



ADP CR3, LLC

Crystal River Nuclear Plant
2760 South Falkenburg Rd
Riverview FL, 33578
Docket 50-302
Docket 72-1035
Operating License No. DPR-72

10 CFR 50.54(q)
10 CFR 50.4(b)(5)
10 CFR 50, Appendix E
10 CFR 50.90
10 CFR 72.44(f)

March 17, 2021
3F0321-01

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

Subject: Crystal River Unit 3 – License Amendment Request, Revision to Independent Spent Fuel Storage Installation (ISFSI)-Only Emergency Plan, Draft A, and ISFSI-Only Emergency Action Level Bases Manual.

Reference: 1. NRC to CR-3 letter dated March 30, 2015, “Crystal River Unit 3 – Exemptions from Certain Emergency Planning Requirements and Related Safety Evaluation (TAC No. MF2981)” (ADAMS Accession No. ML15058A906)

Dear Sir:

Pursuant to 10 CFR 50.54(q) and 10 CFR 50.4(b)(5), ADP CR3, LLC (ADP CR3) herewith submits a proposed change to the CR3 ISFSI-Only Emergency Plan (IOEP). As required by 10 CFR 50.54(q)(ii)(4), ADP CR3 requests an amendment to the facility operating license in accordance with 10 CFR 50.90.

The proposed revision of the IOEP and Emergency Action Level Bases Manual include the revision of emergency action levels to be consistent with guidance in 10 CFR 72.32(a), a revised emergency response organization (ERO), incorporation of the Emergency Action Level Bases Manual into the IOEP, and removal of items unnecessarily carried over from the Permanently Defueled Emergency Plan (PDEP) and previous plans.

The proposed changes have been reviewed considering the requirements of 10 CFR 50.54(q), the planning standards of 10 CFR 50.47(b) and 10 CFR 50, Appendix E. These changes include those that have been determined to cause a reduction in the effectiveness of the IOEP in accordance with the requirements of 10 CFR 50.54(q), and require prior NRC approval. The reduction in effectiveness is due to the revised emergency action levels per the regulatory guidance in 10 CFR 72.32(a) and a decrease in Emergency Response Organization (ERO) staffing. The proposed changes are being submitted to the NRC for approval prior to implementation, as required under 10 CFR 50.54(q)(4), 10 CFR 50, Appendix E, Section IV.B.2, and 10 CFR 72.44(f).

The proposed emergency plan continues to rely on previously granted exemptions from certain emergency planning requirements (Reference 1), as the basis for these exemptions has not changed and remains in effect.

Enclosure 1 contains a description of the proposed License Amendment Request, Proposed Changes, and Regulatory Analysis. Enclosure 2 contains the proposed IOEP, Draft Revision A, which will now include the Emergency Action Level Technical Bases. Although the requirements of 10 CFR 72.32 do not apply to part 50 licensees, the proposed changes to the IOEP are consistent with and reflect the implementation of the regulatory requirements in 10 CFR 72.32(a).

The proposed changes to the IOEP have been reviewed with the Florida Division of Emergency Management for concurrence.

A copy of this submittal has been provided to the State of Florida in accordance with 10 CFR 50.91(b).

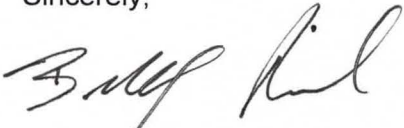
There are no new regulatory commitments made within this submittal.

ADP CR3 requests approval of this IOEP LAR by January 2022. Once approved, the Amendment will be implemented within 60 days.

If you have any questions regarding this submittal, please contact Mr. Mark Van Sicklen, Licensing Manager, at (352) 224-1200, ext. 2901.

I declare under penalty of perjury that the foregoing is true and correct. Executed on March 17, 2021.

Sincerely,



Billy Reid, Site Vice President

BR/mvs

- Enclosures:
1. Discussion of Change, Technical Analysis, Significant Hazards Determination, and Environmental Considerations
 2. ISFSI-Only Emergency Plan, Draft Revision A (Clean Copy)

xc: NMSS Project Manager
Regional Administrator, Region I
State of Florida

ADP CR3, LLC

CRYSTAL RIVER UNIT 3

**DOCKET NUMBERS 50-302 AND 72-1035
LICENSE NUMBER DPR-72**

ISFSI-ONLY EMERGENCY PLAN, DRAFT REVISION A

ENCLOSURE 1

**DISCUSSION OF CHANGE, TECHNICAL ANALYSIS,
SIGNIFICANT HAZARDS DETERMINATION, AND
ENVIRONMENTAL CONSIDERATIONS**

Discussion of Change, Technical Analysis, Significant Hazards Determination, and Environmental Considerations

1.0 INTRODUCTION

This license amendment request proposes changes to the CR3 ISFSI-Only Emergency Plan (IOEP) in accordance with 10 CFR 50.54(q). Although the requirements of 10 CFR 72.32 do not apply to part 50 licensees, the requirements of 10 CFR 72.32 were used as guidance in evaluating the acceptability of plan changes. The proposed changes to the IOEP revise emergency event classification levels to be consistent with the guidance provided in 10 CFR 72.32(a), revise the emergency response organization (ERO) to eliminate the Resource Manager position, and delete plan elements that are no longer required for an IOEP.

The proposed changes have been reviewed considering the requirements of 10 CFR 50.54(q), the planning standards of 10 CFR 50.47(b) and 10 CFR 50, Appendix E. These changes include those that have been determined to cause a reduction in the effectiveness of the IOEP in accordance with the requirements of 10 CFR 50.54(q), and require prior NRC approval. The reduction in effectiveness is due to the revised emergency classification levels and a decrease in ERO augmentation staffing. The entire plan has been revised to remove elements no longer required for an IOEP that were carried over from the Permanently Defueled Emergency Plan (PDEP) and will be issued as the next revision. The revised IOEP will also include the Emergency Action Level Technical Bases, which is currently a separate document.

2.0 BACKGROUND

By letter dated February 20, 2013, Crystal River Unit 3 Nuclear Generating Plant (CR3) submitted a certification of permanent cessation of power operation and permanent removal of fuel from the reactor vessel. Consequently, as specified in 10 CFR 50.82(a)(2), the 10 CFR Part 50 license no longer authorizes operation of the reactor or emplacement or retention of fuel in the reactor vessel.

The U.S. Nuclear Regulatory Commission (NRC) issued a letter dated March 30, 2015, "Crystal River Unit 3 – Exemptions from Certain Emergency Planning Requirements and Related Safety Evaluation. (TAC No. MF2981)" (ADAMS Accession No. ML15058A906)

On March 22, 2017, the NRC issued Amendment No. 253 to Facility License No. DPR-72 for CR3. That amendment revised the CR3 license to approve the IOEP, and IOEP Action Level Bases Manual, after all the spent fuel had been moved from the spent fuel pool to the ISFSI (TAC No. L53129). (ADAMS Accession No. ML17048A478)

On May 3, 2019, the NRC issued Amendment No. 257 to Facility License No. DPR-72 for the CR3. That amendment revised the CR3 license to approve the IOEP, Revision 1, removing the site Emergency Response Coordinator from the Emergency Response Organization. (ADAMS Accession No. ML19129A141)

The IOEP, Revision 2 and implementing procedures were revised and issued on July 6, 2020 to support license transfer to ADP CR3, LLC (ADP CR3). All changes were evaluated, in accordance with 10 CFR 50.54(q)(5), and did not reduce the effectiveness of the Emergency Plan. In accordance with 10 CFR 50.54(q)(5) this revision was submitted to the NRC on July 21, 2020. (ADAMS Accession No. ML20203M142)

3.0 DESCRIPTION

The proposed amendment would modify the CR3 license by revising the emergency plan and associated emergency action level (EAL) classification levels. The proposed changes continue to reduce the scope of onsite emergency planning requirements to reflect the reduced scope of potential radiological accidents with all spent fuel in dry cask storage within the ISFSI and are consistent with the requirements of 10 CFR 72.32. There continues to be no need for formal offsite emergency response plans at CR3 because no design basis accident or reasonably credible beyond-design-basis accident can result in a radioactive release that exceeds Environmental Protection Agency (EPA) Protective Action Guides (PAGs) beyond the site boundary.

The current EAL scheme was approved for use at CR3 on May 3, 2019 and is based on NEI 99-01, Revision 6. The proposed EAL scheme remains based on NEI 99-01, Revision 6, as appropriate for the ISFSI-Only condition at CR3.

Sections 4 through 8 provides discussion of the proposed changes, technical analysis, regulatory analysis and environmental consideration. Enclosure 2 provides the revised Emergency Plan reflecting the proposed changes, which includes the revised EAL Technical Bases.

4.0 PROPOSED CHANGES

The major changes to the CR3 Emergency plan are:

- revision of the EALs,
- revision of the ERO to delete the Resource Manager augmentation position,
- Inclusion of the EAL Technical Bases Manual into the IOEP as Appendix C, and
- removal of items no longer applicable to the IOEP.

4.1 Revision of the Emergency Action Levels

The initiating conditions (ICs) and EALs associated with emergency classification in the current emergency plan are based on NEI 99-01, Revision 6. Specifically, Section 8 of NEI 99-01 contains one IC and EAL for ISFSI-only power plants that had previously operated under a 10 CFR Part 50 license which have permanently ceased operations.

Section 7.1 of the IOEP describes the methodology and guidance used in establishing the bases for classification of events. The introductory paragraph was changed by noting that consistent with NRC guidance and the intent in 10 CFR 72.32(a), accidents and off-normal events that rise to the level of an emergency at the CR-3 ISFSI are given the emergency classification of an Alert.

Therefore, the classification levels listed in Table 1 below are being revised from the currently approved emergency plan for CR3.

Table 1 – Emergency Plan Initiating Conditions Being Deleted or Revised

Current Approved IOEP EAL ICs	
ALERT	UNUSUAL EVENT
PD-HA1: HOSTILE ACTION is occurring or has occurred.	PD-HU1: Confirmed SECURITY CONDITION or threat.
PD-HA3: Other conditions exist which in the judgment of the Emergency Coordinator warrant declaration of an ALERT.	PD-HU3: Other conditions exist which in the judgment of the Emergency Coordinator warrant declaration of an UNUSUAL EVENT (UE).
	E-HU1: Damage to a Dry Shielded Canister CONFINEMENT BOUNDARY

Proposed IOEP EAL ICs	
ALERT	UNUSUAL EVENT
PD-HU1: Confirmed SECURITY CONDITION or threat.	
PD-HU3: Other conditions exist which in the judgment of the Emergency Coordinator warrant declaration of an ALERT.	
E-HU1: Damage to a Dry Shielded Canister CONFINEMENT BOUNDARY	

The ICs associated with the Unusual Event Classification are being deleted from the EALs above because they are primarily associated with a decommissioning nuclear power plant site with spent fuel stored in the spent fuel pool (SFP) and are not applicable to an ISFSI facility, which, according to regulatory guidance, should be addressed with only an Alert emergency classification. The EALs at the Unusual Event threshold for a confirmed Security Condition (PD-HU1), Damage to a Dry Shielded Canister Confinement Boundary (E-HU1), and Other Conditions exist which in the judgment of the Emergency Coordinator (EC) warrant declaration of an Alert, were maintained verbatim and are unchanged from those previously approved for an Unusual Event. The ICs being retained are consistent with the NRC endorsed guidance for the onsite ISFSI-Only storage of the spent fuel at CR3. Specifically, NEI 99-01 supports this approach in Section 1.3, which states:

Regarding the above information, the expectations for an offsite response to an Alert classified under a 10 CFR § 72.32 emergency plan are generally consistent with those for a Notification of Unusual Event in a 10 CFR § 50.47 emergency plan (e.g., to provide assistance if requested).

Consistent with the previously approved IOEP, no potential emergencies are classified as higher than an Alert because there are no design basis accident or reasonably credible beyond-design-basis accidents that could result in a radioactive release that exceeds EPA PAGs beyond the site boundary.

4.2 Emergency Response Organization Revision - Deletion of the Resource Manager ERO position

The Resource Manager position along with a second individual trained to respond to events involving radiological consequences were included in the original IOEP to provide assistance and support to the EC. In accordance with the IOEP, the Resource Manager was notified by the EC within two (2) hours of classification “to augment the EC by assisting in assessing the emergency condition, coordinating required resources, including public information interface.” This position was only required to make contact with the EC in order to provide support and was never required to respond to the site or to direct the conduct of emergency response actions. During the conduct of required drills and exercises, it was noted that the EC has sufficient time and ability to obtain support without the need for a dedicated Resource Manager to perform these responsibilities.

The EC may elect to utilize any member of management, employees, or contract personnel on site at the time of the event to augment the emergency response (per sections 6.1.1, 6.2, and 8.2.1 of the IOEP) to assist and coordinate response. This includes the responsibility for public information interface, which is assigned to the ISFSI Manager. The ISFSI Manager would coordinate public information interface per section 10.0 of the IOEP. For events that occur during off-normal hours, the EC is provided with a contact listing for site personnel to facilitate their request if needed for augmented support.

Removing the dedicated Resource Manager position does not result in the reduction or inability to perform any of the functional responsibilities originally assigned to the Resource Manager. For any emergency classification involving radiological consequences, radiological support for the EC will continue to be available within four hours.

