[7590-01-P]

NUCLEAR REGULATORY COMMISSION

[Docket No. 50-302; NRC-2015-0042]

Duke Energy Florida, Inc.; Crystal River Unit 3 Nuclear Generating Station

AGENCY: Nuclear Regulatory Commission.

ACTION: Exemption; issuance.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is granting exemptions in response to a request from Duke Energy Florida, Inc. (DEF or the licensee) regarding certain emergency planning (EP) requirements. The exemptions will eliminate the requirements to maintain an offsite radiological emergency plan and reduce the scope of onsite emergency planning activities at the Crystal River Unit 3 Nuclear Generating Station (CR-3) based on the reduced risks of accidents that could result in an offsite radiological release at a decommissioning nuclear power reactor.

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I. Background.

The CR-3 facility is a decommissioning power reactor located in Citrus County, Florida. The licensee, DEF, is the holder of CR-3 Facility Operating License No. DPR-72. The license provides, among other things, that the facility is subject to all rules, regulations, and orders of the NRC now or hereafter in effect.

By letter dated February 20, 2013 (ADAMS Accession No. ML13056A005), DEF submitted to the NRC a certification in accordance with section 50.82(a)(1)(i) of Title 10 of the *Code of Federal Regulations* (10 CFR) indicating it would permanently cease power operations,

and 10 CFR 50.82(a)(1)(ii) that it had permanently defueled the reactor vessel at CR-3. On May 28, 2011, DEF completed the final removal of fuel from the reactor vessel at CR-3. As a permanently shutdown and defueled facility, and in accordance with section 50.82(a)(2), DEF is no longer authorized to operate the reactor or emplace nuclear fuel into the reactor vessel. CR-3 is still authorized to possess and store irradiated (i.e., spent) nuclear fuel. The spent fuel is currently being stored onsite in a spent fuel pool (SFP).

During normal power reactor operations, the forced flow of water through the reactor coolant system (RCS) removes heat generated by the reactor. The RCS, operating at high temperatures and pressures, transfers this heat through the steam generator tubes converting non-radioactive feedwater to steam, which then flows to the main turbine generator to produce electricity. Many of the accident scenarios postulated in the updated safety analysis reports (USARs) for operating power reactors involve failures or malfunctions of systems, which could affect the fuel in the reactor core, which in the most severe postulated accidents, would involve the release of large quantities of fission products. With the permanent cessation of reactor operations at CR-3 and the permanent removal of the fuel from the reactor vessel, such accidents are no longer possible. The reactor, RCS, and supporting systems are no longer in operation and have no function related to the storage of the spent fuel. Therefore, EP provisions for postulated accidents involving failure or malfunction of the reactor, RCS, or supporting systems are no longer applicable.

Based on the time that CR-3 has been permanently shutdown (approximately 64 months), there is no longer any possibility of an offsite radiological release from a design-basis accident that could exceed the U.S. Environmental Protection Agency's (EPA) Protective Action Guidelines (PAGs) at the exclusion area boundary.

The EP requirements of 10 CFR 50.47, "Emergency plans," and appendix E to 10 CFR part 50, "Emergency Planning and Preparedness for Production and Utilization Facilities," continue to apply to nuclear power reactors that have permanently ceased operation and have

removed all fuel from the reactor vessel. There are no explicit regulatory provisions distinguishing EP requirements for a power reactor that is permanently shutdown and defueled from a reactor that is authorized to operate. In order for DEF to modify the CR-3 emergency plan to reflect the reduced risk associated with the permanently shutdown and defueled condition of CR-3, certain exemptions from the EP regulations must be obtained before the CR-3 emergency plan can be amended.

II. Request/Action.

By letter dated September 26, 2013 (ADAMS Accession No. ML13274A584), "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," DEF requested exemptions from certain EP requirements of 10 CFR part 50 for CR-3. More specifically, DEF requested exemptions from certain planning standards in 10 CFR 50.47(b) regarding onsite and offsite radiological emergency plans for nuclear power reactors; from certain requirements in 10 CFR 50.47(c)(2) that require establishment of plume exposure and ingestion pathway emergency planning zones for nuclear power reactors; and from certain requirements in 10 CFR 50, appendix E, section IV, which establishes the elements that make up the content of emergency plans. In a letter dated March 28, 2014 (ADAMS Accession No. ML14098A072), DEF provided responses to the NRC staff's request for additional information (RAI) concerning the proposed exemptions. In a letter dated May 7, 2014 (ADAMS Accession No. ML14139A006), DEF provided an additional supplemental response to a separate set of RAIs, which contained information applicable to the SFP inventory makeup strategies for mitigating the potential loss of water inventory due to a beyond-design-basis accident. In a letter dated August 28, 2014 (ADAMS Accession No. ML14251A237), CR-3 provided a supplement, which

amended its request to align with the exemptions recommended by the NRC staff and approved by the Commission in staff requirements memorandum (SRM) to SECY-14-0066, “Request by Dominion Energy Kewaunee, Inc. for Exemptions from Certain Emergency Planning Requirements,” dated August 7, 2014 (ADAMS Accession No. ML14219A366). The information provided by DEF included justifications for each exemption requested. The exemptions requested by DEF will eliminate the requirements to maintain formal offsite radiological emergency plans, reviewed by the Federal Emergency Management Agency (FEMA) under the requirements of 44 CFR part 350, and reduce the scope of onsite emergency planning activities. DEF stated that application of all of the standards and requirements in 10 CFR 50.47(b), 10 CFR 50.47(c) and 10 CFR part 50, appendix E is not needed for adequate emergency response capability based on the reduced risks at the permanently shutdown and defueled facility. If offsite protective actions were needed for a very unlikely accident that could challenge the safe storage of spent fuel at CR-3, provisions exist for offsite agencies to take protective actions using a comprehensive emergency management plan (CEMP) under the National Preparedness System to protect the health and safety of the public. A CEMP in this context, also referred to as an emergency operations plan (EOP), is addressed in FEMA’s Comprehensive Preparedness Guide 101, “Developing and Maintaining Emergency Operations Plans.” Comprehensive Preparedness Guide 101 is the foundation for State, territorial, Tribal, and local emergency planning in the United States. It promotes a common understanding of the fundamentals of risk-informed planning and decision making and helps planners at all levels of government in their efforts to develop and maintain viable, all-hazards, all-threats emergency plans. An EOP is flexible enough for use in all emergencies. It describes how people and property will be protected; details who is responsible for carrying out specific actions; identifies the personnel, equipment, facilities, supplies and other resources available; and outlines how all actions will be coordinated. A CEMP is often referred to as a synonym for “all hazards planning.”

III. Discussion.

In accordance with 10 CFR 50.12, “Specific exemptions,” the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of 10 CFR part 50 when: (1) the exemptions are authorized by law, will not present an undue risk to public health or safety, and are consistent with the common defense and security; and (2) any of the special circumstances listed in 10 CFR 50.12(a)(2) are present. These special circumstances include, among other things, that the application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule.

