



Crystal River Nuclear Plant  
15760 W. Power Line Street  
Crystal River, FL 34428  
Docket 50-302  
Docket 72-1035  
Operating License No. DPR-72

10 CFR 50.4(b)(5)(ii)  
10 CFR 50.54(q)(5)  
10 CFR 50, Appendix E

February 11, 2020  
3F0220-01

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555-001

Subject: 10 CFR 50.54(q) Evaluation

Dear Sir:

In accordance with 10 CFR 50.4(b)(5)(ii) and 10 CFR 50.54(q)(5), Duke Energy Florida, LLC, is submitting the 10 CFR 50.54(q) Screening Evaluation Form and the 10 CFR 50.54(q) Effectiveness Evaluation Form for revisions to Crystal River Unit 3 (CR-3), Emergency Plan implementing procedures. Implementing procedures ISFS-190 (ISFSI Off-Normal Events). AI-4000 (Conduct of The Emergency Planning Coordinator & Schedule for ISFSI Only Emergency Plan Maintenance), TPP-219 (Emergency Response Organization Training Program), EM-502 (Conduct of The Emergency Coordinator) and ADEP-602 (Emergency Plan Change Screening and Effectiveness Evaluations 10 CFR 50.54 (q)) were issued on January 27, 2020. The ISFSI Only Emergency Plan (IOEP) has not been modified at this time,

There are no new regulatory commitments contained within this letter.

If you have any questions regarding this submittal, please contact Mr. Mark Van Sicklen, Licensing, Nuclear Regulatory Affairs, at (352) 501-3045.

Sincerely,

Ivan L. Wilson  
Manager – Operations and Maintenance, SAFSTOR  
Crystal River Nuclear Plant

ILW/mvs

Enclosures: 10 CFR 50.54(q) Screening Evaluation Form and 10 CFR 50.54(q) Effectiveness Evaluation Form for implementing procedure changes.

cc: NMSS Project Manager  
Regional Administrator, Region I



Crystal River Nuclear Plant  
15760 W. Power Line Street  
Crystal River, FL 34428  
Docket 50-302  
Docket 72-1035  
Operating License No. DPR-72

**DUKE ENERGY FLORIDA, LLC**

**CRYSTAL RIVER UNIT 3**

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

**ENCLOSURE 1**

**10 CFR 50.54(q) Screening Evaluation Form and 10 CFR 50.54(q)  
Effectiveness Evaluation Form for implementing procedure changes**

## &lt;&lt; 10 CFR 50.54(q) Screening Evaluation Form &gt;&gt;

Screening and Evaluation Number			
EREG #: _2306008_____		<b>CR3 ISFSI</b>	
50.59 #: _2306005_____			
<b>Document and Revision</b> ADEP-0602 R1; AI-4000 R25; AI-4001 R11; EM-205 R38; EM-211 R33; EM-213 R38; EM-500 R7; EM-502 R8; EM-504 R4; EM-911D R7; IOEP R2; ISFS-190 R6; TPP-219 R11			
<b>Part I. Description of Activity Being Reviewed (event or action, or series of actions that may result in a change to the emergency plan or affect the implementation of the emergency plan):</b>			
<b>ADEP-0602 Summary of Changes</b>			
#	Section	Change	Reason
1	1.0.4	Added purpose to provide training to those using this procedure for 10 CFR 50.54(q)	Addition of Training to 50.54(q) procedure
2	4.1.4, 5.2.2, 5.3.16, 5.4.2, 5.5.1, Attachment 2	Removed specific regarding performing this procedure using CAS terminology to allow for future flexibility	Editorial. No impact of function or intent
3	4.4 (new)	Added Emergency Planning Coordinator responsibilities related to the new training portions of this change.	Addition of Training to 50.54(q) procedure
4	5.6 (new)	New section added to incorporate required information from AD-EP-ALL-0502 for training personnel to perform 10 CFR 50.54(q) screens and evaluations.	Addition of Training to 50.54(q) procedure
5	6.0	Added Attachment 3 as a required record	Addition of Training to 50.54(q) procedure
6	Attachment 3 (new)	Added qualification card for 50.54(q) evaluator training. The only changes made from the previous qualification card which was the removal of the Qualification group identifying information used by the site training database for generic wording.	Addition of Training to 50.54(q) procedure
<b>AI-4000 Summary of Changes</b>			
#	Section	Change	Reason
7	2.2	Removed references to AD-EP-ALL-0502, OPS-1000, and PRO-0204 Revised AD-EP-ALL-0602 to ADEP-0602	Editorial
8	3.0.2 Enclosure 4	Changed CAP-0200 to the more generic corrective action program including removing specific significance levels which are defined in the corrective action program procedures.	Editorial
9	4.0.2.g	Removed Duke Management from list of interfaces.	Change to be evaluated
10	9.2.4.2.g	Changed NOS to Independent Oversight	Editorial

