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10 CFR 50.4(b)(5)(ii)
10 CFR 50.54(q)(5)

January 4, 2024
Serial: RA-24-0006

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

Shearon Harris Nuclear Power Plant, Unit 1
Docket No. 50-400/Renewed License No. NPF-63

Subject: 10 CFR 50.54(q) Evaluation

Ladies and Gentlemen:

In accordance with 10 CFR 50.4(b)(5)(ii) and 10 CFR 50.54(q)(5), Duke Energy Progress, LLC, is submitting the 10 CFR 50.54(q) Review Form for a revision to the Shearon Harris Nuclear Power Plant, Unit 1 (HNP), On-Shift Staffing Analysis. EP-HNP-OSSA, "Harris On-Shift Staffing Analysis," Revision 1, was issued on December 14, 2023.

This submittal contains no regulatory commitments. Please refer any questions regarding this submittal to Sarah McDaniel at (984) 229-2002.

Sincerely,

A handwritten signature in blue ink, appearing to read "J Sharlow", written over a light blue circular stamp.

Jamey Sharlow

Enclosure: 10 CFR 50.54(q) Review Form for EP-HNP-OSSA, Revision 1

cc: P. Boguszewski, NRC Senior Resident Inspector, HNP
M. Mahoney, NRC Project Manager, HNP
NRC Regional Administrator, Region II

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Enclosure

ENCLOSURE

SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1

DOCKET NO. 50-400/RENEWED LICENSE NUMBER NPF-63

10 CFR 50.54(Q) REVIEW FORM FOR EP-HNP-OSSA, REVISION 1

(21 PAGES PLUS COVER)

EMERGENCY PLAN CHANGE SCREENING AND EFFECTIVENESS EVALUATIONS 10 CFR 50.54(Q)	AD-EP-ALL-0602
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Section I: 10 CFR 50.54(q) Review Number: (EREG #):		02478380	
Applicable Sites and Applicability Determination # (5AD)			
<input type="checkbox"/> BNP		<input type="checkbox"/> CNS	<input checked="" type="checkbox"/> HNP 02497822
<input type="checkbox"/> MNS		<input type="checkbox"/> ONS	<input type="checkbox"/> RNP
Document #, EC #, or N/A	Revision # or N/A	Document or Activity Title	
EP-HNP-OSSA	001	Harris On-Shift Staffing Analysis	

Section II: Identify/Describe All Proposed Activities/Changes 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 (Use attachments, or continue additional pages as necessary): Continue to **Section III**.

EP-HNP-OSSA, Harris On-Shift Staffing Analysis, provides the on shift staffing analysis regulatory basis and guidance, the staffing compliment used in the analysis, the events and tasks used during the analysis, applicable time motion studies and the analysis results for Harris Nuclear Plant. Revision 1 of EP-HNP-OSSA incorporates various updates to on-shift personnel requirements and tasks performed by the Chemistry Technician, Mechanic, and I&C Technician. A description of each proposed change made in Revision 1 is shown in the table below.

Change #	Section or Step #	Changed From	Changed To
1	Revision Summary	Old revision summary	Updated revision summary identifying the changes made in Revision 1
2	Throughout	EP-HNP-OSSA: Old revision number (000)	EP-HNP-OSSA: New revision number (001)
3	Section 3.4	Chemistry Technician, Mechanic, and I&C Technician were included in the bulleted list of on-shift personnel and their respective locations	Removed Chemistry Technician, Mechanic, and I&C Technician from the bulleted list of on-shift personnel and their respective locations