As noted previously, the current EP regulations contained in 10 CFR 50.47(b) and appendix E to 10 CFR part 50 apply to both operating and shutdown power reactors. The NRC has consistently acknowledged that the risk of an offsite radiological release at a power reactor that has permanently ceased operations and removed fuel from the reactor vessel is significantly lower, and the types of possible accidents are significantly fewer, than at an operating power reactor. However, current EP regulations do not recognize that once a power reactor permanently ceases operation, the risk of a large radiological release from credible emergency accident scenarios is significantly reduced. The reduced risk for any significant offsite radiological release is based on two factors. One factor is the elimination of accidents applicable only to an operating power reactor, resulting in fewer credible accident scenarios. The second factor is the reduced short-lived radionuclide inventory and decay heat production due to radioactive decay. Due to the permanently defueled status of the reactor, no new spent fuel will be added to the SFP and the radionuclides in the current spent fuel will continue to decay as the spent fuel ages. The irradiated fuel will produce less heat due to radioactive decay, increasing the available time to mitigate the SFP inventory loss. The NRC’s NUREG-

1738, “Technical Study of Spent Fuel Pool Accident Risk at Decommissioning Nuclear Power Plants,” dated February 2001 (ADAMS Accession No. ML010430066), confirmed that for permanently shutdown and defueled power reactors bounded by the assumptions and conditions in the report, the risk of offsite radiological release is significantly less than for an operating power reactor.

EP exemptions similar to those requested by DEF were granted to permanently shutdown and defueled power reactor licensees, such as for Zion Nuclear Power Station in 1999 (ADAMS Legacy Accession No. 9909070079) and Kewaunee Power Station in 2014 (ADAMS Accession No. ML14261A223). However, the exemptions did not relieve the licensees of all EP requirements. Rather, the exemptions allowed the licensees to modify their emergency plans commensurate with the credible site-specific risks that were consistent with a permanently shutdown and defueled status. Specifically, approval of the prior exemptions was based on demonstrating that: (1) the radiological consequences of design-basis accidents would not exceed the limits of the EPA PAGs at the exclusion area boundary; and (2) in the unlikely event of a beyond-design-basis accident resulting in a loss of all modes of heat transfer from the fuel stored in the SFP, there is sufficient time to initiate appropriate mitigating actions, and if needed, for offsite authorities to implement offsite protective actions using a CEMP approach to protect the health and safety of the public.

With respect to design-basis accidents at CR-3, the licensee provided analyses demonstrating that none would warrant an offsite radiological emergency plan meeting the requirements of 10 CFR part 50.

With respect to beyond-design-basis accidents at CR-3, the licensee analyzed two bounding beyond-design-basis accidents that have a potential for a significant offsite release. One of these beyond-design-basis accidents involves a complete loss of SFP water inventory, where cooling of the spent fuel would be primarily accomplished by natural circulation of air through the uncovered spent fuel assemblies. The licensee’s analysis of this accident shows

that as of September 26, 2013, air cooling of the spent fuel assemblies was sufficient to keep the fuel within a safe temperature range indefinitely without fuel damage or offsite radiological release. The second beyond-design-basis accident analysis performed by the licensee could not completely rule out the possibility of a radiological release from an SFP. This more limiting analysis assumes an incomplete drain down of the SFP water, or some other catastrophic event (such as a complete drainage of the SFP with rearrangement of spent fuel rack geometry and/or the addition of rubble to the SFP) that would effectively impede any decay heat removal through all possible modes of cooling. This analysis is commonly referred to as an adiabatic heat-up. The licensee's analysis demonstrates that, as of September 26, 2013, there would be at least 19.7 hours under adiabatic heat-up conditions before the spent fuel cladding would reach a temperature where the potential for a significant offsite radiological release could occur. This analysis conservatively does not consider the period of time from the initiating event causing a loss of SFP water inventory until all cooling means are lost.

The NRC staff has verified DEF's analyses and its calculations. The analyses provide reasonable assurance that in granting the requested exemptions to DEF, there is no design-basis accident that will result in an offsite radiological release exceeding the EPA PAGs at the exclusion area boundary. In the unlikely event of a beyond-design-basis accident affecting the SFP that results in adiabatic heat-up conditions (i.e., a complete loss of heat removal via all modes of heat transfer), the NRC staff has reviewed and verified that there will be at least 19.7 hours available before an offsite release might occur and, therefore, at least 19.7 hours to initiate appropriate mitigating actions to restore a means of heat removal to the spent fuel. If a radiological release were projected to occur under this unlikely scenario, a minimum of 10 hours is considered sufficient time for offsite authorities to implement protective actions using a CEMP approach to protect the health and safety of the public.

The NRC staff reviewed the licensee's justification for the requested exemptions against the criteria in 10 CFR 50.12(a) and the bases for prior EP exemption request approvals, as

discussed above. The staff determined, as described below, that the criteria in 10 CFR 50.12(a) are met, and that the exemptions should be granted. Assessment of the DEF EP exemptions is described in SECY-14-0118, "Request by Duke Energy Florida, Inc., for Exemptions from Certain Emergency Planning Requirements," dated October 29, 2014 (ADAMS Accession No. ML14219A444). The Commission approved the NRC staff's intention to grant the exemptions in the SRM to SECY-14-0118, dated December 30, 2014 (ADAMS Accession No. ML14364A111). Descriptions of the specific exemptions requested by DEF and the NRC staff's basis for granting each exemption are provided in SECY-14-0118 and summarized in a table at the end of this document. The staff's detailed review and technical basis for the approval of the specific EP exemptions are provided in the NRC staff's safety evaluation enclosed in an NRC letter dated March 30, 2015 (ADAMS Accession No. ML15058A906).

A. Authorized by Law

The licensee has proposed exemptions from certain EP requirements in 10 CFR 50.47(b), 10 CFR 50.47(c)(2), and 10 CFR 50, appendix E, section IV, that would allow DEF to revise the CR-3 Emergency Plan to reflect the permanently shutdown and defueled condition of the station. As stated above, in accordance with 10 CFR 50.12, the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of 10 CFR part 50. The NRC staff has determined that granting of the licensee's proposed exemptions will not result in a violation of the Atomic Energy Act of 1954, as amended, or the NRC's regulations. Therefore, the exemptions are authorized by law.

B. No Undue Risk to Public Health and Safety

As stated previously, DEF provided analyses that show the radiological consequences of design-basis accidents will not exceed the limits of the EPA PAGs at the exclusion area

boundary. Therefore, formal offsite radiological emergency plans required under 10 CFR part 50 are no longer needed for protection of the public beyond the exclusion area boundary.

Although very unlikely, there is one postulated beyond-design-basis accident that might result in significant offsite radiological releases. However, NUREG-1738 confirms that the risk of beyond-design-basis accidents is greatly reduced at permanently shutdown and defueled reactors. The NRC staff's analyses concludes that the event sequences important to risk at permanently shutdown and defueled power reactors are limited to large earthquakes and cask drop events. For EP assessments, this is an important difference relative to operating power reactors where typically a large number of different sequences make significant contributions to risk. Per NUREG-1738, relaxation of offsite EP requirements under 10 CFR part 50 a few months after shutdown resulted in only a small change in risk.