	9.6.1 Enclosure 3		
11	9.2.4.2.h	Removed EP webpage from list	Editorial, content of webpage is part of the remaining documents to review.
12	9.7.3	Revised AD-EP-ALL-0602 to ADEP-0602	Editorial
13	9.7.4	Removed reference to PRO-0204 and replaced with generic wording "Procedure Change Process"	Editorial

#### AI-4001 Summary of Changes

#	Section	Change	Reason
14	9.4.4.2, 9.4.6.1.b, 9.4.7.2	Changed CR-1&2 and CR-4&5 to CREC Plants	Editorial
15	Enclosure 1	Changed NOS to Independent Oversight	Editorial
16	Enclosure 2	Changed DEF to CR3	Editorial
17	Enclosure 8	Removed "as IMPR Condition Reports or Procedure Revision Requests"	Editorial. Change continues to require documentation of recommendations from drills

#### EM-205 Summary of Changes

#	Section	Change	Reason
18	3.0.8	Changed Duke Energy to the licensee	Editorial
19	2.1, 9.4.2	Removed list of fossil plant emergency plans.	Editorial, Emergency plans continue to be referenced, document number removed.

#### EM-211 Summary of Changes

#	Section	Change	Reason
20	2.1.1, Attachment 1 Note, Attachment 2 Note	Removed reference to Duke Energy	Editorial
21	2.1.4, 6.0.2, 6.0.3	Changed reference AD-SY-ALL-0110 to CR3-ISFSI-0110	Editorial
22	3.0.2, 4.0.1, 4.0.2, 4.0.3, 4.0.4, 4.0.5, 9.0 Note, Attachment 2-1.0.1, Attachment 2-2.0.2	Changed ISFSI Security Manager to Manager Nuclear ISFSI Security	Editorial, Title Change
23	4.0.5, 9.3	Updated organization title to CR3 ISFSI Security	Editorial, Title Change

#### EM-213 Summary of Changes

#	Section	Change	Reason
24	4.0.7	Removed reference to Safety Homepage	Editorial, document remains referenced and unchanged

#### EM-500 Summary of Changes

#	Section	Change	Reason
25	2.0, 9.2.1.d, 9.3, Attachment 1	Change CP-151 to AI-151	Editorial, Document superseded
26	Attachment 2	Changed Duke Energy Telephone system to Site Telephone system	Editorial, updated nomenclature.

#### EM-502 Summary of Changes

#	Section	Change	Reason
27	6.0	Revised wording to clarify timing requirements for emergency declaration and notification	Drill Comment to clarify step intent
28	9.1.8, 9.1.10, 9.1.11, 9.2.8, 9.2.10, 9.2.12	Added reference to instructions for filling out Attachment 1 form (PRR 2301100)	Drill Comment to provide additional guidance and reduce errors.
29	9.2.9	Replaced contacting Risk Management with Station Duty Manager for notifying NEIL	Change in responsibility
30	9.2.12	Replaced contacting Risk Management with NEIL	Change in responsibility
31	Attachment 3	Removed outdated callback number on form	Editorial
32	Attachment 4	Removed fossil phone numbers from procedure and referred to the offsite directory. Removed reference to specific fossil emergency plan documents.	Editorial Contact number remains on offsite support list.

#### EM-504 Summary of Changes

#	Section	Change	Reason
33	3.0.4	Added definition of release from EM-502	Editorial. Provides additional information from other documents
34	Attachment 1	Removed link to L Drive.	Editorial. Information referenced remains unchanged

#### EM-911D Summary of Changes

#	Section	Change	Reason
35	1.0.3, 2.1.10	Replaced AD-SY-ALL-0110 with CR3-ISFSI-0110 (editorial)	Editorial
36	Attachment 2 Step 3	Replaced AI-1830 with CR3-ISFSI-0206 (editorial)	Editorial