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4	Attachment 2, Table 1 – On-Shift Positions, Analysis Event # 1 – Main Steam Line Break (MSLB)	Line 15 Chemistry Technician (CT), line 16 Mechanic (MT), and line 17 I&C Technician (ICT) were included in Table 1 with no tasks assigned	Removed line 15 Chemistry Technician (CT), line 16 Mechanic (MT), and line 17 I&C Technician (ICT) from Table 1 with no tasks assigned
5	Attachment 2, Table 2 – Plant Operations & Safe Shutdown Analysis Event # 1 – Main Steam Line Break (MSLB)	Table 2 included a section for ‘Other (non-Operations) Personnel’ that included the Mechanic (MT) under line 16 and I&C Technician (ICT) under line 17 with no tasks assigned	Removed ‘Other (non-Operations) Personnel’ section of Table 2 that removed the Mechanic (MT) and I&C Technician (ICT) with no tasks assigned
6	Attachment 2, Analysis Event #3- Reactor Coolant Pump Rotor Seizure Tasks and Timing	<p>Line 12 contained an action to ‘Dispatch CT to perform samples per step 1’</p> <p>Line 13 action to ‘Sample per AOP-32 step 1’ was assigned to the CT.</p> <p>Line 45 contained an action for the ICT to ‘Check pressure switches for MFP reset/Drain Pumps’</p> <p>Line 48 contained an action for the MT to ‘Station at Turbine coastdown/ensure</p>	<p>Line 12 contains an action to ‘Dispatch CT or RPT2 to perform samples per step 1’</p> <p>Line 13 action to ‘Sample per AOP-32 step 1’ is assigned to the RPT2.</p> <p>Previous action for the ICT to ‘Check pressure switches for MFP reset/Drain Pumps’ is removed.</p> <p>Previous action for the MT to ‘Station at Turbine coastdown/ensure proper turning gear ops’ is removed.</p>

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Change #	Section or Step #	Changed From	Changed To
		proper turning gear ops'	
7	Attachment 2, Table 1- On-Shift Positions, Analysis Event #3- Reactor Coolant Pump Rotor Seizure	Attachment 2, Table 1 contained lines for the Chemistry Technician (CT) under line 15 with '4/8' role in Table # / Line # column, Mechanic (MT) under line 16 with '2/16' role in Table # / Line # column, and I&C Technician (ICT) under line 17 with '2/17' role in Table # / Line # column Attachment 2, Table 1, line 14 for RP Qualified Individual (RPT2) had '4/1' role in Table # / Line # column	Attachment 2, Table 1 does not include lines for the Chemistry Technician (CT), Mechanic (MT), and I&C Technician (ICT) Attachment 2, Table 1, line 14 for RP Qualified Individual (RPT2) has '4/1' and '4/8' roles in Table # / Line # column
8	Attachment 2, Table 2 – Plant Operations & Safe Shutdown Analysis Event # 3 – Reactor Coolant Pump Rotor Seizure	Table 2 included a section for 'Other (non-Operations) Personnel' that included the Mechanic (MT) that performed the 'Turbine Coastdown Monitoring' task under line 16 and I&C Technician (ICT) that performed the "Check Pressure Switches' task under line 17	Removed 'Other (non-Operations) Personnel' section of Table 2 that removed the Mechanic (MT) that performed the 'Turbine Coastdown Monitoring' task and I&C Technician (ICT) that performed the "Check Pressure Switches' task
9	Attachment 2, Table 4 – Radiation	Task 8 to 'Sample RCS' was performed by the	Task 8 to 'Sample RCS' was revised to be