NUREG-1738 further concludes that the change in risk due to relaxation of offsite EP requirements is small because the overall risk is low, and because even under current EP requirements for operating power reactors, EP was judged to have marginal impact on evacuation effectiveness in the severe earthquakes that dominate SFP risk. Specifically, for ground motion levels that correspond to SFP failure in the central and eastern United States, it is expected that electrical power would be lost and more than half of the bridges and buildings (including those housing communication systems and emergency response equipment) would be unsafe even for temporary use within at least 10 miles of the plant. This approach is also consistent with previous Commission rulings on San Onofre and Diablo Canyon in which the Commission found that for those risk-dominant earthquakes that cause very severe damage to both the plant and the offsite area, emergency response would have marginal benefit because of offsite damage. All other sequences including cask drops (for which offsite radiological emergency plans are expected to be more effective) are too low in likelihood to have a significant impact on risk.

Therefore, granting exemptions that eliminate the requirements of 10 CFR part 50 to

maintain offsite radiological emergency plans and reducing the scope of onsite emergency planning activities will not present an undue risk to the public health and safety.

C. Consistent with the Common Defense and Security

The requested exemptions by DEF only involve EP requirements under 10 CFR part 50 and will allow DEF to revise the CR-3 Emergency Plan to reflect the permanently shutdown and defueled condition of the facility. Physical security measures at CR-3 are not affected by the requested EP exemptions. The discontinuation of formal offsite radiological emergency plans and the reduction in scope of the onsite emergency planning activities at CR-3 will not adversely affect DEF's ability to physically secure the site or protect special nuclear material. Therefore, the proposed exemptions are consistent with common defense and security.

D. Special Circumstances

Special circumstances, in accordance with 10 CFR 50.12(a)(2)(ii), are present whenever application of the regulation in the particular circumstances is not necessary to achieve the underlying purpose of the rule. The underlying purpose of 10 CFR 50.47(b), 10 CFR 50.47(c)(2), and 10 CFR part 50, appendix E, section IV, is to provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency, to establish plume exposure and ingestion pathway emergency planning zones for nuclear power plants, and to ensure that licensees maintain effective offsite and onsite radiological emergency plans. The standards and requirements in these regulations were developed by considering the risks associated with operation of a power reactor at its licensed full-power level. These risks include the potential for a reactor accident with offsite radiological dose consequences.

As discussed previously, because CR-3 is permanently shutdown and defueled, there is no longer a risk of offsite radiological release from a design-basis accident and the risk of a

significant offsite radiological release from a beyond-design-basis accident is greatly reduced when compared to an operating power reactor. The NRC staff has confirmed the reduced risks at CR-3 by comparing the generic risk assumptions in the analyses in NUREG-1738 to site specific conditions at CR-3 and determined that the risk values in NUREG-1738 bound the risks presented by CR-3. Furthermore, the staff has recently concluded in NUREG-2161, "Consequence Study of a Beyond-Design-Basis Earthquake Affecting the Spent Fuel Pool for a U.S. Mark I Boiling Water Reactor," dated September 2014 (ADAMS Accession No. ML14255A365), that, consistent with earlier research studies, SFPs are robust structures that are likely to withstand severe earthquakes without leaking cooling water and potentially uncovering the spent fuel. The NUREG-2161 study shows the likelihood of a radiological release from spent fuel after the analyzed severe earthquake at the reference plant to be about one time in 10 million years or lower.

The licensee has analyzed site-specific spent fuel air-cooling and adiabatic heat-up beyond-design-basis accident scenarios to determine the risk of cladding damage, and the time to rapid cladding oxidation. The air-cooling analysis shows that as of September 26, 2013, in the event of a complete SFP drain down due to a loss of water inventory, assuming that natural circulation of air through the spent fuel racks was available, the peak fuel clad temperature would remain below 1049°F (565ºC), the temperature at which incipient cladding failure may occur. Therefore, in this postulated accident, fuel cladding remains intact.

The beyond-design-basis adiabatic heat-up accident analysis of the spent fuel evaluates a postulated condition involving a very unlikely scenario where the SFP is drained in such a way that all modes of cooling or heat transfer are assumed to be unavailable. DEF analysis of this beyond-design-basis accident shows that as of September 26, 2013, 19.7 hours would be available between the time the fuel is uncovered (at which time adiabatic heat-up begins), until the fuel cladding reaches a temperature of 1652°F (900ºC), the temperature associated with rapid cladding oxidation and the potential for a significant radiological release.

Exemptions from the offsite EP requirements in 10 CFR part 50 have previously been approved by the NRC when the site-specific analyses show that at least 10 hours is available following a loss of SFP coolant inventory accident with no air cooling (or other methods of removing decay heat) until cladding of the hottest fuel assembly reaches the zirconium rapid oxidation temperature. The NRC staff concluded in its previously granted exemptions, as it does with the DEF requested EP exemptions, that if a minimum of 10 hours is available to initiate mitigative actions consistent with plant conditions, or if needed, for offsite authorities to implement protective actions using a CEMP approach, then formal offsite radiological emergency plans, required under 10 CFR part 50, are not necessary at permanently shutdown and defueled facilities.

Additionally, DEF committed to maintaining SFP makeup strategies in its letter to the NRC dated May 7, 2014 (ADAMS Accession No. ML14139A006). The multiple strategies for providing makeup to the SFP include: using existing plant systems for inventory makeup; supplying water through hoses to connections to the existing SFP piping using the diesel-driven fire service pump; and using a diesel-driven portable pump to take suction from CR-3 intake and discharge canals. These strategies will continue to be required as license condition 2.C.(14), “Mitigation Strategy License Condition.” Considering the very low probability of beyond-design-basis accidents affecting the SFP, these diverse strategies provide multiple methods to obtain additional makeup or spray to the SFP before the onset of any postulated offsite radiological release.

For all the reasons stated above, the NRC staff finds that the licensee’s requested exemptions to meet the underlying purpose of all of the standards in 10 CFR 50.47(b), and requirements in 10 CFR 50.47(c)(2) and 10 CFR part 50, appendix E, acceptably satisfy the special circumstances in 10 CFR 50.12(a)(2)(ii) in view of the greatly reduced risk of offsite radiological consequences associated with the permanently shutdown and defueled state of the CR-3 facility.

The NRC staff has concluded that the exemptions being granted by this action will maintain an acceptable level of emergency preparedness at CR-3 and, if needed, that there is reasonable assurance that adequate offsite protective measures can and will be taken by State and local government agencies using a CEMP approach in the unlikely event of a radiological emergency at the CR-3 facility. Since the underlying purposes of the rules, as exempted, would continue to be achieved, even with the elimination of the requirements under 10 CFR part 50 to maintain formal offsite radiological emergency plans and reduction in the scope of the onsite emergency planning activities at CR-3, the special circumstances required by 10 CFR 50.12(a)(2)(ii) exist.