## IOEP Summary of Changes

#	Section	Change	Reason
37	Cover	Removed Duke Energy Florida, LLC	Editorial
38	2.1	<ul style="list-style-type: none"> <li>Changed Duke Energy to the licensee</li> <li>Removed Duke Energy in reference to the Operating License DPR 72</li> </ul>	Editorial
39	4.1.14	Changed Duke Energy to the licensee	Editorial
40	5.1	Changed Duke Energy to the licensee	Editorial
41	5.3.6	Changed Duke Energy to the licensee	Editorial
42	6.2	Changed Duke Energy to the licensee	Editorial
43	6.2.5	Removed Duke Energy when referring to other company facilities	Editorial
44	8.1	Changed Duke Energy to CR-3	Editorial
45	9.0	Changed Duke Energy to the licensee	Editorial
46	11.0	<ul style="list-style-type: none"> <li>Removed Duke Energy from Corporate Communications title.</li> <li>Revised the statement "The Corporate Communications will be notified at the company's Charlotte headquarters and a near-site response team may be established for the CR-3 ISFSI." To read "The Corporate Communications may establish a near-site response team for the CR-3 ISFSI."</li> </ul>	Editorial (removed specifics related to the location of Corporate Communication without changing response requirements)
47	12.2.1	Changed Duke Energy to CR-3	Editorial
48	13.0	Changed Duke Energy to the licensee	Editorial
49	16.0	Changed Duke Energy to the licensee	Editorial
50	16.2	Changed Duke Energy to CR-3	Editorial
51	16.3	<ul style="list-style-type: none"> <li>Removed Duke Energy when referring to employees.</li> <li>Changed Duke Energy to the licensee</li> </ul>	Editorial
52	17.0	<ul style="list-style-type: none"> <li>Removed Duke Energy when referring to organization.</li> <li>Changed Duke Energy to the licensee</li> </ul>	Editorial
53	17.2	Changed Duke Energy to CR-3	Editorial
54	20.4	Changed Duke Energy to the licensee	Editorial

## ISFS-190 Summary of Changes

#	Section	Change	Reason
55	2.1	<ul style="list-style-type: none"> <li>Removed Amendment and Revision numbers of references.</li> <li>Added references L-001-045 and AR 229460-83 (PRR 2301101)</li> </ul>	Editorial

56	9.1	Removed contact number from ACP	Editorial Contact number remains on offsite support list.
57	9.2	<ul style="list-style-type: none"> <li>Added note referring to HSM/DSC Layout drawing in Attachment 1</li> <li>Added step to record date and time of survey</li> <li>Revised wording on Neutron Dose Rate Multiplication Table to indicate using a factor of 1.5 for HSM damaged with unknown DSC dose rates.</li> <li>Moved step for Emergency Plan Entry to before Tech Spec entry since Emergency Plan has more significant time restraint.</li> </ul>	Drill comments. Requires ISFSI and Emergency Plan change evaluation
58	9.4.1	Removed references to fleet/corporate organizations	Change function to site personnel
59	Attachment 1	<ul style="list-style-type: none"> <li>Added HSM/DSC Layout drawing from L-001-045</li> <li>Updated Pre-Fire Plan information based on FS system abandonment and installation of above ground fire hydrant system</li> <li>Changed CR to Corrective Action Program</li> </ul>	<ul style="list-style-type: none"> <li>Editorial</li> <li>Previously evaluated ISFSI change under EC 407270 and DTO AR 714369 and associated REG0010 evaluations</li> <li>Editorial</li> </ul>

#### TPP-219 Summary of Changes

#	Section	Change	Reason
60	4.2, Attachment 1, Attachment 2	Removed references to NLMS, Job Codes, and Duty Areas. Replaced with generic wording	Editorial
61	Attachment 1	Added ISFSI Design Basis Accidents and ISFS-190 to EQR for EC/RM	Added training based on comments
62	Attachment 2	Removed HUM-0001 reference. Added review of drill concerns.	Added training based on comments

#### Summary

A bulk of the changes to these Emergency Plan Implementing procedures are editorial in nature based on title changes, documents being superseded, and other changes that do not change the function or intent of the procedure. Changes that require further evaluation include:

- 1, 3, 4, 5, and 6 regarding the addition of 50.54(q) training from AD-EP-ALL-0502 and previously approved qualification card.
- 9, 29, 30, 58 removes interface with Duke Energy Management and places the function on coordinating with site personnel
- 27 revises the wording to clarify the timing requirements of declaring an event to better align with the exempted requirements within the IOEP.