4.3 Inclusion of the Emergency Action Level Technical Bases Document into the IOEP as App.C.

The EAL Technical Bases Manual is currently a separate document from the IOEP. This proposed revision will incorporate this document into the IOEP as Appendix C, “Emergency Action Level Technical Bases.”

4.4 Removal of items no longer applicable to the IOEP

In addition to the changes listed above, editorial and/or minor grammatical changes have been made throughout the IOEP to:

- remove references to Duke Energy,
- add references to 10 CFR 72.32,
- correct titles for ISFSI organization,
- simplify, correct, or combine descriptions,
- clarify/revise drill and drill frequencies consistent with an ISFSI-only emergency plan,
- revise the State of Florida Notification Form as agreed upon with the State of Florida Division of Emergency Management,
- revise the State of Florida notification protocol to use commercial telephones thus removing the reference to the SHRD phone, and
- revise page numbers in the Table of Contents and section numbers in the body of the IOEP.

The following Table is a summary of changes by section (major changes are addressed specifically in preceding sections):

Table 2 - Change Summary Table

IOEP CURRENT SECTION	IOEP PROPOSED SECTION	CHANGE	REASON
Cover	Cover	Remove Duke Energy LOGO and change title in signature line.	Editorial – corrected for new company and new title.
Throughout	Throughout	Corrected number sequences to address changes/deletions and title changes.	Editorial
TOC	TOC	Revised to reflect plan content changes	Editorial
Section 1.2	Section 1.2	Added reference to 10 CFR 72.32 and updated the plan revision history.	10 CFR 72.32 was used as guidance for several of the plan changes, Editorial – updated revision history
Section 2.1	Section 2.1	Revised text regarding offsite response information; added reference to 10 CFR 72.32; removed reference to Unusual Event and added explanation of “Alert only” classifications.	Text is repeated later in plan or level of detail is unnecessary. Unusual Events have been eliminated from the classification scheme in the proposed revision, added explanation of “Alert only” classification.
Section 3.0	Section 3.0	Added reference to 10 CFR 72.32	Editorial
Section 4.1	Section 4.1	Added definitions for Confinement Boundary, Credible Security Threat, and Security Condition	Added due to EAL Technical Bases begin added to IOEP as App. C.
Section 4.1	Section 4.1	Removed definition of Unusual Event; revised definition of Alert; and removed definition of “fire.”	Unusual Event has been eliminated from classification scheme; definition as described in Section 4.1 of this document. The fire definition is no longer needed for emergency classification.
Section 4.1	Section 4.1	Revised definition of “Hostile Action” and removed definition of “Protective Actions”	Hostile Action definition revised to remove wording related to other Security-related EALs that no longer apply. Protective Action Guide is defined, this definition is unnecessary.

IOEP CURRENT SECTION	IOEP PROPOSED SECTION	CHANGE	REASON
Section 4.1	Section 4.1	Removed definition of “release (radioactive)”	No longer necessary, not needed in emergency classifications.
Section 4.2	Section 4.2	Removed State Hot Ring Down (SHRD) abbreviation	SHRD equipment is obsolete and the original intent to provide the ability to immediately contact the state no longer aligns with the type of events that could credibly occur and the timelines permitted for event classification and notification at an ISFSI only plant with all fuel in dry storage. Notifications to the State can be accomplished within the required timeframes using the other commercially available phone systems identified in the plan.
Section 5.1	Section 5.1	Revised/corrected titles. Deleted reference to ISFSI Manager – Operations and Maintenance	Editorial. Updated to current Org.
Section 5.2	Section 5.2	Deleted reference to Resource Manager	See Section 4.2 of this document for reason.
Section 5.3.1	Section 5.3.1	Simplified text from description of Florida Watch Office	Unnecessary detail or no longer applies to state response.
Section 5.3.2	N/A	Deleted Florida Division of Emergency Management Section (combined with later section)	Combined this section with federal response in later section.
Section 5.3.3	Section 5.3.2	Revised section to delete reference to county emergency management from Sheriff’s Office and added “and fire”.	County emergency management is no longer directly involved with emergency response related to CR3. Added “and fire” to clarify that fire response is accomplished by dialing 911.
Section 5.3.4	Section 5.3.3	Revised description of Bayfront Hospital	Unnecessary detail and was no longer applicable to CR3 response.
Section 5.3.5	Section 5.3.4	Simplified text from the description of local EMS	Unnecessary detail and no longer applicable to CR3 response.

IOEP CURRENT SECTION	IOEP PROPOSED SECTION	CHANGE	REASON
Section 5.3.6	Section 5.3.5	Combined NRC Federal response with State response	Simplifying text since response is now limited to notifications
Section 5.4	Section 5.4	Revised wording related to letters of agreements	Simplify text to better capture agreement letters.
Sections 6.1 & 6.1.1	Section 6.1, 6.1.1	Revised position title and revise "site" to "ISFSI" Deleted reference to Resource Manager. Added statement that EC authorization for notifications cannot be delegated.	Editorial change. See section 4.2 of this document for the reason for Resource Manager position. Also clarified that authorization of State notifications cannot be delegated.
Section 6.2	Section 6.2	Added text to address activating support personnel	To clarify the EC can request support as needed.
Section 6.2.1	N/A	Deleted reference to Resource Manger	See section 4.2 of this document for reason.
Section 6.2.2	Section 6.2.1	Revised Title	Editorial
Section 6.2.5	Section 6.2.4	Revised "Corporate" to "Company Support" and deleted text.	Clarify current organization and remove unnecessary text.
Table 6.1	Table 6.1	Removed reference to Resource Manager Specified "Radiation Protection Coordinator" as a responder and clarified text.	See section 4.2 of this document for reason for information on Resource Manager. Corrected title of responder.
Section 7.0	N/A	Deleted Section related to Emergency Response Organizations Support	Unnecessary/repetitive information.
Section 8.1	Section 7.1	Deleted reference to Unusual Event and added text describing classification levels using 10 CFR 72.32 as regulatory guidance.	See section 4.1 of this document for information on changes related to emergency classification.
Section 8.1.2	Section 7.1.1	Revised description of Alert and removed reference to Unusual Event	Addressed security terms discussed in the EALs and see Section 4.1 for removal of Unusual Event reference.
Section 8.2	Section 7.2	Revised reference location for the EAL Technical Bases and deleted reference to Citrus County	Editorial – the EAL Bases Document is now located as an appendix to the IOEP. Citrus County no longer reviews EALs. Citrus County Emergency Management is no longer involved in emergency response at CR3

IOEP CURRENT SECTION	IOEP PROPOSED SECTION	CHANGE	REASON
Section 9.2.1	Section 8.2.1	Removed reference to Resource Manager	See section 4.2 of this document for reason for information on Resource Manager.
Section 9.2.2	Section 8.2.2	Changed "Hydro" to "Gas Plant"	Editorial
Section 9.2.3	Section 8.2.3	Added notification requirement for NRC	Enhanced wording to address notification requirement for NRC.
Section 9.2.4	Section 8.2.4	Revised text for Florida State Watch Office related to SHRD and deleted notification to county	SHRD is no longer required and county notification of an emergency declaration may be performed at the discretion of the State, by the State.
Section 10.0	Section 9.0	Deleted reference to SHRD, clarified the radios as "security" radios, and added that cell phone service is available on site.	SHRD no longer required at CR3. State notifications are completed using commercial phone service and addressed cell phone service on site.
Section 11.0	Section 10.0	Revised Public Information Section	Addressed current PI protocol for new company. The ISFSI Manager is responsible for coordinating public information activities.
Section 12.3 and Table 12.1	Section 11.3	Deleted reference to Table 12 listing typical emergency supplies	Not necessary to list the "typical" supplies in the emergency kits. Contents of the kits are verified using plant procedures.
Section 13.0	Section 12.0	Revised Accident Assessment information and changed to "Radiological Assessment" and updated text.	Address current protocol for assessing ISFSI radiological conditions.
Section 14.1	Section 13.1	Revised Accountability section	Clarify that accountability is the ISFSI Protected Area and removed unnecessary information.
Section 14.2	Section 13.2	Revised wording related to the Crystal River Emergency Complex and clarified authority of the EC to control access to the Controlled Area.	Clarified that accountability for all areas outside of the protected area is completed in accordance with procedures for those areas and that the EC is authorized to control access to the Controlled Area.

IOEP CURRENT SECTION	IOEP PROPOSED SECTION	CHANGE	REASON
Section 16.0	Section 15.0	Revised Text to delete training information.	This information is currently addressed in Section 18.4 of the IOEP
Section 16.3	Section 15.3	Revised text to delete specific medical information	The additional medical was unnecessary as it pertains to any medical treatment center.
Section 17.2	Section 16.2	Organization/Title Change	Editorial
Section 18.1	Section 17.1	Revised section to separate drill information from exercise information.	Clarify drill conduct versus exercise conduct and to improve description.
Section 18.2	Section 17.2	Revised training drill section to describe/clarify the conduct and type of drills. Communication "drill" was revised to state Communication "Check;" Staff Augmentation Drill was deleted.	Enhanced description of drills and deleted drills that were carried over from operational E-Plan per guidance in 10 CFR 72.32.
Section 18.3	Section 17.3	Title Change	Editorial
Section 19.1 thru 19.4	Section 18.1 thru 18.4	Revised training description for Emergency Coordinator, medical response personnel, radiation monitoring personnel, and offsite law enforcement and medical response. Changed "Human Conformance Concerns" to "Recommendations."	Updated training description to better describe training program for the emergency coordinator qualified individuals, rad monitoring personnel, and offsite medical and law enforcement personnel to correct and clarify current training programs. Updated terms for identified drill or exercise items for the corrective action program.
Section 20.1	Section 19.1	Title change	Editorial
Section 20.2	Section 19.2	Removed reference to implementing procedures.	Not all implementing procedure changes require a 50.54(q) review when changing.
Section 20.2	Section 19.2	Revised the frequency of phone number updates to semi-annual and removed reference to support plans.	To be consistent with regulatory guidance described in 10 CFR 72.32. Deleted support plans are no longer applicable to CR3 ISFSI.
Section 20.4	Section 19.4	Revised text regarding audits.	Text updated to reflect new company.

IOEP CURRENT SECTION	IOEP PROPOSED SECTION	CHANGE	REASON
App. A	App. A	Updated Section Numbers and Addressed EAL Bases Document being moved into the IOEP as an Appendix.	Editorial
App. B	App. B	Added (Law Enforcement and Fire response) to Citrus County and removed the words "Sheriff's Office"	To clarify that Fire and Law Enforcement response is accomplished via 911.
IOEP EALBM	App. C	Significant revision of EALBM to be consistent with proposed IOEP classifications and then incorporated into the IOEP as Appendix C.	See Sections 4.1 and 4.3 of this document for specific details of the change.

5.0 TECHNICAL ANALYSIS

Related to the Emergency Classification System, 10 CFR 50.47(B)(4) states in part, a standard classification scheme is in use by the nuclear facility licensee. 10 CFR 50 Appendix E states in part under "Assessment Actions" ... emergency action levels that are to be used as criteria for determine when and what type of actions should be considered within the site boundary and should include hostile action that may adversely affect the site.

As discussed in Section 4.1 of this document, the proposed changes to the emergency action levels will remain consistent with NEI 99-01 Revision 6 for an ISFSI only emergency plan. The changes are also consistent with the NRC guidance and the intent provided in 10 CFR 72.32 and as approved in other industry ISFSI only emergency plans (Zion Station). Moving the Emergency Action Level Technical Bases from a stand-alone document into the IOEP resulting in a more comprehensive emergency plan and simplifying the control of changes and distribution of the plan.

Related to the emergency response organization, 10 CFR 50.47 states in part, that On-shift licensee responsibilities for emergency response are unambiguously defined and adequate staff to provide initial facility accident response is maintained at all times, timely augmentation of response capabilities is available... 10 CFR 50 Appendix E states in part, that the emergency plan will describe the authorities, responsibilities, and duties of an onsite emergency coordinator who will be in charge of coordinating and implementing offsite emergency measures.

As discussed in Section 4.2 of this document, the removal of the Resource Manager will not impact the capability or timeliness of emergency response at the CR3 ISFSI. The Resource Manager was not required to respond to the site. All activities assigned to the Resource Manager can be carried out on site by the Emergency Coordinator or can be assigned to any member of the organization by the authority and discretion of the Emergency Coordinator. This change is also consistent with other industry approved ISFSI only emergency plans.

These changes described above and those listed do not prevent implementation of any of the Emergency Plan functions. The revised IOEP continues to meet the requirements of 10 CFR 50, Appendix E and 10 CFR 50.47(b) Planning Standards as previously exempted (ML15058A906).

State and Local Government Review of Proposed Changes

Prior to submittal, CR3 provided an overview of the proposed classification scheme and IOEP changes to State and local emergency management officials in accordance with 10 CFR 50, Appendix E, Section IV.B.1 and received concurrence via email correspondence.

6.0 Summary

This proposed amendment would revise both the emergency plan and the EAL scheme appropriate for the condition of the station wherein all spent nuclear fuel is in dry storage within the ISFSI. The new emergency plan and EAL revisions are being submitted to the NRC for approval, as required under Section IV.B.2 of Appendix E to 10 CFR Part 50. Additionally, 10 CFR 50.54(q)(4) and 10 CFR 72.44(f) require that proposed changes that reduce the effectiveness of the plan receive prior approval by the NRC.

