

Mr. John Paul Cowan
 Vice President, Nuclear Operations
 Florida Power Corporation
 ATTN: Manager, Nuclear Licensing (NA2C)
 Crystal River Energy Complex
 15760 W. Power Line Street
 Crystal River, Florida 34428-6708

May 4, 1999

SUBJECT: SUMMARY OF CONFERENCE CALL CONCERNING ADOPTION OF NEW
 EMERGENCY ACTION LEVEL METHODOLOGY (TAC NO. MA1706)

Dear Mr. Cowan:

By letter dated July 29, 1998, and revised by letter dated November 20, 1998, Florida Power Corporation (FPC) requested approval to adopt Nuclear Energy Institute 97-03 Draft Final Revision 3, "Methodology for Development of Emergency Action Levels," for Crystal River Unit 3. On April 12 and 14, 1999, representatives of the U.S. Nuclear Regulatory Commission (NRC) staff held a teleconference with FPC representatives to discuss NRC staff questions concerning this request. The enclosure summarizes and documents this teleconference, including our understanding of actions FPC will take to resolve NRC concerns. If the understanding of your staff concerning the agreed-to actions differ from ours, please have your staff contact me as soon as possible. The schedule for responding to the action items included in this summary were discussed with John Stephenson of your staff, and it was agreed that a response would be provided within 60 days of receipt of this letter.

Please contact me at (301) 415-1495 if you have any questions regarding this matter.

Sincerely,

Original signed by:

Leonard A. Wiens, Senior Project Manager, Section 2
 Project Directorate II
 Division of Licensing Project Management
 Office of Nuclear Reactor Regulation

Docket No. 50-302

Enclosure: As stated

cc w/encl: See next page

DISTRIBUTION:

Docket File	ACRS
PUBLIC	OGC
CR-3 Reading	LWert, RII
JZwolinski/SBlack	
HBerkow	
SPeterson	
BClayton	
LWiens	9905070119 990504
JO'Brien	PDR ADOCK 05000302
	P PDR

DF011

NRC FILE CENTER COPY

DOCUMENT NAME: G:\CRYSTAL\LTRA3292.WPD

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	PDII-2/PM	E	PDII-2/LA	E	PDII-2/SC	PDII/D		
NAME	LWiens <i>W</i>		BClayton <i>BC</i>		SPeterson <i>SP</i>	HBerkow <i>H</i>		
DATE	4/30/99		4/29/99		5/3/99	5/3/99		04/199

OFFICIAL RECORD COPY

070018



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

May 4, 1999

Mr. John Paul Cowan
Vice President, Nuclear Operations
Florida Power Corporation
ATTN: Manager, Nuclear Licensing (NA2C)
Crystal River Energy Complex
15760 W. Power Line Street
Crystal River, Florida 34428-6708

SUBJECT: SUMMARY OF CONFERENCE CALL CONCERNING ADOPTION OF NEW
EMERGENCY ACTION LEVEL METHODOLOGY (TAC NO. MA1706)

Dear Mr. Cowan:

By letter dated July 29, 1998, and revised by letter dated November 20, 1998, Florida Power Corporation (FPC) requested approval to adopt Nuclear Energy Institute 97-03 Draft Final Revision 3, "Methodology for Development of Emergency Action Levels," for Crystal River Unit 3. On April 12 and 14, 1999, representatives of the U.S. Nuclear Regulatory Commission (NRC) staff held a teleconference with FPC representatives to discuss NRC staff questions concerning this request. The enclosure summarizes and documents this teleconference, including our understanding of actions FPC will take to resolve NRC concerns. If the understanding of your staff concerning the agreed-to actions differ from ours, please have your staff contact me as soon as possible. The schedule for responding to the action items included in this summary were discussed with John Stephenson of your staff, and it was agreed that a response would be provided within 60 days of receipt of this letter.

Please contact me at (301) 415-1495 if you have any questions regarding this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "L. A. Wiens".

Leonard A. Wiens, Senior Project Manager, Section 2
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-302

Enclosure: As stated

cc w/encl: See next page

ISSUES ON CRYSTAL RIVER ENERGY ACTION LEVEL SUBMITTAL
DISCUSSED DURING TELECONFERENCES HELD
APRIL 12 AND 14, 1999

The following issues were discussed during teleconferences held April 12 and 14, 1999. The licensee's emergency action level (EAL) is identified in bold typeface followed by a brief summary of the U. S. Nuclear Regulatory Commission's (NRC's) question or concern. The licensee's response is in italic typeface.

EAL 1.1-1 (NUMARC/NESP-007 AU1)

Please verify that all postulated gaseous releases will be monitored by RM-A1 and RM-A2.