- 28 adds additional information to prompt the procedure user to refer to instructions for filling out the state notification form.
- 57 adds details and changes the step sequencing to respond to an event related to the ISFSI that has the potential for Emergency Plan entry. Additionally, the change is made regarding when to use the 1.5 multiplier for accounting for neutron dose when measuring gamma. The current ISFS-190 information was not clear for the condition with a damaged HSM and elevated dose rates but an unknown condition of the DSC. Based on the evaluation within the Dosimetry Technical Report 17-02 (AR 229460-83), the condition of the HSM is not important with elevated dose rates when the DSC condition is unknown. This report used measured data gathered during loading to draw these conclusions. The addition of damaged HSM to the multiplier aligns with the current basis for this determination.
- 61 and 62 adds additional training to the Emergency Coordinator/Resource Manager/Radiation Protection Coordinator based on comments.

Part II. Activity Previously Reviewed?					
Is this activity Fully bounded by an NRC approved 10 CFR 50.90 submittal?		Yes	<input type="checkbox"/>	No	x
If yes, identify bounding source document number or approval reference and ensure the basis for concluding the source document fully bounds the proposed change is documented below:  Justification:		10 CFR 50.54(q) Effectiveness Evaluation is not required. Enter justification below and complete Attachment 1, Part V.		Continue to Attachment 1, Part III	
Bounding document attached (optional) <input type="checkbox"/>					
Part III. Editorial Change					
Is this activity an editorial or typographical change only, such as formatting, paragraph numbering, spelling, or punctuation that does not change intent?		Yes	<input type="checkbox"/>	No or Partially	x
Justification:		10 CFR 50.54(q) Effectiveness Evaluation is not required. Enter justification and complete Attachment 1, Part V.		Continue to Attachment 1, Part IV and address non-editorial changes	

## &lt;&lt; 10 CFR 50.54(q) Screening Evaluation Form &gt;&gt;

Part IV. Emergency Planning Element and Function Screen		
Does this activity involve any of the following, including program elements from NUREG-0654/FEMA REP-1 Section II? If answer is yes, then check box.		
1	10 CFR 50.47(b)(1) Assignment of Responsibility (Organization Control)	
1a	Responsibility for emergency response is assigned.	<input type="checkbox"/>
1b	The response organization has the staff to respond and to augment staff on a continuing basis (24-7 staffing) in accordance with the emergency plan.	<input type="checkbox"/>
2	10 CFR 50.47(b)(2) Onsite Emergency Organization	
2a	Process ensures that on shift emergency response responsibilities are staffed and assigned	<input type="checkbox"/>
2b	The process for timely augmentation of on shift staff is established and maintained.	x
3	10 CFR 50.47(b)(3) Emergency Response Support and Resources	
3a	Arrangements for requesting and using off site assistance have been made.	x
4	10 CFR 50.47(b)(4) Emergency Classification System	
4a	A standard scheme of emergency classification and action levels is in use.	<input type="checkbox"/>
5	10 CFR 50.47(b)(5) Notification Methods and Procedures	
5a	Procedures for notification of State and local governmental agencies are capable of alerting them of the declared emergency within 60 minutes after declaration of an emergency and providing follow-up notification.	x

## &lt;&lt; 10 CFR 50.54(q) Screening Evaluation Form &gt;&gt;

Part IV. Emergency Planning Element and Function Screen (cont.)		
6	10 CFR 50.47(b)(6) Emergency Communications	
6a	Systems are established for prompt communication among principal emergency response organizations.	<input type="checkbox"/>
6b	Systems are established for prompt communication to emergency response personnel.	<input type="checkbox"/>
7	10 CFR 50.47(b)(7) Public Education and Information	
7a	Coordinated dissemination of public information during emergencies is established.	x
8	10 CFR 50.47(b)(8) Emergency Facilities and Equipment	
8a	Adequate facilities are maintained to support emergency response.	<input type="checkbox"/>
8b	Adequate equipment is maintained to support emergency response.	<input type="checkbox"/>
9	10 CFR 50.47(b)(9) Accident Assessment	
9a	Methods, systems, and equipment for assessment of radioactive releases are in use.	x
10	10 CFR 50.47(b)(10) Protective Response	
10a	A range of protective actions is available for plant emergency workers during emergencies, including those for hostile action events.	<input type="checkbox"/>
11	10 CFR 50.47(b)(11) Radiological Exposure Control	
11a	The resources for controlling radiological exposures for emergency workers are established.	<input type="checkbox"/>
12	10 CFR 50.47(b)(12) Medical and Public Health Support	
12a	Arrangements are made for medical services for contaminated, injured individuals.	<input type="checkbox"/>
13	10 CFR 50.47(b)(13) Recovery Planning and Post-Accident Operations	
13a	Plans for recovery and reentry are developed.	<input type="checkbox"/>
14	10 CFR 50.47(b)(14) Drills and Exercises	
14a	A drill and exercise program (including radiological, medical, health physics and other program areas) is established.	<input type="checkbox"/>
14b	Drills, exercises, and training evolutions that provide performance opportunities to develop, maintain, and demonstrate key skills are assessed via a formal critique process in order to identify weaknesses.	<input type="checkbox"/>
14c	Identified weaknesses are corrected.	<input type="checkbox"/>
15	10 CFR 50.47(b)(15) Emergency Response Training	
15a	Training is provided to emergency responders.	x

