



Crystal River Nuclear Plant  
15760 W. Power Line Street  
Crystal River, FL 34428

Docket 50-302  
Operating License No. DPR-72

10 CFR 50.12

March 28, 2014  
3F0314-01

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

Subject: Crystal River Unit 3 – Exemptions to Radiological Emergency Response Plan Requirements Defined by 10 CFR 50.47 and Appendix E to Part 50, Revision 1, and Response to Request for Additional Information

Reference: CR-3 to NRC letter, "Crystal River Unit 3 – License Amendment Request #315, Revision 0, Permanently Defueled Emergency Plan and Emergency Action Level Scheme, and Request for Exemption to Certain Radiological Emergency Response Plan Requirements Defined by 10 CFR 50," dated September 26, 2013. (ADAMS Accession No. ML13274A584)

Dear Sir:

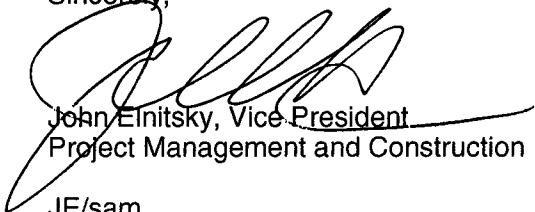
In accordance with 10 CFR 50.12, Duke Energy Florida, Inc. hereby submits the response to the Nuclear Regulatory Commission (NRC) request for additional information (RAI) received by email on February 20, 2014, regarding the request for exemption to certain Radiological Emergency Response Plan requirements defined by 10 CFR 50, which were contained in the September 26, 2013 submittal (Reference). Enclosure 1 to this letter provides the RAI response. Enclosure 2 to this letter provides the revised request for exemption to certain Radiological Emergency Response Plan Requirements defined by 10 CFR 50.47 and Appendix E to Part 50.

This correspondence contains regulatory commitments identified in Enclosure 3.

If you have any questions regarding this submittal, please contact Mr. Dan Westcott, Manager, Nuclear Regulatory Affairs, at (352) 563-4796.

I declare under penalty of perjury that the foregoing is true and correct. Executed on March 28, 2014.

Sincerely,



John Einitsky, Vice President  
Project Management and Construction

JE/sam

Enclosures: 1. Response to Request for Additional Information  
2. Request for Exemption to Certain Radiological Emergency Response Plan Requirements Defined by 10 CFR 50, Revision 1  
3. Regulatory Commitments

xc: NRR Project Manager  
Regional Administrator, Region 1

AK45  
NRR

**DUKE ENERGY FLORIDA, INC.**

**CRYSTAL RIVER UNIT 3**

**DOCKET NUMBER 50 - 302 / LICENSE NUMBER DPR - 72**

**EXEMPTIONS TO RADIOLOGICAL EMERGENCY RESPONSE  
PLAN REQUIREMENTS DEFINED BY 10 CFR 50.47 AND  
APPENDIX E TO PART 50, REVISION 1, AND RESPONSE TO  
REQUEST FOR ADDITIONAL INFORMATION**

**ENCLOSURE 1**

**RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION**

**RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION**

By letter dated September 26, 2013, Duke Energy Florida, Inc. (DEF) requested exemptions from portions of Part 50 of Title 10 of the *Code of Federal Regulations* (10 CFR 50) for the Crystal River Unit 3 Nuclear Plant (CR-3) Radiological Emergency Response Plan (ADAMS Accession No. ML13274A584). Specifically, DEF requested exemption from certain emergency plan requirements of 10 CFR 50.47(b), 10 CFR 50.47(c)(2), and Section IV to Appendix E of 10 CFR 50. The requested exemptions would allow DEF to reduce emergency plan requirements and subsequently revise the CR-3 Radiological Emergency Response Plan consistent with the permanently defueled condition of the reactor.

On February 20, 2014, via an e-Mail, the Nuclear Regulatory Commission (NRC) provided a request for additional information (RAI) regarding the proposed exemptions to CR-3. The RAI questions and the CR-3 responses are provided below.

In the NRC RAI questions, the specific portions of the requirement within the regulation from which the exemption is being requested is depicted in emphasized (bold/strikeout) font. In the tables below, the column titled, "Crystal River Request Wording," indicates CR-3's originally requested exemption as contained in Enclosure 2 of Reference 1. The column, titled, "Past Precedent Wording," indicates exemptions as previously granted by the NRC for the associated regulation.

**RAI-001**

<b>10 CFR</b>	<b>Crystal River Request Wording</b>	<b>Past Precedent Wording</b>
<b>50.47(b)(1)</b>	Primary responsibilities for emergency response by the nuclear facility licensee <b>and by State and local organizations within the Emergency Planning Zones</b> 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.	Primary responsibilities for emergency response by the nuclear facility licensee and by State and local organizations <b>within the Emergency Planning Zones</b> 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.

Although formal offsite radiological emergency preparedness (REP) plans have typically been exempted for decommissioning sites, State and local organizations continue to be relied upon for firefighting, law enforcement, ambulance and medical services in support of the licensee's (onsite) emergency plan. Please provide further justification as to why this requirement would not be applicable based on the context described above.

**Response to RAI-001**

The intent of the originally requested exemption was to continue to rely on State and local organizations for firefighting, law enforcement, ambulance, and medical services as needed for events at the site, but without an expected need for these organizations for offsite radiological emergency response. Details regarding assistance from offsite organizations are provided in the Permanently Defueled Emergency Plan (PDEP), Revision 0 (contained in Enclosure 3 of Reference 1). However, the past precedent wording also meets this intent. Therefore, DEF is revising the originally requested exemption from portions of 10 CFR 50.47(b)(1) in Reference 1, to read as shown in Enclosure 2 of this submittal. The revised request is consistent with the past precedent wording shown above.

**RAI-002**

10 CFR	Crystal River Request Wording	Past Precedent Wording
50.47(b)(7)	<p><del>Information is made available to the public on a periodic basis on how they will be notified and what their initial actions should be in an emergency (e.g., listening to a local broadcast station and remaining indoors), the principal points of contact with the news media for dissemination of information during an emergency (including the physical location or locations) are established in advance, and procedures for coordinated dissemination of information to the public are established.</del></p>	<p><del>Information is made available to the public on a periodic basis on how they will be notified and what their initial actions should be in an emergency (e.g., listening to a local broadcast station and remaining indoors),</del> [T]he principal points of contact with the news media for dissemination of information during an emergency <del>(including the physical location or locations)</del> are established in advance, and procedures for coordinated dissemination of information to the public are established.</p>

10 CFR 72.32(a)(16) states, "Arrangements made for providing information to the public." While CR-3 does not currently have an ISFSI, the staff used the regulations and guidance for an ISFSI to inform the previous exemptions granted to decommissioning licensees to maintain consistency as the licensee transitions through the decommissioning process. Please describe how information would be disseminated to the public should an event occur at the CR-3 site.

**Response to RAI-002**

DEF maintains a corporate communications organization, which includes a media relations group. News media contacts for CR-3 will continue to be maintained and upon an event at the CR-3 site, information will be disseminated to the public and briefings with pertinent media organizations will be conducted per corporate communication protocols.

Since there are no longer any pre-planned actions that the public needs to take as a result of an anticipated emergency at CR-3, it is no longer necessary to pre-plan dissemination of emergency information to the public. The intent of the originally requested exemption was to discontinue specific emergency response organizational requirements for major interactions with news media. However, the past precedent wording also meets this intent. Therefore, DEF is revising the originally requested exemption from portions of 10 CFR 50.47(b)(7) in Reference 1, to read as shown in Enclosure 2 of this submittal. The revised request is consistent with the past precedent wording shown above.

**RAI-003**

10 CFR	Crystal River Request Wording	Past Precedent Wording
50.47(c)(2)	<p><del>Generally, the plume exposure pathway EPZ for nuclear power plants shall consist of an area about 10 miles (16 km) in radius and the ingestion pathway EPZ shall consist of an area about 50 miles (80 km) in radius. The exact size and configuration of the EPZs surrounding a particular nuclear power reactor shall be determined in relation to local emergency response needs and capabilities as they are affected by such conditions as demography, topography, land characteristics, access routes, and jurisdictional boundaries. The size of the EPZs also may be determined on a case-by-case basis for gas-cooled nuclear reactors and for reactors with an authorized power level less than 250 MW thermal. The plans for the ingestion pathway shall focus on such actions as are appropriate to protect the food ingestion pathway.</del></p>	<p><del>Generally, the plume exposure pathway EPZ for nuclear power plants shall consist of an area about 10 miles (16 km) in radius and the ingestion pathway EPZ shall consist of an area about 50 miles (80 km) in radius. The exact size and configuration of the EPZs surrounding a particular nuclear power reactor shall be determined in relation to local emergency response needs and capabilities as they are affected by such conditions as demography, topography, land characteristics, access routes, and jurisdictional boundaries. The size of the EPZs also may be determined on a case-by-case basis for gas-cooled nuclear reactors and for reactors with an authorized power level less than 250 MW thermal. The plans for the ingestion pathway shall focus on such actions as are appropriate to protect the food ingestion pathway.</del></p>

This requirement as it relates to gas-cooled nuclear reactors and for reactors with an authorized power level less than 250 MW thermal is not applicable to CR-3, and therefore, does not require exemption. Please remove as a requested exemption or provide specific justification for exemption.

**Response to RAI-003**

DEF agrees that the portion of 10 CFR 50.47(c)(2) that identifies the requirement for determination of the size of the Emergency Planning Zones (EPZs) for gas-cooled nuclear reactors and for reactors with an authorized power level less than 250 MW thermal is not applicable to CR-3 and is revising the originally requested exemption from portions of 10 CFR 50.47(c)(2) in Reference 1, to read as shown in Enclosure 2 of this submittal. The revised request is consistent with the past precedent wording shown above.

**RAI-004**

10 CFR 50	Crystal River Request Wording	Past Precedent Wording
<p><b>Appendix E, III</b></p>	<p>The final safety analysis report or the site safety analysis report for an early site permit that includes complete and integrated emergency plans under § 52.17(b)(2)(ii) of this chapter shall contain the plans for coping with emergencies. The plans shall be an expression of the overall concept of operation; they shall describe the essential elements of advance planning that have been considered and the provisions that have been made to cope with emergency situations. The plans shall incorporate information about the emergency response roles of supporting organizations <del>and offsite agencies</del>. That information shall be sufficient to provide assurance of coordination among the supporting groups and with the licensee. The site safety analysis report for an early site permit which proposes major features must address the relevant provisions of 10 CFR 50.47 and 10 CFR part 50, appendix E, within the scope of emergency preparedness matters addressed in the major features. <del>The plans submitted must include a description of</del></p>	

	<p><del>the elements set out in Section IV for the emergency planning zones (EPZs) to an extent sufficient to demonstrate that the plans provide reasonable assurance that adequate protective measures can and will be taken in the event of an emergency.</del></p>	
--	---	--

This section of the regulations is not applicable to CR-3, as it applies to only license applicants and therefore does not require exemption. Please remove as a requested exemption or provide specific justification for exemption.

**Response to RAI-004**

DEF agrees that this requirement is not applicable to CR-3 and is revising the originally requested exemption from portions of 10 CFR 50, Appendix E, III in Reference 1, to identify that no exemption is requested.

**RAI-005**

10 CFR 50	Crystal River Request Wording	Past Precedent Wording
<p><b>Appendix E.IV.1</b></p>	<p>The applicant's emergency plans shall contain, but not be limited to, information needed to demonstrate compliance with the elements set forth below, i.e., organization for coping with radiological emergencies, assessment actions, activation of emergency facilities and equipment, training, maintaining emergency preparedness and recovery, and onsite protective actions during <del>hostile action</del>. In addition, the emergency response plans submitted by an applicant for a reactor power reactor operating license under this Part, or for an early site permit (as applicable) or combined license under 10 CFR Part 52, <del>shall contain information needed to demonstrate compliance with the standards described in §50.47(b)</del>, and they will be evaluated against those standards.</p>	<p>The applicant's emergency plans shall contain, but not be limited to, information needed to demonstrate compliance with the elements set forth below, i.e., organization for coping with radiological emergencies, assessment actions, activation of emergency facilities and equipment, training, maintaining emergency preparedness and recovery, <del>and onsite protective actions during hostile action</del>. In addition, the emergency response plans submitted by an applicant for a reactor power reactor operating license under this Part, or for an early site permit (as applicable) or combined license under 10 CFR Part 52, shall contain information needed to demonstrate compliance with the standards described in §50.47(b), and they will be evaluated against those standards.</p>

The standards in §50.47(b) that have not been exempted remain applicable to CR-3. Therefore, the emergency plans still “shall contain information needed to demonstrate compliance with the standards described in §50.47(b).” Please provide specific justification for exempting this requirement or delete these words from the exemption request.

**Response to RAI-005**

DEF agrees that the PDEP still “shall contain information needed to demonstrate compliance with the standards described in §50.47(b),” and is revising the originally requested exemption from portions of 10 CFR 50, Appendix E, IV.1 in Reference 1, to read as shown in Enclosure 2 of this submittal. The revised request is consistent with the past precedence wording shown above.

**RAI-006**

10 CFR 50	Crystal River Request Wording	Past Precedent Wording
<b>Appendix E.IV.A.4</b>	Identification, by position and function to be performed, of persons within the licensee organization who will be responsible for making <del>offsite dose projections and a description of how these projections will be made and the results transmitted to State and local authorities, NRC, and other appropriate governmental entities.</del>	Identification, by position and function to be performed, of persons within the licensee organization who will be responsible for making <del>offsite</del> dose projections and a description of how these projections will be made and the results transmitted to State and local authorities, NRC, and other appropriate governmental entities.

10 CFR 72.32(a)(9) states: “*Information to be communicated.* A brief description of the types of information on facility status; radioactive releases; and recommended protective actions, if necessary, to be given to offsite response organizations and to the NRC.”

While unlikely or not projected to exceed EPA protective action guidelines, a radiological release reaching beyond the site boundary is still possible (based on elapsed time since cessation of power operations). Please provide specific justification for exempting this requirement.

**Response to RAI-006**

The intent of the originally requested exemption was to discontinue offsite dose assessment and the transmittal of offsite dose projection results to offsite agencies, but to maintain the responsibility and process for communicating information on facility status and onsite radioactive releases (from onsite dose projection results) to offsite response organizations and to the NRC if necessary,



as defined in the PDEP, Revision 0. Therefore, DEF is revising the originally requested exemption from portions of 10 CFR 50, Appendix E, IV.A.4 in Reference 1, to read as shown in Enclosure 2 of this submittal. The revised request is consistent with the past precedence wording shown above.

**RAI-007**

<b>10 CFR 50</b>	<b>Crystal River Request Wording</b>	<b>Past Precedent Wording</b>
<b>Appendix E.IV.B.1</b>	<p>The means to be used for determining the magnitude of, and for continually assessing the impact of, the release of radioactive materials shall be described, including emergency action levels that are to be used as criteria for determining the need for notification and participation of local and State agencies, the Commission, and other Federal agencies, and the emergency action levels that are to be used for determining when and what type of protective measures should be considered within <del>and outside</del> the site boundary to protect health and safety. The emergency action levels shall be based on in-plant conditions and instrumentation in addition to onsite and offsite-monitoring. By June 20, 2012, for nuclear power reactor licensees, these action levels must include hostile action that may adversely affect the nuclear power plant. The initial emergency action levels shall be discussed and agreed on by the applicant or licensee and State and local governmental authorities, and approved by the NRC. Thereafter, <del>emergency action levels shall be reviewed with the State and local governmental authorities on an annual basis.</del></p>	<p>The means to be used for determining the magnitude of, and for continually assessing the impact of, the release of radioactive materials shall be described, including emergency action levels that are to be used as criteria for determining the need for notification and participation of local and State agencies, the Commission, and other Federal agencies, and the emergency action levels that are to be used for determining when and what type of protective measures should be considered within <del>and outside</del> the site boundary to protect health and safety. The emergency action levels shall be based on in-plant conditions and instrumentation in addition to onsite and offsite monitoring. <del>By June 20, 2012, for nuclear power reactor licensees, these action levels must include hostile action that may adversely affect the nuclear power plant.</del> The initial emergency action levels shall be discussed and agreed on by the applicant or licensee and State and local governmental authorities, and approved by the NRC. Thereafter, emergency action levels shall be reviewed with the State and local governmental authorities on an annual basis.</p>

In the EP Final Rule, the Commission defined "hostile action" as, in part, an act directed toward a nuclear power plant or its personnel. The staff determined that a decommissioning reactor site would not be characterized as a nuclear power plant in view of

the risk for offsite radiological consequences. Therefore, CR-3 would not be required to include hostile action in the EALs. Please provide specific justification for maintaining this requirement.

Maintaining the requirement for the offsite response organizations (OROs) to review the EALs on an annual basis will ensure the proper awareness by OROs of applicable emergency classifications and will also ensure that communications with the proper authorities are maintained based on continued requirement for prompt notification of State and local response organizations in the event of a classified emergency under §50.47(b)(5). As such, the basis for this requirement remains applicable. Please provide specific justification for exempting this requirement.

***Response to RAI-007***

After further consideration of the intent of 10 CFR 50, Appendix E, IV.B.1, DEF agrees that the requirement to include hostile actions in the Emergency Action Levels (EALs) should be included in the exemption in view of the current risk for offsite radiological consequences. Therefore, DEF is revising the originally requested exemption from portions of 10 CFR 50, Appendix E, IV.B.1 in Reference 1, to read as shown in Enclosure 2 of this submittal. This change will require an update to the Permanently Defueled (PD) EAL Bases Manual, Revision 0 (contained in Enclosure 5 of Reference 1), and an update to the PDEP that will be completed with the PDEP RAI response (regulatory commitment).

The intent of the originally requested exemption was to discontinue the review of the EALs with local governmental authorities on an annual basis as a result of the reduced extent of involvement of local county officials in the CR-3 PDEP. However, based upon this question, DEF understands that this annual review supports proper ORO awareness of applicable classifications and ensures communications with proper authorities are maintained based upon the State and local response organization notification requirements upheld by CR-3. CR-3 proposes to continue to review EALs with the State of Florida and local governmental authorities on an annual basis.