ADP CR3 was granted exemptions from portions of 10 CFR 50.47(b), 10 CFR 50.47(c)(2), and 10 CFR 50, Appendix E, Section IV, by letter dated March 30, 2015 (ML15058A906). The basis for these exemptions has not changed and remains in effect for the proposed emergency plan changes. With the granted exemptions, the emergency plan, as revised, will continue to meet the remaining applicable requirements in 10 CFR 50, Appendix E, and the planning standards of 10 CFR 50.47(b).

7.0 REGULATORY ANALYSIS

7.1 No Significant Hazards Consideration

In accordance with 10 CFR 50.90, "Application for amendment of license, construction permit, or early site permit," ADP CR3 LLC (ADP CR3), requests NRC approval of a reduction in effectiveness of the site Emergency Plan, specifically the reduction in effectiveness is due to the revised emergency action levels per the regulatory guidance in 10 CFR 72.32 and a decrease in Emergency Response Organization (ERO) staffing. The proposed revision to the site Independent Spent Fuel Storage Installation (ISFSI)-Only Emergency Plan (IOEP) is commensurate with the changes approved for other ISFSI sites.

ADP CR3 has evaluated whether a significant hazards consideration is involved with the proposed amendment by focusing on the three conditions set forth in 10 CFR 50.92, "Issuance of amendment," discussed below:

- 1. Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?**

Response: No

The proposed amendment would modify the CR3 facility operating license by revising the emergency plan including the EAL scheme consistent with the guidance of NEI 99-01, Revision 6 for an ISFSI only emergency plan. CR3 has permanently ceased operation and is permanently defueled. Occurrence of postulated accidents associated with the Part 50 plant, currently undergoing demolition, is no longer credible since all spent fuel pool has been permanently removed from the plant and Technical Specifications prevent fuel from being stored outside the ISFSI. The UFSAR for NUHOMS Certificate of Compliance (CoC) 1004 states most accidents are not credible and the accident analysis demonstrates that none of the hypothetical accidents analyzed has any consequential effect on the public. Many of the analyzed events, like a fire at the ISFSI, have no radiological release. The proposed amendment has no effect on the capability of any ISFSI System, Structure, or Components (SSC) to perform its design function. The proposed amendment would not increase the likelihood of the malfunction of any ISFSI SSC as there are no hardware or software modifications associated with this change. The proposed amendment would have no effect on any of the previously evaluated accidents in the ISFSI UFSAR for CoC 1004.

2 Does the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No

The proposed amendment to revise emergency action levels and emergency response organization structure does not involve a physical alteration of the plant. No new or different types of equipment will be installed and there are no physical modifications to existing equipment as a result of the proposed amendment. Similarly, the proposed amendment would not physically change any SSC involved in the mitigation of any postulated accidents. Thus, no new initiators or precursors of a new or different kind of accident are created. Furthermore, the proposed amendment does not create the possibility of a new failure mode associated with any equipment or personnel failures. The credible events for the ISFSI remain unchanged.

Therefore, the proposed amendment does not create the possibility of a new or different kind of accident from any previously evaluated.

3. Does the proposed amendment involve a significant reduction in a margin of safety?

Response: No

Because the 10 CFR Part 50 license for CR3 no longer authorizes operation of the reactor or emplacement or retention of fuel into the reactor vessel, as specified in 10 CFR 50.82(a)(2), the occurrence of postulated accidents associated with reactor operation is no longer credible. With all spent nuclear fuel transferred out of wet storage from the spent fuel pools and placed in dry storage within the ISFSI, a fuel handling accident is no longer credible. The accident analyses presented in the ISFSI UFSAR for CoC 1004 demonstrates that there are no accidents or events that will result in any type of significant release, with most accidents having no radiological release.

The proposed amendment does not involve a change in the plant's design, configuration, or operation. The proposed amendment does not affect either the way in which the plant

structures, systems, and components perform their safety function or their design margins. Because there is no change to the physical design of the plant, there is no change to these margins.

Therefore, the proposed amendment does not involve a significant reduction in a margin of safety.

Based on the above, ADP CR3 concludes that the proposed amendment presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and accordingly a finding of “no significant hazards consideration” is justified.

7.2 Applicable Regulatory Requirement/Criteria

The applicable regulatory requirements, as exempted, are discussed below:

Section 50.47(b) establishes the standards that emergency response plans must meet for NRC staff to make a positive finding that there is reasonable assurance that the licensee can and will take adequate protective measures in the event of a radiological emergency.

- 10 CFR 50.47(b)(1) states, in part: “... each principal response organization has staff to respond and to augment its initial response on a continuous basis;”
- 10 CFR 50.47(b)(2) states, in part: “... adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available ...;”
- 10 CFR 50.47(b)(4) states, in part: “A standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by the nuclear facility licensee...;”
- 10 CFR 50.47(b)(5) states, in part: “Procedures have been established for notification, by the licensee, of State and local response organizations...”
- 10 CFR 50.47(b)(6) states, in part: “Provisions exist for prompt communications among principal response organizations...”
- 10 CFR 50.47(b)(8) states, in part: “Adequate emergency facilities and equipment to support the emergency response are provided and maintained.”
- 10 CFR 50.47(b)(14) states, in part: “Periodic exercises are (will be) conducted to evaluate major portions of emergency response capabilities, periodic drills are (will be) conducted to develop and maintain key skills...”
- 10 CFR 50.47(b)(15) states, in part: “Radiological emergency response training is provided to those who may be called on to assist in an emergency.”
- 10 CFR 50.47(b)(16) states, in part: “Responsibilities for plan development and review and for distribution of emergency plans are established...”

10 CFR 50, Appendix E, Section IV, Part A, "Organization," states, in part: "The organization for coping with radiological emergencies shall be described, including definition of authorities, responsibilities, and duties of individuals assigned to the licensee's emergency organization....;"

10 CFR 50, Appendix E, Section IV, Part B, "Assessment Actions," states, in part: "The emergency action levels shall be based on in-plant conditions and instrumentation in addition to onsite and offsite monitoring.

10 CFR 50, Appendix E, Section IV, Part D.1, "Notification Procedures," states, in part: "Administrative and physical means for notifying local, State, and Federal officials and agencies and agreements reached with these officials and agencies for the prompt notification of the public and for public evacuation or other protective measures, should they become necessary, shall be described.

10 CFR 50, Appendix E, Section IV, Part F, states, in part: "The program to provide for: (a) The training of employees and exercising, by periodic drills, of emergency plans to ensure that employees of the licensee are familiar with their specific emergency response duties..."

10 CFR 72.32(a)(3) states: "A classification system for classifying accidents as 'Alerts';" and

10 CFR 72.32(a)(7) states, in part: "A brief description of the responsibilities of licensee personnel should an accident occur...."

10 CFR 50.54(q)(4) specifies the process for revising emergency plans where the change reduces the effectiveness of the plan. This regulation states the following:

"The changes to a licensee's emergency plan that reduce the effectiveness of the plan as defined in paragraph (q)(1)(iv) of this section may not be implemented without prior approval by the NRC."

The proposed emergency plan continues to rely on previously granted exemptions from certain emergency planning requirements as the basis for these exemptions has not changed and remains in effect.

The proposed changes to the Emergency Plan continue to implement the applicable requirements of the regulations cited above as noted in the existing exemptions for emergency planning. Therefore, the revised Emergency Plan provides reasonable assurance that public health and safety is not endangered, and CR3 continues to satisfy the applicable planning standards set forth in 10 CFR 50.47(b), 10 CFR 50 Appendix E, and 10 CFR 72.32(a).

7.3 Precedent

The proposed changes to the CR3 IOEP EALs and to the ERO staffing requirements are consistent with changes previously approved by the NRC in the Safety Evaluation Report by the Office of Nuclear Security and Incident Response Related to Zion Nuclear Power Station, Units 1 and 2 Defueled Station Emergency Plan License Amendment, Docket Nos. 50-295, 50-304 and 72-1037, dated December 20, 2016 (ML16211A103).

7.4 Conclusions

Based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

8.0 ENVIRONMENTAL CONSIDERATION

A review has determined that the proposed amendment would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

ADP CR3, LLC

CRYSTAL RIVER UNIT 3

**DOCKET NUMBERS 50-302 AND 72-1035/
LICENSE NUMBER DPR-72**

**LICENSE AMENDMENT REQUEST, REVISION 0,
ISFSI-ONLY EMERGENCY PLAN,
WHICH NOW INCLUDES
ISFSI-ONLY EMERGENCY ACTION LEVEL BASES MANUAL,
DRAFT REVISION A**

ENCLOSURE 2

ISFSI-ONLY EMERGENCY PLAN, DRAFT REVISION A



CRYSTAL RIVER UNIT 3

INDEPENDENT SPENT FUEL STORAGE INSTALLATION (ISFSI) ONLY EMERGENCY PLAN

(IOEP)

Revision DRAFT A

Emergency Planning Coordinator

Date

ISFSI Manager

Date

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1.0 INTRODUCTION

Crystal River Unit 3 Nuclear Plant (CR3) was safely shutdown on September 26, 2009. On February 20, 2013, by letter 3F0213-07, Duke Energy provided certification to the U.S. Nuclear Regulatory Commission (NRC) required by 10 CFR 50.82(a)(1)(i) and (ii) that CR3 has permanently ceased operations and that all fuel has been permanently removed from the reactor vessel. Subsequently, all spent fuel has been transferred to the on-site INDEPENDENT SPENT FUEL STORAGE INSTALLATION (ISFSI) facility.

The CR3 ISFSI Only Emergency Plan (IOEP) describes the plan for responding to emergencies that may arise at the station's ISFSI. In this condition, no reactor operations can take place and all irradiated fuel is removed from the Spent Fuel Pool. This IOEP adequately addresses the risks associated with CR3's current conditions.

As provided in the ISFSI storage system UFSARs, the analyses of the potential radiological impacts of postulated off-normal, natural phenomenon, and accident events in an ISFSI-Only condition indicates that any releases would result in a dose to the public below the radiation limits established in 10 CFR 72.106(b). Exposure levels, which warrant pre-planned response measures, are generally limited to the ISFSI pad and nearby vicinity, and for this reason; radiological emergency planning is focused on this area.

1.1 PURPOSE

The purpose of the IOEP is to assure an adequate level of preparedness to cope with the spectrum of emergencies that could be postulated to occur. This Plan integrates the necessary elements to provide effective emergency response considering cooperation and coordination of organizations expected to respond to emergencies.

1.2 SCOPE

The IOEP is developed to respond to potential radiological emergencies at the CR3 ISFSI. Because there are no postulated off-normal, natural phenomenon, or accident events that would result in offsite dose consequences large enough to require offsite emergency planning, the overall scope of this plan delineates the actions necessary to safeguard onsite personnel. The concepts presented in this plan address the applicable regulations stipulated in 10 CFR 72.32, "Emergency Plan", 10 CFR 50.47, "Emergency Plans," and 10 CFR 50 Appendix E, "Emergency Planning and Preparedness for Production and Utilization Facilities". The Plan is consistent with the applicable guidelines established in NUREG-0654/FEMA-REP-1, Revision 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants" and NEI 99-01, "Development of Emergency Action Levels for Non-Passive Reactors," Rev. 6.

Exemptions from selected portions of 10 CFR 50.47 and 10 CFR 50 Appendix E for CR3 were granted by the Nuclear Regulatory Commission (NRC) on March 30, 2015 (ADAMS Accession Number: ML15058A906).

The IOEP, Revision 0, was approved per NRC Safety Evaluation dated March 22, 2017.

The IOEP, Revision 1 changes were approved per NRC Safety Evaluation dated May 3, 2019.

The IOEP, Revision 2 was issued July 1, 2020 to address site license change.

The IOEP, Revision 3 changes were approved per NRC Safety Evaluation dated XXXX XX, XXXX.

2.0 DISCUSSION

2.1 OVERVIEW OF ISFSI-ONLY EMERGENCY PLAN (IOEP)

In the event of an emergency at the CR3 ISFSI, actions are required to identify and assess the nature of the emergency and to bring it under control in a manner that protects the health and safety of onsite personnel. This Plan describes the organization and responsibilities of the licensee for implementing emergency measures. It describes interfaces with Federal, State of Florida, and Citrus County organizations, which may be notified in the event of an emergency, and may provide assistance. Offsite emergency services, if needed, are provided by local public and private entities.

CR3 is licensed under the requirements of 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities." Consistent with the requirements of 10 CFR Part 50, this Plan is based on the requirements of 10 CFR Part 50, Section 50.47(b) and Appendix E, "Emergency Planning and Preparedness for Production and Utilization Facilities," with approved exemptions. Sections 5.0 thru 19.0 of this Plan address the standards outlined in 10 CFR 50.47(b)(1) through (16). The Plan also complies with 10 CFR 72.32, "Emergency Plan" for ISFSI. In addition, the Plan is also intended to meet appropriate U.S. NRC regulations in accordance with the Operating License (No. DPR 72). CR3 is licensed to store spent fuel in the CR3 ISFSI under the General License provisions of 10 CFR 72.210 and 10 CFR 72.212.