## &lt;&lt; 10 CFR 50.54(q) Screening Evaluation Form &gt;&gt;

Part IV. Emergency Planning Element and Function Screen (cont.)		
16	10 CFR 50.47(b)(16) Emergency Plan Maintenance	
16a	Responsibility for emergency plan development and review is established.	x
16b	Planners responsible for emergency plan development and maintenance are properly trained.	x
PART IV. Conclusion If no Part IV criteria are checked, then provide Justification and complete Part V below. Justification:		<input type="checkbox"/>
If any Attachment 1, Part IV criteria are checked, then complete Attachment 1, Part V and perform a 10 CFR 50.54(q) Effectiveness Evaluation (Attachment 2).		x
Part V. Signatures:		
Preparer Name (Print): Anthony Doruff	Preparer Signature: See CAS	Date: See CAS
Reviewer Name (Print): Jeff Endsley	Reviewer Signature: See CAS	Date: See CAS
Approver Name (Print): Mark Garrison	Approver Signature: See CAS	Date: See CAS

QA RECORD

## &lt;&lt; 10 CFR 50.54(q) Effectiveness Evaluation Form &gt;&gt;

Screening and Evaluation Number			
EREG #: 2306008_____		<b>CR3 ISFSI</b>	
50.59 #: 2306005_____			
<b>Document and Revision</b> ADEP-0602 R1; AI-4000 R25; AI-4001 R11; EM-205 R38; EM-211 R33; EM-213 R38; EM-500 R7; EM-502 R8; EM-504 R4; EM-911D R7; IOEP R2; ISFS-190 R6; TPP-219 R11			
<b>Part I. Description of Proposed Change:</b> Note: This description only lists those changes that require further evaluation. For a complete list of changes see the screening activity in this EREG.			
<b>ADEP-0602 Summary of Changes</b>			
#	Section	Change	Reason
1	1.0.4	Added purpose to provide training to those using this procedure for 10 CFR 50.54(q)	Addition of Training to 50.54(q) procedure
3	4.4 (new)	Added Emergency Planning Coordinator responsibilities related to the new training portions of this change.	Addition of Training to 50.54(q) procedure
4	5.6 (new)	New section added to incorporate required information from AD-EP-ALL-0502 for training personnel to perform 10 CFR 50.54(q) screens and evaluations.	Addition of Training to 50.54(q) procedure
5	6.0	Added Attachment 3 as a required record	Addition of Training to 50.54(q) procedure
6	Attachment 3 (new)	Added qualification card for 50.54(q) evaluator training. The only changes made from the previous qualification card which was the removal of the Qualification group identifying information used by the site training database for generic wording.	Addition of Training to 50.54(q) procedure
<b>AI-4000 Summary of Changes</b>			
#	Section	Change	Reason
9	4.0.2.g	Removed Duke Management from list of interfaces.	Change to be evaluated
<b>EM-502 Summary of Changes</b>			
#	Section	Change	Reason
27	6.0	Revised wording to clarify timing requirements for emergency declaration and notification	Drill Comment to clarify step intent
28	9.1.8, 9.1.10, 9.1.11, 9.2.8, 9.2.10, 9.2.12	Added reference to instructions for filling out Attachment 1 form (PRR 2301100)	Drill Comment to provide additional guidance and reduce errors.
29	9.2.9	Replaced contacting Risk Management with Station Duty Manager for notifying NEIL	Change in responsibility