The CR-3 Radiological Emergency Response Plan (RERP) currently defines local government to include Citrus County and Levy County, as a result of the need for the public to take protective actions and offsite emergency planning by State and local organizations. Because it is no longer possible for the radiological consequences of a design basis accident or a credible beyond design basis accident at CR-3 to result in radioactive releases which exceed the EPA Protective Action Guides at the site boundary, DEF will only include Citrus County government authorities in the review of EALs, since local support organizations may coordinate with the Citrus County Emergency Operations Center (EOC).

Based upon the reduced scope of EALs for the permanently defueled facility, the scope of the annual review of EALs is expected to be reduced (informal mailings, etc.), however this will ensure the proper awareness of the applicable emergency classifications. Therefore, DEF is revising the originally requested exemption from portions of 10 CFR 50, Appendix E, IV.B.1 in Reference 1, to read

as shown in Enclosure 2 of this submittal. This change will require an update to the PDEP and will be completed with the PDEP RAI response (regulatory commitment).

In addition to the past precedent wording included in RAI-007, "and offsite" is struck through the requested exemption to 10 CFR 50, Appendix E, IV.B.1 in Enclosure 2 of this submittal, since offsite monitoring is no longer applicable. This strikethrough was included in the Table 1, "EXEMPTIONS FOR CONSIDERATION," contained in the NRC draft Interim Staff Guidance (ISG) document NSIR/DPR-ISG-02, "Emergency Planning Exemption Requests for Decommissioning Nuclear Power Plants," for 10 CFR 50, Appendix E, IV.B.1.

**RAI-008**

<b>10 CFR 50</b>	<b>Crystal River Request Wording</b>	<b>Past Precedent Wording</b>
<b>Appendix E.IV.C.1</b>	<p>The entire spectrum of emergency conditions that involve the alerting or activating of progressively larger segments of the total emergency organization shall be described. The communication steps to be taken to alert or activate emergency personnel under each class of emergency shall be described. Emergency action levels (based not only on onsite and offsite radiation monitoring information but also on readings from a number of sensors that indicate a potential emergency, <del>such as the pressure in containment and the response of the Emergency Core Cooling System</del>) for notification of offsite agencies shall be described. The existence, but not the details, of a message authentication scheme shall be noted for such agencies. The emergency classes defined shall include: (1) notification of unusual events, (2) alert, (3) <del>site area emergency</del>, and (4) <del>general emergency</del> of 10 CFR Part 50, Appendix E, IV.C.1. These classes are further discussed in NUREG-0654/FEMA-REP-1.</p>	<p>The entire spectrum of emergency conditions that involve the alerting or activating of progressively larger segments of the total emergency organization shall be described. The communication steps to be taken to alert or activate emergency personnel under each class of emergency shall be described. Emergency action levels (based not only on onsite <del>and offsite</del> radiation monitoring information but also on readings from a number of sensors that indicate a potential emergency, <del>such as the pressure in containment and the response of the Emergency Core Cooling System</del>) for notification of offsite agencies shall be described. The existence, but not the details, of a message authentication scheme shall be noted for such agencies. The emergency classes defined shall include: (1) notification of unusual events, (2) alert, (3) <del>site area emergency</del>, and (4) <del>general emergency</del> of 10 CFR Part 50, Appendix E, IV.C.1. These classes are further discussed in NUREG-0654/FEMA-REP-1.</p>

CR-3 requested exemption 10 CFR 50.47(b)(9), "Adequate methods, systems and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use". Typical EAL schemes for decommissioning sites do not include use of offsite radiation monitoring information as part of EAL scheme. Please provide justification for maintaining the requirement for use of radiation monitoring information.

**Response to RAI-008**

The intent of the originally requested exemption was to eliminate the requirement to maintain methods, systems and equipment for assessing and monitoring offsite consequences of a radiological emergency condition, as described in the PDEP, Revision 0. Therefore, DEF is revising the originally requested exemption from portions of 10 CFR 50, Appendix E, IV.C.1 in Reference 1, to read as shown in Enclosure 2 of this submittal. The revised request is consistent with the past precedent wording shown above.

**RAI-009**

<b>10 CFR 50</b>	<b>Crystal River Request Wording</b>	<b>Past Precedence Wording</b>
<b>Appendix E.IV.D.3</b>	<p>A licensee shall have the capability to notify responsible State <del>and local governmental</del> agencies within 15-minutes after declaring an emergency. <del>The licensee shall demonstrate that the appropriate governmental authorities have the capability to make a public alerting and notification decision promptly on being informed by the licensee of an emergency condition. Prior to initial operation greater than 5% of rated thermal power of the first reactor at a site, each nuclear power reactor licensee shall demonstrate that administrative and physical means have been established for alerting and providing prompt instructions to the public within the plume exposure pathway EPZ. The design objective of the prompt public alert and notification system shall be to have the capability to essentially complete the initial alerting and initiate notification of the public within the plume exposure pathway EPZ within about 15 minutes. The use of this</del></p>	<p>A licensee shall have the capability to notify responsible State and local governmental agencies within 15-minutes after declaring an emergency. <del>The licensee shall demonstrate that the appropriate governmental authorities have the capability to make a public alerting and notification decision promptly on being informed by the licensee of an emergency condition. Prior to initial operation greater than 5% of rated thermal power of the first reactor at a site, each nuclear power reactor licensee shall demonstrate that administrative and physical means have been established for alerting and providing prompt instructions to the public within the plume exposure pathway EPZ. The design objective of the prompt public alert and notification system shall be to have the capability to essentially complete the initial alerting and initiate notification of the public within the plume exposure pathway EPZ within about 15 minutes. The use of this</del></p>

<p><del>alerting and notification capability will range from immediate alerting and notification of the public (within 15 minutes of the time that State and local officials are notified that a situation exists requiring urgent action) to the more likely events where there is substantial time available for the appropriate government authorities to make a judgment whether or not to activate the public alert and notification system. The alerting and notification capability shall additionally include administrative and physical means for a backup method of public alerting and notification capable of being used in the event the primary method of alerting and notification is unavailable during an emergency to alert or notify all or portions of the plume exposure EPZ population. The backup method shall have the capability to alert and notify the public within the plume exposure pathway EPZ, but does not need to meet the 15 minute design objective for the primary prompt public alert and notification system. When there is a decision to activate the alert and notification system, the appropriate governmental authorities will determine whether to activate the entire alert and notification system simultaneously or in a graduated or staged manner. The responsibility for activating such a public alert and notification system shall remain with the appropriate governmental authorities.</del></p>	<p><del>alerting and notification capability will range from immediate alerting and notification of the public (within 15 minutes of the time that State and local officials are notified that a situation exists requiring urgent action) to the more likely events where there is substantial time available for the appropriate government authorities to make a judgment whether or not to activate the public alert and notification system. The alerting and notification capability shall additionally include administrative and physical means for a backup method of public alerting and notification capable of being used in the event the primary method of alerting and notification is unavailable during an emergency to alert or notify all or portions of the plume exposure EPZ population. The backup method shall have the capability to alert and notify the public within the plume exposure pathway EPZ, but does not need to meet the 15 minute design objective for the primary prompt public alert and notification system. When there is a decision to activate the alert and notification system, the appropriate governmental authorities will determine whether to activate the entire alert and notification system simultaneously or in a graduated or staged manner. The responsibility for activating such a public alert and notification system shall remain with the appropriate governmental authorities.</del></p>
--	--

10 CFR 72.32(a)(8) states: "*Notification and coordination.* A commitment to and a brief description of the means to promptly notify offsite response organizations and request offsite assistance, including medical assistance for the treatment of contaminated injured onsite workers when appropriate. A control point must be established. The notification and coordination must be planned so that

unavailability of some personnel, parts of the facility, and some equipment will not prevent the notification and coordination. The licensee shall also commit to notify the NRC operations center immediately after notifications of the appropriate offsite response organizations and not later than one hour after the licensee declares an emergency.”

The requirement to maintain the capability to notify the local government agencies (response organizations) is still required under §50.47(b)(5) and has been retained for previous exemption requests. Please provide specific justification for exempting requirement to notify local government agencies.

***Response to RAI-009***

The intent of the originally requested exemption was to maintain the capability to notify offsite response organizations and request offsite assistance, including medical assistance for the treatment of contaminated injured onsite workers when appropriate, as described in the PDEP, Revision 0. A control point is established and the responsibilities for notification and coordination are planned, as described by the PDEP.

In 1999, the NRC exempted Zion Units 1 and 2 from notifying responsible State and local government agencies within 15 minutes of an emergency with the commitment to maintain notification of the State of Illinois and Wisconsin within 30 minutes (Reference 3). In 1998, the NRC exempted Maine Yankee from notifying responsible State and local government agencies within 15 minutes of an emergency and currently Maine Yankee notifies the Maine State Police within one hour of the declaration of an emergency (Reference 4). Both the Zion and Maine Yankee Emergency Plans notify the NRC operations center immediately after notifications of the appropriate offsite response organizations and not later than one hour after the licensee declares an emergency. The past precedent wording of the exemption to Appendix E, IV.D.3 for Zion and Maine Yankee is the same as the past precedent wording referenced in RAI 9.

CR-3 will maintain the capability to communicate with the State Watch Office Tallahassee (SWOT) within 60 minutes after an emergency declaration or a change in classification. The SWOT will assume the responsibility to provide notification to Citrus County (acknowledged by agreements between DEF and Citrus County and also the State of Florida). CR-3 will notify the NRC operations center immediately after notifications of the appropriate offsite response organizations and not later than one hour after the licensee declares an emergency, as described in the PDEP, Revision 0. This notification and coordination practice is consistent with practices maintained by Zion and Maine Yankee, which were approved by the NRC. This was the intent of the originally requested exemption, however based upon this RAI, the text strikeout was incorrect. Therefore, DEF is revising the originally requested exemption from portions of 10 CFR 50, Appendix E, IV.D.3 in Reference 1, to read as shown in Enclosure 2 of this submittal. The revised request is consistent with the past precedent wording shown above.

**RAI-010**

10 CFR 50	Crystal River Request Wording	Past Precedent Wording
Appendix E.IV.E.8.a(1)	A licensee <del>onsite technical support center and an emergency operations facility</del> from which effective direction can be given and effective control can be exercised during an emergency	A licensee <del>onsite technical support center and an emergency operations</del> facility from which effective direction can be given and effective control can be exercised during an emergency

A designated “facility” needs to be maintained to provide a point for command and control. Please provide specific justification for elimination of term “facility” or provide substitute terminology as part of exemption request.

***Response to RAI-010***

The intent of the originally requested exemption was to eliminate the requirement to maintain an onsite technical support center and an emergency operations facility, and maintain a designated onsite facility to provide a point for command and control, as described in the PDEP, Revision 0. Therefore, DEF is revising the originally requested exemption from portions of 10 CFR 50, Appendix E, IV.E.8.a(i) in Reference 1, to read as shown in Enclosure 2 of this submittal. The revised request is consistent with the past precedent wording shown above.

**RAI-011**

10 CFR 50	Crystal River Request Wording	Past Precedent Wording
Appendix E.IV.E.8.b.	<del>For a nuclear power reactor licensee's emergency operations facility required by paragraph 8.a of this section, either a facility located between 10 miles and 25 miles of the nuclear power reactor site(s), or a primary facility located less than 10 miles from the nuclear power reactor site(s) and a backup facility located between 10 miles and 25 miles of the nuclear power reactor site(s). An emergency operations facility may serve more than one nuclear power reactor site. A licensee desiring to locate an emergency operations facility more than 25 miles from a nuclear power reactor site shall request prior</del>	

	<p><del>Commission approval by submitting an application for an amendment to its license. For an emergency operations facility located more than 25 miles from a nuclear power reactor site, provisions must be made for locating NRC and offsite responders closer to the nuclear power reactor site so that NRC and offsite responders can interact face-to-face with emergency response personnel entering and leaving the nuclear power reactor site. Provisions for locating NRC and offsite responders closer to a nuclear power reactor site that is more than 25 miles from the emergency operations facility must include the following:</del></p>	
--	---	--

"A licensee desiring to locate an emergency operations facility more than 25 miles from a nuclear power reactor site shall request prior Commission approval by submitting an application for an amendment to its license. For an emergency operations facility located more than 25 miles from a nuclear power reactor site, provisions must be made for locating NRC and offsite responders closer to the nuclear power reactor site so that NRC and offsite responders can interact face-to-face with emergency response personnel entering and leaving the nuclear power reactor site. Provisions for locating NRC and offsite responders closer to a nuclear power reactor site that is more than 25 miles from the emergency operations facility must include the following:" is not applicable to CR-3 because the EOF is closer than 25 miles from the site. Please remove this wording from the exemption request or justify why the exemption is needed.

**Response to RAI-011**

DEF agrees that this requirement is not applicable to CR-3 and is revising the originally requested exemption from portions of 10 CFR 50, Appendix E, IV.E.8.b in Reference 1, to identify that no exemption is requested.



**RAI-012**

10 CFR 50	Crystal River Request Wording	Past Precedent Wording
Appendix E.IV.E.9.a	Provisions for communications with <del>contiguous State/local governments within the plume exposure pathway EPZ.</del> Such communication shall be tested monthly	Provisions for communications with contiguous State/local governments <del>within the plume exposure pathway EPZ.</del> Such communication shall be tested monthly

Notification of State and the local governments (response organizations) was retained in previous exemptions under §50.47(b)(5) and as discussed in RAI-010 above. Requirement in Appendix E IV.IV.E.9.a continues to be applicable to ensure that adequate lines of communication are maintained in support of these notifications. Please provide specific justification for exempting this requirement as requested.

***Response to RAI-012***

The intent of the originally requested exemption was to maintain the capability to notify State and local response organizations with adequate lines of communication to coordinate assistance onsite if required, as described in the PDEP, Revision 0. CR-3 will maintain the capability to communicate with the State Watch Office Tallahassee (SWOT) within 60 minutes after an emergency declaration or a change in classification. The SWOT will assume the responsibility to provide notification to the Citrus County EOC (acknowledged by agreements between DEF and Citrus County and also the State of Florida). Additionally, CR-3 will notify resources for firefighting, law enforcement, ambulance, and medical services through the established lines of communication. This was the intent of the originally requested exemption, however based upon this RAI, the text strikeout was incorrect. Therefore, DEF is revising the originally requested exemption from portions of 10 CFR 50, Appendix E, IV.E.9.a in Reference 1, to read as shown in Enclosure 2 of this submittal. The revised request is consistent with the past precedent wording shown above.

**RAI-013**

10 CFR 50	Crystal River Request Wording	Past Precedent Wording
Appendix E.IV.E.9.c	Provision for communications among the nuclear power reactor control room, the onsite <del>technical support center, and the emergency operations facility; and among the</del> nuclear facility, the principal State and <del>local</del> emergency operations centers, <del>and the field assessment teams</del> . Such communications systems shall be tested annually.	Provision for communications among the <del>nuclear power reactor control room, the onsite technical support center, and the emergency operations facility; and among the</del> nuclear facility, the principal State and local emergency operations centers, <del>and the field assessment teams</del> . Such communications systems shall be tested annually.

DEK's Basis for Requested Exemption states in part, "an onsite facility (whether the control room or a facility similar to the technical support center) would continue to be maintained, from which effective control can be exercised during an emergency." While the basis for requested exemption indicates that one onsite facility will be maintained, the requested exemption wording infers that two separate locations: the nuclear power control room **AND** an onsite nuclear facility will be maintained to support communications to principle offsite emergency operations centers. Please clarify or provide further justification for exemption.

Additionally, please provide specific justification for exempting provisions for communications with "local" emergency operations centers, as required in §50.47(b)(5).

**Response to RAI-013**

CR-3 will maintain the capability to communicate with the SWOT from the Control Room. The SWOT will assume the responsibility to provide notification to Citrus County. The communication with State and Citrus County EOCs will ensure the coordination of assistance onsite if required. Additional offsite organization contact information will be maintained in the Control Room. The onsite facility located in the Control Complex (adjacent to the Control Room) will be used as a point of assembly for necessary technical expertise to assist the Emergency Coordinator in the assessment, mitigation and response to an emergency, as described in the PDEP, Revision 0. The Control Complex contains commercial telephone lines and intra-plant phones (PAX) and augmented staff responders will bring radios for onsite communication. Augmented staff responding to the Control Complex will have access to up-to-date technical documentation, including drawings, system information and procedures to enable mitigation planning and support of the Control Room staff.

DEF is revising the originally requested exemption from portions of 10 CFR 50, Appendix E, IV.E.9.c in Reference 1, to read as shown in Enclosure 2 of this submittal. The revised request is consistent with the past precedent wording shown above.

**RAI-014**

10 CFR 50	Crystal River Request Wording	Past Precedent Wording
<b>Appendix E.IV.E.9.d</b>	Provisions for communications by the licensee with NRC Headquarters and the appropriate NRC Regional Office Operations Center from the nuclear power reactor control room, the onsite <del>technical support center, and the emergency operations facility</del> . Such communications shall be tested monthly	Provisions for communications by the licensee with NRC Headquarters and the appropriate NRC Regional Office Operations Center from the <del>nuclear power reactor control room, the onsite technical support center, and the emergency operations</del> facility. Such communications shall be tested monthly

DEK's Basis for Requested Exemption states in part, "an onsite facility (whether the control room or a facility similar to the technical support center) would continue to be maintained, from which effective control can be exercised during an emergency". While the basis for requested exemption indicates that one onsite facility will be maintained. The requested exemption wording infers that two separate locations: the nuclear power control room AND an onsite nuclear facility will be maintained to support communications to principle offsite emergency operations centers. Please clarify or provide further justification for exemption.

**Response to RAI-014**

CR-3 will maintain the capability to communicate with the NRC, via the Emergency Notification System (ENS), from the Control Room. DEF is revising the originally requested exemption from portions of 10 CFR 50, Appendix E, IV.E.9.d in Reference 1, to read as shown in Enclosure 2 of this submittal. The revised request is consistent with the past precedent wording shown above.