E. Environmental Considerations

In accordance with 10 CFR 51.31(a), the Commission has determined that the granting of this exemption will not have a significant effect on the quality of the human environment as discussed in the NRC staff's Finding of No Significant Impact and associated Environmental Assessment published March 2, 2015 (80 FR 11233).

IV. Conclusions.

Accordingly, the Commission has determined, pursuant to 10 CFR 50.12(a), that DEF's request for exemptions from certain EP requirements in 10 CFR 50.47(b), 10 CFR 50.47(c)(2), and 10 CFR part 50, appendix E, section IV, and as summarized in the table at the end of this document, are authorized by law, will not present an undue risk to the public health and safety,

and are consistent with the common defense and security. Also, special circumstances are present. Therefore, the Commission hereby grants DEF exemptions from certain EP requirements of 10 CFR 50.47(b), 10 CFR 50.47(c)(2), and 10 CFR part 50, appendix E, section IV, as discussed and evaluated in detail in the staff's safety evaluation dated March 30, 2015. The exemptions are effective as of March 30, 2015.

Dated at Rockville, Maryland, this 30th day of March, 2015.

For the Nuclear Regulatory Commission.

/RA/

Michele G. Evans, Director,
Division of Operating Reactor Licensing,
Office of Nuclear Reactor Regulation.

Table of Exemptions Granted to DEF.

10 CFR 50.47	NRC Staff Basis for Exemption
10 CFR 50.47(b) The NRC is granting exemptions from portions of the rule language that would otherwise require offsite emergency response plans.	In the Statement of Considerations (SOC) for the final rule for emergency planning (EP) requirements for independent spent fuel storage installations (ISFSIs) and for monitor retrievable storage installations (MRS) (60 *Federal Register* (FR) 32430; June 22, 1995), the Commission responded to comments concerning offsite EP for ISFSIs or a MRS and concluded that, "the offsite consequences of potential accidents at an ISFSI or a MRS would not warrant establishing Emergency Planning Zones [EPZ]." In a nuclear power reactor's permanently defueled state, the accident risks are more similar to an ISFSI or a MRS than an operating nuclear power plant. The EP program would be similar to that required for an ISFSI under section 72.32(a) of 10 CFR when fuel stored in the spent fuel pool (SFP) has more than 5 years of decay time and would not change substantially when all the fuel is transferred from the SFP to an onsite ISFSI. Exemptions from offsite EP requirements have previously been approved when the site-specific analyses show that at least 10 hours is available until the hottest fuel assembly reaches 900°C from a partial drain-down event without any spent fuel cooling. The technical basis that underlied the approval of the exemption request is based partly on the analysis of a time period that spent fuel stored in the SFP is unlikely to reach the zirconium ignition temperature in less than 10 hours. This time period is based on a heat-up calculation, which uses several simplifying assumptions. Some of these assumptions are conservative (adiabatic conditions), while others are non-conservative (no oxidation below 900°C). Weighing the conservatisms and non-conservatisms, the NRC staff judges that this calculation reasonably represents conditions, which may occur in the event of an SFP accident. The staff concluded that if 10 hours were available to initiate mitigative actions, or if needed, offsite protective actions using a comprehensive emergency management plan (CEMP), formal offsite radiological emergency plans are not necessary for these permanently defueled nuclear power

	reactor licensees. As supported by the licensee's SFP analysis, the NRC staff believes an exemption to the requirements for formal offsite radiological emergency plans is justified for a zirconium fire scenario considering the low likelihood of this event together with time available to take mitigative or protective actions between the initiating event and before the onset of a postulated fire. The Duke Energy Florida, Inc. (DEF) analysis has demonstrated that due to the considerable time since shutdown, approximately 4 years as of the date of the analysis, the radiological consequences of design-basis accidents will not exceed the limits of the U.S. Environmental Protection Agency's (EPA) Protective Action Guidelines (PAGs) at the exclusion area boundary. These analyses also show that for beyond-design-basis events where the SFP is drained, air cooling will prevent the fuel from reaching the lowest temperature where incipient cladding failure may occur (565°C). In the event that air cooling is not possible, 19.7 hours is available to take mitigative or, if needed, offsite protective actions using a CEMP from the time the fuel is uncovered until it reaches the auto-ignition temperature of 900°C. DEF has also furnished information on its SFP inventory makeup strategies for mitigating the loss of water inventory. Several sources of makeup to the pools are available, such as the fire service system, using the diesel-driven fire service pump for loss of electrical power. If available fresh water sources are depleted, salt water sources with inexhaustible inventory from the Crystal River Unit 3 (CR-3) intake and discharge canal, using portable diesel powered pumps are available. Pool inventory addition can be implemented without accessing the elevation of the pool deck. In a letter dated May 7, 2014, "Crystal River Unit 3 - Response to Requests for Additional Information and Supplement 1 to License Amendment Request #316, Revision 0" (ADAMS Accession No. ML14139A006), DEF withdrew its request to remove License Condition 2.C.(14), "Mitigation Strategy License Condition," from its

	Facility Operating License. This license condition requires CR-3 to maintain its SFP inventory makeup strategies as discussed above.
10 CFR 50.47(b)(1) The NRC is granting exemptions from portions of the rule language that would otherwise require the need for Emergency Planning Zones (EPZs).	Refer to basis for 10 CFR 50.47(b).
10 CFR 50.47(b)(3) The NRC is granting exemptions from portions of the rule language that would otherwise require the need for an Emergency Operations Facility (EOF).	Considering the time available to take mitigative or, if needed, offsite protective actions using a CEMP between the initiating event and before the onset of a postulated fire, decommissioning power reactors present a low likelihood of any credible accident resulting in a radiological release. As such, an emergency operations facility would not be required. The “nuclear island,” control room, or other onsite location can provide for the communication and coordination with offsite organizations for the level of support required. Also refer to basis for 10 CFR 50.47(b).
10 CFR 50.47(b)(4) The NRC is granting exemptions from portions of the rule language that would otherwise require reference to formal offsite radiological emergency response plans.	Considering the time available to take mitigative or if needed, offsite protective actions using a CEMP between the initiating event and before the onset of a postulated fire, decommissioning power reactors present a low likelihood of any credible accident resulting in a radiological release. As such, formal offsite radiological emergency response plans are not required. The Nuclear Energy Institute (NEI) document NEI 99-01, “Development of Emergency Action Levels for Non-Passive Reactors” (Revision 6), was found to be an acceptable method for development of emergency action levels (EALs) and was endorsed by the U.S. Nuclear Regulatory Commission (NRC) in a letter dated March 28, 2013 (ADAMS Accession No. ML12346A463). NEI 99-01 provides EALs for non-passive operating nuclear power reactors, permanently defueled reactors, and ISFSIs. Also refer to basis for 10 CFR 50.47(b).