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Change #	Section or Step #	Changed From	Changed To
	Protection and Chemistry Analysis Event # 3 – Reactor Coolant Pump Rotor Seizure	CT	performed by the RPT2
10	Attachment 2, Analysis Event #6- Steam Generator Tube Rupture (SGTR) Tasks and Timing	Line 38 contained an action for the RPT1 to 'Notify CT for sampling CVPET' Line 42 contained an action for the CT to 'Sample CVPET'	The action for the RPT1 to 'Notify CT for sampling CVPET' is removed The action for the CT to 'Sample CVPET' is removed
11	Attachment 2, Table 1 – On-Shift Positions, Analysis Event #6- Steam Generator Tube Rupture (SGTR)	Attachment 2, Table 1 contained lines for the Chemistry Technician (CT) under line 15 with a role in Table # /Line # column as '4/8', Mechanic (MT) under line 16 with no tasks, and I&C Technician (ICT) under line 17 with no tasks	Attachment 2, Table 1 does not include lines for the Chemistry Technician (CT), Mechanic (MT), and I&C Technician (ICT). The CT task was removed with this change.
12	Attachment 2, Table 2 – Plant Operations & Safe Shutdown Analysis Event # 6 – Steam Generator Tube Rupture (SGTR)	Table 2 included a section for 'Other (non-Operations) Personnel' that included the Mechanic (MT) under line 16 and I&C Technician (ICT) under line 17 with no tasks assigned	Removed 'Other (non-Operations) Personnel' section of Table 2 that removed the Mechanic (MT) and I&C Technician (ICT) with no tasks assigned

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Change #	Section or Step #	Changed From	Changed To
13	Attachment 2, Table 4 – Radiation Protection and Chemistry Analysis Event # 6 – Steam Generator Tube Rupture (SGTR)	Task 8 to ‘Sample CVPET’ was performed by the CT	Task 8 to ‘Sample CVPET’ was removed
14	Attachment 2, Table 1 – On-Shift Positions, Analysis Event #7-Large Break Loss of Coolant Accident (LB-LOCA)	Attachment 2, Table 1 contained lines for the Chemistry Technician (CT) under line 15 with no tasks, Mechanic (MT) under line 16 with no tasks, and I&C Technician (ICT) under line 17 with no tasks	Attachment 2, Table 1 does not include lines for the Chemistry Technician (CT), Mechanic (MT), and I&C Technician (ICT). No tasks were impacted based upon this change.
15	Attachment 2, Table 2 – Plant Operations & Safe Shutdown Analysis Event # 7- Large Break Loss of Coolant Accident (LB-LOCA)	Table 2 included a section for ‘Other (non-Operations) Personnel’ that included the Mechanic (MT) under line 16 and I&C Technician (ICT) under line 17 with no tasks assigned	Removed ‘Other (non-Operations) Personnel’ section of Table 2 that removed the Mechanic (MT) and I&C Technician (ICT) with no tasks assigned
16	Attachment 2, Table 1 – On-Shift Positions, Analysis Event #9-Design Basis Threat (DBT)	Attachment 2, Table 1 contained lines for the Chemistry Technician (CT) under line 15 with no tasks, Mechanic (MT) under line 16 with no tasks, and I&C Technician (ICT) under	Attachment 2, Table 1 does not include lines for the Chemistry Technician (CT), Mechanic (MT), and I&C Technician (ICT). No tasks were impacted based upon this change.

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Change #	Section or Step #	Changed From	Changed To
		line 17 with no tasks	
17	Attachment 2, Table 2 – Plant Operations & Safe Shutdown Analysis Event # 9- Design Basis Threat (DBT)	Table 2 included a section for ‘Other (non-Operations) Personnel’ that included the Mechanic (MT) under line 16 and I&C Technician (ICT) under line 17 with no tasks assigned	Removed ‘Other (non-Operations) Personnel’ section of Table 2 that removed the Mechanic (MT) and I&C Technician (ICT) with no tasks assigned
18	Attachment 2, Analysis Event #10- Probable Aircraft Threat Tasks and Timing	Line 31 contained an action for CT to ‘Perform surveillances’	Removed the action for CT to ‘Perform surveillances’
19	Attachment 2, Table 1 – On-Shift Positions, Analysis Event #10- Probable Aircraft Threat	Attachment 2, Table 1 contained lines for the Chemistry Technician (CT) under line 15 with a role in Table # /Line # column as ‘4/8’, Mechanic (MT) under line 16 with no tasks, and I&C Technician (ICT) under line 17 with no tasks	Attachment 2, Table 1 does not include lines for the Chemistry Technician (CT), Mechanic (MT), and I&C Technician (ICT). The CT task was removed with this change.
20	Attachment 2, Table 2 – Plant Operations & Safe Shutdown Analysis Event #10- Probable Aircraft Threat	Table 2 included a section for ‘Other (non-Operations) Personnel’ that included the Mechanic (MT) under line 16 and I&C Technician (ICT) under	Removed ‘Other (non-Operations) Personnel’ section of Table 2 that removed the Mechanic (MT) and I&C Technician (ICT) with no tasks