**RAI-015**

10 CFR 50	Crystal River Request Wording	Past Precedent Wording
Appendix E.IV.F.1	<del>In addition, a radiological orientation training program shall be made available to</del> local services personnel; e.g., local emergency services/ <del>Civil</del> Defense, local law enforcement personnel, <del>local news media persons.</del>	In addition, a radiological orientation training program shall be made available to local services personnel; e.g., local emergency services/ <del>Civil</del> <b>Defense</b> , local law enforcement personnel, <del>local</del> <b>news media persons.</b>

10 CFR 50.47(b)(15) states: "Radiological emergency response training is provided to those who may be called on to assist in an emergency."

10 CFR 72.32(a)(10) states: "*Training.* A brief description of the training the licensee will provide workers on how to respond to an emergency and any special instructions and orientation tours the licensee would offer to fire, police, medical and other emergency personnel."

Local services personnel (i.e., firefighting, local law enforcement and ambulance) expected to respond onsite under the licensee's emergency plan will continue to require some basic knowledge about radiation and the facility to facilitate their timely response consistent with §50.47(b)(15), which DEF did not request an exemption from. Please provide justification for exempting this requirement, specifically how training to prepare these local services personnel to respond to an event at the CR-3 site will be provided or why training is no longer deemed necessary.

**Response to RAI-015**

The intent of the originally requested exemption was to ensure radiological emergency response training is provided to local services personnel (firefighting, local law enforcement, and ambulance) to prepare these local services personnel to respond to an event at the CR-3 site, as described in the PDEP, Revision 0. This intent is reflected in the PDEP, Revision 0. Therefore, DEF is revising the originally requested exemption from portions of 10 CFR 50, Appendix E, IV.F.1 in Reference 1, to read as shown in Enclosure 2 of this submittal. The revised request is consistent with the past precedent wording shown above.

**RAI-016**

10 CFR 50	Crystal River Request Wording	Past Precedent Wording
<p><b>Appendix E.IV.F.2.b</b></p>	<p>Each licensee at each site shall conduct a subsequent exercise of its onsite emergency plan every 2 years. <del>Nuclear power reactor licensees shall submit exercise scenarios under § 50.4 at least 60 days before use in an exercise required by this paragraph 2.b. The exercise may be included in the full participation biennial exercise required by paragraph 2.c. of this section.</del> In addition, the licensee shall take actions necessary to ensure that adequate emergency response capabilities are maintained during the interval between biennial exercises by conducting drills, including at least one drill involving a combination of some of the principal functional areas of the licensee's onsite emergency response capabilities. The principal functional areas of emergency response include activities such as management and coordination of emergency response, accident assessment, event classification, notification of offsite authorities, assessment of the onsite <del>and offsite</del> impact of radiological releases, protective action recommendation development, protective action decision making, plant system repair and mitigative action implementation. During these</p>	<p>Each licensee at each site shall conduct a subsequent exercise of its onsite emergency plan every 2 years. <del>Nuclear power reactor licensees shall submit exercise scenarios under § 50.4 at least 60 days before use in an exercise required by this paragraph 2.b. The exercise may be included in the full participation biennial exercise required by paragraph 2.c. of this section.</del> In addition, the licensee shall take actions necessary to ensure that adequate emergency response capabilities are maintained during the interval between biennial exercises by conducting drills, including at least one drill involving a combination of some of the principal functional areas of the licensee's onsite emergency response capabilities. The principal functional areas of emergency response include activities such as management and coordination of emergency response, accident assessment, event classification, notification of offsite authorities, assessment of the onsite <u>and offsite</u> impact of radiological releases, <del>protective action recommendation development, protective action decision making, plant</del> system repair and mitigative action implementation. During these</p>

	drills, activation of all of the licensee's emergency response facilities <del>(Technical Support Center (TSC), Operations Support Center (OSC), and the Emergency Operations Facility (EOF))</del> would not be necessary, licensees would have the opportunity to consider accident management strategies, supervised instruction would be permitted, operating staff in all participating facilities would have the opportunity to resolve problems (success paths) rather than have controllers intervene, and the drills may focus on the onsite exercise training objectives.	drills, activation of all of the licensee's emergency response facilities <del>(Technical Support Center (TSC), Operations Support Center (OSC), and the Emergency Operations Facility (EOF))</del> would not be necessary, licensees would have the opportunity to consider accident management strategies, supervised instruction would be permitted, operating staff in all participating facilities would have the opportunity to resolve problems (success paths) rather than have controllers intervene, and the drills may focus on the onsite exercise training objectives.
--	---	---

While previous exemptions granted by the NRC recognized the need to retain the ability to assess the impact of a radiological release and promptly communicate with offsite government authorities, the technical basis for evaluating exemption requests to remove formal offsite REP plan requirement assumes that release would not exceed EPA protective action guidelines at the site boundary or that sufficient time would be available for offsite response organizations to implement offsite protective measures on an ad hoc basis. As such, please provide specific justification for DEF's retaining ability for "protective action recommendation development and protective action decision making," including any agreements with State or local government authorities to retain these capabilities.

**Response to RAI-016**

CR-3 recognizes that it is no longer possible for a radiological release from a credible accident to exceed Environmental Protection Agency (EPA) protective action guidelines at the site boundary and that sufficient time would be available for offsite response organizations to implement offsite protective measures on an ad hoc basis. DEF will not plan to retain the ability for "protective action recommendation development and protective action decision making" and this intent is reflected in the PDEP, Revision 0. Therefore, DEF is revising the originally requested exemption from portions of 10 CFR 50, Appendix E, IV.F.2.b in Reference 1, to read as shown in Enclosure 2 of this submittal. The revised request is consistent with the past precedent wording shown above.

**RAI-017**

<b>10 CFR 50</b>	<b>Crystal River Request Wording</b>	<b>Past Precedent Wording</b>
<b>Appendix E.IV.F.2.e</b>	Licensees shall enable any State <del>or local</del> <b>government located within the plume exposure pathway EPZ</b> to participate in the licensee's drills when requested by such State <del>or local</del> <b>government.</b>	Licensees shall enable any State or local government <del>located within the plume exposure pathway EPZ</del> to participate in the licensee's drills when requested by such State or local government.

10 CFR 72.32(a)(12) states: "*Exercises.* (i) Provisions for conducting semiannual communications checks with offsite response organizations and biennial onsite exercises to test response to simulated emergencies. Radiological/Health Physics, Medical, and Fire drills shall be conducted annually. Semiannual communications checks with offsite response organizations must include the check and update of all necessary telephone numbers. **The licensee shall invite offsite response organizations to participate in the biennial exercise.**

ii) **Participation of offsite response organizations in biennial exercises, although recommended, is not required.** Exercises must use scenarios not known to most exercise participants. The licensee shall critique each exercise using individuals not having direct implementation responsibility for conducting the exercise. Critiques of exercises must evaluate the appropriateness of the plan, emergency procedures, facilities, equipment, training of personnel, and overall effectiveness of the response. Deficiencies found by the critiques must be corrected."

While formal REP plans may no longer be required pending granting of exemption request, the licensee's emergency plan will still retain the requirement to promptly notify State and local government authorities and to identify, and provide orientation training to, local service personnel who may be expected to respond to the CR-3 site in the event of an emergency. Please provide additional justification for exempting this requirement, specifically addressing how these elements of the licensee's emergency plan would be periodically tested.

***Response to RAI-017***

CR-3 will enable the State of Florida or local government to participate in drills when requested by such State or local government. DEF is revising the originally requested exemption from portions of 10 CFR 50, Appendix E, IV.F.2.e in Reference 1, to read as shown in Enclosure 2 of this submittal. The revised request is consistent with the past precedent wording shown above.

**RAI-018**

10 CFR 50	Crystal River Request Wording	Past Precedent Wording
<p><b>Appendix E.IV.F.2.f</b></p>	<p><del>Remedial exercises will be required if the emergency plan is not satisfactorily tested during the biennial exercise, such that NRC, in consultation with FEMA, cannot (1) find reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency or (2) determine that the Emergency Response Organization (ERO) has maintained key skills specific to emergency response. The extent of State and local participation in remedial exercises must be sufficient to show that appropriate corrective measures have been taken regarding the elements of the plan not properly tested in the previous exercises.</del></p>	<p>Remedial exercises will be required if the emergency plan is not satisfactorily tested during the biennial exercise, such that NRC, <del>in consultation with FEMA,</del> cannot (1) find reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency or (2) determine that the Emergency Response Organization (ERO) has maintained key skills specific to emergency response. <del>The extent of State and local participation in remedial exercises must be sufficient to show that appropriate corrective measures have been taken regarding the elements of the plan not properly tested in the previous exercises.</del></p>

10 CFR 50.47(b)(14) states: “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, and deficiencies identified as a result of exercises or drills are (will be) corrected.”

Biennial exercises of the licensee’s emergency plan continue to be required and are subject to NRC inspection under §50.47(14). A remedial exercise, if required, ensures that, an exercise does provide reasonable assurance to the NRC that the license can and will take adequate protective measures in the event of a radiological emergency. Please provide justification for exempting this requirement.

***Response to RAI-018***

CR-3 recognizes the role that a remedial exercise has, if required, is to provide reasonable assurance to the NRC that the license can and will take adequate protective measures in the event of a radiological emergency. This was not the intent of the original exemption, however remedial exercises will be conducted commensurate with the reduced exercise scenario scope when necessary. Therefore, DEF is revising the originally requested exemption from portions of 10 CFR 50, Appendix E, IV.F.2.f in Reference 1, to read as shown in Enclosure 2 of this submittal. The revised request is consistent with the past precedence wording shown above. This change will require an update to the PDEP and will be completed with the PDEP RAI response (regulatory commitment).

**RAI-019**

10 CFR 50	Crystal River Request Wording	Past Precedence Wording
Appendix E.IV.F.2.h	<del>The participation of State and local governments in an emergency exercise is not required to the extent that the applicant has identified those governments as refusing to participate further in emergency planning activities, pursuant to § 50.47(c)(1). In such cases, an exercise shall be held with the applicant or licensee and such governmental entities as elect to participate in the emergency planning process.</del>	None.

This section of the regulations applies to an “applicant,” and therefore, is not applicable to CR-3, and does not require exemption. Please provide justification for further staff consideration as an exemption.

***Response to RAI-019***

DEF agrees that this requirement is not applicable to CR-3 and is revising the originally requested exemption from portions of 10 CFR 50, Appendix E, IV.E.F.2.h in Reference 1, to identify that no exemption is requested.

**RAI-020**

10 CFR 50	Crystal River Request Wording	Past Precedence Wording
Appendix E.IV.I	<del>By June 20, 2012, for nuclear power reactor licensees, a range of protective actions to protect onsite personnel during hostile action must be developed to ensure the continued ability of the licensee to safely shut down the reactor and perform the functions of the licensee’s emergency plan.</del>	<del>By June 20, 2012, for nuclear power reactor licensees, a range of protective actions to protect onsite personnel during hostile action must be developed to ensure the continued ability of the licensee to safely shut down the reactor and perform the functions of the licensee’s emergency plan.</del>

Appendix E.IV.I is applicable only to onsite protective actions during hostile actions, which DEF is requesting to be exempted. However, exemption request retains the statement “and perform the functions of the licensee’s emergency plan.” Please provide rational for retaining this statement and provide context for its applicability.



**Response to RAI-020**

DEF agrees that the statement “and perform the functions of the licensee’s emergency plan” should be included in the exemption. Therefore, DEF is revising the originally requested exemption from portions of 10 CFR 50, Appendix E, IV.I in Reference 1, to read as shown in Enclosure 2 of this submittal. This change will require an update to the PDEP and will be completed with the PDEP RAI response (regulatory commitment).

**RAI-021**

The Executive Summary in NUREG-1738 states (in part), “the staff’s analyses and conclusions apply to decommissioning facilities with SFPs [*spent fuel pools*] that meet the design and operational characteristics assumed in the risk analysis. These characteristics are identified in the study as industry decommissioning commitments (IDCs) and staff decommissioning assumptions (SDAs). Provisions for confirmation of these characteristics would need to be an integral part of rulemaking.” The IDCs and SDAs are listed in tables 4.1-1 and 4.1-2, respectively, of NUREG-1738. Please explain if/how CR-3 meets each of these IDCs and SDAs, or why they are not considered applicable.

**Response to RAI-021**

Results of a comparison of the CR-3 spent fuel pool against the IDCs and SDAs listed in tables 4.1-1 and 4.1-2, respectively, of NUREG-1738, are shown below.

**Table 1: Industry Decommissioning Commitments (IDCs) Comparison**

IDC No.	IDC Description	CR-3 Alignment with IDC
1.	Cask drop analyses will be performed or single failure-proof cranes will be in use for handling of heavy loads (i.e., phase II of NUREG-0612 will be implemented).	CR-3 practices align with this commitment.  CR-3 has developed procedures for handling heavy loads that comply with NUREG-0612 guidelines. Heavy load drops (other than spent fuel casks) have been evaluated and safe load paths developed. These safe load paths are administratively controlled by operations procedures. These controls are in accordance with CR-3 Final Safety Analysis Report, Section 9.6.4, “Control of Heavy Loads Program Description.” Currently, the CR-3 Auxiliary Building Overhead Crane (FHCR-5), which will be used for lifting spent fuel casks, is not a single failure proof crane. This crane is administratively controlled so that it will not be used for cask lifts until required upgrades are completed. These upgrades

IDC No.	IDC Description	CR-3 Alignment with IDC
		will be completed before the CR-3 Independent Spent Fuel Storage Installation (ISFSI) project is complete. In accordance with License Amendments #239 (ADAMS Accession No. ML11321A165) and #241 (ADAMS Accession No. ML12136A392), CR-3 will complete replacement of FHCR-5 with a single failure proof crane prior to moving a spent fuel shipping cask.
2.	Procedures and training of personnel will be in place to ensure that onsite and offsite resources can be brought to bear during an event.	CR-3 practices align with this commitment.  Consistent with CR-3 Radiological Emergency Response Plan (RERP) requirements, CR-3 has procedures in place to ensure that onsite and offsite resources are available and appropriate personnel are trained on the access and use thereof during an event. The Permanently Defueled Emergency Plan (PDEP), Revision 0 (contained in Enclosure 3 of Reference 1), maintains these requirements with EM-202, "Duties of the Emergency Coordinator." EM-202 is an implementing procedure identified in Appendix A of the RERP. CR-3 also maintains agreements with offsite agencies to ensure additional resources are available if needed.
3.	Procedures will be in place to establish communication between onsite and offsite organizations during severe weather and seismic events.	CR-3 practices align with this commitment.  PDEP implementing procedure, EM-202, will maintain the requirements that establish the appropriate communication between onsite and offsite organizations during severe weather and following seismic events. CR-3 maintains separate procedures to provide information to assist in a site response to violent weather. Should severe weather or a seismic event occur that results in a RERP/PDEP entry, EM-202 directs personnel to establish the necessary communications and make the appropriate notifications. For example, the Emergency Coordinator (Shift Supervisor) would direct notification of the Emergency Response Organization (ERO), the State of Florida who will notify Citrus County, local response organizations if necessary, and the NRC.
4.	An offsite resource plan will be developed	CR-3 practices align with this commitment.

IDC No.	IDC Description	CR-3 Alignment with IDC
	<p>which will include access to portable pumps and emergency power to supplement onsite resources. The plan would principally identify organizations or suppliers where offsite resources could be obtained in a timely manner.</p>	<p>CR-3 maintains an Off-site Support Directory (OSD). The OSD provides the information necessary to access the necessary offsite resources in a timely manner. Appropriate station personnel are trained to use the OSD to obtain offsite resources, when needed, to support onsite activities. The OSD lists contacts for government agencies, emergency equipment contacts (e.g., for fuel, electrical power, makeup water, firefighting equipment, etc.). It also identifies private agencies that would be capable of transporting resources when needed.</p> <p>EM-503, "Conduct of the Emergency Mitigation Coordinator." EM-503 requires that the Emergency Mitigation Coordinator make the determination on the need for off-site resources. Once received on-site, the accident assessment procedure addressing Contingencies for a Loss of SFP Level will be used for installation and operation of the off-site equipment.</p> <p>EM-503 is not listed in the current implementing procedure list contained in Appendix A of the PDEP, however will be added to align with this IDC. This change will require an update to the PDEP and will be completed with the PDEP RAI response (regulatory commitment).</p>
5.	<p>SFP instrumentation will include readouts and alarms in the Control Room (or where personnel are stationed) for SFP temperature, water level, and area radiation levels.</p>	<p>The CR-3 design aligns with this commitment.</p> <p>SFP temperature: Independent temperature elements monitor SFPs "A" and "B" that provide inputs to the plant computer. Computer points provide high temperature alarms when the monitored pool reaches 140°F.</p> <p>SFP level: Independent level transmitters monitor SFP "A" and "B" that provide inputs to level indicators on the Main Control Board (MCB) for continuous level indication. A high level alarm is received when the monitored pool level reaches elevation 159' and a low level alarm is received when pool level reaches elevation 156'6". Both alarms annunciate in the Main Control Room for the monitored pool. The lowest Control Room level indication is at elevation 154'.</p> <p>The Cask Loading Area is monitored by a level switch which provides a high level</p>

IDC No.	IDC Description	CR-3 Alignment with IDC
		<p>alarm at elevation 159' and a low level alarm at elevation 157'6". Both alarms annunciate in the Main Control Room.</p> <p>There are 2 gates located in the SFP which are normally not installed. One gate isolates the "A" SFP from the "B" SFP and one gate isolates the "B" SFP from the Cask Area. If the gates are not installed, any one of the three level instruments will provide level monitoring for the entire SFP.</p> <p>Area radiation levels: Two general area radiation monitors are installed to measure radiations levels in the fuel storage area. One is located adjacent to the pools at elevation 149' and the second is located on the SF Handling Bridge directly above the SFPs. Both monitors provide local indication and alarms in addition to indication and alarms in the Main Control Room.</p>
6.	<p>SFP seals that could cause leakage leading to fuel uncover in the event of seal failure shall be self limiting to leakage or otherwise engineered so that drainage cannot occur.</p>	<p>The CR-3 design aligns with this commitment.</p> <p>The CR-3 SFPs have no gates with seals that could lead to fuel uncover. There are 2 gates located in the SFP which are normally not installed. One gate isolates the "A" SFP from the "B" SFP and one gate isolates the "B" SFP from the Cask Area. The two gates are identical in construction. The gates are 28'3-3/8" tall and 39" wide. The bottom of the gate is located at elevation 134', when installed, which is approximately 1' above the top of the spent fuel racks. Therefore, failure or leakage of a SFP gate seal would not allow fuel uncover.</p> <p>If failure of a seal were assumed, the design of the gates would significantly limit the amount of leakage allowed. During installation, the gates are lowered down into a vertical slot which captures the gate horizontally. A 1/4" gap exists on each side of the gate to allow for installation. In the event of a seal failure, leakage would be limited to the amount that could flow through the 1/4" gaps. If a differential water level existed across a gate, it is likely that the gate would shift horizontally to one side of the slot due to the differential pressure across the gate and the 1/4" gap would be eliminated. Therefore, it is concluded that the SFP gate design is also leak limiting.</p>