Analyses of the credible design basis events and consequences indicate there are no postulated accidents that would result in off-site dose consequences that are large enough to require off-site emergency planning. Consistent with NRC guidance for an away-from-reactor ISFSI, accidents and off-normal events that rise to level of an emergency at the CR3 ISFSI are given the classification of ALERT. Classifications of ISFSI emergencies at this level, meet the intent for emergency planning in CFR 72.32. This classification scheme has been discussed and agreed upon with responsible off-site organizations

2.1 OVERVIEW OF ISFSI-ONLY EMERGENCY PLAN (IOEP) (Continued)

The licensee is responsible for planning and implementing emergency measures associated with the CR3 ISFSI. This Plan is provided to meet that responsibility. To carry out specific emergency measures discussed in this Plan, detailed implementing procedures are established and maintained. Appendix A provides a listing of the implementing procedures for this Plan.

In addition to the description of activities and steps that can be implemented during a potential emergency, this Plan also provides a general description of the steps taken to recover from an emergency. It also describes the training, drills, exercises, planning, and coordination appropriate to maintain an adequate level of emergency preparedness.

2.2 FACILITY DESCRIPTION

The CR3 Plant is located at Red Level, Florida in Citrus County, about 5 miles south of Levy County. The site is 7.5 miles northwest of Crystal River, Florida and 90 miles north of St. Petersburg, Florida. CR3 is situated on the Gulf of Mexico, within the Crystal River Energy Complex.

CR3 formerly consisted of a single unit nominal 911 MWe / 2609 MWth Nuclear Power Plant, utilizing a Babcock & Wilcox (B&W) Company (currently AREVA) pressurized water reactor (PWR). The unit is certified to have ceased power operations and is permanently defueled in accordance with 10 CFR 50.82(a)(1)(i) and (ii). All spent fuel has been transferred to the CR3 INDEPENDENT SPENT FUEL STORAGE INSTALLATION (ISFSI) which is located to the east of the CR3 Plant. The CR3 ISFSI is a robust and high integrity facility for the spent fuel storage system. This facility is designed to prevent the release of radioactivity in the event of accidents, including environmental phenomena (e.g., earthquake and flooding).

2.3 SUMMARY OF EMERGENCY ACTIONS

The IOEP is activated by the ISFSI Shift Supervisor (ISS) upon identification of an emergency situation based upon the EMERGENCY ACTION LEVEL (EAL) criteria. The ISS assumes the position of the EMERGENCY COORDINATOR (EC). The emergency measures described in the subsequent sections and implementing procedures are implemented in accordance with the classification and nature of the emergency at the direction of the EC. Regulatory authorities and off-site support organizations are notified in accordance with this Plan. The EC has authority and responsibility for control and mitigation of the emergency, including emergency response resources, coordination of radiological ASSESSMENT ACTIVITIES, RECOVERY implementation, and coordination of emergency response activities.

The following sections of this IOEP describe the detailed plans and actions of the CR3 Emergency Response Organization (ERO), including interfaces with off-site support organizations.

3.0 **REFERENCES**

- 3.1 10 CFR 50.47, "Emergency Plans"
- 3.2 10 CFR Part 50, Appendix "E," "Emergency Planning and Preparedness for Production and Utilization Facilities"
- 3.3 10 CFR Part 20, "Standards for Protection Against Radiation"
- 3.4 NUREG-0578, "TMI-2 Lessons Learned Task Force Status Report and Short-Term Recommendations" (July 1979)
- 3.5 NUREG-0654/FEMA-REP-1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants" (November 1980)
- 3.6 Regulatory Guide 1.101, "Emergency Planning and Preparedness for Nuclear Power Reactors"
- 3.7 Environmental Protection Agency, "Protective Action Guide and Planning Guidance for Radiological Incidents," Draft for Interim Use and Public Comment (March 2013)
- 3.8 "State of Florida Radiological Emergency Management Plan" (herein referred to as State Plan)
- 3.9 State of Florida Statutes, Chapter 170J-1, "Control of Radiation Hazards"
- 3.10 CR3 Defueled Safety Analysis Report (DSAR)
- 3.11 CR3 Permanently Defueled Technical Specifications
- 3.12 Emergency Plan Implementing Procedures
- 3.13 Bayfront Health Seven Rivers Hospital "Radioactive Materials Procedure"
- 3.14 NRC Bulletin 2005-02, "Emergency Preparedness and Response Actions for Security-Based Events"
- 3.15 NEI 99-01, "Development of Emergency Action Levels for Non-Passive Reactors," Rev. 6
- 3.16 CR3 Letter 3F0213-07 dated February 20, 2013. Crystal River Unit 3 – Certification of Permanent Cessation of Power Operations and that Fuel Has Been Permanently Removed from the Reactor. ML13056A005.
- 3.17 NRC Letter dated March 13, 2013. Crystal River Unit 3 Nuclear Generating Plant Certification of Permanent Cessation of Operation and Permanent Removal of Fuel From the Reactor.
- 3.18 NRC Letter dated March 30, 2015. Exemptions From Certain Emergency Planning Requirements And Related Safety Evaluation. ML15058A906.
- 3.19 ISFSI Storage System Certificates of Compliance, Updated Final Safety Analysis Reports and Technical Specifications.
- 3.20 10 CFR 72.106, Controlled area of an ISFSI or MRS.
- 3.21 10 CFR 72.32 "Emergency Plan"

4.0 **DEFINITIONS AND ABBREVIATIONS**

4.1 **DEFINITIONS**

This section provides definitions that are used in this document. Terms capitalized in the text of this document indicate that they are defined here.

1. **Accountability:** Discretionary protective action taken for all persons onsite (within the PROTECTED AREA) that involves the gathering of personnel into pre-designated areas and subsequent verification that the location of all personnel is known.
2. **Annual:** Once per calendar year unless otherwise specifically stated.
3. **Assessment Activities:** Actions taken during or after an emergency for the purpose of obtaining and processing the information that will be used to make the decisions to implement specific emergency measures.
4. **Confinement Boundary:** The barrier(s) between spent fuel and the environment once the spent fuel is processed for dry storage. As applied to the CR3 ISFSI, the CONFINEMENT BOUNDARY is the Dry Shielded Canister (DSC) consisting of the DSC shell, the inner top and inner bottom cover plates, the siphon and vent block, the siphon and vent port cover plates, and the associated welds.
5. **Controlled Area:** The area of land (approximately 884 acres) that is owned, leased, or otherwise controlled by the licensee. The CONTROLLED AREA is the area of land within the SITE BOUNDARY, as shown in Figure 2-2 of the DSAR. The PROTECTED AREA is located within the CONTROLLED AREA.
6. **Credible Security Threat:** A threat to the CR3 ISFSI confirmed and validated by Security per procedures or received over the Emergency Notification System (ENS) from the NRC.
7. **Emergency Actions:** Assessment, corrective, and protective actions designed to achieve a safe, stable condition, and to immediately mitigate the effects of the emergency.

4.1 DEFINITIONS (Continued)

8. **Emergency Action Level (EAL):** A pre-determined, observable threshold for conditions that places the CR3 ISFSI in a given emergency classification.
9. **Emergency Classification System:** A system of classification in which emergency occurrences are categorized according to specific protective action levels. The emergency classification at the CR3 ISFSI is an ALERT. This classification is defined by NEI 99-01, Rev. 6 as follows:

Alert: Events are in progress or have occurred which involve an actual or potential substantial degradation of the level of safety of the CR3 ISFSI or a Security Condition that involves probable life threatening risk to ISFSI personnel or damage to ISFSI equipment.
10. **Emergency Coordinator (EC):** This position is the highest level of authority for the CR3 ERO and on-site emergency activities. This position is held by the ISFSI Shift Supervisor or designated alternate.
11. **Frequency:** That unit of time specified (monthly, quarterly, etc.) plus or minus 25 percent unless otherwise specifically stated. This definition does not apply to "ANNUAL" when it is related to the conduct of the Biennial Exercise (NRC Evaluated). Biennial Exercises are performed within the calendar year.
12. **Hostile Action:** An act toward the CR3 ISFSI or its personnel that includes the use of violent force to destroy equipment, take hostages, and/or intimidate the licensee to achieve an end. This includes attack by air, land, or water using guns, explosives, projectiles, vehicles, or other devices used to deliver destructive force. Other acts that satisfy the overall intent may be included.

"HOSTILE ACTION" should not be construed to include acts of civil disobedience or felonious acts that are not part of a concerted attack on the CR3 ISFSI.
13. **Hostile Force:** One or more individuals who are engaged in a determined assault, overtly or by stealth and deception, equipped with suitable weapons capable of killing, maiming, or causing destruction. (NEI 99-01, Rev. 6)

4.1 DEFINITIONS (Continued)

14. **Independent Spent Fuel Storage Installation (ISFSI):** A complex that is designed and constructed for the interim storage of spent nuclear fuel and other radioactive materials associated with spent fuel storage.
15. **Local Assembly Area:** A pre-designated area personnel report to for organization, roll-call, and supervision when CR3 ISFSI ACCOUNTABILITY is initiated.
16. **Protected Area:** The area encompassed by physical barriers and to which access is controlled.
17. **Protective Action Guide (PAG):** The projected dose to an individual, resulting from a radiological incident at which a specific protective action to reduce or avoid that dose is warranted.
18. **Recovery:** The condition declared after the immediate hazards to life and safety due to the emergency have been removed and efforts are directed to returning affected areas to normal.
19. **Recovery Actions:** Those actions taken after the emergency to restore the CR3 ISFSI as nearly as possible to its pre-emergency condition.
20. **Security Condition:** Any security event as listed in the approved security contingency plan that constitutes a threat/compromise to ISFSI security, threat/risk to ISFSI personnel, or a potential degradation to the level of safety of the CR3 ISFSI. A SECURITY CONDITION may or may not involve a HOSTILE ACTION.
21. **Site Boundary:** That line beyond which the land is not owned, leased, or otherwise controlled by the licensee. This line establishes the perimeter of the CONTROLLED AREA (CA).

4.2 **ABBREVIATIONS**

CCSO	Citrus County Sheriff's Office
CR3	Crystal River Unit 3
EAL	Emergency Action Level
EC	Emergency Coordinator
ENS	Emergency Notification System
EPA	U.S. Environmental Protection Agency
ERO	Emergency Response Organization
DSAR	Defueled Safety Analysis Report
ISFSI	Independent Spent Fuel Storage Installation
NRC	U.S. Nuclear Regulatory Commission
ORO	Offsite Response Organization
PAG	Protective Action Guide
RCA	Radiation Controlled Area
REAC/TS	Radiation Emergency Assistance Center/Training Site
SWO	State Watch Office

5.0 ASSIGNMENT OF RESPONSIBILITY (ORGANIZATION CONTROL)

The CR3 ISFSI Organization has complete capability at all times to perform the detection, classification, initial response, and notification functions required during an emergency.

Primary responsibilities for emergency response have been assigned, the emergency responsibilities of the various supporting organizations have been specifically established, and each principal response organization has staff to respond and to augment its initial response on a continuous basis.

5.1 ISFSI ORGANIZATION

The licensee is responsible for the safe storage of spent fuel in accordance with the State of Florida and NRC regulations. Responsibility for planning and implementing all emergency measures rests with the licensee.

The CR3 ISFSI Organization has an inherent emergency response/RECOVERY function in its overall management and operation. This function can be delineated by reviewing management structure and responsibilities as follows:

1. ISFSI Manager

The ISFSI Manager is directly responsible for the operation of the CR3 ISFSI and has ultimate responsibility for the overall effectiveness of the CR3 IOEP.

2. ISFSI Shift Supervisor (ISS)

The on-shift ISS reports to the ISFSI Manager for the purposes of performing EC responsibilities. The ISS is staffed 24-hours a day, and is the senior management position during off-hours. This position is responsible for monitoring conditions at the CR3 ISFSI.

5.2 EMERGENCY RESPONSE AND RESPONSIBILITIES

The ISFSI Shift Supervisor (ISS) has the responsibility and authority to declare an emergency and initiate appropriate actions in accordance with written procedures to mitigate the consequences. When an off-normal, natural phenomenon, or accident event becomes apparent, the ISS shall assess the condition and declare an emergency if warranted. When an emergency is declared the ISS assumes the position of the Emergency Coordinator (EC).

The EC is responsible for the direction of all activities at the ISFSI site during an emergency. Should evaluation indicate the need, the EC has the authority to direct any or all personnel to relocate from the ISFSI and surrounding area and to notify all applicable agencies of the ISFSI status. The EC ensures that appropriate actions are taken to mobilize emergency teams and to notify management and applicable off site supporting organizations and regulatory agencies as necessary.

The functions associated within the EC's scope of responsibilities are specified in Table 6-1. The EC does not have concurrent duties which conflict with these responsibilities. At the direction of the EC, additional personnel may be activated to support the on-shift staff.

5.3 OFFSITE RESPONSE ORGANIZATIONS (ORO)

Response organizations are available on a continuous basis and interrelate to receive notifications and communications and provide medical and law enforcement support to the CR3 ISFSI.

5.3.1 FLORIDA STATE WATCH OFFICE (SWO)

The Florida State Watch Office (SWO) is the primary point of contact for the State of Florida for the purpose of notification of an emergency declaration. Notification of an emergency will be made to the SWO within 60 minutes after an emergency declaration.

Emergency notification is received from the EC or designated alternate by use of commercially available communications equipment. .

5.3.2 CITRUS COUNTY SHERIFF'S OFFICE

The Citrus County Sheriff's Office is responsible for coordinating law enforcement and fire support at the CR3 ISFSI, via the Citrus County 9-1-1 Dispatch Center.