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Change #	Section or Step #	Changed From	Changed To
		line 17 with no tasks assigned	assigned
21	Attachment 2, Table 4 – Radiation Protection and Chemistry Analysis Event # 10 – Probable Aircraft Threat	Task 8 to ‘Perform Surveillances’ was performed by the CT	Task 8 to ‘Perform Surveillances’ was removed
22	Attachment 2, Table 1 – On-Shift Positions, Analysis Event #11- Control Room Evacuation Due to Fire	Attachment 2, Table 1 contained lines for the Chemistry Technician (CT) under line 15 with no tasks, Mechanic (MT) under line 16 with no tasks, and I&C Technician (ICT) under line 17 with no tasks	Attachment 2, Table 1 does not include lines for the Chemistry Technician (CT), Mechanic (MT), and I&C Technician (ICT). No tasks were impacted based upon this change.
23	Attachment 2, Table 2 – Plant Operations & Safe Shutdown Analysis Event #11- Control Room Evacuation Due to Fire	Table 2 included a section for ‘Other (non-Operations) Personnel’ that included the Mechanic (MT) under line 16 and I&C Technician (ICT) under line 17 with no tasks assigned	Removed ‘Other (non-Operations) Personnel’ section of Table 2 that removed the Mechanic (MT) and I&C Technician (ICT) with no tasks assigned
24	Attachment 2, – Table 4- Radiation Protection and Chemistry Analysis for Event #1 – MSLB, Event# 3-	Title of Table 4 was ‘Radiation Protection and Chemistry Analysis’	Title of Table 4 is ‘Radiation Protection’

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Change #	Section or Step #	Changed From	Changed To
	RCP Rotor Seizure, Event #6- SGTR, Event#7 – LB-LOCA, Event #9 – DBT, Event #10 – PAT, and Event #11 – Control Room Evacuation Due to Fire.		

Section III: Description and Review of Licensing Basis Affected by the Proposed activity or Change:

List all emergency plan sections that were reviewed for this activity by number and title.

IF THE ACTIVITY IN ITS ENTIRETY IS AN EMERGENCY PLAN CHANGE, EAL CHANGE OR EAL BASIS CHANGE, Enter Licensing Basis affected by the change and continue to **Section VI**.

Licensing Basis

- EP-ALL-EPLAN, Duke Energy Common Emergency Plan, Revision 0
- EP-HNP-EPLAN-ANNEX, Duke Energy Harris Emergency Plan Annex, Revision 0

Current Emergency Plans

- EP-ALL-EPLAN, Duke Energy Common Emergency Plan, Rev 5
- EP-HNP-EPLAN-ANNEX, Duke Energy Harris Emergency Plan Annex, Rev 1

The differences in the approved and the current revision of the Emergency Plan have been reviewed, and they have been determined to meet the regulatory requirements required during the course of revisions.

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Section IV: Ability to Maintain the Emergency Plan.
Answer the following questions related to impact on the ability to maintain the Emergency Plan. Continue to Section V.

1. Do any of the elements of the proposed activity change information or intent contained in the Emergency Plan?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
2. Do any elements of the proposed activity change the process or capability for alerting or notifying the public as described in the FEMA-approved Alert and Notification System Design Report?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
3. Do any elements of the proposed activity change the Evacuation Time Estimate results?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
4. Do any elements of the proposed activity change the On-Shift Staffing Analysis results?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
5. Does the Proposed activity require a change to the Emergency Plan Programmatic Description?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

If Question 5 was answered yes, and the document being reviewed is NOT the Emergency Plan, then exit this review until the Emergency Plan change is complete or the proposed change is modified to not change the Emergency Plan Programmatic Description.