30	9.2.12	Replaced contacting Risk Management with NEIL	Change in responsibility
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#### ISFS-190 Summary of Changes

#	Section	Change	Reason
57	9.2	<ul style="list-style-type: none"> <li>Added note referring to HSM/DSC Layout drawing in Attachment 1</li> <li>Added step to record date and time of survey</li> <li>Revised wording on Neutron Dose Rate Multiplication Table to indicate using a factor of 1.5 for HSM damaged with unknown DSC dose rates.</li> <li>Moved step for Emergency Plan Entry to before Tech Spec entry since Emergency Plan has more significant time restraint.</li> </ul>	Drill comments. Requires ISFSI and Emergency Plan change evaluation
58	9.4.1	Removed references to fleet/corporate organizations	Change function to site personnel

#### TPP-219 Summary of Changes

#	Section	Change	Reason
61	Attachment 1	Added ISFSI Design Basis Accidents and ISFS-190 to EQR for EC/RM	Added training based on comments
62	Attachment 2	Removed HUM-0001 reference. Added review of drill concerns.	Added training based on comments

#### Summary

A bulk of the changes to these Emergency Plan Implementing procedures are editorial in nature based on title changes, documents being superseded, and other changes that do not change the function or intent of the procedure. Changes that require further evaluation include:

- 50.54(q) Training – Changes 1, 3, 4, 5, and 6 regarding the addition of 50.54(q) training from AD-EP-ALL-0502 and previously approved qualification card.
- Duke Energy Corporate Interfaces – Changes 9, 29, 30, 58 removes interface with Duke Energy Management and places the function on coordinating with site personnel
- Notification Enhancements:
  - Change 27 revises the wording to clarify the timing requirements of declaring an event to better align with the exempted requirements within the IOEP.
  - Change 28 adds additional information to prompt the procedure user to refer to instructions for filling out the state notification form.
- ISFSI Response Sequence – Change 57 (partial) adds details and changes the step sequencing to respond to an event related to the ISFSI that has the potential for Emergency Plan entry.
- ISFSI Radiation levels – Change 57 (partial) adds damaged HSM with elevated dose rates to the current list of multipliers under the 1.5 multiplier heading for calculating the combined gamma and neutron dose.
- EC/RM Training – Changes 61 and 62 add additional training to the Emergency Coordinator/Resource Manager/Radiation Protection Coordinator based on comments.

Part II. Description and Review of Licensing Basis Affected by the Proposed Change:

The following is a list of applicable sections to the ISFSI Only Emergency Plan that apply to the changes being evaluated:

- IOEP Section 6.2.5, Corporate Organization
  - Describes the availability of other organizations within the company and contractors to provide support during an ISFSI emergency.
- IOEP Section 9.0, Notification Methods and Procedures
  - Describes the purpose for notifications to be made to State, NRC, and local staff including the other power plants within the Energy Complex.
- IOEP Section 11.0, Public Information
  - Describes the interface with a communications group that will be notified of an Emergency Declaration and provide a response team to interact with the local media. This section is being revised by this change to remove specifics related to Duke Energy such as titles and locations. The overall actions remain the same with this change.
- IOEP Section 13.0, Accident Assessment
  - Describes the requirement to evaluate dose to make a determination if the thresholds for EALs related to ISFSI dose rates have been met.
- IOEP Section 19.0, Emergency Response Organization Training
  - Specifically related to 19.1 for Emergency Coordinator/ Resource Manager Training, provides details on the specific training activities required for these positions to have the knowledge base to perform their functions.
- IOEP Section 20.0, Responsibility for the Planning Effort: Development, Periodic Review and Distribution of Emergency Plans
  - Specifically related to 20.2 for the review and approval of plan and implementing procedure updates utilizing the 50.54(q) process.

Part III. Description of How the Proposed Change Complies with Regulation and Commitments.

If the emergency plan, modified as proposed, no longer complies with planning standards in 10 CFR 50.47(b) and the requirements in Appendix E to 10 CFR Part 50, then ensure the change is rejected, modified, or processed as an exemption request under 10 CFR 50.12, Specific Exemptions, rather than under 10 CFR 50.54(q):

**Note:** Refer to description in Part 1 of this form for change numbers referenced in this section. Regulation descriptions (as exempted) are found in Part IV of this form.