10 CFR 50.47(b)(5) The NRC is granting exemptions from portions of the rule language that would otherwise require early notification of the public and a means to provide instructions to the public within the plume exposure pathway EPZ.	Refer to basis for 10 CFR 50.47(b).
10 CFR 50.47(b)(6) The NRC is granting exemptions from portions of the rule language that would otherwise require prompt communications with the public.	Refer to basis for 10 CFR 50.47(b).
10 CFR 50.47(b)(7) The NRC is granting exemptions from portions of the rule language that would otherwise require information to be made available to the public on a periodic basis about how they will be notified and what their initial protective actions should be.	Refer to basis for 10 CFR 50.47(b).
10 CFR 50.47(b)(9) The NRC is granting exemptions from portions of the rule language that would otherwise require the capability for monitoring offsite consequences.	Refer to basis for 10 CFR 50.47(b).
10 CFR 50.47(b)(10) The NRC is granting exemptions from portions of the rule language that would reduce the range of protective actions developed for radiological emergencies. Consideration of evacuation, sheltering, or the use of potassium iodide will no longer be necessary. Evacuation time estimates (ETEs) will no longer need to developed or updated. Protective actions for the ingestion exposure pathway EPZ will not need to be developed.	In the unlikely event of an SFP accident, the iodine isotopes, which contribute to an offsite dose from an operating reactor accident, are not present, so potassium iodide distribution would no longer serve as an effective or necessary supplemental protective action. The CR-3 SFP is considered an ISFSI and is licensed under 10 CFR part 72, subpart K, “General License for Storage of Spent Fuel at Power Reactor Sites.” The Commission responded to comments in its SOC for the final rule for EP requirements for ISFSIs and MRS facilities (60 FR 32435), and concluded that, “the offsite consequences of potential accidents at an ISFSI or an MRS would not warrant establishing EPZs.” Additionally, in the SOC for the final rule for EP requirements for ISFSIs and for MRS facilities (60 FR 32430), the Commission

	responded to comments concerning site-specific EP that includes evacuation of surrounding population for an ISFSI not at a reactor site, and concluded that, "The Commission does not agree that as a general matter emergency plans for an ISFSI must include evacuation planning." Also refer to basis for 10 CFR 50.47(b) and 10 CFR 50.47(b)(2).
10 CFR 50.47(c)(2) The NRC is granting exemptions from portions of the rule language that would otherwise require the establishment of a 10 mile radius plume exposure pathway EPZ and a 50 mile radius ingestion pathway EPZ.	Refer to basis for 10 CFR 50.47(b)(10).

10 CFR part 50, appendix E, section IV	**NRC Staff Basis for Exemption**
10 CFR part 50, appendix E, section IV.1. The NRC is granting exemptions from portions of the rule language that would otherwise require onsite protective actions during hostile action.	The EP Rule published in the *Federal Register* (76 FR 72560; November 23, 2011), amended certain requirements in 10 CFR part 50. Among the changes, the definition of "hostile action" was added as an act directed toward a nuclear power plant or its personnel. This definition is based on the definition of "hostile action" provided in NRC Bulletin 2005-02, "Emergency Preparedness and Response Actions for Security-Based Events." NRC Bulletin 2005-02 was not applicable to nuclear power reactors that have permanently ceased operations and have certified that fuel has been removed from the reactor vessel. The NRC excluded non-power reactors from the scope of "hostile action" at the time of the rulemaking because, as defined in 10 CFR 50.2, a non-power reactor is not considered a nuclear power reactor and a regulatory basis had not been developed to support the inclusion of non-power reactors within the scope of "hostile action." Similarly, a decommissioning power reactor or an ISFSI is not a "nuclear reactor" as defined in 10 CFR part 50. A decommissioning power reactor also has a low likelihood of a credible accident resulting in radiological releases requiring offsite protective measures. For all of these reasons, the NRC staff concludes that a decommissioning power reactor is not a facility that falls within the scope of "hostile

	action." Similarly, for security, risk insights can be used to determine which targets are important to protect against sabotage. A level of security commensurate with the consequences of a sabotage event is required and is evaluated on a site-specific basis. The severity of the consequences declines as fuel ages and, thereby, removes over time the underlying concern that a sabotage attack could cause offsite radiological consequences. Although, this analysis provides a justification for exempting CR-3 from "hostile action" related requirements, some EP requirements for security-based events are maintained. The classification of security-based events, notification of offsite authorities and coordination with offsite agencies under a CEMP concept are still required.
10 CFR part 50, appendix E, section IV.2. The NRC is granting exemptions from portions of the rule language concerning the evacuation time analyses within the plume exposure pathway EPZ for the licensee's initial application.	Refer to basis for 10 CFR 50.47(b)(10).
10 CFR part 50, appendix E, section IV.3. The NRC is granting exemptions from portions of the rule language that would otherwise require use of NRC-approved ETEs and updates to State and local governments when developing protective action strategies.	Refer to basis for 10 CFR part 50, appendix E, section IV.2 and 10 CFR 50.47(b).
10 CFR part 50, appendix E, section IV.4. The NRC is granting exemptions from portions of the rule language that would otherwise require licensees to update evacuation time estimates based on the most recent census data and submit the ETE analysis to the NRC prior to providing it to State and local government for developing protective action strategies.	Refer to basis for 10 CFR part 50, appendix E, section IV.2 and 10 CFR 50.47(b).

10 CFR part 50, appendix E, section IV.5. The NRC is granting an exemption from portions of the rule language that would otherwise require licensees to estimate the EPZ permanent resident population changes once a year between decennial censuses.	Refer to basis for 10 CFR part 50, appendix E, section IV.2 and 10 CFR 50.47(b).
10 CFR part 50, appendix E, section IV.6. The NRC is granting an exemption from portions of the rule language that would otherwise require the licensee to submit an updated ETE analysis to the NRC based on changes in the resident population that result in exceeding specific evacuation time increase criteria.	Refer to basis for 10 CFR part 50, appendix E, section IV.2 and 10 CFR 50.47(b).
10 CFR part 50, appendix E, section IV.A.1. The NRC is granting an exemption from the word “operating” in the requirement to describe the normal plant organization.	Based on the permanently shutdown and defueled status of the reactor, a decommissioning reactor is not authorized to operate under 10 CFR 50.82(a). Because the licensee cannot operate the reactors, the licensee does not have a “plant operating organization.”
10 CFR part 50, appendix E, section IV.A.3. The NRC is granting an exemption from the requirement to describe the licensee’s headquarters personnel sent to the site to augment the onsite emergency response organization.	The number of staff at decommissioning sites is generally small but is commensurate with the need to safely store spent fuel at the facility in a manner that is protective of public health and safety. Decommissioning sites typically have a level of emergency response that does not require response by the licensee’s headquarters personnel.
10 CFR part 50, appendix E, section IV.A.4. The NRC is granting exemptions from portions of the rule language that would otherwise require the licensee to identify a position and function within its organization, which will carry the responsibility for making offsite dose projections.	Although, the likelihood of events that would result in doses in excess of the EPA PAGs to the public beyond the exclusion area boundary based on the permanently shutdown and defueled status of the reactor is extremely low, the licensee still must be able to determine if a radiological release is occurring. If a release is occurring, then the licensee staff should promptly communicate that information to offsite authorities for their consideration. The offsite organizations are responsible for deciding what, if any, protective actions should be taken based on comprehensive EP. Also refer to basis for 10 CFR 50.57(b)