Section IV conclusion:

If questions 1-5 in **Section IV** marked NO, then complete **Section V**.

If any question 1-5 of **Section IV** marked yes, then continue at **Section VI**.

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Section V: Maintaining the Emergency Plan Conclusion.

The questions in **Section IV** do not represent the total of all conditions that may cause a change to or impact the ability to maintain the emergency plan. Originator and reviewer signatures in **Section XIV** document that a review of all elements of the proposed change have been considered for their impact on the ability to maintain the emergency plan and their potential to change the emergency plan.

1. Provide a brief conclusion below that describes how the conditions, as described in the emergency plan, are maintained with this activity.
 2. Select the box below when the review completes all actions for all elements of the activity and no 10CFR50.54 screening or evaluation is required for any element. Continue to **Section XIV**.
- I have completed a review of this activity in accordance with 10CFR50.54(q)(2) and determined that the effectiveness of the emergency plan is maintained. This activity does not make any changes to the emergency plan. No further actions are required to screen or evaluate this activity in accordance with 10CFR50.54(q)(3).

Conclusion:

Section VI: Activity Previously Reviewed?
Is this activity fully bounded by an NRC approved 10CFR50.90 submittal or Alert and Notification System Design Report?

<input type="checkbox"/>	Yes	10 CFR 50.54(q) Evaluation is not required. Identify bounding source document below and continue to Section XIV .
<input checked="" type="checkbox"/>	No	Continue to Section VII .
<input type="checkbox"/>	Partially	If PARTIALLY , identify bounding source document and list changes bounded by the approved 10 CFR 50.90 or Alert and Notification System Design Report below. Changes not bound by the approved 10 CFR 50.90 or Alert and Notification System Design Report (i.e., part requiring further review). Continue the review in Section VII .

Bounding source document and list of bounded changes:

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Section VII: Editorial Changes		
<input type="checkbox"/>	Yes	All Activities/Changes identified in Section II are editorial/typographical changes such as formatting, paragraph numbering, spelling, or punctuation that does not change intent.
<input type="checkbox"/>	No	None of the Activities/Changes listed in Section II are editorial/typographical changes. Continue to Section VIII .
<input checked="" type="checkbox"/>	Partially	Some Activities/Changes are editorial/typographical.
<p>If Yes is checked, Identify the activities/changes listed in Section II that are editorial/typographical changes and provide justification below. Continue to Section XII.</p> <p>If Partially is checked, Identify the activities/changes listed in Section II that are editorial/typographical changes and provide justification below. Continue to Section VIII for changes not identified as editorial.</p>		

Justification:

Change 1 updated the revision summary for the EP-HNP-OSSA, Revision 1 scope of changes.
Change 2 updated the revision number of the EP-HNP-OSSA from Revision 0 to Revision 1.
Changes 1 and 2 are defined as editorial in accordance with AD-EP-ALL-0602.