5.3.3 BAYFRONT HEALTH SEVEN RIVERS HOSPITAL

Bayfront Health Seven Rivers hospital in Crystal River, Florida serves as the hospital to treat injuries resulting from any non-radiological or radiological emergency situation at the CR3 ISFSI.

The hospital will furnish the services of physicians to injured persons. The hospital will accept all patients dispatched from the CR3 ISFSI. If necessary, the hospital will utilize radiological support provided by CR3 ISFSI Staff.

5.3.4 LOCAL EMERGENCY MEDICAL SERVICES

Ambulance service is available 24 hours per day to provide assistance in the event of an emergency at the CR3 ISFSI via the Citrus County 9-1-1 Dispatch Center.

5.3.5 STATE AND FEDERAL GOVERNMENT

State and Federal Government response is expected to be limited to documenting the notification of the emergency, periodically receiving updated information on the emergency, and coordinating public information releases if necessary. Investigations or inquiries may be initiated by State or Federal Officials following an event.

5.4 WRITTEN AGREEMENTS FOR EMERGENCY RESPONSE

Agreements have been established, in writing, with organizations having responsibilities for responding to emergencies at the CR3 ISFSI. Appendix B contains a list of these agreements. A copy of each agreement is maintained on file.

6.0 EMERGENCY RESPONSE ORGANIZATION

Emergency Response Organization (ERO) responsibilities for emergency response are listed in Table 6-1.

6.1 ON-SHIFT POSITIONS

The personnel and resources of the CR3 ISFSI organization maintain the capabilities necessary to respond to an emergency. All ISFSI activities are conducted under the direction and control of the ISFSI Manager. To provide support in required areas, the CR3 ISFSI organization is broken down into functional areas headed by designated managers. As appropriate, these areas are further subdivided according to specific technical disciplines or support functions.

6.1.1 ISFSI SHIFT SUPERVISOR (ISS) / EMERGENCY COORDINATOR (EC)

The ISFSI Shift Supervisor (ISS) is at the CR3 ISFSI on a 24-hour basis and is the senior management position during off-hours. This position is responsible for monitoring conditions at the CR3 ISFSI. The ISS has the responsibility and authority to declare an emergency and to initiate appropriate actions in accordance with written procedures to mitigate the consequences of the emergency. The ISS will assume the position of EC upon declaration of an emergency.

The EC is responsible for the direction of all activities at the CR3 ISFSI during any emergency. In accordance with site procedures, the EC shall evaluate the emergency and take necessary actions to mitigate the consequences. The EC has the authority to direct personnel to relocate or to direct activities on the Energy Complex as necessary to ensure personnel safety.

The EC is responsible for assuring that appropriate corrective and protective actions are taken to mobilize emergency response personnel and for notifying management and off site supporting organizations and regulatory agencies, as necessary.

6.1.1 ISFSI SHIFT SUPERVISOR (ISS) / EMERGENCY COORDINATOR (EC)

(Continued)

Other responsibilities assumed by the EC associated with the functions listed in Table 6-1 include:

- classification of the event (cannot be delegated)
- authorization of State and NRC Notifications (cannot be delegated)
- authorization of radiation exposure in excess of 10 CFR 20 limits. (cannot be delegated)
- management of available station resources
- initiation of mitigative actions
- initiation of corrective actions
- initiation of onsite protective actions
- decision to request offsite police, fire, or ambulance assistance
- augmentation of the emergency staff, as deemed necessary
- coordination of Security activities
- termination of the emergency condition when appropriate
- performance of initial radiological assessment
- maintaining a record of event activities, and
- suspension of security measures

6.1.2 SECURITY

Security staffing is maintained in accordance with the CR3 ISFSI Security Plan.

6.2 CR3 ISFSI AUGMENTED EMERGENCY RESPONSE ORGANIZATION

The licensee maintains the necessary personnel and resources to support the CR3 ISFSI EC in responding to an emergency. For an Emergency Classification of ALERT, support personnel can be activated at the discretion of the EC.

6.2.1 RADIATION PROTECTION COORDINATOR

For a declared emergency involving radiological consequences (E-HU1), a minimum of one person trained in radiological monitoring and assessment will report to the CR3 ISFSI within four hours of the emergency declaration to assist the EC.

6.2.2 MEDICAL RESPONSE PERSONNEL

Individuals trained in first aid will be available. Medical supplies are available at the CR3 ISFSI. First aid assistance is designed to handle a wide range of injuries. This task is accomplished by on-site individuals trained in basic first aid procedures.

6.2.3 FIRE RESPONSE

Firefighting response at the CR3 ISFSI is implemented in accordance with the CR3 ISFSI Fire Protection Plan. Citrus County Fire Rescue is designated to provide response and support services as requested. The nearest staffed fire department is approximately 10 miles away from the CR3 ISFSI, which allows for a timely response from the initial notification.

6.2.4 COMPANY SUPPORT ORGANIZATIONS

In the event of an emergency at the CR3 ISFSI that requires personnel and other support resources beyond those available within the CR3 ERO, support is available from other facilities and can be requested from various contractors

6.2.5 OFFSITE RESPONSE ORGANIZATIONS (ORO)

Additional support is available from OROs, as previously discussed in section 5.3 of this IOEP.

TABLE 6.1
EMERGENCY RESPONSE ORGANIZATION STAFFING AND RESPONSIBILITIES

FUNCTIONAL AREA	LOCATION	ON-SHIFT STAFF	AUGMENTED OFFSITE RESPONSE
Assessment of Condition (Emergency Declaration)	Emergency Response Facility	EMERGENCY COORDINATOR	_____
Emergency Direction and Control	Emergency Response Facility	EMERGENCY COORDINATOR	-----
Notification/Communication	Emergency Response Facility	EMERGENCY COORDINATOR	-----
Radiological Accident Assessment and Protective Actions	Emergency Response Facility/ On Scene	EMERGENCY COORDINATOR	_____
			Radiation Protection Coordinator- Note 1
Corrective Actions	Emergency Response Facility/ On Scene	EMERGENCY COORDINATOR	-----
Firefighting	On Scene	Per CR3 ISFSI Fire Protection Plan	Offsite Response Organization
Rescue Operations	On Scene	---	Offsite Response Organization
First Aid	On Scene	On-Shift Personnel	---
Security	Per ISFSI Security Plan	Per ISFSI Security Plan	N/A

Note 1: For a declared emergency involving radiological consequences (E-HU1), a minimum of one person trained in radiological monitoring and assessment (Radiation Protection Coordinator) will report to the CR3 ISFSI within four hours of the emergency declaration

7.0 EMERGENCY CLASSIFICATION SYSTEM

7.1 STANDARD CLASSIFICATION OF EMERGENCIES

CR3 utilizes NEI 99-01, "Development of Emergency Action Levels for Non-Passive Reactors" Rev. 6, as its basis for classifying emergencies. The classification system referenced in NEI 99-01, Rev. 6 has been endorsed by the NRC and offers a standard method for classifying emergencies. Consistent with NRC guidance for an away-from-reactor ISFSI, accidents and off-normal events that rise to the level of an emergency at the CR3 ISFSI are given the emergency classification of an ALERT. Classification of ISFSI emergencies at this level meet the intent for emergency planning in 10 CFR 72.32. EALs are addressed in site procedures and Appendix C.

This IOEP addresses one (1) classification of an emergency (ALERT), based on potential accidents that could occur at the CR3 ISFSI. Once indications are available that an EAL is met, the event is assessed and classified, and the corresponding emergency classification level is promptly declared as soon as possible.

7.1.1 Alert

Events are in progress or have occurred which involve an actual or potential substantial degradation of the level of safety of the CR3 ISFSI or a SECURITY CONDITION that involves probable life threatening risk to ISFSI personnel or damage to ISFSI equipment.

The ALERT classification includes emergency situations which are not expected to threaten the public, but for which notification of the State of Florida and the NRC is required.

7.2 EMERGENCY ACTION LEVELS AND POSTULATED ACCIDENTS

Both emergency classifications are characterized by EALs consisting of specific instrument readings and/or observations which are used to tell the CR3 ISS that an initiating condition has been met. These EALs are used to assure that the initial classification of emergencies can be accomplished rapidly, allowing for the prompt identification of the nature of mitigating activities needed.

EALs and Initiating Conditions are provided under the following categories for the CR3 ISFSI:

- ISFSI Malfunction
- Hazards and Other Conditions

The ISFSI UFSAR describes the Design Basis Accidents (DBAs) applicable to the CR3 ISFSI, along with the radiological dose calculation results. Specific guidance for classifying emergencies is found in site procedures and the Emergency Action Level Technical Bases in Appendix C

EALs shall be reviewed with State of Florida government authorities on an ANNUAL basis.

8.0 NOTIFICATION METHODS AND PROCEDURES

To provide prompt notification of affected personnel and emergency response organizations in the event of an emergency at the CR3 ISFSI, the licensee has established means for notification and dissemination of emergency messages.

8.1 BASIS FOR NOTIFICATION

The notification of personnel and emergency response organizations is commensurate with the hazard posed by the emergency. The EMERGENCY CLASSIFICATION SYSTEM described in Section 7.0 is the primary bases for notification and has been mutually agreed upon by applicable State and Federal response organizations.

The EC is responsible for identifying the appropriate emergency classification, declaring the emergency and initiating emergency notifications.

8.2 MEANS OF NOTIFICATION

Various communications systems, as described in Section 9.0 are available to perform emergency notifications. The EC is the primary individual for initiating notifications; however, the EC may designate an individual to carry out appropriate notifications. Implementing procedures and various directories identify organizations and individuals to be notified and contain appropriate listings of telephone numbers.

The following sections describe the means of notifying, alerting, and mobilizing the various emergency response organizations or individuals.

8.2.1 CR3 ISFSI STAFF

Following declaration of an emergency, the EC will determine if additional assistance is required and notify site or contract personnel needed to assist in assessing the emergency condition, coordinating required resources, or serving as the public information interface. Notifications to management and key personnel will be made as in accordance with established procedures. These notifications will be completed via the on-site telephone system, or other commercial means which may include land line and/or wireless devices.

8.2.2 FOSSIL/GAS PLANT PERSONNEL

Upon declaration of an emergency, the EC or a delegate will notify the Fossil/Gas Plant facilities by telephone or other available means, and an appropriate response will be initiated. The EC or a delegate will provide further instructions, as required.

8.2.3 NUCLEAR REGULATORY COMMISSION

The NRC Operations Center will be notified immediately after the notification to the State and not later than 60 minutes after declaration of an emergency via the Event Notification System (ENS) telephone line. Upon contact with the NRC, a description of the emergency is provided, along with potential consequences. Commercial phone lines will be used as a backup means of notification in the event of failure of the ENS.

8.2.4 FLORIDA STATE WATCH OFFICE (SWO)

The Florida State Watch Office (SWO) will be notified of an emergency via commercial telephone line. Upon contact, the content of the Florida Nuclear Plant Emergency Notification Form will be provided.

8.2.5 SUPPORT ORGANIZATIONS

Medical, local law enforcement agency, and firefighting support services are primarily notified for assistance via the public 9-1-1 process. Requests for support services are the responsibility of the EC.

8.3 EMERGENCY MESSAGES

Notification of an emergency is provided verbally to the SWO based on the content of the Florida Emergency Notification Form. The form may also be transmitted electronically. The content of the initial notification and follow-up message form has been established in conjunction with the State of Florida and includes the date and time of the incident, the class of emergency, and the EAL. Appropriate identification of the caller and time of the notification are also provided.

As additional information describing the emergency situation and local conditions becomes available, supplemental messages containing additional detail are provided.

9.0 EMERGENCY COMMUNICATIONS

Several modes of communication are available to transmit information at the CR3 ISFSI, throughout the Crystal River Energy Complex, and to various locations off-site during normal and emergency conditions. In the event of an emergency at the CR3 ISFSI, these communications systems provide the appropriate means for alerting or activating emergency personnel in each response organization and allow continued means for contact throughout the emergency.

The various communications systems provided for both on-site and off-site communications are used on a regular basis or tested periodically in accordance with established procedures. Periodic testing or frequent use of each system is conducted as follows:

<u>System</u>	<u>Use/Testing</u>
Commercial Telephones	Frequent Use
Portable Security UHF Radios	Frequent Use
ENS	Tested Monthly

Cellular phone service is also available on site. All systems are available at the CR3 Emergency Response Facility on a 24-hour basis to allow prompt notification and activation of emergency response organizations.

10.0 PUBLIC INFORMATION

The EC will notify the ISFSI Manager following an emergency declaration. The ISFSI Manager will coordinate with personnel for the dissemination of information to the media

11.0 EMERGENCY FACILITY AND EQUIPMENT

Adequate emergency facilities and equipment to support the emergency response are provided and maintained. This section of the IOEP identifies and describes the emergency response facility, assessment equipment, the first aid and medical facilities, and protective equipment and supplies that can be utilized during an emergency.

11.1 EMERGENCY RESPONSE FACILITY (ERF)

The emergency command and control functions are managed within the ERF. Within the ERF the EC (or other personnel as directed) can assess conditions, evaluate the magnitude and potential consequences of abnormal conditions, initiate preventative and corrective actions, and perform notifications. The ERF provides sufficient space to accommodate anticipated response personnel and provides availability of communication systems as specified in Section 9.0. Radiological conditions as a result of DBAs specified in the ISFSI storage system.