Licensee verified that all anticipated gaseous releases will be monitored by RM-A1 and RM-A2. If a steam generator tube rupture (SGTR) occurs and a secondary safety lifts however, there is no monitor for this type of release.

Please discuss how the thresholds for radioactive releases are set on the radioactive release permit. An example of a radioactive release permit will facilitate discussions.

The licensee stated that a new procedure will be developed to identify the Unusual Event (UE) and Alert thresholds on the radioactive release permits.

EAL 1.1-2 (NUMARC/NESP-007 AU1)

Please discuss why this EAL refers only to the noble gas instantaneous release limit.

The licensee stated that this is the only species which is monitored real-time. Iodines and particulates are not monitored as a release rate but rather are collected on a filter and evaluated in terms of the cumulative release.

EAL 1.3-1 (NUMARC/NESP-007 AS1-1)

Please discuss the following issues:

- Justification for deviation from NUMARC/NESP-007 guidance (i.e., accuracy, timeliness).
- potential numbering error in basis.
- Does a shift dose assessment capability exist and if it does, why does the emergency response team need to provide input.
- Why a note which provides for classifying on real time dose assessment (when available) instead of radiation monitor setpoints was not included.
- What was the source term which was used in establishing the radiation monitor setpoints.

The licensee discussed these issues and will submit the requested justification/information.

Enclosure

EAL 1.4-2 (NUMARC/NESP-007 AG1)

Please discuss why indication of core damage is necessary to classify this event.

The licensee discussed these issues and will submit the requested justification/information.

EAL 1.7-1, 1.8-2 (NUMARC/NESP-007 AU2-3, AA3-2)

Please discuss why this EAL does not include all area radiation monitors. In particular, the staff would like to discuss whether local radiation levels could limit access to safety equipment without causing the listed radiation monitors to exceed the specified setpoints.

The licensee discussed these issues and will consider modifying the EAL to add additional monitors to address the NRC concern. The licensee will submit the modified EAL and/or justification for maintaining current EAL.

EAL 1.9 (also EAL 1.10.2) (NUMARC/NESP-007 AU2-1, AA2-2)

Please discuss why this EAL does not specify a water level in the refueling cavity.

The licensee discussed these issues and will submit the requested justification/information

EAL 1.10-1b (NUMARC/NESP-007 AA2-1)

Please discuss why this EAL refers to increasing trend instead of providing a setpoint. Further, the staff would like to discuss how this event would be classified if the increasing trend stabilized.

The licensee discussed these issues and will consider modifying the EAL to address the NRC concern. The licensee will submit the modified EAL and/or justification for maintaining current EAL.

EAL 2.1 (NUMARC/NESP-007 HU1-1)

Please discuss why this EAL did not specify ground motion sensed as a stand-alone condition. In addition, please discuss the setpoint used (Revision 18 had the annunciated earthquake at the Alert level).

The licensee stated that sensing ground motion may not be a result of an earthquake but may be due to other causes such as turbine vibration. Furthermore, the licensee stated that the seismic alarm is set at .01g which is below the operating basis earthquake level and is consistent with the NUMARC/NESP-007 guidance.

EAL 2.6 (NUMARC/NESP-007 HU1-2)

Please discuss why high winds were not included in this EAL.

The licensee stated that, as described in its deviation document, the primary sources of high winds are hurricanes or tornados. The NRC stated that it needs to further consider whether this deviation is appropriate.

EAL 2.7 (NUMARC/NESP-007 HA1-2)

Please discuss an apparent editorial mistake in this EAL.

The licensee stated that it will fix the editorial mistake and resubmit the corrected EAL.

EAL 2.10 (NUMARC/NESP-007 HU3-2)

Please discuss why "sheltering" was not included in this EAL.

The licensee stated that it will add sheltering to the EAL and resubmit it to the NRC.

EAL 2.11 (NUMARC/NESP-007 AU1)

Please discuss why this EAL would not be applicable if personnel protective equipment was used. (The staff would like to discuss whether there are other EALs which include statements in its basis which limit their applicability.)

The licensee stated that it can safely operate equipment while using protective equipment and that this EAL is similar to one approved for Watts Bar. The NRC stated that there may be situations where operation of equipment needed for safe plant operation with protective equipment (due to the presence of toxic gases) might represent a potential degradation in the level of safety of the plant warranting a UE [unusual event] classification. The NRC stated that it needs to further consider whether this deviation is appropriate.

EAL 2.15 (NUMARC/NESP-007 HA1-4)

Please discuss the statements limiting the applicability of this EAL contained in the basis for the EAL.

The licensee stated that it is considering ways of modifying the EAL to address the NRC's concerns. A teleconference will be scheduled to discuss this issue further.