10 CFR part 50, appendix E, section IV.A.5. The NRC is granting an exemption from the requirement for the licensee to identify individuals with special qualifications, both licensee employees and non-employees, for coping with emergencies.	The minimal systems and equipment needed to maintain the spent nuclear fuel in the SFP in a safe condition requires minimal personnel and is governed by the technical specifications. As such, additional employees or other persons with special qualifications are not anticipated. Refer to basis for 10 CFR part 50, appendix E, section IV.A.3
10 CFR part 50, appendix E, section IV.A.7. The NRC is granting exemptions from portions of the rule language that would otherwise require a description of the assistance expected from State, local, and Federal agencies for coping with a hostile action.	Offsite emergency measures are limited to support provided by local police, fire departments, and ambulance and hospital services, as appropriate. Due to the low probability of design-basis accidents or other credible events to exceed the EPA PAGs, protective actions such as evacuation should not be required, but could be implemented at the discretion of offsite authorities using a CEMP. Refer to basis for 10 CFR part 50, appendix E, section IV.1 and 10 CFR 50.47(b).
10 CFR part 50, appendix E, section IV.A.8. The NRC is granting an exemption from the requirement to identify the State and local officials for ordering protective actions and evacuations.	Offsite emergency measures are limited to support provided by local police, fire departments, and ambulance and hospital services, as appropriate. Due to the low probability of design-basis accidents or other credible events to exceed the EPA PAGs, protective actions such as evacuation should not be required, but could be implemented at the discretion of offsite authorities using a CEMP. Also refer to basis for 10 CFR 50.47(b).
10 CFR part 50, appendix E, section IV.A.9. The NRC is granting an exemption from the requirement for the licensee to provide an analysis demonstrating that on-shift personnel are not assigned responsibilities that would prevent performance of their assigned emergency plan functions.	Responsibilities should be well defined in the emergency plan and procedures, regularly tested through drills and exercises audited and inspected by the licensee and the NRC. The duties of the on-shift personnel at a decommissioning reactor facility are not as complicated and diverse as those for an operating power reactor. The NRC staff considered the similarity between the staffing levels at a permanently shutdown and defueled reactor and staffing levels at an operating power reactor site. The minimal systems and equipment needed to maintain the spent nuclear fuel in the SFP or in an ISFSI in a

	safe condition requires minimal personnel and is governed by Technical Specifications. In the EP final rule published in the *Federal Register* (76 FR 72560; November 23, 2011), the NRC concluded that the staffing analysis requirement was not necessary for non-power reactor licensees due to the small staffing levels required to operate the facility. The NRC staff also examined the actions required to mitigate the very low probability design-basis events for the SFP. Several sources of makeup to the pools are available, such as the fire service system, using the diesel-driven fire service pump for loss of electrical power. If available fresh water sources are depleted, salt water sources with inexhaustible inventory from the CR-3 intake and discharge canal, using portable diesel powered pumps are available. Pool inventory addition can be implemented without accessing the elevation of the pool deck. DEF believes these diverse strategies provide defense-in-depth and ample time to provide makeup or spray to the SFP prior to the onset of zirconium cladding ignition when considering very low probability beyond-design-basis events affecting the SFP. In a letter dated May 7, 2014, DEF withdrew its request to remove License Condition 2.C.(14), "Mitigation Strategy License Condition," from its Facility Operating License. This license condition requires CR-3 to maintain its SFP inventory makeup strategies as discussed above.
10 CFR part 50, appendix E, section IV.B.1. The NRC is granting exemptions from portions of the rule language that would otherwise require offsite emergency actions levels and offsite protective measures and associate offsite monitoring for the emergency conditions. In addition, the NRC is granting exemption from portions of the rule language that would otherwise require emergency action levels based on hostile action.	NEI 99-01, Revision 6, was found to be an acceptable method for development of EALs. No offsite protective actions are anticipated to be necessary, so classification above the alert level is no longer required, which is consistent with ISFSI facilities. Also refer to basis for 10 CFR part 50, appendix E, section IV.1 and 10 CFR 50.47(b).
10 CFR part 50, appendix E, section	Containment parameters do not provide an

IV.C.1. The NRC is granting exemptions from portions of the rule language that would otherwise require emergency actions levels based on operating reactor concerns, such as offsite radiation monitoring, pressure in containment, and the response of the emergency core cooling system. In addition, the NRC is striking language that would otherwise require offsite emergency action levels of a site area emergency and a general emergency.	indication of the conditions at a defueled facility and emergency core cooling systems are no longer required. SFP level, SFP temperature, and area radiation monitors indicate the conditions at CR-3. In the SOC for the final rule for EP requirements for ISFSIs and MRS facilities (60 FR 32430), the Commission responded to comments concerning a general emergency at an ISFSI and a MRS, and concluded that, "…an essential element of a General Emergency is that a release can be reasonably expected to exceed EPA PAGs exposure levels off site for more than the immediate site area." The probability of a condition reaching the level above an emergency classification of alert is very low. In the event of an accident at a defueled facility that meets the conditions for relaxation of EP requirements, there will be available time for event mitigation and, if necessary, implementation of offsite protective actions using a CEMP. NEI 99-01, Revision 6, was found to be an acceptable method for development of EALs. No offsite protective actions are anticipated to be necessary, so classification above the alert level is no longer required. Also, refer to the basis for 10 CFR 50.47(b).
10 CFR part 50, appendix E, section IV.C.2. The NRC is granting exemptions from portions of the rule language that would otherwise require the licensee to assess, classify, and declare an emergency condition within 15 minutes.	In the EP rule published in the *Federal Register* (76 FR 72560), non-power reactor licensees were not required to assess, classify and declare an emergency condition within 15 minutes. An SFP and an ISFSI are also not nuclear power reactors as defined in the NRC's regulations. A decommissioning power reactor has a low likelihood of a credible accident resulting in radiological releases requiring offsite protective measures. For these reasons, the NRC staff concludes that a decommissioning power reactor should not be required to assess, classify and declare an emergency condition within 15 minutes.
10 CFR part 50, appendix E, section IV.D.1.	Refer to basis for 10 CFR 50.47(b), 10 CFR 50.47(b)(2) and 10 CFR 50.47(b)(6).