11.2 EMERGENCY EQUIPMENT

This section describes the monitoring instruments used to initiate emergency measures and provide continuing assessment of conditions throughout the course of an emergency.

11.2.1 PORTABLE RADIATION AND CONTAMINATION MONITORING INSTRUMENTS

CR3 maintains portable radiation and contamination monitoring equipment necessary for monitoring the conditions of the CR3 ISFSI. These instruments are normally utilized and maintained by the Radiation Protection Group and are available for emergency use.

11.2.2 COMMUNICATION SYSTEMS

Communication systems are identified and tested as described in Section 9.0.

11.3 EMERGENCY SUPPLIES

Emergency equipment and supplies necessary to carry out the provisions of the IOEP and support procedures are maintained at the Emergency Response Facility.

Emergency kit contents are inspected, inventoried, and operationally checked at least quarterly and anytime a kit is opened and used. Sufficient reserves of instruments/equipment are provided to replace those which are removed from emergency kits for calibration or repair. Calibration of instruments has been established at intervals recommended by instrument suppliers, or as required by Federal regulations.

11.4 FIRST AID FACILITIES

First aid supplies and equipment are located at the CR3 ISFSI. Qualified personnel are available 24 hours per day to provide medical treatment as referenced in Section 15.0.

Radiological wound monitoring on-site is performed using an appropriate instrument. If the severity of the wound restricts decontamination efforts by radiation protection personnel, the injured personnel will be referred to off-site medical personnel or transported to an off-site medical facility for treatment and further decontamination.

12.0 RADIOLOGICAL ASSESSMENT

Effective response to a potential emergency situation requires assessment to determine the nature of the emergency and its actual and potential consequences. The licensee has established various methods to evaluate and monitor the effects of a potential emergency at the CR3 ISFSI and has the appropriate means to assure adequate assessment.

The ASSESSMENT ACTIVITIES required to evaluate a particular emergency depend on the specific nature and classification of the emergency. The ISS/EC is responsible for the initial measurement of ISFSI dose rates after an off-normal, natural phenomena, or accident event. If measurements exceed EAL threshold levels, an ALERT will be declared.

With the declaration of an ALERT due to increased dose rates, follow up radiological surveys will be performed and appropriate actions to limit access and exposure will be taken.

13.0 PROTECTIVE ACTIONS

Protective actions for onsite personnel are provided for their health and safety. Implementation guidelines for onsite protective actions are provided in implementing procedures.

Additionally, implementing procedures provide for a range of protective actions (e.g. relocation of personnel and personnel take cover) to protect onsite personnel during HOSTILE ACTIONS.

13.1 CR3 ISFSI ACCOUNTABILITY

The EC has the authority to initiate personnel ACCOUNTABILITY of the CR3 ISFSI.

ACCOUNTABILITY should be considered and used as a protective action whenever a risk to health or safety exists and prudence dictates. If personnel ACCOUNTABILITY is required, at the direction of the EC, all individuals in the PROTECTED AREA (including employees without emergency assignments, visitors and contractor personnel) shall be notified of the emergency.

ACCOUNTABILITY of all personnel inside the PROTECTED AREA should be accomplished within 60 minutes after event classification and maintained thereafter at the discretion of the EC. If personnel are unaccounted for, teams shall be dispatched to locate the personnel.

13.2 CRYSTAL RIVER ENERGY COMPLEX ACCOUNTABILITY

Assembly/Relocation of personnel in areas outside of the Protected Area in the Crystal River Energy Complex will be in accordance with established procedures. The EC is authorized to control access to the CONTROLLED AREA when the IOEP is activated.

14.0 RADIOLOGICAL EXPOSURE CONTROL

CR3 maintains a radiological exposure control program to assure that protection against radiological exposure, as set forth in 10 CFR Part 20 and Chapter 170J 1 of the State of Florida Statutes, is provided. This program is implemented through the "Radiological Protection Standard" which covers both normal and emergency radiation protection measures.

Means for controlling radiological exposures in an emergency are established for emergency workers. The means for controlling radiological exposures shall include exposure guidelines consistent with EPA Emergency Worker and Lifesaving Activity Protective Action Guides.

14.1 EXPOSURE GUIDELINES

During an emergency, doses above normal occupational radiation exposure limits may be authorized by the EC for activities such as saving a life, preservation of valuable equipment, or controlling exposure. Table 14.1 provides exposure guidelines for on-site emergency activities.

14.2 RADIATION PROTECTION

The purpose of a Radiation Protection Program is to assure that radiation doses received by personnel are kept as low as reasonably achievable and do not exceed the prescribed limits for both normal and emergency conditions. The established measures to provide this assurance include access control, personnel monitoring, and contamination control.

14.2.1 ACCESS CONTROL

During a declared emergency, radiological surveys of the ISFSI pad area will be performed to determine the actual extent of the radiological concern. As necessary, the EC will ensure RCAs and access controls are established to prevent personnel from entering the area. RECOVERY and corrective actions will be planned and executed in a manner that minimizes exposure to personnel.

14.2.2 PERSONNEL EXPOSURE MONITORING

Personal dosimeters are utilized to monitor the exposure of personnel during normal or emergency conditions. Adequate supplies of dosimeters are maintained for use during an emergency. Procedures describe in detail the types of personal dosimeter devices, the manner in which they are to be used, who is to wear them, and how they are to be cared for.

Emergency worker dose records are maintained in accordance with Radiation Protection procedures.

14.3 CONTAMINATION CONTROL

Various contamination control measures are utilized. These include access control measures and means for the decontamination of personnel, areas, and equipment. These activities are addressed in facility procedures and are briefly described below.

All personnel are monitored for radioactive contamination prior to leaving the site. During normal or emergency conditions, contamination should be removed from any part of a person's body prior to their leaving the RCA. All personnel decontamination, even during an emergency, will be performed under the supervision of the Radiation Protection Group and in accordance with established procedures.

Portable contamination monitoring instruments are available to frisk personnel for potential contamination.

Documentation of surveys, contamination, and decontamination activities shall be maintained in accordance with Radiation Protection procedures.

TABLE 14.1

GUIDELINES FOR EMERGENCY RESPONSE WORKER EXPOSURE

ACTIVITY	GUIDELINE	CONDITION
All occupational exposures	5 rem	All reasonably achievable actions have been taken to minimize dose.
Protecting valuable property necessary for public welfare.	10 rem ^a	Exceeding 5 rem unavoidable and all appropriate actions taken to reduce dose. Monitoring available to project or measure dose.
Lifesaving or protection of large populations	25 rem ^b	Exceeding 5 rem unavoidable and all appropriate actions taken to reduce dose. Monitoring available to project or measure dose.

Notes: a For potential doses >5 rem, medical monitoring programs should be considered.

b In the case of a very large incident, consider need to raise property and lifesaving response worker guidelines.

NOTE: Reference for this table is Table 2-2 in the EPA PAG Manual.

NOTE: The dose limits listed above are in addition to any annual occupational dose already received.

15.0 MEDICAL AND HEALTH SUPPORT

Medical assistance is available on-site and off-site for treatment of CR3 ISFSI personnel. Various means of transportation are also available to transport individuals for radiological and non-radiological injuries.

The individuals and organizations providing emergency medical assistance as identified in this section either have the capability for evaluation of radiation exposure and uptake or they are provided this capability from the licensee in the form of personnel and/or equipment. Letters of Agreement with off-site organizations and individuals for medical support are listed in Appendix B.

15.1 ON-SITE FIRST AID

First aid assistance at the CR3 ISFSI is designed to handle a wide range of injuries. This task is accomplished by medical response personnel. The medical response personnel are on-site individuals trained in basic first aid procedures. Medical response personnel are trained to handle injured personnel, with or without radiological considerations.

15.2 MEDICAL TRANSPORTATION

Transportation of injured personnel is available via local emergency medical services, other CR3 vehicles, or private vehicles. When personnel are transported to Bayfront Health Seven Rivers hospital while in a contaminated condition, a person trained in radiological monitoring will be dispatched to monitor and maintain radiological controls.

15.3 OFF-SITE MEDICAL SUPPORT

The Bayfront Health Seven Rivers hospital in Crystal River, Florida has medical facilities capable of handling various types of injuries. Bayfront Health Seven Rivers hospital is capable of treating patients with injuries of a non-radiological or radiological nature.

When local facilities are considered inadequate because of the nature or severity of the injury sustained, the injured person may be referred to a trauma center in Florida or to Oak Ridge, Tennessee - REAC/TS for hospitalization. Oak Ridge Associated Universities (ORAU) operates a research hospital in Oak Ridge, Tennessee for the U.S. Department of Energy.

16.0 EMERGENCY TERMINATION AND RECOVERY

The licensee has established general plans described in the following sections to yield RECOVERY from potential emergencies at the CR3 ISFSI. The recovery organization will be based on the normal organization and would function with the senior management position being responsible for site activities.

16.1 EMERGENCY TERMINATION AND NOTIFICATION

Termination of an emergency status is the responsibility of the EC. The EC is also responsible for providing notification of the emergency termination and initiation of RECOVERY operations to the NRC, State of Florida (SWO), the CR3 ERO, and other organizations that may be providing on-site support.

16.2 RECOVERY OPERATIONS

RECOVERY operations begin immediately following emergency termination and will address the specific emergency circumstances.

RECOVERY planning includes equipment to be repaired or replaced, licensing implications, special training requirements, offsite support, and determination of causes and consequences. Site procedures addressing RECOVERY operations provide an outline for a short term RECOVERY plan.

The ISFSI Manager shall be responsible for the development and implementation of the RECOVERY plan and shall provide for detailed monitoring of the implementation and status reporting. The ISFSI Manager also has the authority to revise or halt activities as circumstances dictate.

The RECOVERY will be terminated by the CR3 senior management position after the ISFSI is returned to a stable condition.

17.0 EXERCISE AND DRILLS

Periodic exercises are conducted to evaluate major portions of emergency response capabilities. Periodic drills are conducted to develop and maintain key skills. Deficiencies as a result of exercises or drills are identified and corrected.

17.1 BIENNIAL EXERCISE

A Biennial Exercise is conducted and tests the capability and a major portion of the basic elements existing within emergency preparedness plans and organizations. Offsite response organizations will be invited to participate or observe.

Exercise scenarios will include, at a minimum, the following:

- Basic objective(s) of the exercise.
- Date(s), time period, place(s), and participating organizations.
- A time schedule of real and simulated initiating events.
- A narrative summary describing the conduct of the drill to include such items as simulated casualties, offsite fire assistance, rescue of personnel, and use of protective clothing.

A remedial exercise will be conducted if it is determined that the emergency plan was not satisfactorily tested during the biennial exercise such that the NRC cannot find reasonable assurance that adequate protective measures can be taken in the event of a radiological emergency.

17.2 TRAINING DRILLS

In addition to the training described earlier, the ISFSI staff will conduct drills to enhance skills and knowledge of the practical implementation of the Emergency plan and demonstrate the adequacy of emergency facilities, equipment, and implementing procedures. Drills allow interaction between evaluators and ERO personnel to reinforce requirements and overall process implementation. Drills will be scheduled with various objectives to demonstrate these capabilities. Some drills will focus on specific functions while others will involve a broader scope of the Emergency Plan. Offsite support organizations (e.g., ambulance service, fire department, and LLEA) may be invited to participate in drills. Problems should be noted for discussion as part of the training drill critique. Required drills shall be conducted at the FREQUENCY indicated below:

a. Medical Emergency Drills

- ANNUAL - This drill will involve medical response personnel and include a simulated contaminated individual and may also allow provisions for participation by local support agencies (i.e., ambulance and off-site medical facilities). The off-site portions of the drill may be performed as part of the Biennial Exercise.

b. Radiological Monitoring

- ANNUAL - A drill involving radiation monitoring personnel to demonstrate ability to perform radiological survey and assessment.

c. Communication Checks

- Semi-Annual – Communication Capability between CR3 ISFSI and the Florida State Watch Office (SWO) shall be demonstrated.

Drill requirements may be satisfied as part of the Biennial Exercise. A critique shall be conducted as soon as practical after each drill or exercise. The critique shall evaluate the ability of the organization to respond to a simulated emergency situation.

17.3 CRITIQUES

A critique is performed as soon as practicable after training drills and exercises to evaluate the ability of the participating organizations to respond as indicated in this IOEP. Recommendations for revisions to the CR3 IOEP, the implementing procedures and/or the upgrading of emergency equipment and supplies as a result of the drill or exercise should be forwarded to the Emergency Planning Coordinator who shall review, coordinate, and assure that appropriate changes are implemented to correct any deficiencies. A written evaluation shall result from the critique of the Biennial Exercise. The ISFSI Manager shall assure that identified deficiencies are corrected.

18.0 EMERGENCY RESPONSE ORGANIZATION TRAINING

Radiological emergency response training is provided to those who may be called on to assist in an emergency. All personnel at the CR3 ISFSI who fill required positions in the ERO will take part in a training program to assure adequate preparedness to assist in an emergency situation. Specific off-site support resources that may be called upon for emergency assistance will also be invited to participate in appropriate training programs. Emergency response personnel in the following categories receive initial training and ANNUAL retraining:

18.1 ISFSI SHIFT SUPERVISORS/EMERGENCY COORDINATORS

These following subjects shall be covered as a minimum on an ANNUAL basis:

- EMERGENCY ACTION LEVEL Classification.
- Federal, State and local government notification procedures.
- ERO Implementation.
- Dose rate meter operation.
- Radiological assessment.
- Emergency exposure control.
- Protective actions for onsite personnel.
- ISFSI Design Basis Accidents.
- Review of applicable drill identified deficiencies and recommendations.