EAL 2.16 (NUMARC/NESP-007 HA5-1)

Please discuss why it is not appropriate to declare this event as soon as possible.

The licensee stated that it is considering ways of modifying the basis for this EAL to address the NRC's concerns. The licensee will submit the modified basis and/or justification for maintaining current basis.

EAL 2.17 (NUMARC/NESP-007 HS2)

Please discuss the initiating condition for this EAL and its relationship to the NUMARC/NESP-007 guidance. Please discuss the ease of classifying this event using the referenced procedure.

The licensee stated that its EAL does not deviate from the NUMARC/NESP-007 guidance. The NRC agreed. The licensee will evaluate the referenced procedure to ensure it provides sufficient guidance to support classifying this type of event.

EAL 2.19, 20 (NUMARC/NESP-007 HA1, HS1)

Please discuss how this EAL corresponds to its NUMARC/NESP-007 counterpart and whether there are any other safeguards events which should be included.

The staff would like to discuss deviations from NUMARC/NESP-007 in the initiating conditions specified for the security event EALs.

The licensee stated that it would modify its EAL to meet the NUMARC/NESP-007 criteria as appropriate and will have security representatives review the EAL to ensure it captures all safeguard events of concern.

EAL 2.21 (NUMARC/NESP-007 HG1)

Please discuss the justification for this deviation from the NUMARC/NESP-007 guidance.

The licensee stated that it will review the EAL and modify it to meet the NUMARC/NESP-007 guidance or justify deviations as appropriate.

EAL 2.23 (no corresponding NUMARC/NESP-007 EAL)

Please discuss the statement in the basis regarding the applicability of the EAL.

The licensee stated that it is considering ways of modifying the EAL to address the NRC's concerns. A teleconference will be scheduled to discuss this issue further.

EAL 3.2 (NUMARC/NESP-007 SA4-1)

Please discuss why including the condition "reactor power 5% and decreasing" is not a deviation from the NUMARC/NESP-007 guidance.

The licensee stated that it would modify its EAL to utilize its EOP [Emergency Operating Procedure] terminology for the failure to trip the reactor.

EAL 3.3 (NUMARC/NESP-007 SS2-1)

Please discuss whether reactor power less than 5% power corresponds to the power level for which the safety systems are designed.

The licensee stated that it would modify its EAL to utilize its EOP terminology for the failure to trip the reactor.

EAL 3.4 (NUMARC/NESP-007 SG2-1)

Please discuss how this EAL relates to the NUMARC/NESP-007 guidance for including indications that heat removal is extremely challenged.

The licensee stated that it was considering modifying its EAL to include the NUMARC/NESP-007 condition. The licensee stated it would modify the EAL or submit justification for the deviation.

EAL 3.6 (NUMARC/NESP-007 SU3-1)

Please discuss the purpose of the annunciator printer.

The licensee described the annunciator printer function and will provide further information to the NRC on its use.

EAL 3.15 (NUMARC/NESP-007 SA3-1)

Please discuss how this EAL relates to the guidance provided in NUMARC/NESP-007.

The licensee stated that it would modify its EAL to meet the NUMARC/NESP-007 guidance.

EAL 3.16 (NUMARC/NESP-007 SS5-1)

Please discuss how this EAL relates to the guidance provided in NUMARC/NESP-007.

The licensee explained its use of site-specific indications in the EAL and will submit this justification to the NRC. The licensee stated that it would modify those parts of its EAL which deviated from the NUMARC/NESP-007 guidance.

EAL 4.4 (NUMARC/NESP-007 SG1-1)

Please discuss an apparent editorial error in this EAL.

The licensee stated that it would correct the editorial error.

EAL Fission Product Barrier (FPB) -- Loss of Fuel Clad based on Radiation Monitor Reading

Please discuss the basis for the setpoint used (e.g. RM-G29 > 100 R/hr).

The licensee stated that it would re-evaluate the setpoint and submit justification for the setpoint used.

EAL Fission Product Barrier (FPB) -- Potential Loss of Fuel Clad based on CSFS Core Cooling-Orange OR Heat Sink-Red

Please discuss whether there is any equivalent site-specific conditions which can be used to develop an EAL which corresponds to this NUMARC/NESP-007 EAL.

The licensee stated that it would consider whether other conditions should be included in this EAL and will modify the EAL or submit justification for this deviation.

EAL Fission Product Barrier (FPB) -- Loss of Reactor Coolant System based on Steam Generator Leak

Please discuss:

- How the loss of adequate subcooling margin is determined and how this setpoint relates to the NUMARC/NESP-007 and NEI EAL guidance.
- How the use of the setpoint "one or more injection valves" relates to the NUMARC/NESP-007 and NEI EAL guidance.