1. 50.54(q) Training – Changes 1, 3, 4, 5, and 6. Impacts 10 CFR 50.47(b) Planning Standard 16.  
The changes made included adding responsibilities to the Emergency Planning Coordinator regarding the training of 50.54(q) evaluators. Additionally, training requirements were copied from AD-EP-ALL-0502 and placed into ADEP-0602 to consolidate the training and implementation of 50.54(q). This change continues to meet the associated Planning Standard as the individuals responsible for evaluating 50.54(q) will continue to receive the same level of training to perform this function.
2. Duke Energy Corporate Interfaces – Changes 9, 29, 30, and 58. Impacts 10 CFR 50.47(b) Planning Standards 2, 3, and 7.  
The changes made are related to the Duke Energy Corporate interface for Emergency Response and Communications with local news outlets. The removal of specific actions to contact Duke Energy corporate organizations for support during emergency recovery have been replaced with generic wording that still begins recovery actions but does not specify how those actions are to proceed. This continues to meet the planning standard 2 requirements since it does not impact initial and planned augmentation response. The change to the description of corporate communication to include less details continues to meet planning standard 7. The response actions required in the IOEP remain unchanged and continue to align with this standard.

3. Notification Enhancements: Change 27 and 28. Impacts 10 CFR 50.47(b) Planning Standard 5 as well as 10 CFR 50 Appendix E Sections IV.C.2, IV.D.1, and IV.D.3.

The changes made to enhance the process of classifying and eventually making notifications serve to reduce the potential for confusion in what the specific requirements are and how to achieve them. Clarification of the timing requirements for classifying an Emergency and subsequent notification do not impact the actual response steps for performing these actions. The addition of information in the body of the procedure regarding previously existing instructions for filling out the state notification form serve to enhance the finding of this information and the repeatability of completing the form in a timely manner. This additional information will not slow the response time to making the notifications. These changes continue to meet the applicable planning standard and Appendix E sections.

4. ISFSI Response Sequence – Change 57. Impacts 10 CFR 50 Appendix E Sections IV.C.2.

This change is related to the change in the sequence in the response procedure for an issue that could result in meeting an EAL criteria for the spent fuel storage. The previous sequence prompted review of the TN Tech Specs prior to considering the Emergency Plan. The change places the Emergency Plan as a higher priority in the step sequence which only serves to reduce the number of actions prior to entering the Emergency Plan and therefore, would not have any negative impact on the Emergency Plan. The applicable Appendix E section continues to be met by this change.

5. ISFSI Radiation levels - Change 57. Impacts 10 CFR 50.47(b) Planning Standard 9 as well as 10 CFR 50 Appendix E Section IV.B.1.

This change is made regarding when to use the 1.5 multiplier for accounting for neutron dose when measuring gamma. The current ISFS-190 information was not clear for the condition with a damaged HSM and elevated dose rates but an unknown condition of the DSC. Based on the evaluation within the Dosimetry Technical Report 17-02 (AR 229460-83), the condition of the HSM is not important with elevated dose rates when the DSC condition is unknown. This report used measured data gathered during loading to draw these conclusions. The addition of damaged HSM to the multiplier aligns with the current basis for this determination. This change does not have any impact on the ability to accurately assess the conditions and make entry into the Emergency Plan. Therefore, these changes continue to meet the applicable planning standard and Appendix E sections.

6. EC/RM Training – Changes 61 and 62. Impacts 10 CFR 50.47(b) Planning Standard 15 as well as 10 CFR 50 Appendix E Section IV.F.1.

This change provides additional training to the Emergency Coordinator and Resource Manager with the addition of required reading of ISFS-190 and a training module in ISFSI design basis accidents. The Radiation Protection Coordinator adds training in drill comments. The inclusion of this training continues to meet the required training discussed in the IOEP, Planning Standard and Appendix E.

## &lt;&lt; 10 CFR 50.54(q) Effectiveness Evaluation Form &gt;&gt;

Part IV. Description of Emergency Plan Planning Standards, Functions and Program Elements Affected by the Proposed Change (Address each function identified in Attachment 1, Part IV of associated Screen):

Note: Struck out text are based on the approved exemptions from the applicable regulation by letter dated March 30, 2015.