IDC No.	IDC Description	CR-3 Alignment with IDC
		<p>It is likely that the gate between SFP "B" and the cask loading area will be used to load spent fuel into casks to support dry fuel storage. The lowest the cask area water level can be lowered with the permanently installed equipment is elevation 138'4". If the SFPs are at the low level alarm set point of 156'6" and the cask area gate seals fail, approximately 13,500 gallons of water would drain from the SFPs to the cask area. This would drop the level in the SFPs approximately 1'3". Since there is approximately 11,100 gallons per foot in the SFPs, it is concluded that the most credible failure scenario involving a SFP gate would result in a relatively small change in SFP level.</p>
7.	<p>Procedures or administrative controls to reduce the likelihood of rapid draindown events will include (1) prohibitions on the use of pumps that lack adequate siphon protection or (2) controls for pump suction and discharge points. The functionality of anti-siphon devices will be periodically verified.</p>	<p>Both design features and administrative controls are provided which reduce the likelihood of rapid draindown events. Normal SFP level is at 158'6", and the low level alarm is at 156'6". The top of the taller fuel storage rack is at 132'11". The bottom of the SF pump suction connections to the pools are at 154'2". The lowest drain point with available alignment to installed pumps is at 138'4" in the SF cask loading area connected to the pools via a gate which is normally open. This drain line is equipped with an anti-siphon vent, but is not functionally tested; the only valve in the anti-siphon line is locked open by procedure. The drain is a 3" pipe which would limit the rate of SFP draindown. If unmitigated draining were to occur thru this line, the lowest pool level that could be reached would leave approximately 5' of pool level over the fuel storage racks. If draining were to occur, it would be signaled by three level alarms, two area radiation alarms, and likely an Auxiliary Building sump alarm that all annunciate in the Control Room.</p> <p>The cask loading area drain, which is normally isolated by a procedurally controlled closed valve, can be connected to a pump in the Demineralized Water system for water addition. If this drain is used to draw down the cask loading area to load in a cask, the water is transferred by SFP-2 to the SFPs. The Spent Fuel Cooling system operating procedure contains a limit and precaution instructing operators to monitor pool levels and affected tank or system levels, when cross connecting to another system, to prevent inadvertent water transfer out of the SFPs.</p>

IDC No.	IDC Description	CR-3 Alignment with IDC
8.	<p>An onsite restoration plan will be in place to provide repair of the SFP cooling systems or to provide access for makeup water to the SFP. The plan will provide for remote alignment of the makeup source to the SFP without requiring entry to the refuel floor.</p>	<p>CR-3 practices and design align with this commitment.</p> <p>The Demineralized Water system provides normal makeup to the SFPs. The system can be used to add inventory without accessing the fuel pool floor.</p> <p>An assessment will be performed to determine the feasibility of repairing any emergent SFP cooling system issues. However if repair is not feasible, CR-3 has two permanent connection points diverse from the SFP deck for makeup capabilities to the pool. They are located at valves SFV-122 and SFV-129. These valves are physically located on the 143' and 119' elevation of the Auxiliary Building, respectively, and are diverse/separated from the SFP deck (162' elevation plant datum). Each connection (only one is required to achieve the required flow) requires the removal of a threaded pipe cap and the installation of an adapter for hook up to a portable independently powered pump. Either valve is approximately 1000 feet from the expected location of the pump used to mitigate this event; hoses are used to connect the pump to the SF valves. The adapters are stored within an Emergency Operations Box (EOB) which will keep them protected and readily accessible during the event. The contents of this storage box are periodically inventoried by a CR-3 surveillance procedure to ensure the availability of the equipment. The installation of the adapter will be governed by an Accident Assessment procedure addressing Contingencies for Loss of SFP Level, along with the installation of the hose and operation of the pump.</p>
9.	<p>Procedures will be in place to control SFP operations that have the potential to rapidly decrease SFP inventory. These administrative controls may require additional operations or management review, management physical presence for designated operations or administrative limitations such as restrictions on heavy load movements.</p>	<p>CR-3 practices align with this commitment.</p> <p>CR-3 has procedures that stipulate fuel handling activities shall not occur without a licensed Senior Reactor Operator or Certified Fuel Handler providing oversight of the activities. Procedures further require that heavy loads (<math>\geq 2750</math> pounds) that travel over fuel assemblies in the SFP shall not occur without a Shift Supervisor/Certified Fuel Handler providing oversight of the activity and an individual qualified in Radiation Protection on site.</p>

<b>IDC No.</b>	<b>IDC Description</b>	<b>CR-3 Alignment with IDC</b>
		See IDC 1 for a description of control of heavy loads and the CR-3 requirement for a single failure proof crane for fuel cask handling operations.
10.	Routine testing of the alternative fuel pool makeup system components will be performed and administrative controls for equipment out of service will be implemented to provide added assurance that the components would be available, if needed.	CR-3 practices align with this commitment.  The CR-3 Fire Protection Program establishes the administrative controls over the operability of the fire service pumps similar to the controls established in the CR-3 Technical Specifications for accident mitigation systems. Surveillance Procedures periodically test pump starting and running, output, fuel supply, and battery condition. Fire hoses for adding water to the pools are also periodically checked for integrity.

**Table 2: Staff Decommissioning Assumptions (SDAs) Comparison**

SDA No.	SDA Description	CR-3 Alignment with SDA
1.	<p>Licensee's SFP cooling design will be at least as capable as that assumed in the risk assessment, including instrumentation. Licensees will have at least one motor-driven and one diesel-driven fire pump capable of delivering inventory to the SFP.</p>	<p>The CR-3 design aligns with this assumption.</p> <p>The SFP is a safety related, Seismic Class 1 structure that is sufficiently robust to be protected from severe environmental challenges. It is located within the Auxiliary Building which is a Class I structure (excluding the steel roof support structure) protected from external hazards such as missiles and flooding. The CR-3 engineering procedure for the condition monitoring of structures provides the inspection and acceptance criteria to assure design function capability is monitored under the Maintenance Rule.</p> <p>The SFP cooling system at CR-3 includes all the basic equipment described in Figure 3.1 of NUREG-1738. There are 2 redundant motor driven pumps, 2 redundant heat exchangers, an ultimate heat sink, a demineralized water system tank for makeup water, a filtration system, and isolation valves. The installed SF pumps are powered from Engineering Safeguards (ES) buses and can be supplied power from an onsite diesel generator upon a loss of offsite power. Motor and diesel driven fire pumps are also available to provide makeup water to the SFPs.</p> <p>Spent fuel decay heat is transferred to the original systems used to provide SF cooling. These systems include the Nuclear Services Closed Cycle Cooling Water system (SW) and the Nuclear Services and Decay Heat Seawater system (RW). These systems reject heat to the Gulf of Mexico. These systems include a normal duty pump powered from the plant unit buses and safety related emergency duty pumps which are powered from ES buses and can also be powered from the onsite emergency diesel generator.</p> <p>Any future changes to the SFP cooling configuration will maintain conformance with the capabilities assumed in the risk assessment.</p> <p>The response to IDC 5 describes the SFP temperature and level instrumentation and the associated alarms.</p>



SDA No.	SDA Description	CR-3 Alignment with SDA
		CR-3 has the fire pump configuration described in this SDA, each rated for 2000 gpm at 125 psi, capable of delivering inventory to the SFPs.
2.	<p>Walk-downs of SFP systems will be performed at least once per shift by the operators.</p> <p>Procedures will be developed for and employed by the operators to provide guidance on the capability and availability of onsite and offsite inventory makeup sources and time available to initiate these sources for various loss of cooling or inventory events.</p>	<p>The CR-3 operating procedures and processes align with the intent of this assumption.</p> <p>CR-3 procedures require Operations personnel to record SFP level and temperature in the Control Room and visually observe the pools at least once per shift. Other SF system operating parameters are recorded once per day during operator rounds in the Auxiliary Building where the equipment is located.</p> <p>CR-3 response procedures do not explicitly identify the time available to initiate actions for loss of cooling or loss of inventory events. Operations personnel are aware of SFP conditions based on the daily plant data report that is part of the shift briefing for each on-coming crew. This data continually informs Operations personnel of the relative time to respond to SFP events addressed in Abnormal Procedures (AP) for Loss of SFP Cooling or Refueling Canal/SFP Level Lowering. APs are procedures which once entered are executed expeditiously until the entry condition is resolved using installed systems, or the conditions escalate to a severity where additional onsite or offsite resources must be employed. The calculations described in Enclosure 6 of LAR #315 (Reference 1) demonstrate time available to respond to the full spectrum of possible SFP conditions. Due to the 4.5 years since CR-3 last operated, the remaining low decay heat of the fuel provides an abundance of time to respond to anticipated events addressed in the response procedures.</p> <p>In the event of a significant loss of inventory that causes SFP area radiation monitors to alarm, CR-3 would enter one of two Emergency Action Level (EAL) conditions prompting entry in the PDEP. This requires the Emergency Coordinator (Operations Shift Supervisor) to assess the situation and provide notification to the State of Florida (who will notify Citrus County), local response organizations if necessary, and the NRC within one hour, and the ability to augment the ERO within 4 hours.</p>

SDA No.	SDA Description	CR-3 Alignment with SDA
3.	<p>Control Room instrumentation that monitors SFP temperature and water level will directly measure the parameters involved.</p> <p>Level instrumentation will provide alarms at levels associated with calling in offsite resources and with declaring a general emergency.</p>	<p>The CR-3 design aligns with this assumption.</p> <p>The response to IDC 5 describes the SFP temperature and level instrumentation and the associated alarms.</p> <p>CR-3 will adopt the Permanently Defueled (PD) EALs detailed in Nuclear Energy Institute (NEI) 99-01, "Development of Emergency Action Levels for Non-Passive Reactors," Revision 6. The EAL entry conditions include detection of a SFP low level by a high radiation alarm or an elevated temperature condition that may warrant declaration of an emergency event (Unusual Event).</p> <p>Regarding the declaration of a general emergency, it should be understood that consistent with the PD EAL scheme, station conditions will not have the capacity to reach any threshold requiring the declaration of a General Emergency.</p>
4.	<p>Licensee determines that there are no drain paths in the SFP that could lower the pool level (by draining, suction, or pumping) more than 15 feet below the normal pool operating level and that licensee must initiate recovery using offsite sources.</p>	<p>As described in IDC 7, the lowest drain point with available alignment to installed pumps could reduce the SFP levels to 20 feet below the normal pool operating level, which is 5 feet above the top of the fuel storage racks.</p> <p>Recovery from draining can be accomplished by either onsite or offsite resources.</p>
5.	<p>Load Drop consequence analyses will be performed for facilities with non single failure-proof systems. The analyses and any mitigative actions necessary to preclude catastrophic damage to the SFP that would lead to a rapid pool draining would be sufficient to demonstrate that there is high confidence in the facilities ability to withstand a heavy load drop.</p>	<p>The CR-3 design aligns with this assumption.</p> <p>CR-3 has developed procedures for handling heavy loads that comply with NUREG-0612 guidelines. Heavy load drops (other than spent fuel casks) have been evaluated and safe load paths developed. These postulated load drops do not result in catastrophic damage to the SFP. All heavy load lifts (other than casks) and safe load paths are administratively controlled by maintenance and operations procedures.</p> <p>See IDC 1 for a description of control of heavy loads and the CR-3 requirement</p>

SDA No.	SDA Description	CR-3 Alignment with SDA
		for a single failure proof crane for fuel cask handling operations.
6.	<p>Each decommissioning plant will successfully complete the seismic checklist provided in Appendix 2B to this study. If the checklist cannot be successfully completed, the decommissioning plant will perform a plant specific seismic risk assessment of the SFP and demonstrate that SFP seismically induced structural failure and rapid loss of inventory is less than the generic bounding estimates provided in this study (<math>&lt;1 \times 10^{-5}</math> per year including non-seismic events).</p>	<p>CR-3 has determined that completion of the seismic checklist contained in Appendix 2B of NUREG-1738 is not required. Checklist Item 10 contains the following potential mitigation measures that may be considered in the event that the requirements of the seismic screening checklist are not met at a particular plant.</p> <ul style="list-style-type: none"> <li>• Delay requesting the licensing waivers (E-Plan, insurance, etc.) until the plant specific danger of a zirconium fire is no longer a credible concern.</li> <li>• Design and install structural plant modifications to correct/address the identified areas of non-compliance with the checklist. (It must be acknowledged that this option may not be practical for significant seismic failure concerns.)</li> <li>• Perform plant-specific seismic hazard analyses to demonstrate that the seismic risk associated with a catastrophic failure of the pool is at an acceptable level. (The exact "acceptable" risk level has not been precisely quantified but is believed to be in the range of <math>1 \times 10^{-5}</math> per year.)</li> </ul> <p>To satisfy the first mitigative measure, CR-3 has completed an analysis that shows that the surface temperature of the cladding in the SFPs will not exceed the failure temperature for zirconium following a total loss of water from the pools. This is based on spent fuel conditions on or after September 26, 2013. As discussed below for seismic risk, dropped objects, and other IDC/SDAs discussed in this submittal, the probability of a rapid drain down event is very unlikely. Therefore, CR-3 concludes that a zirconium fire is no longer a credible concern.</p> <p>The second mitigative measure is not being considered by CR-3.</p> <p>The third mitigative measure is addressed by existing license and design basis features of the SFP. Currently, CR-3 has no plans to complete a plant specific</p>

SDA No.	SDA Description	CR-3 Alignment with SDA
		<p>seismic risk assessment to show compliance with the seismic checklist. CR-3 is located in a seismically inactive zone and considers the catastrophic failure of the SFP due to seismic activity to be very low risk.</p> <p>The SFP is designed as a Safety Related, Seismic Class I structure using a conservative ground response (0.05g for an Operating Basis Earthquake and 0.1g for a Safe Shutdown Earthquake). The conservative nature of the CR-3 design basis seismic loads was recently confirmed when CR-3 received the EPRI sponsored ground motion study completed by Lettis Consultants International, Inc. The "Central and Eastern United States Seismic Source Characterization" document shows a ground motion response spectra (GMRS) that is less than the licensing basis of the CR-3 Safe Shutdown Earthquake ground response.</p> <p>With no credible zirconium fire and no credible seismic damage to the SFP, CR-3 concludes completion of the seismic checklist is not required. In addition, CR-3 has procedures in place to ensure successful implementation of mitigation measures to supply alternate cooling water using portable equipment. As a result, no radiological releases with offsite consequence are expected following a severe earthquake.</p>
7.	Licensees will maintain a program to provide surveillance and monitoring of Boraflex in high-density spent fuel racks until such time as spent fuel is no longer stored in these high-density racks.	CR-3 does not have Boraflex in the spent fuel racks. CR-3 proactively replaced the "B" Spent Fuel Racks that contained Boraflex in 2000 with racks containing Boral.

**RAI-022**

The first page of Enclosure 2 includes the statement, "shaded text identifies the extent of the proposed exemption with respect to the regulation." However, no shaded text appears in the table, while it appears that strikeouts are actually used to identify proposed exemption text. Please clarify the use of shaded areas or strikeouts.

***Response to RAI-022***

The statement on the first page of Enclosure 2 should have specified "strikeout text identifies the extent of the proposed exemption with respect to the regulation." DEF has revised this statement to identify "bold strike out text identifies the extent of the proposed exemption with respect to the regulation" and updated the text for the proposed exemptions to bold strike out text, as shown in Enclosure 2 of this submittal. The bold strikeout text is consistent with the format of the past precedence exemptions provided in the RAI (Reference 2) previously granted by the NRC for the associated regulations. The Enclosure 2 also includes revision bars to identify the sections of regulation wording with strikeout changes and to identify where the basis for exemption text was modified from the previous Enclosure 2 included in Reference 1.

**RAI-023**

Part of the justification for relaxing formal offsite REP plan requirements is based on the ability to perform actions to prevent or mitigate the effects of a zirconium fire at CR-3. Section 3.1.5 of Enclosure 1 to DEK's license amendment request #315, states "This analysis determined the time to heat up adiabatically to 900 degrees Celsius to be 19.7 hours. This result meets the acceptance criteria. Further, because of the length of time it would take for the adiabatic heatup to occur, there is ample time to respond to any partial drain down event that might cause such an occurrence by restoring cooling or makeup, or providing spray. As a result, the likelihood that such a scenario would progress to a zirconium fire is not deemed credible.

Please provide additional information related to:

- a. What is the availability of trained personnel to perform the required actions?
- b. How is the referenced equipment maintained and tested?
- c. Are there procedures developed to perform this task and how are they controlled?
- d. Will these procedures and equipment be referenced in the emergency plan since the basis for this exemption, in part, is the existence of these mitigative strategies?