The licensee described how its site-specific indications meet the intent of the NUMARC/NESP-007 guidance and will submit this justification to the NRC.

EAL Fission Product Barrier (FPB) -- Potential Loss of Reactor Coolant System based on CSFS RCS Integrity - Red OR Heat Sink-Red

Please discuss whether there are any equivalent site-specific conditions which can be used to develop an EAL which corresponds to this NUMARC/NESP-007 EAL.

The licensee stated that it would consider whether other conditions should be included in this EAL and will modify the EAL or submit justification for this deviation.

EAL Fission Product Barrier (FPB) -- Loss of Containment based on Steam Generator Leak

Please discuss how the CR EAL relates to the NUMARC/NESP-007 and NEI EAL guidance.

The licensee described how its site-specific indications meet the intent of the NUMARC/NESP-007 guidance and will submit this justification to the NRC.

EAL Fission Product Barrier (FPB) -- Loss of Containment based upon ICC curves

Please discuss why the CR EAL did not include the 15-minute criteria provided in the NUMARC/NESP-007 and NEI EAL guidance. In addition the staff would like to discuss why a setpoint based upon reactor vessel level was not included.

The licensee described how its site-specific indications meet the intent of the NUMARC/NESP-007 guidance and will submit this justification to the NRC.

EAL Fission Product Barrier (FPB) -- Loss of Containment based upon area Radiation Levels

Please discuss whether this EAL might misclassify an event due to shine from the containment in the event of a severe accident.

The licensee determined that misclassification may occur due to shine and decided to delete this EAL.

EAL Fission Product Barrier (FPB) -- Loss of Containment based upon Sump Indications

Please discuss why CR did not include an EAL equivalent to the NUMARC/NESP-007 EAL "Containment pressure or sump level response not consistent with LOCA conditions."

The licensee stated that it was modifying its EAL scheme to include this EAL.

NUMARC/NESP-007 EAL SU4

Please discuss whether there are any monitors which may be used in this EAL.

The licensee stated that there were no monitors which could be used. However, monitors in the letdown lines isolate letdown and prompt sample analysis can be used to classify the event.

NUMARC/NESP-007 EAL HU5

Please discuss whether rapid depressurization of the secondary side should be included as an EAL. Revision 18 included this condition as an EAL, classified at the Unusual Event level.

The licensee stated that this type of event would be classified as an Unusual Event under EAL 2.12 for catastrophic failure of pressurized equipment or as an Alert under EAL. The NRC stated that it needed to consider this issue further.

GENERAL

The NRC representative stated that, although the licensee had developed its EAL scheme using guidance provided in NEI 97-03, it was reviewing the EAL scheme against the guidance provided in NUMARC/NESP-007 because the guidance in NEI 97-03 had not been approved by the NRC. However, the NRC was considering insights provided in NEI 97-03 in its review.

Mr. John Paul Cowan
Florida Power Corporation

CRYSTAL RIVER UNIT NO. 3

cc:

Mr. R. Alexander Glenn
Corporate Counsel (MAC-BT15A)
Florida Power Corporation
P.O. Box 14042
St. Petersburg, Florida 33733-4042

Chairman
Board of County Commissioners
Citrus County
110 North Apopka Avenue
Inverness, Florida 34450-4245

Mr. Charles G. Pardee, Director
Nuclear Plant Operations (PA4A)
Florida Power Corporation
Crystal River Energy Complex
15760 W. Power Line Street
Crystal River, Florida 34428-6708

Ms. Sherry L. Bernhoft, Director
Nuclear Regulatory Affairs (NA2H)
Florida Power Corporation
Crystal River Energy Complex
15760 W. Power Line Street
Crystal River, Florida 34428-6708

Mr. Michael A. Schoppman
Framatome Technologies Inc.
1700 Rockville Pike, Suite 525
Rockville, Maryland 20852

Senior Resident Inspector
Crystal River Unit 3
U.S. Nuclear Regulatory Commission
6745 N. Tallahassee Road
Crystal River, Florida 34428

Mr. William A. Passetti, Chief
Department of Health
Bureau of Radiation Control
2020 Capital Circle, SE, Bin #C21
Tallahassee, Florida 32399-1741

Mr. Gregory H. Halnon
Director, Quality Programs (SA2C)
Florida Power Corporation
Crystal River Energy Complex
15760 W. Power Line Street
Crystal River, Florida 34428-6708

Attorney General
Department of Legal Affairs
The Capitol
Tallahassee, Florida 32304

Mr. Joe Myers, Director
Division of Emergency Preparedness
Department of Community Affairs
2740 Centerview Drive
Tallahassee, Florida 32399-2100