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Section VIII: Emergency Planning Element and Function Screen		
<i>(Utilize Reg Guide 1.219 and Attachment 1, Additional Regulatory Guidance References for additional assistance)</i>		
Does any of Proposed Activities/Changes Identified in Section I impact any of the following, including program elements from NUREG-0654/FEMA REP-1 Section II? If yes check appropriate 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 checked="" type="checkbox"/>
2b	The process for timely augmentation of onshift staff is established and maintained.	<input type="checkbox"/>
3	10 CFR 50.47(b)(3) Emergency Response Support and Resources	
3a	Arrangements for requesting and using off site assistance have been made.	<input type="checkbox"/>
3b	State and local staff can be accommodated at the EOF in accordance with the emergency plan.	<input type="checkbox"/>
4	10 CFR 50.47(b)(4) Emergency Classification System	RS
4a	A standard scheme of emergency classification and action levels is in use. (Requires V/V (Attachment 3) and final approval of Screen and Evaluation by EP CFAM)	<input type="checkbox"/>
5	10 CFR 50.47(b)(5) Notification Methods and Procedures	RS
5a	Procedures for notification of State and local governmental agencies are capable of alerting them of the declared emergency within 15 minutes (60 minutes for CR3) after declaration of an emergency and providing follow-up notification.	<input type="checkbox"/>
5b	Administrative and physical means have been established for alerting and providing prompt instructions to public within the plume exposure pathway.	<input type="checkbox"/>
5c	The public ANS meets the design requirements of FEMA-REP-10, Guide for Evaluation of Alert and Notification Systems for Nuclear Power Plants, or complies with the licensee's FEMA-approved ANS design report and supporting FEMA approval letter	<input type="checkbox"/>
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"/>

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7	10 CFR 50.47(b)(7) Public Education and Information	
7a	Emergency preparedness information is made available to the public on a periodic basis within the plume exposure pathway emergency planning zone (EPZ).	<input type="checkbox"/>
7b	Coordinated dissemination of public information during emergencies is established.	<input type="checkbox"/>
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.	<input type="checkbox"/>
10	10 CFR 50.47(b) (10) Protective Response	
10a	A range of public PARs is available for implementation during emergencies.	<input type="checkbox"/>
10b	Evacuation time estimates for the population located in the plume exposure pathway EPZ are available to support the formulation of PARs and have been provided to State and local governmental authorities.	<input type="checkbox"/>
10c	A range of protective actions is available for plant emergency workers during emergencies, including those for hostile action events.	<input type="checkbox"/>
10d	KI is available for implementation as a protective action recommendation in those jurisdictions that chose to provide KI to the public.	<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.	<input type="checkbox"/>
16	10 CFR 50.47(b) (16) Emergency Plan Maintenance	
16a	Responsibility for emergency plan development and review is established.	<input type="checkbox"/>

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16b	Planners responsible for emergency plan development and maintenance are properly trained.	<input type="checkbox"/>
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Section VIII: Conclusion

■ If any **Section VIII** criteria are checked, document the basis for conclusion below for any changes that are more than editorial, however not impacted by any of the identified criteria in Section VIII and continue the 50.54(q) Review in **Section IX**.

If no **Section VIII** criteria are checked, 10CFR50.54(q)(3) Evaluation is NOT required.

Document justification below for any changes that are more than editorial and continue to **Section XIV**.

Justification for changes that are more than editorial, however, not impacted by any of the identified criteria in Section VIII:

Changes 4, 5, 12, 14, 15, 16, 17, 20, 22, and 23 updated various tables to remove the Chemistry Technician (CT), Mechanic (MT), and I&C Technician (ICT) positions that were shown with no tasks assigned. These changes have no impact to the on-shift staffing analysis since the tasks for each event response were not impacted.

Section IX: Description of Emergency Plan Planning Standards, Functions and Program Elements Affected by the Proposed Change

Copy each emergency planning standard, function and program element affected by the proposed change that was identified as applicable in **Section VIII**. Continue to **Section X**.

List affected Emergency Planning Standards, Functions, and Program Elements:

Planning Standard

The regulation at 10 CFR 50.47(b)(2) states the following:

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.

Function

The applicable emergency planning function identified for this planning standard:

The process ensures that onshift emergency response responsibilities are staffed and assigned.

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Applicable sections of Appendix E to 10 CFR Part 50

IV.A of Appendix E to 10 CFR Part 50

The organization for coping with radiological emergencies shall be described, including definition of authorities, responsibilities, and duties of individuals assigned to the licensee's emergency organization and the means for notification of such individuals in the event of an emergency.