1. 50.54(q) Training

- a. 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"

2. Duke Energy Corporate Interfaces

- a. 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."
- b. 10 CFR 50.47(b)(7): ~~"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."~~

3. Notification Enhancements:

- a. 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 messages to response organizations ~~and the public has been established; and means to provide early notification and clear instruction to the populace within the plume exposure pathway Emergency Planning Zone have been established."~~
- b. 10 CFR 50 Appendix E Section IV.C.2: ~~"By June 20, 2012, nuclear power reactor licensees shall establish and maintain the capability to assess, classify, and declare an emergency condition within 15 minutes 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 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."~~
- c. 10 CFR 50 Appendix E Section IV.D.1: ~~"Administrative and physical means for notifying local, State, and Federal officials and agencies and agreements reached with these officials and agencies for the prompt notification of the public and for public evacuation or other protective measures, should they become necessary, shall be described. This description shall include identification of the appropriate officials, by title and agency, of the State and local government agencies within the EPZs."~~
- d. 10 CFR 50 Appendix E Section IV.D.3: "A licensee shall have the capability to notify responsible State and local governmental agencies ~~within 15 minutes~~ after declaring an emergency."

[remainder exempted]

4. ISFSI Response Sequence

- a. 10 CFR 50 Appendix E Section IV.C.2: “~~By June 20, 2012,~~ nuclear power reactor licensees shall establish and maintain the capability to assess, classify, and declare an emergency condition ~~within 15 minutes~~ 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 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.”

5. ISFSI Radiation levels

- a. 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.”
- b. 10 CFR 50 Appendix E Section IV.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 local and State agencies, the Commission, and other Federal agencies...”

6. EC/RM Training

- a. 10 CFR 50.47(b)(15): “Radiological emergency response training is provided to those who may be called on to assist in an emergency.”
- b. 10 CFR 50 Appendix E Section IV.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:
- i. Directors and/or coordinators of the plant emergency organization;” [additional list items not applicable to change not printed here]

Part V. Description of Impact of the Proposed Change on the Effectiveness of Emergency Plan Functions:

Based on the discussion in Part II of this form, the changes described continue to meet the applicable sections of the IOEP, Planning Standards and Appendix E, as exempted. There is no reduction in the capability to respond to and perform the emergency planning functions required during an event. Therefore, this change is not a reduction in effectiveness.

Part VI. Evaluation Conclusion.

Answer the following questions about the proposed change.

1	Does the proposed change comply with 10 CFR 50.47(b) and 10 CFR 50 Appendix E?	Yes x	No <input type="checkbox"/>
2	Does the proposed change maintain the effectiveness of the emergency plan (i.e., no reduction in effectiveness)?	Yes x	No <input type="checkbox"/>
3	Does the proposed change maintain the current Emergency Action Level (EAL) scheme?	Yes x	No <input type="checkbox"/>
4	Choose one of the following conclusions:		
a	The activity does continue to comply with the requirements of 10 CFR 50.47(b) and 10 CFR 50, Appendix E, and the activity does not constitute a reduction in effectiveness or change in the current Emergency Action Level (EAL) scheme. Therefore, the activity can be implemented without prior NRC approval.	x	

b	The activity does not continue to comply with the requirements of 10 CFR 50.47(b) or 10 CFR 50 Appendix E or the activity does constitute a reduction in effectiveness or EAL scheme change. Therefore, the activity cannot be implemented without prior NRC approval.	<input type="checkbox"/>	
Part VII. Disposition of Proposed Change Requiring Prior NRC Approval			
Will the proposed change determined to require prior NRC approval be either revised or rejected?		Yes <input type="checkbox"/>	No <input type="checkbox"/>
If No, then initiate a License Amendment Request in accordance with site procedures.			

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Part VIII. Signatures:		
Preparer Name (Print): Anthony Doruff	Preparer Signature: See CAS	Date: See CAS
Reviewer Name (Print): Jeff Endsley	Reviewer Signature: See CAS	Date: See CAS
Approver Name (Print): Mark Garrison	Approver Signature: See CAS	Date: See CAS
<p>If the proposed activity is a change to the E-Plan, then initiate PRRs. <input type="checkbox"/></p> <p>If the proposed activity is a change to the E-Plan, then create two EREG General Assignments.</p> <ul style="list-style-type: none"> <li>One for EP to provide the 10 CFR 50.54(q) summary of the analysis, or the completed 10 CFR 50.54(q), to Licensing. <input checked="" type="checkbox"/></li> <li>One for Licensing to submit the 10 CFR 50.54(q) information to the NRC within 30 days after the change is put in effect. <input checked="" type="checkbox"/></li> </ul>		

QA RECORD