18.2 MEDICAL RESPONSE PERSONNEL

All onsite medical response personnel are provided training. Training for personnel assigned to provide first aid support shall include courses equivalent to Red Cross Multi-Media.

18.3 RADIATION MONITORING PERSONNEL

Initial and ANNUAL retraining for radiation monitoring personnel consists of the following topics:

- Use of Radiation Protection procedures.
- Use of emergency survey equipment.
- Communications.
- Field surveys.
- Radiological Monitoring.
- Review of applicable drill identified deficiencies and recommendations

18.4 OFFSITE LAW ENFORCEMENT AND MEDICAL SUPPORT PERSONNEL

Organizations which may be called upon to render assistance on-site will be offered general facility familiarization sessions on an annual basis. The sessions may include a walk down of the facility, building layout, access protocol, communications capabilities, and security requirements. The training will be structured to meet the needs of the respective organization with respect to the nature of their support.

19.0 RESPONSIBILITY FOR THE PLANNING EFFORT: DEVELOPMENT, PERIODIC REVIEW AND DISTRIBUTION OF EMERGENCY PLANS

19.1 EMERGENCY PLANNING COORDINATION

The ISFSI Manager has overall authority and responsibility for emergency response planning. The CR3 ISFSI Emergency Planning Coordinator develops and updates emergency plans and coordinates these plans with other response organizations. In the event that licensing actions by the NRC or changes in the State agencies or other off-site resources impact this Plan, the Emergency Planning Coordinator is responsible for identifying the particular impact and necessary revisions to the Plan. The Emergency Planning Coordinator reports to the ISFSI Manager

The Emergency Planning Coordinator training will consist of periodic reviews of Federal emergency preparedness requirements and guidance documents and various site-specific documents related to emergency preparedness. Training is supplemented primarily by on-the-job activities and attendance of short courses, seminars, or executive conferences that relate specifically to emergency preparedness.

19.2 PLAN/PROCEDURES REVIEW AND UPDATE

The CR3 IOEP should be reviewed and verified to be current on an ANNUAL basis by the Emergency Planning Coordinator. Revisions to the CR3 IOEP will be reviewed in accordance with 10 CFR 50.54(q) requirements.

Procedures listed in Appendix A shall be reviewed and verified to be current by the appropriate individual in accordance with established procedures. These procedures will be updated as appropriate and will consider improvements identified during drills and training.

19.2 PLAN/PROCEDURES REVIEW AND UPDATE (Continued)

In addition, there shall be a semi-annual review and update of the notification rosters used to activate and implement the Plan.

Review of the CR3 IOEP and the plans of support organizations shall consider applicable emergency planning criteria and regulations promulgated by the NRC, as applicable to the CR3 ISFSI.

In addition to the above reviews and updates, the Emergency Planning Coordinator shall review and update appropriate support agreements (see Appendix B) as required.

19.3 TRAINING

The Emergency Planning Coordinator shall assist management in coordinating and/or providing emergency planning-related training. They shall assure that the training described in Section 18.0, is properly coordinated to assure adequate qualification, training, and retraining of personnel.

19.4 AUDITS

All Emergency Plan program elements shall be reviewed by persons having no direct responsibility for the implementation of the Emergency Plan at least once every 12 months to satisfy the requirements of 10 CFR 50.54(t).

An independent audit covering all program elements satisfies this requirement.

ISFSI ONLY EMERGENCY PLAN

APPENDIX A

CROSS REFERENCE IOEP SECTION TO PLANNING STANDARDS/REQUIREMENTS AND IMPLEMENTING PROCEDURES

APPENDIX A
CROSS REFERENCE IOEP SECTION TO PLANNING STANDARDS/REQUIREMENTS
AND IMPLEMENTING PROCEDURES

Regulatory Requirement	Corresponding IOEP Section(s)	Procedure
10 CFR 50.47(b)(1)	5.0	Not Applicable (N/A)
10 CFR 50.47(b)(2)	6.0	EM-502, ISFS-190
10 CFR 50.47(b)(3)	5.0, , Appendix B	AI-4000
10 CFR 50.47(b)(4)	7.0	IOEP App. C
10 CFR 50.47(b)(5)	8.0	EM-205, EM-502
10 CFR 50.47(b)(6)	9.0	AI-4000
10 CFR 50.47(b)(7)	10.0	EM-502
10 CFR 50.47(b)(8)	11.0	AI-4000
10 CFR 50.47(b)(9)	12.0	EM-502, ISFS-190
10 CFR 50.47(b)(10)	13.0	EM-205
10 CFR 50.47(b)(11)	14.0	EM-502, EM-504, HPP-334
10 CFR 50.47(b)(12)	15.0	AI-4000
10 CFR 50.47(b)(13)	16.0	EM-502
10 CFR 50.47(b)(14)	17.0	AI-4000, AI-4001
10 CFR 50.47(b)(15)	18.0	TPP-219
10 CFR 50.47(b)(16)	19.0	AI-4000
10 CFR 50.47(c)(2)	2.1	N/A
10 CFR Part 50, Appendix E IV		
10 CFR Part 50, Appendix E IV.A	5.0, 6.0, 7.0	EM-502, AI-4000
10 CFR Part 50, Appendix E IV.B	7.0, 12.0	IOEP, App.C
10 CFR Part 50, Appendix E IV.C	7.0, 8.0	EM-502
10 CFR Part 50, Appendix E IV.D	8.0, 9.0	EM-502
10 CFR Part 50, Appendix E IV.E	11.0	N/A
10 CFR Part 50, Appendix E IV.F	17.0, 18.0	TPP-219
10 CFR Part 50, Appendix E IV.G	19.0	AI-4000
10 CFR Part 50, Appendix E IV.H	16.0	EM-502
10 CFR Part 50, Appendix E IV.I	13.0	EM-911D
10 CFR Part 50, Appendix E V	Appendix A	N/A
10 CFR Part 50, Appendix E VI	Not Applicable	N/A

ISFSI ONLY EMERGENCY PLAN

APPENDIX B

AGREEMENTS WITH SUPPORTING ORGANIZATIONS

AGREEMENTS WITH SUPPORTING ORGANIZATIONS

The following agreements are reviewed on an ANNUAL basis and updated as necessary. The documents are kept on file at CR3 and maintained by the Emergency Planning Group.

1. Citrus County (Law Enforcement and Fire response)
2. Bayfront Health Seven Rivers Hospital
3. Nature Coast EMS

ISFSI ONLY EMERGENCY PLAN

APPENDIX C

EMERGENCY ACTION LEVEL TECHNICAL BASES

EMERGENCY ACTION LEVEL TECHNICAL BASES

1.0 PURPOSE

This manual provides an explanation and rationale for each EMERGENCY ACTION LEVEL (EAL) included in the Independent Spent Fuel Storage Installation (ISFSI) Only EAL scheme for the CR3 ISFSI facility. The information provided should be used to facilitate reviews of EALs and provide documentation for future reference. Decision-makers performing the duties of the Emergency Coordinator (EC) may use the information included in this document as a technical reference in support of an EAL interpretation. This information may assist the EC in making classifications.

This manual is an Emergency Plan Implementing Procedure (EPIP). Any revisions must be carefully considered for Emergency Plan impact by evaluating changes in accordance with 10 CFR 50.54(q).

2.0 REFERENCES

1. NEI 99-01, Revision 6, November 2012, Development of Emergency Action Levels for Non-Passive Reactors Section 8, Independent Spent Fuel Storage Installation (ISFSI) ICs/EALs.
2. Independent Spent Fuel Storage Installation (ISFSI) Only Emergency Plan (IOEP).
3. NEI 03-12, Template for Security Plan, Training and Qualification, Safeguards Contingency Plan, and ISFSI Security Program.
4. 10 CFR 72.32(a), Emergency Plan.

EMERGENCY ACTION LEVEL TECHNICAL BASES

3.0 Table A-1: Recognition Category “PD” and “E” Initiating Condition Matrix

ALERT
PD-HU1: Confirmed SECURITY CONDITION or threat.
PD-HU3: Other conditions exists which in the judgment of the Emergency Coordinator warrant declaration of an ALERT.
E-HU1: Damage to a Dry Shielded Canister CONFINEMENT BOUNDARY.

EMERGENCY ACTION LEVEL TECHNICAL BASES

4.0 Hazards and Other Conditions

PD-HU1

ECL: Alert

Initiating Condition: Confirmed SECURITY CONDITION or threat.

Emergency Action Levels: (1 or 2)

UNUSUAL EVENT
1. <u>Confirmed SECURITY CONDITION or threat.</u>
1) A SECURITY CONDITION as reported by the Security Shift Supervisor.
<u>OR</u>
2) Notification of a CREDIBLE SECURITY THREAT directed at the site.

SECURITY CONDITION: Any security event as listed in the approved security contingency plan that constitutes a threat/compromise to ISFSI security, threat/risk to ISFSI personnel, or a potential degradation to the level of safety of the CR3 ISFSI. A SECURITY CONDITION may or may not involve a HOSTILE ACTION.

HOSTILE ACTION: An act toward the CR3 ISFSI or its personnel that includes the use of violent force to destroy equipment, take hostages, and/or intimidate the licensee to achieve an end. This includes attack by air, land, or water using guns, explosives, projectiles, vehicles, or other devices used to deliver destructive force. Other acts that satisfy the overall intent may be included. HOSTILE ACTION should not be construed to include acts of civil

disobedience or felonious acts that are not part of a concerted attack on the CR3 ISFSI.

CREDIBLE SECURITY THREAT: A threat to the CR3 ISFSI confirmed and validated by Security per procedures or received over the Emergency Notification System (ENS) from the NRC.

EMERGENCY ACTION LEVEL TECHNICAL BASES

4.0 Hazards and Other Conditions (continued)

PD-HU1

Basis:

This IC addresses events that pose a threat to plant personnel or spent fuel and thus represent a potential degradation in the level of plant safety. Security events which do not meet one of these EALs are adequately addressed by the requirements of 10 CFR § 73.71 or 10 CFR § 50.72.

Timely and accurate communications between Security Shift personnel and the ISFSI Shift Supervisor/Emergency Coordinator are essential for proper classification of a security-related event. Classification of these events will initiate appropriate threat-related notifications to plant personnel and Off Site Response Organizations.

Security plans and terminology are based on the guidance provided by NEI 03-12, *Template for the Security Plan, Training and Qualification Plan, Safeguards Contingency Plan [and Independent Spent Fuel Storage Installation Security Program]*.

EAL #1 references the Shift Supervisor because these are the individuals trained to confirm that a SECURITY CONDITION is occurring or has occurred. Training on security event confirmation and classification is controlled due to the nature of Safeguards and 10 CFR § 2.390 information.

EAL #2 addresses the receipt of a CREDIBLE SECURITY THREAT. The credibility of the threat is assessed in accordance with Security procedures.

Emergency plans and implementing procedures are public documents; therefore, EALs should not incorporate Security-sensitive information. This includes information that may be advantageous to a potential adversary, such as the particulars concerning a specific threat or threat location. Security-sensitive information should be contained in non-public documents such as the Security Plan.

EMERGENCY ACTION LEVEL TECHNICAL BASES

4.0 Hazards and Other Conditions (continued)

PD-HU3

ECL: Alert

Initiating Condition: Other conditions exist which in the judgment of the Emergency Coordinator warrant declaration of an ALERT.

Emergency Action Levels:

ALERT
1) Other conditions exists which in the judgment of the Emergency Coordinator indicate that events are in progress or have occurred which indicate a potential degradation of the level of safety of the ISFSI.

Basis:

This IC addresses unanticipated conditions not addressed explicitly elsewhere but that warrant declaration of an emergency because conditions exist which are believed by the Emergency Coordinator to fall under the emergency classification level description for an ALERT.

EMERGENCY ACTION LEVEL TECHNICAL BASES

5.0 ISFSI Malfunction

E-HU1

ECL: Alert

Initiating Condition: Damage to a Dry Shielded Canister **CONFINEMENT BOUNDARY.**

UNUSUAL EVENT
<p><u>Damage to a Dry Shielded Canister</u> <u>CONFINEMENT BOUNDARY</u> as indicated by radiation readings greater than or equal to the following:</p> <ol style="list-style-type: none">1) 1300 mR/hr (gamma +neutron) on the radial surface of the fuel transfer cask while in transit to the ISFSI Horizontal Storage Module (HSM). <u>OR</u>2) 1050 mR/hr (gamma + neutron) on the HSM Front Bird Screen while stored in the HSM. <u>OR</u>3) 4 mR/hr (gamma + neutron) HSM Outside Door while stored in the HSM. <u>OR</u>4) 40 mR/hr (gamma + neutron) HSM End Shield Wall Exterior while stored in the HSM. <p>NOTE: Radiation readings are taken at the locations prescribed by the Technical Specifications for the Standardized NUHOMS Horizontal Storage.</p>

Emergency Action Levels: (1 or 2 or 3 or 4)

Mode Applicability: All

CONFINEMENT BOUNDARY: The
barrier(s) between spent fuel and the
environment once the spent fuel is processed
for dry storage. As applied to the CR3 ISFSI,
the **CONFINEMENT BOUNDARY** is the Dry
Shielded Canister (DSC) consisting of the
DSC shell, the inner top and inner bottom
cover plates, the siphon and vent block, the
siphon and vent port cover plates, and the
associated welds.