***Response to RAI-023***

- a. Availability of trained personnel to perform the required actions

The on-shift Plant Operators and other plant personnel are appropriately trained on the various actions to provide makeup to the Spent Fuel Pool (SFP) using procedures that have been in place since August 2005 to respond to the spectrum of conditions that could result from a large area fire. A minimum of two trained on-shift individuals will be maintained to perform the required actions until all fuel is removed from the pools to storage in an ISFSI. This number of trained personnel are sufficient to perform the required actions necessary to mitigate the conditions.

b. Referenced equipment maintained and tested

Existing plant systems used for SFP makeup are maintained and tested/surveilled during operation using existing plant procedures. Governance for SFP abnormal inventory events is provided within CR-3's abnormal procedure for Refueling Canal/SFP Level Lowering. This procedure provides guidance for inventory make-up to the SFPs using permanent plant systems. An accident assessment guidance procedure contains instructions for multiple methods to provide inventory control using normal make-up through the demineralized water (DW) pumps (required flows < 100 gpm) to significantly larger flow volume pumps, such as the fire service pumps or the portable independently powered pump. During operator rounds, the performance of the normal duty DW pumps is routinely monitored. With respect to the fire service and portable independently powered pump, performance testing by surveillance procedures is performed to validate their functionality on a regular basis.

c. Procedures developed to perform this task and how they are controlled

The CR-3 procedures that govern the operation of the pool are an operating procedure for the spent fuel cooling system, abnormal procedures for Loss of SFP Cooling and Refueling Canal/SFP Level Lowering and an accident assessment procedure addressing Contingencies for Loss of SFP Level. These procedures are maintained in accordance with the CR-3 10 CFR 50 Appendix B document control process.

d. Referencing these procedures and equipment in the emergency plan

These procedures and equipment are not specifically referenced in the PDEP, but are contained in the PDEP implementing procedure, EM-503, "Conduct of the Emergency Mitigation Coordinator." For the scenario described, EM-503 would instruct the Emergency Mitigation Coordinator to direct implementation of the accident assessment procedure addressing Contingencies for a Loss of SFP Level. As identified in IDC No. 4, EM-503 is not listed in the current implementing procedure list contained in Appendix A of the PDEP, however will be added to align with this IDC.

**References:**

1. CR-3 to NRC letter, "Crystal River Unit 3 – License Amendment Request #315, Revision 0, Permanently Defueled Emergency Plan and Emergency Action Level Scheme, and Request for Exemption to Certain Radiological Emergency Response Plan Requirements Defined by 10 CFR 50," dated September 26, 2013. (ADAMS Accession No. ML13274A584)
2. NRC to CR-3, e-Mail from C. Gratton (NRC) to D. Westcott (CR-3), "Request for Additional Information: Exemptions to the Radiological Emergency Plan Requirements," dated February 20, 2014.
3. NRC to Zion Nuclear Power Station, Unit Nos. 1 and 2, "Request For Approval of Defueled Station Emergency Plan and Exemption from Certain Requirements of 10 CFR 50.47, "Emergency Plans"- Zion Nuclear Power Station, Unit Nos. 1 and 2 (TAC NOS MA5253 and MA5254)," dated August 31, 1999. (ADAMS Accession No. 9909070079)
4. NRC to Maine Yankee Atomic Electric Company, "Response to Exemption Request For Portions of Title 10 of the Code of Federal Regulations Part 50, Appendix E, and Section 50.47 of Title 10 of the Code of Federal Regulations for the Maine Yankee Atomic Power Station (TAC NO. L24661)," dated May 2, 2013. (ADAMS Accession No. ML13112A842)

**DUKE ENERGY FLORIDA, INC.**

**CRYSTAL RIVER UNIT 3**

**DOCKET NUMBER 50 - 302 / LICENSE NUMBER DPR - 72**

**EXEMPTIONS TO RADIOLOGICAL EMERGENCY RESPONSE  
PLAN REQUIREMENTS DEFINED BY 10 CFR 50.47 AND  
APPENDIX E TO PART 50, REVISION 1, AND RESPONSE TO  
REQUEST FOR ADDITIONAL INFORMATION**

**ENCLOSURE 2**

**REQUEST FOR EXEMPTION TO CERTAIN RADIOLOGICAL  
EMERGENCY RESPONSE PLAN REQUIREMENTS DEFINED  
BY 10 CFR 50, REVISION 1**



**REQUEST FOR EXEMPTION TO CERTAIN RADIOLOGICAL EMERGENCY RESPONSE PLAN REQUIREMENTS DEFINED BY 10 CFR 50,**  
**REVISION 1**

Bold strike out text identifies the extent of the proposed exemption with respect to the regulation. The basis for the exemption explains the scope of the exception. The 10 CFR 50.12, "Specific exemptions," provisions with respect to the proposed exemptions are discussed in Section 4.2 of Enclosure 1.

Reference #	Regulation in 10 CFR 50.47	Basis for Exemption
1	10 CFR 50.47(b): The onsite <del>and, except as provided in paragraph (d) of this section,</del> offsite emergency response plans for nuclear power reactors must meet the following standards:	<p>Crystal River Unit 3 (CR-3) requests an exemption to the requirements for offsite emergency response plans. Offsite response plans are not necessary because it is no longer possible for the radiological consequences of a design basis accident or a postulated beyond design basis accident to result in radioactive releases which exceed the U.S. Environmental Protection Agency's (EPA) Protective Action Guides (PAGs) at the site boundary.</p> <p>CR-3 requests exemptions from the regulations to the extent that these regulations apply to specific provisions of onsite and offsite emergency planning that are not applicable to CR-3. Details related to specific exemption requests are provided below.</p>
2	10 CFR 50.47(b)(1): Primary responsibilities for emergency response by the nuclear facility licensee and by State and local organizations <del>within the Emergency Planning Zones</del> 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.	<p>CR-3 requests an exemption from the regulation requiring the assignment of primary responsibilities for emergency response to State and local organizations within the existing Plume Exposure Pathway and Ingestion Exposure Pathway Emergency Planning Zones (EPZs). Because it is no longer possible for EPA PAGs to be exceeded at the site boundary, defined Plume Exposure Pathway and Ingestion Exposure Pathway EPZs are no longer necessary. Letters of Agreement and conduct of operations with various offsite support organizations (hospitals, ambulance, fire-fighting and law enforcement) will be maintained to the extent necessary to support defueled conditions. Response may be to the plant or in support of transport or treatment of contaminated and/or injured individuals. The normal station operating staff and Emergency Organization will be replaced by a Defueled On-Shift Staff and Emergency Organization with the capability to respond to declared emergencies on a 24-hour basis. Minimum on-shift positions will be governed by the CR-3 Technical Specifications. Augmented staff will be available to respond</p>

Reference #	Regulation in 10 CFR 50.47	Basis for Exemption
		to an emergency.
3	10 CFR 50.47(b)(2): On-shift facility licensee responsibilities for emergency response are unambiguously defined, adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available and the interfaces among various onsite response activities and offsite support and response activities are specified.	No exemption is requested.
4	10 CFR 50.47(b)(3): Arrangements for requesting and effectively using assistance resources have been made, <del>arrangements to accommodate State and local staff at the licensee's Emergency Operations Facility have been made,</del> and other organizations capable of augmenting the planned response have been identified.	CR-3 requests an exemption from the regulation to maintain arrangements to accommodate State and local emergency response staff at the Emergency Operations Facility (EOF). Because it is no longer possible for EPA PAGs to be exceeded at the site boundary, elimination of the EOF is requested since there will be no need for a response by offsite agencies to this facility. The CR-3 emergency plan will continue to maintain arrangements for requesting and using assistance resources from offsite support organizations.
5	10 CFR 50.47(b)(4): 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, <del>and State and local response plans call for reliance on information provided by facility licensees for determinations of minimum initial offsite response measures.</del>	CR-3 requests an exemption from the regulation requiring the onsite emergency classification and action level scheme information to be provided in support of initial offsite response measures. CR-3 will adopt the Permanently Defueled Emergency Action Levels (EALs) detailed in Nuclear Energy Institute (NEI) 99-01, "Development of Emergency Action Levels for Non-Passive Reactors," Revision 6. Because it is no longer possible for the radiological consequences of a design basis accident or a postulated beyond design basis accident at CR-3 to result in radioactive releases which exceed the EPA PAGs at the site boundary, the need to provide information to State and local response organizations for the development of Protective Action Decisions and offsite emergency planning by State and local organizations, with currently defined emergency response roles, is no longer necessary.
6	10 CFR 50.47(b)(5): Procedures have been established for notification, by the licensee, of State and local response organizations and for notification of emergency personnel by all organizations; the content of initial and followup	CR-3 requests an exemption from the regulation requiring onsite and State and local offsite emergency plans contain the means to provide early notification and clear instruction to the populace within the Plume Exposure Pathway EPZ. Because it is no longer possible for the

Reference #	Regulation in 10 CFR 50.47	Basis for Exemption
	<p>messages to response organizations <del>and the public</del> has been established; <del>and means to provide early notification and clear instruction to the populace within the plume exposure pathway Emergency Planning Zone have been established.</del></p>	<p>radiological consequences of a design basis accident or a postulated beyond design basis accident at CR-3 to result in radioactive releases which exceed the EPA PAGs at the site boundary, the need to provide these messages to the public, the need to maintain the Alert and Notification System, the need for the public to take protective actions and offsite emergency planning by State and local organizations, with currently defined emergency response roles, is no longer necessary.</p>
7	<p>10 CFR 50.47(b)(6): Provisions exist for prompt communications among principal response organizations to emergency personnel <del>and to the public.</del></p>	<p>CR-3 requests an exemption from the regulation requiring maintenance of provisions for prompt notification to the public. Because it is no longer possible for the radiological consequences of a design basis accident or a postulated beyond design basis accident at CR-3 to result in radioactive releases which exceed the EPA PAGs at the site boundary, the need for prompt notification and supporting systems, the need for the public to take protective actions and offsite emergency planning by State and local organizations, with currently defined emergency response roles, is no longer necessary.</p>
8	<p>10 CFR 50.47(b)(7): <del>Information is made available to the public on a periodic basis on how they will be notified and what their initial actions should be in an emergency (e.g., listening to a local broadcast station and remaining indoors),</del> the principal points of contact with the news media for dissemination of information during an emergency (<del>including the physical location or locations</del>) are established in advance, and procedures for coordinated dissemination of information to the public are established.</p>	<p>CR-3 requests an exemption from the regulation requiring information be made available to the public on a periodic basis on how they will be notified and what their initial actions should be during an emergency. News media contacts for CR-3 will be maintained and upon an event at the CR-3 site, information would be disseminated to the public and briefings with pertinent media organizations would be conducted per corporate communication protocols. Because it is no longer possible for the radiological consequences of a design basis accident or a postulated beyond design basis accident at CR-3 to result in radioactive releases which exceed the EPA PAGs at the site boundary, the need to educate the public on what their prompt actions would be in the event of a radiological emergency is not necessary because the need for the public to take protective actions does not exist.</p>
9	<p>10 CFR 50.47(b)(8): Adequate emergency facilities and equipment to support the emergency response are provided and maintained.</p>	<p>No exemption is requested.</p>
10	<p>10 CFR 50.47(b)(9); Adequate methods, systems, and</p>	<p>CR-3 requests an exemption from the regulation requiring offsite</p>

Reference #	Regulation in 10 CFR 50.47	Basis for Exemption
	<p>equipment for assessing and monitoring actual or potential <b>offsite</b> consequences of a radiological emergency condition are in use.</p>	<p>accident assessment capabilities during an emergency and for the onsite emergency plan to contain established procedures for coordinating accident assessment capabilities with offsite organizations. Because it is no longer possible for the radiological consequences of a design basis accident or a postulated beyond design basis accident at CR-3 to result in radioactive releases which exceed the EPA PAGs at the site boundary, there is no need for CR-3 to maintain offsite accident assessment capabilities. Since a need for monitoring and assessing no longer exists, CR-3 no longer intends to maintain the capability to deploy field teams for assessing and monitoring offsite radiological conditions. The CR-3 Permanently Defueled Emergency Plan (PDEP) will continue to maintain onsite assessment capabilities.</p>
11	<p>10 CFR 50.47(b)(10): <del>A range of protective actions has been developed for the plume exposure pathway EPZ for emergency workers and the public. In developing this range of actions, consideration has been given to evacuation, sheltering, and, as a supplement to these, the prophylactic use of potassium iodide (KI), as appropriate. Evacuation time estimates have been developed by applicants and licensees. Licensees shall update the evacuation time estimates on a periodic basis. Guidelines for the choice of protective actions during an emergency, consistent with Federal guidance, are developed and in place, and protective actions for the ingestion exposure pathway EPZ appropriate to the locale have been developed.</del></p>	<p>CR-3 requests an exemption from the regulation requiring development of protective actions for the Plume Exposure Pathway and Ingestion Exposure Pathway EPZs. Because it is no longer possible for EPA PAGs to be exceeded at the site boundary, the need to provide Protective Action Recommendations (PARs) to State and local response organizations for the development of Protective Action Decisions, including consideration to evacuation, sheltering, and, as a supplement to these, the prophylactic use of potassium iodide (KI) is no longer necessary. Evacuation of the public and the need to develop Evacuation Time Estimates (ETEs) is no longer necessary.</p>
12	<p>10 CFR 50.47(b)(11): 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.</p>	<p>No exemption is requested.</p>

Reference #	Regulation in 10 CFR 50.47	Basis for Exemption
13	10 CFR 50.47(b)(12): Arrangements are made for medical services for contaminated injured individuals.	No exemption is requested.
14	10 CFR 50.47(b)(13): General plans for recovery and reentry are developed.	No exemption is requested.
15	10 CFR 50.47(b)(14): 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, and deficiencies identified as a result of exercises or drills are (will be) corrected.	No exemption is requested.
16	10 CFR 50.47(b)(15): Radiological emergency response training is provided to those who may be called on to assist in an emergency.	No exemption is requested.
17	10 CFR 50.47(b)(16): Responsibilities for plan development and review and for distribution of emergency plans are established, and planners are properly trained.	No exemption is requested.
18	10 CFR 50.47(c)(2): <del>Generally, the plume exposure pathway EPZ for nuclear power plants shall consist of an area about 10 miles (16 km) in radius and the ingestion pathway EPZ shall consist of an area about 50 miles (80 km) in radius. The exact size and configuration of the EPZs surrounding a particular nuclear power reactor shall be determined in relation to local emergency response needs and capabilities as they are affected by such conditions as demography, topography, land characteristics, access routes, and jurisdictional boundaries.</del> The size of the EPZs also may be determined on a case-by-case basis for gas cooled nuclear reactors and for reactors with an authorized power level less than 250 MW thermal. <del>The plans for the ingestion pathway shall focus on such actions as are appropriate to protect the food ingestion pathway.</del>	CR-3 requests an exemption from the regulation requiring defined Plume Exposure Pathway and Ingestion Exposure Pathway EPZs. The analysis of the potential radiological impact of an accident for CR-3 in a permanently defueled condition indicates that any releases beyond the site boundary are limited to small fractions of the EPA PAG exposure levels, as detailed in the EPA's "Protective Action Guides and Planning Guidance for Radiological Incidents, Draft for Interim Use and Public Comment," dated March 2013 (PAG Manual). According to the PAG Manual, "EPZs are not necessary at those facilities where it is not possible for PAGs to be exceeded off-site."

Reference #	Regulation in Appendix E to Part 50	Basis for Exemption
19	<p>10 CFR 50 App E: III. The Final Safety Analysis Report; Site Safety Analysis Report</p> <p>The final safety analysis report or the site safety analysis report for an early site permit that includes complete and integrated emergency plans under § 52.17(b)(2)(ii) of this chapter shall contain the plans for coping with emergencies. The plans shall be an expression of the overall concept of operation; they shall describe the essential elements of advance planning that have been considered and the provisions that have been made to cope with emergency situations. The plans shall incorporate information about the emergency response roles of supporting organizations and offsite agencies. That information shall be sufficient to provide assurance of coordination among the supporting groups and with the licensee. The site safety analysis report for an early site permit which proposes major features must address the relevant provisions of 10 CFR 50.47 and 10 CFR part 50, appendix E, within the scope of emergency preparedness matters addressed in the major features. The plans submitted must include a description of the elements set out in Section IV for the emergency planning zones (EPZs) to an extent sufficient to demonstrate that the plans provide reasonable assurance that adequate protective measures can and will be taken in the event of an emergency.</p>	No exemption is requested.
20	<p>10 CFR 50 App E</p> <p>IV Content of Emergency Plans</p> <p>1. The applicant's emergency plans shall contain, but not necessarily be limited to, information needed to demonstrate compliance with the elements set forth below, <i>i.e.</i>, organization for coping with radiological emergencies, assessment actions, activation of emergency organization, notification procedures, emergency facilities and equipment, training,</p>	The scope of the PDEP will not include onsite protective actions during hostile action. In the Emergency Preparedness (EP) Final Rule (December 2011), the NRC defined "hostile action" as, in part, an act directed toward a nuclear power plant or its personnel. The NRC excluded non-power reactors (NPRs) from the definition of "hostile action." CR-3 should not be required to plan for an offsite impact resulting from "hostile action" because: (1) the facility poses a lower radiological risk to the public than does a power reactor, and (2) the facility has a low likelihood of a credible accident resulting in

	<p>maintaining emergency preparedness, recovery, <del>and onsite protective actions during hostile action.</del> In addition, the emergency response plans submitted by an applicant for a nuclear power reactor operating license under this part, or for an early site permit (as applicable) or combined license under 10 CFR part 52, shall contain information needed to demonstrate compliance with the standards described in § 50.47(b), and they will be evaluated against those standards.</p>	<p>radiological releases requiring offsite protective measures.</p>
21	<p>IV. 2 This nuclear power reactor license applicant shall also provide an analysis of the time required to evacuate various sectors and distances within the plume exposure pathway EPZ for transient and permanent populations, using the most recent U.S. Census Bureau data as of the date the applicant submits its application to the NRC.</p>	<p>No exemption is requested. This regulation does not apply to CR-3 (intended for nuclear power reactor license applicants).</p>
22	<p>IV. 3 <del>Nuclear power reactor licensees shall use NRC approved evacuation time estimates (ETEs) and updates to the ETEs in the formulation of protective action recommendations and shall provide the ETEs and ETE updates to State and local governmental authorities for use in developing offsite protective action strategies.</del></p>	<p>CR-3 requests an exemption from the regulation requiring the use of NRC-approved ETEs and updates to the ETEs in the formulation of PARs and the requirement to provide ETE updates to State and local government authorities for use in developing offsite protective action strategies. Because it is no longer possible for EPA PAGs to be exceeded at the site boundary, EPZs and the associated protective actions developed with consideration to ETEs are no longer required.</p>
23	<p>IV. 4 <del>Within 365 days of the later of the date of the availability of the most recent decennial census data from the U.S. Census Bureau or December 23, 2011, nuclear power reactor licensees shall develop an ETE analysis using this decennial data and submit it under § 50.4 to the NRC. These licensees shall submit this ETE analysis to the NRC at least 180 days before using it to form protective action recommendations and providing it to State and local governmental authorities for use in developing offsite protective action strategies.</del></p>	<p>CR-3 requests an exemption from the regulation requiring the use of NRC-approved ETEs and updates to the ETEs in the formulation of PARs and the requirement to provide ETE updates to State and local government authorities for use in developing offsite protective action strategies. Because it is no longer possible for EPA PAGs to be exceeded at the site boundary, EPZs and the associated protective actions developed with consideration to ETEs are no longer required.</p>