The NRC is granting exemptions from portions of the rule language that would otherwise require the licensee to reach agreement with local, State, and Federal officials and agencies for prompt notification of protective measures or evacuations. In addition, the NRC is granting an exemption from identifying the associated titles of officials to be notified for each agency within the EPZs.	
10 CFR part 50, appendix E, section IV.D.2. The NRC is granting an exemption from the requirement for the licensee to annually disseminate general information on emergency planning and evacuations within the plume exposure pathway EPZ. In addition, the NRC is granting an exemption for the need for signage or other measures to address transient populations in the event of an accident.	Refer to basis for 10 CFR 50.47(b) ,10 CFR 50.47(b)(2) and 10 CFR 50.47(b)(5).
10 CFR part 50, appendix E, section IV.D.3. The NRC is granting exemptions from portions of the rule language that would otherwise require the licensee to have the capability to make notifications to State and local government agencies within 15 minutes of declaring an emergency.	While the capability needs to exist for the notification of offsite government agencies within a specified time period, previous exemptions have allowed for extending the State and local government agencies' notification time up to 60 minutes based on the site-specific justification provided. DEF's exemption request provides that CR-3 will make notifications to the State of Florida and the NRC within 60 minutes of declaration of an event. The State Watch Office will perform the notification to the County (Citrus), as well as the Florida Department of Emergency Management. In the permanently defueled condition of the reactor, the rapidly developing scenarios associated with events initiated during reactor power operation are no longer credible. Also refer to basis for 10 CFR 50.47(b) and 10 CFR 50.47(b)(2).
10 CFR part 50, appendix E, section IV.D.4.	Refer to basis for 10 CFR part 50, appendix E, section IV.D.3 regarding the alert and notification

The NRC is granting an exemption from the requirement for the licensee to obtain FEMA approval of its backup alert and notification capability.	system requirements.
10 CFR part 50, appendix E, section IV.E.8.a.(i) The NRC is granting exemptions from portions of the rule language that would otherwise require the licensee to have an onsite technical support center and emergency operations facility.	Due to the low probability of design-basis accidents or other credible events to exceed the EPA PAGs at the exclusion area boundary, the available time for event mitigation at a decommissioning reactor and, if needed, to implement offsite protective actions using a CEMP, an EOF and a technical support center (TSC) would not be required to support offsite agency response. Onsite actions may be directed from the control room or other location, without the requirements imposed on a TSC.
10 CFR part 50, appendix E, section IV.E.8.a.(ii) The NRC is granting exemptions from portions of the rule language that would otherwise require the licensee to have an onsite operational support center.	NUREG-0696, "Functional Criteria for Emergency Response Facilities" (ADAMS Accession No. ML051390358) provides that the operational support center (OSC) is an onsite area separate from the control room and the TSC where licensee operations support personnel will assemble in an emergency. For a decommissioning power reactor, an OSC is no longer required to meet its original purpose of an assembly area for plant logistical support during an emergency. The OSC function can be incorporated into another facility. Also refer to the basis for 10 CFR part 50, appendix E, section IV.E.8.a.(i).
10 CFR part 50, appendix E, section IV.E.8.b. and subpart sections IV.E.8.b.(1) - E.8.b.(5) The NRC is granting exemptions from the requirements related to an offsite emergency operations facility's location, space and size, communications capability, access to plant data and radiological information, and access to copying and office supplies.	Refer to basis for 10 CFR 50.47(b)(3) and 10 CFR part 50, appendix E, section IV.E 8.a.(i) .
10 CFR part 50, App. E, section IV E.8.c. and sections IV E.8.c.(1) - E.8.c.(3) The NRC is granting exemptions from the requirements to have an emergency	Refer to basis for 10 CFR 50.47(b)(3) and 10 CFR part 50, appendix E, section IV.E 8.a.(i).

operations facility with the capabilities to obtain and display plant data and radiological information; the capability to analyze technical information and provide briefings; and the capability to support events occurring at more than one site (if the emergency operations center supports more than one site).	
10 CFR part 50, App. E, section IV E.8.d The NRC is granting exemptions from the requirements to have an alternate facility 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.	Refer to basis for 10 CFR part 50, appendix E, section IV.1; 10 CFR part 50, appendix E, section IV.E 8.a.(i); and 10 CFR 50, appendix E, section IV.E.8.a.(ii).
10 CFR part 50, appendix E, section IV.E.8.e. The NRC is granting an exemption from the need for the licensee to comply with paragraph 8.b of this section that details EOFs requirements.	Because of the low probability of design-basis accidents or other credible events that would be expected to exceed the EPA PAGs and the available time for event mitigation and, if needed, implementation of offsite protective actions using a CEMP, there is no need for the EOF. Refer to basis for 10 CFR 50.47(b)(3) and 10 CFR part 50, appendix E, section IV.E 8.a.(i).
10 CFR part 50, appendix E, section IV.E.9.a. The NRC is granting exemptions from portions of the rule language that would otherwise require the licensee to have communications with contiguous State and local governments that are within the plume exposure pathway EPZ.	The Plume exposure pathway EPZ is no longer required by the exemption granted to 10 CFR 50.47(b)(10). The State and the local governments in which the nuclear facility is located will still need to be informed of events and emergencies, so lines of communication must be maintained. Refer to basis for 10 CFR 50.47(b)(2) and 10 CFR 50.47(b)(10).
10 CFR part 50, appendix E, section IV.E.9.c. The NRC is granting exemption from the requirements for communication and testing provisions between the control room, the onsite TSC, State/local emergency operations centers, and field assessment teams.	Because of the low probability of design-basis accidents or other credible events that would be expected to exceed the EPA PAGs and the available time for event mitigation and, if needed, implementation of offsite protective actions using a CEMP, there is no need for the TSC, EOF, offsite field assessment teams, and the communication and testing provisions that refer to them. Refer to justification for 10 CFR 50.47(b)(3) and

	10 CFR part 50, appendix E, section IV.E 8.a.(i). Communication with State and local emergency operation centers is maintained to coordinate assistance on site if required.
10 CFR part 50, appendix E, section IV.E.9.d. The NRC is granting exemptions from portions of the rule language that would otherwise require provisions for communications from the control room, onsite TSC, and EOF with NRC Headquarters and the appropriate Regional Operations Center.	The functions of the control room, EOF, TSC, and OSC may be combined into one or more locations due to the smaller facility staff and the greatly reduced required interaction with State and local emergency response facilities. The licensee is still required to maintain monthly communication tests with NRC Headquarters and the appropriate Regional Operations Center. Also refer to basis for 10 CFR 50.47(b); 10 CFR 50, appendix E, section IV.E.8.a.(i); and 10 CFR 50, appendix E, section IV.E.8.a.(ii).
10 CFR part 50, appendix E, section IV.F.1. and section IV F.1.viii. The NRC is granting exemptions from portions of the rule language that would otherwise require the licensee to provide training and drills for the licensee's headquarters personnel, Civil Defense personnel, or local news media.	Decommissioning power reactor sites typically have a level of emergency response that does not require additional response by the licensee's headquarters personnel. Therefore, the NRC staff considers exempting licensee's headquarters personnel from training requirements to be reasonable. Due to the low probability of design-basis accidents or other credible events to exceed the EPA PAGs, offsite emergency measures are limited to support provided by local police, fire departments, and ambulance and hospital services, as appropriate. Local news media personnel no longer need radiological orientation training since they will not be called upon to support the formal Joint Information Center. The term "Civil Defense" is no longer commonly used; references to this term in the examples provided in the regulation are, therefore, not needed. Also refer to basis for 10 CFR 50.47(b).
10 CFR part 50, appendix E, section IV.F.2. The NRC is granting exemptions from portions of the rule language that would otherwise require testing of a public alert and notification system.	Because of the low probability of design-basis accidents or other credible events that would be expected to exceed the limits of EPA PAGs and the available time for event mitigation and offsite protective actions from a CEMP, the public alert and notification system are not needed and, therefore, require no testing. Also refer to basis for 10 CFR 50.47(b).
10 CFR part 50, appendix E, section	Due to the low probability of design-basis