EMERGENCY ACTION LEVEL TECHNICAL BASES

5.0 ISFSI Malfunction (continued)

E-HU1

Basis:

This IC addresses an event that results in damage to the CONFINEMENT BOUNDARY of a dry shielded canister containing spent fuel. It applies to irradiated fuel that is licensed for dry storage beginning at the point that the loaded storage canister is sealed. The issues of concern are the creation of a potential or actual release path to the environment, degradation of one or more fuel assemblies due to environmental factors, and configuration changes which could cause challenges in removing the canister or fuel from storage.

The existence of “damage” is determined by radiological survey. NEI 99-01, Revision 6, November 2012, Development of Emergency Action Levels for Non-Passive Reactors, Section 8, Independent Spent Fuel Storage Installation (ISFSI) ICs/EALs recommends using “2 times” the site-specific cask specific technical specification allowable radiation level as the EAL. The technical specification multiple of “2 times” is used here to distinguish between non-emergency and emergency conditions. The emphasis for this classification is the degradation in the level of safety of the spent fuel dry shielded canister and not the magnitude of the associated dose or dose rate. It is recognized that in the case of extreme damage to a loaded canister, the fact that the “on-contact” dose rate limit is exceeded may be determined based on measurement of a dose rate at some distance from the canister.

Security-related events for ISFSIs are covered under ICs PD-HU1 and PD-HA1.

An ALERT in this EAL is categorized on the basis of the occurrence of an event of sufficient magnitude that a loaded Dry Shielded Canister (DSC) CONFINEMENT BOUNDARY is damaged or violated while in transit or storage.

EMERGENCY ACTION LEVEL TECHNICAL BASES

5.0 ISFSI Malfunction (continued)

E-HU1

EALs 1-4 provide the thresholds and locations of the radiation readings.

This EAL applies to emergency conditions affecting a spent fuel DSC caused by an accident or natural phenomena. This EAL would be applicable at all times in all modes for a loaded DSC from the time the lid is installed, during transport to the INDEPENDENT SPENT FUEL STORAGE INSTALLATION (ISFSI) and while stored in the Horizontal Storage Module (HSM).

As provided in the Transnuclear “Standardized NUHOMS System Technical Specifications”, Section 5.2.4 (Radiation Protection Program) and Section 5.4.2 (HSM or HSM-H Dose Rate Evaluation Program) contain radiation dose levels for the DSC that should not be exceeded based on whether the DSC is being transported inside the fuel transfer cask or while it is stored in the HSM. Keeping in line with Regulatory guidance that an ALERT is warranted for radiation conditions at a level of twice the Technical Specification value, the values chosen for EAL E-HU1 represent these values. The “Note” in the EAL provides reference on the location of the radiation readings when evaluating this EAL.

EMERGENCY ACTION LEVEL TECHNICAL BASES

6.0 EMERGENCY CLASSIFICATION TABLE

Emergency Classification Table Index

HAZARDS AND OTHER CONDITIONS	
CATEGORY	ALERT
SECURITY	HU1
Hazards and Other Conditions/ Emergency Coordinator Judgment	HU3
ISFSI MALFUNCTION	
CATEGORY	ALERT
ISFSI Malfunction	HU1

EMERGENCY ACTION LEVEL TECHNICAL BASES

6.0 EMERGENCY CLASSIFICATION TABLE (continued)

6.1 Permanently Defueled (PD)

CATEGORY	ALERT (<u>HU1</u>)
<u>Hazards and Other Conditions</u>	<p>1. <u>Confirmed SECURITY CONDITION or threat.</u></p> <p>1) A SECURITY CONDITION as reported by the Security Shift Supervisor.</p> <p><u>OR</u></p> <p>2) Notification of a CREDIBLE SECURITY THREAT directed at the site.</p>

EMERGENCY ACTION LEVEL TECHNICAL BASES

6.0 EMERGENCY CLASSIFICATION TABLE (continued)

6.2 MODE: Permanently Defueled (PD)

CATEGORY	ALERT (<u>HU3</u>)
<u>Hazards and Other Conditions</u>	<p>1. <u>Other conditions exist which in the judgment of the Emergency Coordinator warrant declaration of an ALERT.</u></p> <p>1) Other conditions exists which in the judgment of the Emergency Coordinator indicate that events are in progress or have occurred which indicate a potential degradation of the level of safety of the ISFSI or indicate a security threat to facility protection has been initiated. No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occurs.</p>

EMERGENCY ACTION LEVEL TECHNICAL BASES

6.0 EMERGENCY CLASSIFICATION TABLE (continued)

6.3 Independent Spent Fuel Storage Installation (ISFSI)

MODE: All (E)

CATEGORY	ALERT (<u>HU1</u>)
<u>ISFSI Malfunction</u>	<p>Damage to a Dry Shielded Canister <u>CONFINEMENT BOUNDARY</u> as indicated by radiation readings greater than or equal to the following:</p> <p>1300 mR/hr (gamma +neutron) on the radial surface of the fuel transfer cask while in transit to the ISFSI Horizontal Storage Module (HSM).</p> <p>OR</p> <p>1050 mR/hr (gamma + neutron) on the HSM Front Bird Screen while stored in the HSM.</p> <p>OR</p> <p>4 mR/hr (gamma + neutron) HSM Outside Door while stored in the HSM.</p> <p>OR</p> <p>40 mR/hr (gamma + neutron) HSM End Shield Wall Exterior while stored in the HSM.</p> <p>NOTE: Radiation readings are taken at the locations prescribed by the Technical Specifications for the Standardized NUHOMS Horizontal Storage System.</p>

SUMMARY OF CHANGES

DRR-

SECTION	CHANGE	REASON/REFERENCE
Cover	Remove Duke Energy LOGO and change title in signature line.	Editorial – corrected for new company and new title.
Throughout	Corrected number sequences to address changes/deletions and title changes.	Editorial
TOC	Revised to reflect plan content changes	Editorial
Section 1.2	Added reference to 10 CFR 72.32 and updated the plan revision history.	Editorial and referenced 10 CFR 72.32 (LAR 3F0321-01)
Section 2.1	Revised text regarding offsite response information; added reference to 10 CFR 72.32; removed reference to Unusual Event and added explanation of “Alert only” classifications.	To Address LAR 3F0321-01
Section 3.0	Added reference to 10 CFR 72.32	Editorial
Section 4.1	Added definitions for Confinement Boundary, Credible Security Threat, and Security Condition	Added due to EAL Technical Bases begin added to IOEP as App. C. (LAR 3F0321-01)
Section 4.1	Removed definitions of Unusual Event, Fire, Protective Actions, and Release.	To address LAR 3F0321-01
Section 4.1	Revised definitions of Alert and Hostile Action	To Address LAR 3F0321-01
Section 4.2	Removed State Hot Ring Down (SHRD) abbreviation	SHRD no longer used as primary notification. (LAR 3F0321-01)
Section 5.1	Revised/corrected titles. Deleted reference to ISFSI Manager – Operations and Maintenance	Editorial
Section 5.2	Deleted reference to Resource Manager	Position eliminated (LAR 3F0321-01)
Section 5.3.1	Simplified text from description of Florida Watch Office	Unnecessary detail or no longer applies to state response.
N/A	Deleted Florida Division of Emergency Management Section (combined with later section)	Combined this section with federal response in later section.
Section 5.3.2	Revised section to delete reference to county emergency management from Sheriff's Office and added “and fire”.	County emergency management is no longer directly involved with emergency response related to CR3. Added “and fire” to clarify that fire response is accomplished by dialing 911.
Section 5.3.3	Revised description of Bayfront Hospital	Unnecessary detail and was no longer applicable to CR3 response.
Section 5.3.4	Simplified text from the description of local EMS	Unnecessary detail and no longer applicable to CR3 response.

SECTION	CHANGE	REASON/REFERENCE
Section 5.3.5	Combined NRC Federal response with State response	Simplifying text since response is now limited to notifications
Section 5.4	Revised wording related to letters of agreements	Simplify text to better capture agreement letters.
Section 6.1, 6.1.1	Revised position title and revise “site” to “ISFSI” Deleted reference to Resource Manager. Added statement that EC authorization for notifications cannot be delegated.	Editorial change. Resource Manager position eliminated. (LAR 3F0321-01)
Section 6.2	Added text to address activating support personnel	To clarify the EC can request support as needed.
N/A	Deleted reference to Resource Manger	Position eliminated (LAR 3F0321-01)
Section 6.2.1	Revised Title	Editorial
Section 6.2.4	Revised “Corporate” to “Company Support” and deleted text.	Editorial
Table 6.1	Removed reference to Resource Manager Specified “Radiation Protection Coordinator” as a responder and clarified text.	Position eliminated (LAR 3F0321-01) and editorial change
N/A	Deleted Section related to Emergency Response Organizations Support	Unnecessary/repetitive information.
Section 7.1	Deleted reference to Unusual Event and added text describing classification levels using 10 CFR 72.32 as regulatory guidance.	Unusual Event eliminated (LAR 3F0321-01)
Section 7.1.1	Revised description of Alert and removed reference to Unusual Event	Addressed security terms discussed in the EALs and Unusual Event eliminated (LAR 3F0321-01)
Section 7.2	Revised reference location for the EAL Technical Bases and deleted reference to Citrus County	Editorial – the EAL Bases Document is now located as an appendix to the IOEP. Citrus County no longer reviews EALs.
Section 8.2.1	Removed reference to Resource Manager	Position eliminated (LAR 3F0321-01)
Section 8.2.2	Changed “Hydro” to “Gas Plant”	Editorial
Section 8.2.3	Added notification requirement for NRC	Enhanced wording to address notification requirement for NRC.
Section 8.2.4	Revised text for Florida State Watch Office related to SHRD and deleted notification to county	SHRD is no longer required and county notification of an emergency declaration may be performed at the discretion of the State, by the State. (LAR 3F0321-01)

SECTION	CHANGE	REASON/REFERENCE
Section 9.0	Deleted reference to SHRD, clarified the radios as “security” radios, and added that cell phone service is available on site.	SHRD no longer used as primary notification. (LAR 3F0321-01) and addressed cell phone service on site.
Section 10.0	Revised Public Information Section	Addressed current PI protocol for new company.
Section 11.1	Deleted reference to UFSARS	Statement unnecessary, removal does not change intent.
Section 11.3	Deleted reference to Table 12 listing typical emergency supplies	Table 12.1 eliminated. Contents of the kits are verified using plant procedures.
Section 12.0	Revised Accident Assessment information and changed to “Radiological Assessment” and updated text.	Address current protocol for assessing ISFSI radiological conditions.
Section 13.1	Revised Accountability section	Clarify that accountability is the ISFSI Protected Area and removed unnecessary information.
Section 13.2	Revised wording related to the Crystal River Emergency Complex and clarified authority of the EC to control access to the Controlled Area.	Clarified that accountability for all areas outside of the protected area is completed in accordance with procedures.
Section 15.0	Revised Text to delete training information.	Eliminated repetitive information.
Section 15.3	Revised text to delete specific medical information	The additional medical was unnecessary.
Section 16.2	Organization/Title Change	Editorial
Section 17.1	Revised section to separate drill information from exercise information.	Clarify drill conduct versus exercise conduct and to improve description.
Section 17.2	Revised training drill section to describe/clarify the conduct and type of drills. Communication “drill” was revised to state Communication “Check;” Staff Augmentation Drill was deleted.	Enhanced description of drills and deleted drills that were carried over from operational E-Plan per guidance in 10 CFR 72.32. (LAR 3F0321-01)
Section 17.3	Title Change	Editorial
Section 18.1 thru 18.4	Revised training description for Emergency Coordinator, medical response personnel, radiation monitoring personnel, and offsite law enforcement and medical response. Changed “Human Conformance Concerns” to “Recommendations.”	Updated training description to better describe training program for the emergency coordinator qualified individuals, rad monitoring personnel, and offsite medical and law enforcement personnel to correct and clarify current training programs.
Section 19.1	Title change	Editorial

SECTION	CHANGE	REASON/REFERENCE
Section 19.2	Removed reference to implementing procedures.	Not all implementing procedure changes require a 50.54(q) review when changing.
Section 19.2	Revised the frequency of phone number updates to semi-annual and removed reference to support plans.	To be consistent with regulatory guidance described in 10 CFR 72.32. Deleted support plans are no longer applicable to CR3 ISFSI. SHRD no longer used as primary notification. (LAR 3F0321-01)
Section 19.4	Revised text regarding audits.	Text updated to reflect new company.
App. A	Updated Section Numbers and Addressed EAL Bases Document being moved into the IOEP as an Appendix.	Editorial
App. B	Added (Law Enforcement and Fire response) to Citrus County and removed the words "Sheriff's Office"	To clarify that Fire and Law Enforcement response is accomplished via 911.
App. C	Incorporated IOEP EALBM into the IOEP as Appendix C. Revised all of EAL Technical Bases.	The IOEP EALBM was completely revised to match LAR. 3F0321-01.