24	<p><del>IV 5 During the years between decennial censuses, nuclear power reactor licensees shall estimate EPZ permanent resident population changes once a year, but no later than 365 days from the date of the previous estimate, using the most recent U.S. Census Bureau annual resident population estimate and State/local government population data, if available. These licensees shall maintain these estimates so that they are available for NRC inspection during the period between decennial censuses and shall submit these estimates to the NRC with any updated ETE analysis.</del></p>	<p>CR-3 requests an exemption from the regulation requiring the estimation of EPZ permanent resident population changes once per year using recent U.S. Census Bureau annual resident population estimate and State/local government population data. CR-3 also requests an exemption to the requirement to maintain estimates for NRC inspection and the requirement to submit estimates and updated ETE analysis. ETEs will no longer be used in the formulation of PARs or to provide ETE updates to State and local government authorities for use in developing offsite protective action strategies. Because it is no longer possible for EPA PAGs to be exceeded at the site boundary, EPZs and the associated protective actions developed with consideration to ETEs are no longer required.</p>
25	<p><del>IV 6 If at any time during the decennial period, the EPZ permanent resident population increases such that it causes the longest ETE value for the 2-mile zone or 5-mile zone, including all affected Emergency Response Planning Areas, or for the entire 10-mile EPZ to increase by 25 percent or 30 minutes, whichever is less, from the nuclear power reactor licensee's currently NRC approved or updated ETE, the licensee shall update the ETE analysis to reflect the impact of that population increase. The licensee shall submit the updated ETE analysis to the NRC under § 50.4 no later than 365 days after the licensee's determination that the criteria for updating the ETE have been met and at least 180 days before using it to form protective action recommendations and providing it to State and local governmental authorities for use in developing offsite protective action strategies.</del></p>	<p>CR-3 requests an exemption from the regulation requiring the continuous monitoring of EPZ permanent resident population changes using recent U.S. Census Bureau annual resident population estimate and State/local government population data and the requirement to submit estimates and updated ETE analysis. ETEs will no longer be used in the formulation of PARs or to provide ETE updates to State and local government authorities for use in developing offsite protective action strategies. Because it is no longer possible for EPA PAGs to be exceeded at the site boundary, EPZs and the associated protective actions developed with consideration to ETEs are no longer required.</p>
26	<p>IV 7 After an applicant for a combined license under part 52 of this chapter receives its license, the licensee shall conduct at least one review of any changes in the population of its EPZ at least 365 days prior to its scheduled fuel load. The licensee shall estimate EPZ permanent resident population changes using the most recent U.S. Census Bureau annual resident population</p>	<p>No exemption is requested. CR-3 is not an applicant for a combined license, and therefore, this regulation is not applicable to CR-3.</p>



	estimate and State/local government population data, if available. If the EPZ permanent resident population increases such that it causes the longest ETE value for the 2-mile zone or 5-mile zone, including all affected Emergency Response Planning Areas, or for the entire 10-mile EPZ, to increase by 25 percent or 30 minutes, whichever is less, from the licensee's currently approved ETE, the licensee shall update the ETE analysis to reflect the impact of that population increase. The licensee shall submit the updated ETE analysis to the NRC for review under § 50.4 of this chapter no later than 365 days before the licensee's scheduled fuel load.	
27	A Organization 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 and the means for notification of such individuals in the event of an emergency. Specifically, the following shall be included:	
28	A.1. A description of the normal plant <b>operating</b> organization.	CR-3 requests an exemption to the term "operating" as it no longer applies to CR-3. The station will be maintained by a defueled on-shift staff.
29	A 2. A description of the onsite emergency response organization (ERO) with a detailed discussion of: a. Authorities, responsibilities, and duties of the individual(s) who will take charge during an emergency; b. Plant staff emergency assignments; c. Authorities, responsibilities, and duties of an onsite emergency coordinator who shall be in charge of the exchange of information with offsite authorities responsible for coordinating and implementing offsite emergency measures.	No exemption is requested.
30	A 3. <del>A description, by position and function to be performed, of the licensee's headquarters personnel who will be sent to the plant site to augment the onsite</del>	CR-3 requests an exemption to the requirement to describe headquarters personnel who will be sent to the plant to augment the onsite emergency organization. The level of emergency response

	<b>emergency organization.</b>	required by the CR-3 PDEP does not require response by headquarters personnel. Because it is no longer possible for the radiological consequences of a design basis accident or a postulated beyond design basis accident at CR-3 to result in radioactive releases which exceed the EPA PAGs at the site boundary, the need for headquarters response is no longer necessary.
31	A 4. Identification, by position and function to be performed, of persons within the licensee organization who will be responsible for making <del>offsite</del> dose projections and a description of how these projections will be made and the results transmitted to State and local authorities, NRC, and other appropriate governmental entities.	CR-3 requests an exemption to the requirement to make offsite dose projections. The responsibility and process for completing onsite dose projections and the communication of results to State and local authorities, NRC, and appropriate governmental entities will be maintained by the PDEP. Offsite emergency response capability is no longer appropriate as no design basis accident or postulated beyond design basis accident can result in radioactive releases which exceed EPA PAGs at the site boundary. The postulated dose to the general public from any credible event would not exceed EPA PAGs.
32	A 5. <del>Identification, by position and function to be performed, of other employees of the licensee with special qualifications for coping with emergency conditions that may arise. Other persons with special qualifications, such as consultants, who are not employees of the licensee and who may be called upon for assistance for emergencies shall also be identified. The special qualifications of these persons shall be described.</del>	CR-3 requests an exemption to the requirement to identify employees, other persons or consultants with special qualifications who may be called upon for assistance. Individuals with special qualifications are no longer needed to assist emergency response personnel because no design basis accident or postulated beyond design basis accident can result in radioactive releases which exceed EPA PAGs at the site boundary.
33	A 6. A description of the local offsite services to be provided in support of the licensee's emergency organization.	No exemption is requested.
34	A 7. <del>By June 23, 2014, identification of, and a description of the assistance expected from, appropriate State, local, and Federal agencies with responsibilities for coping with emergencies, including hostile action at the site. For purposes of this appendix, "hostile action" is defined as an act directed toward a nuclear power plant 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</del>	CR-3 requests an exemption to the requirement for describing assistance expected from State, local, and Federal agencies with responsibilities for coping with emergencies, including hostile action. Since protective actions are no longer needed for the public, the responding agencies would not have conflicting duties that may prevent offsite resources from responding to the site during a hostile action. Offsite emergency response capability is no longer appropriate as no design basis accident or postulated beyond design basis accident can result in radioactive releases which exceed EPA PAGs at

	<del>air, land, or water using guns, explosives, projectiles, vehicles, or other devices used to deliver destructive force.</del>	the site boundary. In the EP Final Rule (December 2011), the NRC defined "hostile action" as, in part, an act directed toward a nuclear power plant or its personnel. The NRC excluded NPRs from the definition of "hostile action." CR-3 should not be required to plan for an offsite impact resulting from hostile action because: (1) the facility poses a lower radiological risk to the public than does a power reactor, and (2) the facility has a low likelihood of a credible accident resulting in radiological releases requiring offsite protective measures.
35	<del>A 8. Identification of the State and/or local officials responsible for planning for, ordering, and controlling appropriate protective actions, including evacuations when necessary.</del>	CR-3 requests an exemption to the requirement to identify State or local officials responsible for protective actions. Offsite protective actions are no longer appropriate as no design basis accident or postulated beyond design basis accident can result in radioactive releases which exceed EPA PAGs at the site boundary. The need to provide PARs to State and local response organizations for the development of Protective Action Decisions and the need to plan for, order and control protective actions, including evacuations, is no longer necessary.
36	<del>A 9. By December 24, 2012, for nuclear power reactor licensees, a detailed analysis demonstrating that on shift personnel assigned emergency plan implementation functions are not assigned responsibilities that would prevent the timely performance of their assigned functions as specified in the emergency plan.</del>	CR-3 requests an exemption to the requirement to complete a detailed analysis demonstrating that on shift personnel assigned emergency plan implementation functions are not assigned responsibilities that would prevent the timely performance of their assigned functions as specified in the emergency plan. In the EP Final Rule (December 2011), the NRC acknowledged that the staffing analysis requirement was not necessary for non-power reactor licensees because staffing at non-power reactors is generally small which is commensurate with operating the facility in a manner that is protective of the public health and safety. Because of the slow rate of the event scenarios postulated in the design basis accident and postulated beyond design basis accident analyses, significant time is available to complete actions necessary to mitigate an emergency without impeding timely performance of emergency plan functions.
37	B. Assessment Actions B.1. The means to be used for determining the magnitude of, and for continually assessing the impact of, the release of radioactive materials shall be described, including emergency action levels that are to be used as criteria for determining the need for notification and participation of	CR-3 requests an exemption to the requirement to use EALs for consideration of protective measures outside the site boundary because it is no longer possible for the radiological consequences of a design basis accident or a postulated beyond design basis accident at CR-3 to result in radioactive releases which exceed the EPA PAGs at the site boundary. CR-3 will adopt the Permanently Defueled EALs

	<p>local and State agencies, the Commission, and other Federal agencies, and the emergency action levels that are to be used for determining when and what type of protective measures should be considered within <del>and outside</del> the site boundary to protect health and safety. The emergency action levels shall be based on in-plant conditions and instrumentation in addition to onsite <del>and offsite</del> monitoring. <del>By June 20, 2012, for nuclear power reactor licensees, these action levels must include hostile action that may adversely affect the nuclear power plant.</del> The initial emergency action levels shall be discussed and agreed on by the applicant or licensee and state and local governmental authorities, and approved by the NRC. Thereafter, emergency action levels shall be reviewed with the State and local governmental authorities on an annual basis.</p>	<p>detailed in NEI 99-01, Revision 6. CR-3 also requests an exemption from the requirement to include "hostile action". In the EP Final Rule (December 2011), the NRC defined "hostile action" as, in part, an act directed toward a nuclear power plant or its personnel. The NRC excluded NPRs from the definition of "hostile action." CR-3 should not be required to plan for an offsite impact resulting from hostile action because: (1) the facility poses a lower radiological risk to the public than does a power reactor, and (2) the facility has a low likelihood of a credible accident resulting in radiological releases requiring offsite protective measures.</p> <p>CR-3 proposes to continue to review EALs with the State of Florida and local governmental authorities on an annual basis. However, based upon the reduced scope of EALs for the permanently defueled facility, the scope of the annual review of EALs is expected to be reduced (informal mailings, etc.).</p>
38	<p>B.2. A licensee desiring to change its entire emergency action level scheme shall submit an application for an amendment to its license and receive NRC approval before implementing the change. Licensees shall follow the change process in § 50.54(q) for all other emergency action level changes.</p>	<p>No exemption is requested.</p>
39	<p>C. Activation of Emergency Organization C.1. The entire spectrum of emergency conditions that involve the alerting or activating of progressively larger segments of the total emergency organization shall be described. The communication steps to be taken to alert or activate emergency personnel under each class of emergency shall be described. Emergency action levels (based not only on onsite <del>and offsite</del> radiation monitoring information but also on readings from a number of sensors that indicate a potential emergency, <del>such as the pressure in containment and the response of the Emergency Core Cooling System</del>) for notification of offsite agencies shall be described. The existence, but not the details, of a message authentication scheme shall be noted for such</p>	<p>CR-3 requests an exemption from the requirement to describe information from containment pressure sensors and the Emergency Core Cooling System (ECCS) System for notification of offsite agencies. Because it is no longer possible for the radiological consequences of a design basis accident or a postulated beyond design basis accident to result in radioactive releases which exceed the EPA PAGs at the site boundary, the Permanently Defueled EALs, detailed in NEI 99-01, Revision 6, will be adopted. This scheme eliminates the Site Area Emergency and General Emergency event classifications. Additionally, the need to base EALs on containment pressure and the response of the ECCS is no longer appropriate for notification of offsite agencies.</p>

	<p>agencies. The emergency classes defined shall include: (1) Notification of unusual events, (2) alert, <del>(3) site area emergency, and (4) general emergency.</del> These classes are further discussed in NUREG-0654/FEMA-REP-1.</p>	
<p>40</p>	<p>C.2. <del>By June 20, 2012,</del> nuclear power reactor licensees shall establish and maintain the capability to assess, classify, and declare an emergency condition <del>within 15 minutes</del> after the availability of indications to plant operators that an emergency action level has been exceeded and shall promptly declare the emergency condition as soon as possible following identification of the appropriate emergency classification level. Licensees shall not construe these criteria as a grace period to attempt to restore plant conditions to avoid declaring an emergency action due to an emergency action level that has been exceeded. Licensees shall not construe these criteria as preventing implementation of response actions deemed by the licensee to be necessary <del>to protect public health and safety provided that any delay in declaration does not deny the State and local authorities the opportunity to implement measures necessary to protect the public health and safety.</del></p>	<p>CR-3 requests an exemption from the regulation requiring it maintain the capability to assess, classify and declare an emergency condition within 15 minutes after the availability of indications to plant operators that an EAL has been exceeded and promptly declare the emergency. CR-3 will maintain the capability to assess, classify, and declare an emergency condition. In the permanently defueled condition, the rapidly developing scenarios associated with events initiated during reactor power operations are no longer credible. The consequences resulting from the only remaining events (e.g., fuel handling accident) develop over a significantly longer period. As such, the 15 minute requirement to classify and declare an emergency is unnecessarily restrictive. The elimination of the time permitted to identify an event is acceptable since there is no need for State or local response organizations to implement any protective actions. The 10 CFR 50.72(a)(3) requirement to complete an Emergency Notification System notification of the declaration of an Emergency Class within one hour after the time the licensee declares one of the Emergency Classes is not impacted by this exemption. Because it is no longer possible for the radiological consequences of a design basis accident or a postulated beyond design basis accident at CR-3 to result in radioactive releases which exceed the EPA PAGs at the site boundary, and public protective actions are no longer necessary, the need to identify an emergency within 15 minutes and to promptly provide information to the State and local response organizations for the protection of the public health and safety is no longer necessary.</p>
<p>41</p>	<p>D. Notification Procedures D.1. Administrative and physical means for notifying local, State, and Federal officials and agencies and agreements reached with these officials and agencies <del>for the prompt notification of the public and for public evacuation or other protective measures, should they become necessary,</del> shall be described. This description shall</p>	<p>CR-3 requests an exemption from the regulation requiring emergency plans contain the means to provide early notification to local, State and Federal officials and agencies for the prompt notification of the public and for public evacuation or other protective measures. Because it is no longer possible for the radiological consequences of a design basis accident or a postulated beyond design basis accident at CR-3 to result in radioactive releases which exceed the EPA PAGs at the site</p>

	<p>include identification of <del>the appropriate officials, by title and agency</del>, of the State and local government agencies <del>within the EPZs</del>.</p>	<p>boundary, the need to provide these messages to the public, the need to maintain the Alert and Notification System, and the need to implement protective action strategies are no longer necessary. CR-3 requests an exemption from the regulation requiring the description of State and local government officials within the EPZs. Because it is no longer possible for EPA PAGs to be exceeded at the site boundary, the description of EPZs is no longer necessary.</p>
<p>42</p>	<p>D.2. <del>Provisions shall be described for yearly dissemination to the public within the plume exposure pathway EPZ of basic emergency planning information, such as the methods and times required for public notification and the protective actions planned if an accident occurs, general information as to the nature and effects of radiation, and a listing of local broadcast stations that will be used for dissemination of information during an emergency. Signs or other measures shall also be used to disseminate to any transient population within the plume exposure pathway EPZ appropriate information that would be helpful if an accident occurs.</del></p>	<p>CR-3 requests an exemption from the regulation to provide information to the public on a periodic basis for how they will be notified, what their initial actions should be during an emergency, and for the onsite emergency plan to contain established procedures for the coordinated dissemination of information to the public. Because it is no longer possible for the radiological consequences of a design basis accident or a postulated beyond design basis accident at CR-3 to result in radioactive releases which exceed the EPA PAGs at the site boundary, the need for the public to take protective actions and the need to educate the public on what their prompt actions would be in the event of a radiological emergency is no longer necessary.</p>
<p>43</p>	<p>D.3. A licensee shall have the capability to notify responsible State and local governmental agencies within <del>15</del> minutes after declaring an emergency. <del>The licensee shall demonstrate that the appropriate governmental authorities have the capability to make a public alerting and notification decision promptly on being informed by the licensee of an emergency condition. Prior to initial operation greater than 5 percent of rated thermal power of the first reactor at a site, each nuclear power reactor licensee shall demonstrate that administrative and physical means have been established for alerting and providing prompt instructions to the public within the plume exposure pathway EPZ. The design objective of the prompt public alert and notification system shall be to have the capability to essentially</del></p>	<p>CR-3 requests an exemption from the regulation requiring the capability to notify responsible State and local governmental agencies within 15 minutes after declaring an emergency. Because it is no longer possible for the radiological consequences of a design basis accident or a postulated beyond design basis accident at CR-3 to result in radioactive releases which exceed the EPA PAGs at the site boundary, the need for the public to take protective actions in the event of a radiological emergency is not necessary. CR-3 proposes to complete emergency notification through the State Watch Office Tallahassee (SWOT) within 60 minutes after an emergency declaration or a change in classification. This timeframe is consistent with the 10 CFR 50.72 notification to the NRC and is appropriate because there is no need for State or local response organizations to implement any protective actions. The SWOT will assume the responsibility to provide notification to Citrus County. An exemption to</p>