IV.F.2.a. and sections IV.F.2.a.(i) through IV.F.2.a.(iii) The NRC is granting exemptions from the requirements for full participation exercises and the submittal of the associated exercise scenarios to the NRC.	accidents or other credible events that would be expected to exceed the limits of EPA PAGs, the available time for event mitigation and, if necessary, implementation of offsite protective actions using a CEMP, no formal offsite radiological emergency plans are required and full participation emergency plan exercises that test the State and local emergency plans are not necessary. The intent of submitting exercise scenarios at an operating power reactor site is to ensure that licensees utilize different scenarios in order to prevent the preconditioning of responders at power reactors. For decommissioning power reactor sites, there are limited events that could occur, and as such, the submittal of exercise scenarios is not necessary. The licensee would be exempt from 10 CFR part 50, appendix E, section IV.F.2.a.(i)-(iii) because the licensee would be exempt from the umbrella provision of 10 CFR part 50, appendix E, section IV.F.2.a. Also, refer to the basis for 10 CFR 50.47(b) and 10 CFR part 50, appendix E, section IV.C.1.
10 CFR part 50, appendix E, section IV.F.2.b. The NRC is granting exemptions from portions of the rule language that would otherwise require the licensee to submit scenarios for its biennial exercises of its onsite emergency plan. In addition, the NRC is granting exemption from portions of the rule language that requires assessment of offsite releases, protective action decision making, and references to the TSC, OSC, and EOF.	The intent of submitting onsite exercise scenarios at an operating power reactor site is to ensure that licensees utilize different scenarios in order to prevent the preconditioning of responders at power reactors. For decommissioning power reactor sites, there are limited events that could occur, and as such, the submittal of exercise scenarios is not necessary. Biennial exercises are not required per the exemption from 10 CFR part 50, appendix E, section IV.F.2.c. The low probability of design basis accidents or other credible events that would exceed the EPA PAGs, the available time for event mitigation and, if necessary, implementation of offsite protective actions using a CEMP, render a TSC, OSC and EOF unnecessary. The principal functions required by regulation can be performed at an onsite location that does not meet the requirements of the TSC, OSC, or EOF. Refer to basis for 10 CFR part 50, appendix E, section IV.F.2.a; 10 CFR part 50, appendix E,

	section IV.E 8.a.(i); 10 CFR part 50, appendix E, section IV.E 8.a.(ii); and 10 CFR 50.47(b).
10 CFR part 50, appendix E, section IV.F.2.c. and sections IV F.2.c.(1) through F.2.c.(5) The NRC is granting exemptions from the requirements regarding the need for the licensee to exercise offsite plans biennially with full participation by each offsite authority having a role under the radiological response plan. The NRC is also granting exemptions from the conditions for conducting these exercises (including hostile action exercises) if two different licensees have facilities on the same site or on adjacent, contiguous sites, or share most of the elements defining co-located licensees.	Refer to basis for 10 CFR part 50, appendix E, section IV.F.2.a and 10 CFR 50.47(b).
10 CFR part 50, appendix E, section IV.F.2.d. The NRC is granting exemptions from the requirements to obtain State participation in an ingestion pathway exercise and a hostile action exercise, with each State that has responsibilities, at least once per exercise cycle.	Refer to basis for 10 CFR 50, appendix E, section IV.F.2.a.
10 CFR part 50, appendix E, section IV.F.2.e. The NRC is granting exemptions from portions of the rule language that would otherwise require the licensee to allow participation exercise in licensee drills by any State and local Government in the plume exposure pathway EPZ when requested.	Refer to basis for 10 CFR 50.47(b)(2) and 10 CFR 50.47(b)(10).
10 CFR part 50, appendix E, section IV.F.2.f. The NRC is granting exemptions from portions of the rule language that would otherwise require FEMA to consult with the NRC on remedial exercises. The NRC is granting exemption from portions of the rule language that discuss the	FEMA is responsible for evaluating the adequacy of offsite response during an exercise. No action is expected from State or local government organizations in response to an event at a decommissioning power reactor site other than onsite firefighting, law enforcement and ambulance/medical services support. A memorandum of understanding is in place for those services. Offsite response organizations

extent of State and local participation in remedial exercises.	will continue to take actions on a comprehensive emergency planning basis to protect the health and safety of the public as they would at any other industrial site. Also, refer to the basis for 10 CFR 50, appendix E, section IV.F.2.a.
10 CFR part 50, appendix E, section IV.F.2.i. The NRC is granting exemptions from portions of the rule language that would otherwise require the licensee to engage in drills and exercises for scenarios that include a wide spectrum of radiological release events and hostile action.	Due to the low probability of design-basis accidents or other credible events to exceed the EPA PAGs, the available time for event mitigation and, if needed, implementation of offsite protective actions using a CEMP, the previously routine progression to general emergency in power reactor site scenarios is not applicable to a decommissioning site. Therefore, the licensee is not expected to demonstrate response to a wide spectrum of events. Also refer to basis for 10 CFR part 50, appendix E, section IV.1 regarding hostile action.
10 CFR part 50, appendix E, section IV.F.2.j. The NRC is granting exemptions from the requirements regarding the need for the licensee's emergency response organization to demonstrate proficiency in key skills in the principal functional areas of emergency response. In addition, the NRC is granting an exemption during an eight calendar year exercise cycle, from demonstrating proficiency in the key skills necessary to respond to such scenarios as hostile actions, unplanned minimal radiological release, § 50.54(hh)(2) implementation strategies, and scenarios involving rapid escalation to a site area emergency or general emergency.	With the permanently shutdown defueled and conditions of the site, where only the SFP and its related support systems, structures, and components remain, there are no other facilities in which emergency response organization personnel could demonstrate proficiency. Also refer to basis for 10 CFR part 50, appendix E, section IV.F.2.i.
10 CFR part 50, appendix E, section IV.I The NRC is granting exemptions from the requirements regarding the need for the licensee to develop a range of protective action for onsite personnel during hostile actions.	Refer to basis for 10 CFR part 50, appendix E, section IV.1.