. Generally, margin might be reduced if the frequency were reduced (i.e., the interval between performing surveillances were increased). This proposed editorial change to delete the note in SR 3.3.8.1 Frequency does not result in a change to the surveillance frequency. Thus, the proposed deletion of the note does not affect the existing margin of safety.

ENVIRONMENTAL IMPACT EVALUATION:

While 10 CFR 51 requires an environmental assessment (EA) or environmental impact statement (EIS) for any "major Federal action significantly affecting the quality of the human environment," it does allow the NRC discretion in evaluating the extent to which EAs or EISs are necessary. EAs or EISs are not required for any action included in the list of "categorical exclusions" set forth in 10 CFR 51.22(c). Specifically, 10 CFR 51.22(c)(9), provides that an EA is not required for the issuance of an amendment provided that:

- (i) the amendment involves no significant hazards consideration,
- (ii) there is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite, and
- (iii) there is no significant increase in individual or cumulative occupational radiation exposure.

FPC considers that the provisions of 10 CFR 51.22(c)(9) are applicable to this request for revision of the note in SR 3.3.8.1 Surveillance and deletion of the note in SR 3.3.8.1 Frequency. For the reasons described below and elsewhere in this submittal, FPC believes that the three criteria of 10 CFR 51.22(c)(9) are satisfied. Therefore, this License Amendment should be considered under the "categorical exclusions" provisions of 10 CFR 51.22(c)(9).

The basis for this determination includes the following:

- 1. The proposed revision of the note in SR 3.3.8.1 Surveillance and deletion of the note in SR 3.3.8.1 Frequency do not involve significant hazards consideration as discussed above in the No Significant Hazards Consideration.
- 2. The proposed revision of the note in SR 3.3.8.1 Surveillance and deletion of the note in SR 3.3.8.1 Frequency do not result in a significant change in the types or significant increase in the amounts of any effluents that may be released offsite. The change does not result in an increase in the consequences of previously evaluated accidents. Therefore, there will be no environmental impact from the proposed ITS and ITS Bases changes.
- 3. The proposed revision of the note in SR 3.3.8.1 Surveillance and deletion of the note in SR 3.3.8.1 Frequency do not result in a significant increase in individual or cumulative occupational exposure. This conclusion is based on the facts that changes to the note associated with EDG LOPS in the CR-3 ITS and ITS Bases do not result in any increased consequences of accidents previously evaluated, and that changes to such notes is not an initiator of a design basis accident or event.

Therefore, for the reasons given in this submittal, there will be no change in offsite consequences due to this action and its impact is bounded by the impacts assumed in the existing Final Environmental Statement (FES) for CR-3. Even if the NRC chooses to perform an EA, information provided in the FES, together with this submittal, should assist the NRC in making a "finding of no significant impact" in accordance with 10 CFR 51.32.