	<p><del>complete the initial alerting and initiate notification of the public within the plume exposure pathway EPZ within about 15 minutes. The use of this alerting and notification capability will range from immediate alerting and notification of the public (within 15 minutes of the time that State and local officials are notified that a situation exists requiring urgent action) to the more likely events where there is substantial time available for the appropriate governmental authorities to make a judgment whether or not to activate the public alert and notification system. The alerting and notification capability shall additionally include administrative and physical means for a backup method of public alerting and notification capable of being used in the event the primary method of alerting and notification is unavailable during an emergency to alert or notify all or portions of the plume exposure pathway EPZ population. The backup method shall have the capability to alert and notify the public within the plume exposure pathway EPZ, but does not need to meet the 15-minute design objective for the primary prompt public alert and notification system. When there is a decision to activate the alert and notification system, the appropriate governmental authorities will determine whether to activate the entire alert and notification system simultaneously or in a graduated or staged manner. The responsibility for activating such a public alert and notification system shall remain with the appropriate governmental authorities.</del></p>	<p>maintain a backup alerting and notification capability is being taken because this is an offsite emergency planning requirement. Offsite emergency response capability is no longer appropriate as no design basis accident or postulated beyond design basis accident can result in radioactive releases which exceed EPA's protective action guides at the site boundary.</p>
44	<p><del>D.4. If FEMA has approved a nuclear power reactor site's alert and notification design report, including the backup alert and notification capability, as of December 23, 2011, then the backup alert and notification capability requirements in Section IV.D.3 must be implemented by December 24, 2012. If the alert and notification design report does not include a</del></p>	<p>CR-3 requests an exemption from the regulation requiring onsite and State and local offsite emergency plans contain the means to provide early notification and clear instruction to the populace within the Plume Exposure Pathway EPZ. Because it is no longer possible for the radiological consequences of a design basis accident or a postulated beyond design basis accident at CR-3 to result in radioactive releases which exceed the EPA PAGs at the site boundary, the need for the</p>

	<del>backup alert and notification capability or needs revision to ensure adequate backup alert and notification capability, then a revision of the alert and notification design report must be submitted to FEMA for review by June 24, 2013, and the FEMA-approved backup alert and notification means must be implemented within 365 days after FEMA approval. However, the total time period to implement a FEMA-approved backup alert and notification means must not exceed June 22, 2015.</del>	public to take protective actions in the event of a radiological emergency is not necessary. Therefore, the need to provide these messages to the public, the need to maintain the Alert and Notification System and backup capability is no longer necessary.
45	E. Emergency Facilities and Equipment Adequate provisions shall be made and described for emergency facilities and equipment, including: E.1. Equipment at the site for personnel monitoring;	No exemption is requested.
46	E.2. Equipment for determining the magnitude of and for continuously assessing the impact of the release of radioactive materials to the environment;	No exemption is requested.
47	E.3. Facilities and supplies at the site for decontamination of onsite individuals;	No exemption is requested.
48	E.4. Facilities and medical supplies at the site for appropriate emergency first aid treatment;	No exemption is requested.
49	E.5. Arrangements for medical service providers qualified to handle radiological emergencies onsite;	No exemption is requested.
50	E.6. Arrangements for transportation of contaminated injured individuals from the site to specifically identified treatment facilities outside the site boundary;	No exemption is requested.
51	E.7. Arrangements for treatment of individuals injured in support of licensed activities on the site at treatment facilities outside the site boundary;	No exemption is requested.
52	E.8.a. (i) A licensee <del>onsite technical support center and an emergency operations</del> facility from which effective direction can be given and effective control can be	CR-3 requests an exemption from the regulation that requires arrangements are maintained to accommodate State and local emergency response staff at the EOF. Because it is no longer



	<p>exercised during an emergency</p>	<p>possible for EPA PAGs to be exceeded at the site boundary, the EOF will no longer exist and there will be no need for a response by offsite agencies or company employees to the EOF. CR-3 also requests an exemption from the requirement to maintain a Technical Support Center (TSC). An onsite facility will continue to be maintained, from which effective direction can be given and effective control may be exercised during an emergency. The CR-3 PDEP will continue to maintain arrangements for requesting assistance and using resources from appropriate offsite support organizations.</p>
<p>53</p>	<p><b>E.8.a (ii) <del>For nuclear power reactor licensees, a licensee onsite operational support center;</del></b></p>	<p>CR-3 requests an exemption from the requirements for the onsite Operational Support Center (OSC). In the permanently defueled condition, the rapidly developing scenarios associated with events initiated during reactor power operation are no longer credible. As such, an onsite OSC is no longer needed.</p> <p>An onsite facility will continue to be maintained, from which control room support, emergency mitigation, radiation monitoring, and effective control may be exercised during an emergency.</p>
<p>54</p>	<p>E.8.b. For a nuclear power reactor licensee's emergency operations facility required by paragraph 8.a of this section, either a facility located between 10 miles and 25 miles of the nuclear power reactor site(s), or a primary facility located less than 10 miles from the nuclear power reactor site(s) and a backup facility located between 10 miles and 25 miles of the nuclear power reactor site(s). An emergency operations facility may serve more than one nuclear power reactor site. A licensee desiring to locate an emergency operations facility more than 25 miles from a nuclear power reactor site shall request prior Commission approval by submitting an application for an amendment to its license. For an emergency operations facility located more than 25 miles from a nuclear power reactor site, provisions must be made for locating NRC and offsite responders closer to the nuclear power reactor site so that NRC and offsite responders can interact face-to-face with emergency response personnel entering and leaving the</p>	<p>No exemption is requested.</p>

	nuclear power reactor site. Provisions for locating NRC and offsite responders closer to a nuclear power reactor site that is more than 25 miles from the emergency operations facility must include the following:	
55	E.8.b. (1) Space for members of an NRC site team and Federal, State, and local responders	No exemption is requested. Refer to the 10 CFR Appendix E, IV. E.8.b., basis for exemption description, which identifies the elimination of the EOF.
56	E.8.b. (2) Additional space for conducting briefings with emergency response personnel;	No exemption is requested. Refer to the 10 CFR Appendix E, IV. E.8.b., basis for exemption description, which identifies the elimination of the EOF.
57	E.8.b.(3) Communication with other licensee and offsite emergency response facilities;	No exemption is requested. Refer to the 10 CFR Appendix E, IV. E.8.b., basis for exemption description, which identifies the elimination of the EOF.
58	E.8.b.(4) Access to plant data and radiological information; and	No exemption is requested. Refer to the 10 CFR Appendix E, IV. E.8.b., basis for exemption description, which identifies the elimination of the EOF.
59	E.8.b.(5) Access to copying equipment and office supplies;	No exemption is requested. Refer to the 10 CFR Appendix E, IV. E.8.b., basis for exemption description, which identifies the elimination of the EOF.
60	E.8.c. <b>By June 20, 2012, for a nuclear power reactor</b>	CR-3 requests an exemption from the requirements for the EOF.

	<p><del>licensee's emergency operations facility required by paragraph 8.a of this section, a facility having the following capabilities:</del></p> <p><del>(1) The capability for obtaining and displaying plant data and radiological information for each reactor at a nuclear power reactor site and for each nuclear power reactor site that the facility serves;</del></p>	<p>Because it is no longer possible for EPA PAGs to be exceeded at the site boundary, offsite emergency response plans are no longer necessary and there will be no response by offsite agencies to an EOF and JIC. An EOF and JIC will no longer be maintained. The CR-3 PDEP will continue to maintain arrangements for requesting assistance and using resources from offsite support organizations.</p>
61	<p><del>E.8.c (2) The capability to analyze plant technical information and provide technical briefings on event conditions and prognosis to licensee and offsite response organizations for each reactor at a nuclear power reactor site and for each nuclear power reactor site that the facility serves; and</del></p>	<p>CR-3 requests an exemption from the requirement to brief offsite response organizations on event conditions at CR-3. Because it is no longer possible for EPA PAGs to be exceeded at the site boundary, offsite emergency response plans are no longer necessary and there will be no response by offsite agencies to an EOF and JIC. An EOF and JIC will no longer be maintained. The CR-3 PDEP will continue to maintain arrangements for requesting assistance and using resources from offsite support organizations.</p>
62	<p>E.8.c (3) The capability to support response to events occurring simultaneously at more than one nuclear power reactor site if the emergency operations facility serves more than one site; and</p>	<p>This requirement does not apply to the CR-3 EOF.</p>
63	<p><del>E.8.d. For nuclear power reactor licensees, an alternative facility (or facilities) that would be accessible even if the site is under threat of or experiencing hostile action, to function as a staging area for augmentation of emergency response staff and collectively having the following characteristics: the capability for communication with the emergency operations facility, control room, and plant security; the capability to perform offsite notifications; and the capability for engineering assessment activities, including damage control team planning and preparation, for use when onsite emergency facilities cannot be safely accessed during hostile action. The requirements in this paragraph 8.d must be implemented no later than December 23, 2014, with the exception of the capability for staging emergency response organization personnel at the alternative</del></p>	<p>CR-3 will maintain an alternative facility for augmentation of the ERO capable of: communicating with the control room and plant Security, performing notifications to the SWOT, enabling emergency repair and damage control teams to begin planning actions to mitigate the consequences of an event, and supporting a rapid response as soon as the site is deemed accessible, in the event that the site is not accessible. CR-3 requests an exemption from the requirement to maintain communications with the EOF. The scope of an emergency response will be appropriate for the defueled plant status (not be the same as actions necessary for "hostile actions" at operating power plants). In the EP Final Rule (December 2011), the NRC defined "hostile action" as, in part, an act directed toward a nuclear power plant or its personnel. The NRC excluded NPRs from the definition of "hostile action." CR-3 should not be required to plan for an offsite impact resulting from hostile action because: (1) the facility poses a lower radiological risk to the public than does a power reactor, and (2) the facility has a low likelihood of a credible accident resulting in</p>

	<del>facility (or facilities) and the capability for communications with the emergency operations facility, control room, and plant security, which must be implemented no later than June 20, 2012.</del>	radiological releases requiring offsite protective measures.
64	<del>E.8.e. A licensee shall not be subject to the requirements of paragraph 8.b of this section for an existing emergency operations facility approved as of December 23, 2011;</del>	CR-3 requests an exemption from the requirements established for an EOF. Because it is no longer possible for EPA PAGs to be exceeded at the site boundary, the EOF will no longer exist and there will be no need for a response by offsite agencies to the EOF. The CR-3 PDEP will continue to maintain arrangements for requesting assistance and using resources from offsite support organizations.
65	E.9. At least one onsite and one offsite communications system; each system shall have a backup power source. All communication plans shall have arrangements for emergencies, including titles and alternates for those in charge at both ends of the communication links and the primary and backup means of communication. Where consistent with the function of the governmental agency, these arrangements will include:  E.9.a. Provision for communications with contiguous State/local governments <del>within the plume exposure pathway EPZ</del> . Such communications shall be tested monthly.	CR-3 requests an exemption from the regulation requiring communications with contiguous State and local governments within the Plume Exposure Pathway EPZ. Because it is no longer possible for the radiological consequences of a design basis accident or a postulated beyond design basis accident at CR-3 to result in radioactive releases which exceed the EPA PAGs at the site boundary, the need to provide prompt notification to the local governments to implement protective actions is no longer necessary. CR-3 will maintain the capability to communicate with the SWOT. SWOT will assume the responsibility to provide notification to Citrus County. CR-3 will maintain communications with the SWOT and the NRC. The onsite response facilities will be combined into a single facility.
66	E.9.b. Provision for communications with Federal emergency response organizations. Such communications systems shall be tested annually.	No exemption is requested.
67	E.9.c. Provision for communications among the <del>nuclear power reactor control room, the onsite technical support center, and the emergency operations facility; and among the nuclear facility, the principal State and local emergency operations centers, and the field assessment teams</del> . Such communications systems shall be tested annually.	CR-3 requests an exemption from the requirement for communications among the control room, the TSC, and the EOF; and communication with field assessment teams for assessing and monitoring offsite radiological conditions. Because it is no longer possible for the radiological consequences of a design basis accident or a postulated beyond design basis accident at CR-3 to result in radioactive releases which exceed the EPA PAGs at the site boundary, the need to provide prompt notification to the local governments to implement protective actions is no longer necessary. CR-3 will maintain the capability to

		communicate with the SWOT from the control room. The SWOT will assume the responsibility to provide notification to Citrus County. Since a need for monitoring and assessing no longer exists, CR-3 no longer intends to maintain the capability to deploy field teams for assessing and monitoring offsite radiological conditions. The CR-3 PDEP will continue to maintain communication between onsite assessment teams and the onsite response facility.
68	E.9.d. Provisions for communications by the licensee with NRC Headquarters and the appropriate NRC Regional Office Operations Center from the <del>nuclear power reactor control room, the onsite technical support center, and the emergency operations</del> facility. Such communications shall be tested monthly.	CR-3 requests an exemption from the requirement for communications between the NRC and the TSC and EOF. CR-3 will maintain communications with the NRC from the Control Room.
69	F. Training F.1. 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, and (b) The participation in the training and drills by other persons whose assistance may be needed in the event of a radiological emergency shall be described. This shall include a description of specialized initial training and periodic retraining programs to be provided to each of the following categories of emergency personnel	No exemption is requested.
70	F.1. i. Directors and/or coordinators of the plant emergency organization;	No exemption is requested.
71	F.1. ii. Personnel responsible for accident assessment, including control room shift personnel;	No exemption is requested.
72	F.1. iii Radiological monitoring teams;	No exemption is requested.
73	F.1. iv. Fire control teams (fire brigades);	No exemption is requested.
74	F.1. v. Repair and damage control teams;	No exemption is requested.

75	F.1. vi. First aid and rescue teams;	No exemption is requested.
76	F.1. vii. Medical support personnel;	No exemption is requested.
77	F.1. viii. <del>Licensee's headquarters support personnel;</del>	CR-3 requests an exemption from the requirement to provide training to headquarters personnel because the level of emergency response required by the CR-3 PDEP does not require response by headquarters personnel. Because it is no longer possible for the radiological consequences of a design basis accident or a postulated beyond design basis accident at CR-3 to result in radioactive releases which exceed the EPA PAGs at the site boundary, the need for headquarters response is no longer necessary.
78	F.1. ix. Security personnel.	No exemption is requested.
79	F.1 In addition, a radiological orientation training program shall be made available to local services personnel; e.g., local emergency services/ <del>Civil Defense</del> , local law enforcement personnel, <del>local news media persons.</del>	CR-3 requests an exemption from the requirement to maintain a radiological orientation training program for Civil Defense and local news media persons. Training will be provided to prepare local services (firefighting, local law enforcement, and ambulance) personnel for their response to an event at the CR-3 site. Because it is no longer possible for the radiological consequences of a design basis accident or a postulated beyond design basis accident at CR-3 to result in radioactive releases which exceed the EPA PAGs at the site boundary, the need to educate the public on what their prompt actions would be in the event of a radiological emergency is no longer necessary.
80	F.2. The plan shall describe provisions for the conduct of emergency preparedness exercises as follows: Exercises shall test the adequacy of timing and content of implementing procedures and methods, test emergency equipment and communications networks, <del>test the public alert and notification system</del> , and ensure that emergency organization personnel are familiar with their duties.	CR-3 requests an exemption from the requirement to conduct full participation biennial exercises. CR-3 will continue to test the adequacy of timing and content of implementing procedures and methods, test emergency equipment and communications networks, and ensure that ERO personnel are familiar with their duties, through periodic exercise, drill and training activities. CR-3 also requests an exemption from the requirement to test the public notification network as part of emergency preparedness exercises. Because it is no longer possible for the radiological consequences of a design basis accident or a postulated beyond design basis accident at CR-3 to result in radioactive releases which exceed the EPA PAGs at the site boundary, the need to provide emergency messages to the public and

		the need to maintain the Alert and Notification System are no longer necessary.
81	<del>F.2.a. A full participation exercise which tests as much of the licensee, State, and local emergency plans as is reasonably achievable without mandatory public participation shall be conducted for each site at which a power reactor is located. Nuclear power reactor licensees shall submit exercise scenarios under § 50.4 at least 60 days before use in a full participation exercise required by this paragraph 2.a.</del>	CR-3 requests an exemption from the requirement to conduct full participation biennial exercises. CR-3 will continue to include the State of Florida, the Citrus County Sheriff's Office, and local support organizations in the periodic drills and exercises to assess its ability to perform responsibilities related to an emergency at CR-3 to the extent defined by the CR-3 PDEP and State emergency plans. Because it is no longer possible for the radiological consequences of a design basis accident or a postulated beyond design basis accident at CR-3 to result in radioactive releases which exceed the EPA PAGs at the site boundary, the need for State and local response organizations to participate in drills and exercises is no longer necessary. CR-3 also requests an exemption from the requirement to submit the exercise scenario at least 60 days in advance since relief is being requested from the requirement to perform a full participation exercise.
82	F.2.a(i) For an operating license issued under this part, this exercise must be conducted within two years before the issuance of the first operating license for full power (one authorizing operation above 5 percent of rated power) of the first reactor and shall include participation by each State and local government within the plume exposure pathway EPZ and each state within the ingestion exposure pathway EPZ. If the full participation exercise is conducted more than 1 year prior to issuance of an operating licensee for full power, an exercise which tests the licensee's onsite emergency plans must be conducted within one year before issuance of an operating license for full power. This exercise need not have State or local government participation.	No exemption is requested.
83	F 2.a.(ii) For a combined license issued under part 52 of this chapter, this exercise must be conducted within two years of the scheduled date for initial loading of fuel. If the first full participation exercise is conducted more than one year before the scheduled date for initial loading of fuel, an exercise which tests the licensee's onsite emergency plans	No exemption is requested.

	<p>must be conducted within one year before the scheduled date for initial loading of fuel. This exercise need not have State or local government participation. If FEMA identifies one or more deficiencies in the state of offsite emergency preparedness as the result of the first full participation exercise, or if the Commission finds that the state of emergency preparedness does not provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency, the provisions of § 50.54(gg) apply.</p>	
<p>84</p>	<p>F 2.a (iii) For a combined license issued under part 52 of this chapter, if the applicant currently has an operating reactor at the site, an exercise, either full or partial participation, shall be conducted for each subsequent reactor constructed on the site. This exercise may be incorporated in the exercise requirements of Sections IV.F.2.b. and c. in this appendix. If FEMA identifies one or more deficiencies in the state of offsite emergency preparedness as the result of this exercise for the new reactor, or if the Commission finds that the state of emergency preparedness does not provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency, the provisions of § 50.54(gg) apply.</p>	<p>No exemption is requested.</p>
<p>85</p>	<p>F 2.b. Each licensee at each site shall conduct a subsequent exercise of its onsite emergency plan every 2 years. <del>Nuclear power reactor licensees shall submit exercise scenarios under § 50.4 at least 60 days before use in an exercise required by this paragraph 2.b. The exercise may be included in the full participation biennial exercise required by paragraph 2.c. of this section.</del> In addition, the licensee shall take actions necessary to ensure that adequate emergency response capabilities are maintained during the interval between biennial exercises by conducting drills, including at least one drill involving a combination of some of the principal functional areas of the licensee's onsite emergency</p>	<p>CR-3 requests an exemption from the requirement to conduct full participation biennial exercises. Because it is no longer possible for the radiological consequences of a design basis accident or a postulated beyond design basis accident at CR-3 to result in radioactive releases which exceed the EPA PAGs at the site boundary, the need for State and local response organizations to participate in drills and exercises is no longer necessary. CR-3 will continue to include the State of Florida, the Citrus County Sheriff's Office, and local support organizations for firefighting, ambulance and medical services for events at the CR-3 site in the periodic drills and exercises to assess its ability to perform responsibilities related to an emergency at CR-3 to the extent defined by the CR-3 PDEP and State</p>



	<p>response capabilities. The principal functional areas of emergency response include activities such as management and coordination of emergency response, accident assessment, event classification, notification of offsite authorities, assessment of the onsite <del>and offsite</del> impact of radiological releases, <del>protective action recommendation development, protective action decision making, plant</del> system repair and mitigative action implementation. During these drills, activation of all of the licensee's emergency response facilities (<del>Technical Support Center (TSC), Operations Support Center (OSC), and the Emergency Operations Facility (EOF)</del>) would not be necessary, licensees would have the opportunity to consider accident management strategies, supervised instruction would be permitted, operating staff in all participating facilities would have the opportunity to resolve problems (success paths) rather than have controllers intervene, and the drills may focus on the onsite exercise training objectives.</p>	<p>emergency plans.</p> <p>CR-3 also requests an exemption from the requirement to submit the exercise scenario at least 60 days in advance since relief is being requested from the requirement to perform a full participation exercise. The public will no longer have any response actions in the event of an emergency at CR-3. The need to coordinate with State and local response organizations for the development of Protective Action Decisions is no longer necessary. Activation of the EOF, TSC, and OSC is no longer necessary. The onsite response facilities will be combined into a single facility.</p>
86	<p><del>F 2.c. Offsite plans for each site shall be exercised biennially with full participation by each offsite authority having a role under the radiological response plan. Where the offsite authority has a role under a radiological response plan for more than one site, it shall fully participate in one exercise every two years and shall, at least, partially participate in other offsite plan exercises in this period.</del> If two different licensees each have licensed facilities located either on the same site or on adjacent, contiguous sites, and share most of the elements defining co-located licensees, then each licensee shall:</p>	<p>CR-3 requests an exemption from the requirement to conduct full participation biennial exercises. Periodic exercises and drills will be completed to demonstrate ERO proficiency and evaluate performance. Training will be provided to ERO personnel. CR-3 will continue to include the State of Florida, the Citrus County Sheriff's Office, and local support organizations in the periodic drills and exercises to assess its ability to perform responsibilities related to an emergency at CR-3 to the extent defined by the CR-3 PDEP and State emergency plans.</p> <p>Because it is no longer possible for the radiological consequences of a design basis accident or a postulated beyond design basis accident at CR-3 to result in radioactive releases which exceed the EPA PAGs at the site boundary, the need for State and local response organizations to fully participate in drills and exercises is no longer necessary.</p>
87	<p>F 2.c.(1) Conduct an exercise biennially of its onsite emergency plan;</p>	<p>No exemption is requested. This regulation does not apply to CR-3.</p>

88	F 2.c.(2) Participate quadrennially in an offsite biennial full or partial participation exercise;	No exemption is requested. This regulation does not apply to CR-3.
89	F 2.c.(3) Conduct emergency preparedness activities and interactions in the years between its participation in the offsite full or partial participation exercise with offsite authorities, to test and maintain interface among the affected State and local authorities and the licensee. Co-located licensees shall also participate in emergency preparedness activities and interaction with offsite authorities for the period between exercises;	No exemption is requested. This regulation does not apply to CR-3.
90	F 2.c.(4) Conduct a hostile action exercise of its onsite emergency plan in each exercise cycle; and	No exemption is requested. This regulation does not apply to CR-3.
91	F 2.c.(5) Participate in an offsite biennial full or partial participation hostile action exercise in alternating exercise cycles.	No exemption is requested. This regulation does not apply to CR-3.
92	F 2.d. <del>Each State with responsibility for nuclear power reactor emergency preparedness should fully participate in the ingestion pathway portion of exercises at least once every exercise cycle. In States with more than one nuclear power reactor plume exposure pathway EPZ, the State should rotate this participation from site to site. Each State with responsibility for nuclear power reactor emergency preparedness should fully participate in a hostile action exercise at least once every cycle and should fully participate in one hostile action exercise by December 31, 2015. States with more than one nuclear power reactor plume exposure pathway EPZ should rotate this participation from site to site.</del>	CR-3 requests an exemption to conduct the ingestion pathway exercise and the State participation in this exercise. Because it is no longer possible for the radiological consequences of a design basis accident or a postulated beyond design basis accident at CR-3 to result in radioactive releases which exceed the EPA PAGs at the site boundary, the need to conduct an ingestion pathway exercise is no longer necessary. CR-3 also requests an exemption from the requirement to require "hostile action" drills and exercises. In the EP Final Rule (December 2011), the NRC defined "hostile action" as, in part, an act directed toward a nuclear power plant or its personnel. The NRC excluded NPRs from the definition of "hostile action." CR-3 should not be required to plan for an offsite impact resulting from hostile action because: (1) the facility poses a lower radiological risk to the public than does a power reactor, and (2) the facility has a low likelihood of a credible accident resulting in radiological releases requiring offsite protective measures.
93	F 2.e. Licensees shall enable any State or local government <del>located within the plume exposure pathway EPZ</del> to participate in the licensee's drills when requested by	CR-3 requests an exemption from this regulation that requires participation of offsite response organizations within the plume exposure pathway EPZ in drills. CR-3 will enable any State or local

	such State or local government.	government to participate in drills when requested by State of Florida or local government. Because it is no longer possible for the radiological consequences of a design basis accident or a postulated beyond design basis accident at CR-3 to result in radioactive releases which exceed the EPA PAGs at the site boundary, the need to provide information to State and local response organizations for the development of Protective Action Decisions and offsite emergency planning by State and local organizations is no longer necessary.
94	<p>F 2.f. Remedial exercises will be required if the emergency plan is not satisfactorily tested during the biennial exercise, such that NRC, <del>in consultation with FEMA</del>, cannot</p> <p>(1) find reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency or</p> <p>(2) determine that the Emergency Response Organization (ERO) has maintained key skills specific to emergency response. <del>The extent of State and local participation in remedial exercises must be sufficient to show that appropriate corrective measures have been taken regarding the elements of the plan not properly tested in the previous exercises.</del></p>	CR-3 requests an exemption from the requirement for the NRC to consult FEMA if the emergency plan is not satisfactorily tested during the biennial exercise. Remedial exercises will be conducted commensurate with the reduced exercise scenario scope when necessary. Because it is no longer possible for the radiological consequences of a design basis accident or a postulated beyond design basis accident at CR-3 to result in radioactive releases which exceed the EPA PAGs at the site boundary, the need for State and local response organizations to participate in drills and exercises in the same manner as full participation exercise is no longer necessary.
95	F 2.g. All exercises, drills, and training that provide performance opportunities to develop, maintain, or demonstrate key skills must provide for formal critiques in order to identify weak or deficient areas that need correction. Any weaknesses or deficiencies that are identified in a critique of exercises, drills, or training must be corrected.	No exemption is requested.
96	F 2.h. The participation of State and local governments in an emergency exercise is not required to the extent that the applicant has identified those governments as refusing to participate further in emergency planning activities, pursuant to § 50.47(c)(1). In such cases, an exercise shall be held with the applicant or licensee and such governmental entities as elect to participate in the	No exemption is requested.

	<p>emergency planning process.</p>	
<p>97</p>	<p>F 2.i. Licensees shall use drill and exercise scenarios that provide reasonable assurance that anticipatory responses will not result from preconditioning of participants. <del>Such scenarios for nuclear power reactor licensees must include a wide spectrum of radiological releases and events, including hostile action.</del></p> <p>Exercise and drill scenarios as appropriate must emphasize coordination among onsite and offsite response organizations.</p>	<p>CR-3 requests an exemption from the requirement to conduct full participation biennial exercises. Periodic drills and exercises will be completed to demonstrate ERO proficiency and evaluate performance. Because it is no longer possible for the radiological consequences of a design basis accident or a postulated beyond design basis accident at CR-3 to result in radioactive releases which exceed the EPA PAGs at the site boundary, the need for State and local response organizations to participate in drills and exercises is no longer necessary. CR-3 will continue to include the State of Florida, the Citrus County Sheriff's Office, and local support organizations in the periodic drills and exercises to assess its ability to perform responsibilities related to an emergency at CR-3 to the extent defined by the CR-3 PDEP and State emergency plans. CR-3 also requests an exemption from the requirement to include "hostile action" drills and exercises.</p> <p>In the EP Final Rule (December 2011), the NRC defined "hostile action" as, in part, an act directed toward a nuclear power plant or its personnel. The NRC excluded NPRs from the definition of "hostile action." CR-3 should not be required to plan for an offsite impact resulting from hostile action because: (1) the facility poses a lower radiological risk to the public than does a power reactor, and (2) the facility has a low likelihood of a credible accident resulting in radiological releases requiring offsite protective measures.</p>
<p>98</p>	<p>F 2.j. <del>The exercises conducted under paragraph 2 of this section by nuclear power reactor licensees must provide the opportunity for the ERO to demonstrate proficiency in the key skills necessary to implement the principal functional areas of emergency response identified in paragraph 2.b of this section. Each exercise must provide the opportunity for the ERO to demonstrate key skills specific to emergency response duties in the control room, TSC, OSC, EOF, and joint information center. Additionally, in each eight calendar year exercise cycle, nuclear power reactor licensees shall vary the content of scenarios during exercises conducted under paragraph 2 of this section to provide</del></p>	<p>CR-3 requests an exemption from the requirement to conduct full participation biennial exercises. Periodic drills and exercises will be completed to demonstrate ERO proficiency in key skills necessary to implement the principal functional areas of emergency response as applicable for the permanently defueled plant status. Critiques will follow each drill or exercise activity. The CR-3 PDEP discusses exercise and drill types and frequencies of occurrence. Scenarios will be developed to test all major elements of the PDEP within an eight (8) year period. These elements include management and coordination of emergency response, accident assessment, and system repair and corrective action. CR-3 will continue to include the State of Florida, the Citrus County Sheriff's Office, and local support organizations in the periodic drills and exercises to assess its ability to</p>

	<p><del>the opportunity for the ERO to demonstrate proficiency in the key skills necessary to respond to the following scenario elements:</del></p> <p><del>hostile action directed at the plant site, no radiological release or an unplanned minimal radiological release that does not require public protective actions, an initial classification of or rapid escalation to a Site Area Emergency or General Emergency, implementation of strategies, procedures, and guidance developed under § 50.54(hh)(2), and integration of offsite resources with onsite response. The licensee shall maintain a record of exercises conducted during each eight-year exercise cycle that documents the content of scenarios used to comply with the requirements of this paragraph. Each licensee shall conduct a hostile action exercise for each of its sites no later than December 31, 2015. The first eight-year exercise cycle for a site will begin in the calendar year in which the first hostile action exercise is conducted. For a site licensed under Part 52, the first eight-year exercise cycle begins in the calendar year of the initial exercise required by Section IV.F.2.a.</del></p>	<p>perform responsibilities related to an emergency at CR-3 to the extent defined by the CR-3 PDEP and State emergency plans. Because it is no longer possible for the radiological consequences of a design basis accident or a postulated beyond design basis accident at CR-3 to result in radioactive releases which exceed the EPA PAGs at the site boundary, the need for State and local response organizations to participate in drills and exercises is no longer necessary. CR-3 also requests an exemption to require "hostile action" drills and exercises.</p> <p>In the EP Final Rule (December 2011), the NRC defined "hostile action" as, in part, an act directed toward a nuclear power plant or its personnel. The NRC excluded NPRs from the definition of "hostile action." CR-3 should not be required to plan for an offsite impact resulting from hostile action because: (1) the facility poses a lower radiological risk to the public than does a power reactor, and (2) the facility has a low likelihood of a credible accident resulting in radiological releases requiring offsite protective measures.</p>
99	<p>G. Maintaining Emergency Preparedness Provisions to be employed to ensure that the emergency plan, its implementing procedures, and emergency equipment and supplies are maintained up to date shall be described.</p>	<p>No exemption is requested.</p>
100	<p>H. Recovery Criteria to be used to determine when, following an accident, reentry of the facility would be appropriate or when operation could be resumed shall be described.</p>	<p>No exemption is requested.</p>
101	<p>I. Onsite Protective Actions During Hostile Action <del>By June 20, 2012, for nuclear power reactor licensees, a range of protective actions to protect onsite personnel during hostile action must be developed to</del></p>	<p>CR-3 requests an exemption from the requirement to establish protective actions to protect onsite personnel during hostile action to ensure reactor shut down. In the EP Final Rule (December 2011), the NRC defined "hostile action" as, in part, an act directed toward a</p>

	<p><del>ensure the continued ability of the licensee to safely shut down the reactor and perform the functions of the licensee's emergency plan.</del></p>	<p>nuclear power plant or its personnel. The NRC excluded NPRs for an offsite impact resulting from hostile action because: (1) the facility poses a lower radiological risk to the public than does a power reactor, and (2) the facility has a low likelihood of a credible accident resulting in radiological releases requiring offsite protective measures.</p>
102	<p>10CFR 50 App E V. Implementing Procedures No less than 180 days before the scheduled issuance of an operating license for a nuclear power reactor or a license to possess nuclear material, or the scheduled date for initial loading of fuel for a combined license under part 52 of this chapter, the applicant's or licensee's detailed implementing procedures for its emergency plan shall be submitted to the Commission as specified in § 50.4. Licensees who are authorized to operate a nuclear power facility shall submit any changes to the emergency plan or procedures to the Commission, as specified in § 50.4, within 30 days of such changes.</p>	<p>No exemption is requested.</p>
103	<p>10CFR 50 App E VI. Emergency Response Data System 1. The Emergency Response Data System (ERDS) is a direct near real-time electronic data link between the licensee's onsite computer system and the NRC Operations Center that provides for the automated transmission of a limited data set of selected parameters. The ERDS supplements the existing voice transmission over the Emergency Notification System (ENS) by providing the NRC Operations Center with timely and accurate updates of a limited set of parameters from the licensee's installed onsite computer system in the event of an emergency. When selected plant data are not available on the licensee's onsite computer system, retrofitting of data points is not required. The licensee shall test the ERDS periodically to verify system availability and operability. The frequency of ERDS testing will be quarterly unless otherwise set by NRC based on demonstrated</p>	<p>The regulation that identifies the requirement to maintain the Emergency Response Data System (ERDS) is not applicable to nuclear power facilities that are permanently shutdown.</p> <p>Based upon the permanently defueled status of CR-3, this system is no longer necessary to transmit safety system parameter data. No exemption is requested since this change in ERDS data requirement is identified in 10 CFR 50 Appendix E, VI. 2.</p>

	<p>system performance.</p> <p>2. Except for Big Rock Point and all nuclear power facilities that are shut down permanently or indefinitely, onsite hardware shall be provided at each unit by the licensee to interface with the NRC receiving system. Software, which will be made available by the NRC, will assemble the data to be transmitted and transmit data from each unit via an output port on the appropriate data system.</p>	
--	--	--

**DUKE ENERGY FLORIDA, INC.**

**CRYSTAL RIVER UNIT 3**

**DOCKET NUMBER 50-302 / LICENSE NUMBER DPR-72**

**EXEMPTIONS TO RADIOLOGICAL EMERGENCY RESPONSE  
PLAN REQUIREMENTS DEFINED BY 10 CFR 50.47 AND  
APPENDIX E TO PART 50, REVISION 1, AND RESPONSE TO  
REQUEST FOR ADDITIONAL INFORMATION**

**ENCLOSURE 3**

**REGULATORY COMMITMENTS**



### REGULATORY COMMITMENTS

The following table identifies the actions committed to by Duke Energy Florida, Inc. in this document. Any other statements in this submittal are provided for information purposes and are not considered to be regulatory commitments. Please notify the Crystal River Unit 3 (CR-3) Manager, Nuclear Regulatory Affairs of any questions regarding this document or any associated regulatory commitments.

<b>Regulatory Commitments</b>	<b>Due Date/Event</b>
CR-3 will incorporate the requirement to complete the review of Emergency Action Levels (EALs) with the State of Florida and local governmental authorities on an annual basis in a revision to the Permanently Defueled Emergency Plan (PDEP) in the response to the PDEP RAI.	September 25, 2014
CR-3 will incorporate the requirement to conduct remedial exercises commensurate with the reduced exercise scenario scope, when necessary, in a revision to the PDEP in the response to the PDEP RAI.	September 25, 2014
CR-3 will remove "hostile action" from the PDEP and the Permanently Defueled (PD) (EAL) Bases Manual in a revision to the PDEP in the response to the PDEP RAI.	September 25, 2014
CR-3 will add EM-503, "Conduct of the Mitigation Coordinator," to the PDEP implementing procedure list in the response to the PDEP RAI.	September 25, 2014