IV.A.9 of Appendix E to 10 CFR Part 50

By December 24, 2012, for nuclear power reactor licensees, a detailed analysis demonstrating that on-shift personnel assigned emergency plan implementation functions are not assigned responsibilities that would prevent the timely performance of their assigned functions as specified in the emergency plan.

Informing Criteria from NUREG-0654

The applicable program elements describe in NUREG-0654, Section II.B state:

B.1.a - The site-specific emergency response organization (ERO) is developed. Note that while other site programs, such as operations, fire response, rescue and first aid, and security, may be controlled via other licensing documents, it is only when these personnel are assigned EP functions that they become part of this regulatory standard. Consideration is given to ensure that EP functions are not assigned to individuals who may have difficulties performing their EP function(s) simultaneously with their other assigned (non-EP) duties. Appendix E to 10 CFR Part 50 requires licensees to perform an on-shift staffing analysis to ensure on-shift staff can support the EP functions assigned, as well as other assigned duties.

B.3 - A table is developed depicting the site-specific on-shift staffing plan, as well as the ERO staffing augmentation plan. Table B-1, "Emergency Response Organization (ERO) Staffing and Augmentation Plan," provides a model for licensees to consider.

Section X: Describe How the Proposed Change Complies with Relevant Emergency Preparedness Regulation(s) and Previous Commitment(s) Made to the NRC

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). Address each Planning Standard identified in **Section IX. Continue to Section XI.**

Justification:

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Change 6 includes updates to the Reactor Coolant Pump Rotor Seizure event tasks and timing. The first update adds the RP technician 2 as a position available to perform a sample per AOP-032, High RCS Activity. Plant procedural guidance allows for either a Chemistry technician or RP technician to perform sampling in accordance with AOP-032 and CRC-821, Post Accident Sampling. Therefore, this change aligns personnel responsibilities to responsibilities governed by AOP-032 and CRC-821. The second update removes an action for the I&C technician (ICT) to 'Check pressure switches for MFP reset/Drain Pumps'. The action for the ICT to check pressure switches for MFP reset/Drain Pumps was determined to be unnecessary for the Reactor Coolant Pump Rotor Seizure event immediate response. GP-006, Normal Plant Shutdown From Power Operation to Hot Standby (Mode 1 to Mode 3), contains instructions for the ICT to check pressure switches for MFP reset/Drain Pumps, however this action may be completed after personnel have been called out to support a response to this event. The third change removes an action for the mechanic (MT) to 'Station at Turbine coastdown/ensure proper turning gear ops'. The action for the MT to station at Turbine coastdown/ensure proper turning gear ops was determined to be unnecessary for the Reactor Coolant Pump Rotor Seizure event immediate response. This action may be completed after personnel have been called out to support a response to this event.

Change 7 includes updates to the on-shift positions in Table 1 for the Reactor Coolant Pump Rotor Seizure event, based upon Change 6 described above.

Change 8 includes updates to the Plant Operations & Safe Shutdown Analysis in Table 2 for the Reactor Coolant Pump Rotor Seizure event, based upon Change 6 described above.

Change 9 includes updates to the Radiation Protection and Chemistry Analysis in Table 4 for the Reactor Coolant Pump Rotor Seizure event, based upon Change 6 described above. Change 10 includes updates to the Steam Generator Tube Rupture (SGTR) event tasks and timing. The first update removes an action for the RP technician 1 to 'Notify CT for sampling CVPET'. The action for the RP technician 1 to notify CT for sampling CVPET was determined to be unnecessary for the SGTR event immediate response. The second update removes an action for the CT to 'Sample CVPET'. The action for CT to sample the CVPET was determined to be unnecessary for the SGTR event immediate response. The CVPET sampling activity may be completed if necessary after personnel have been called out to support a response to this event.

Change 11 includes updates to the on-shift positions in Table 1 for the SGTR event, based upon Change 10 described above.

Change 13 includes updates to the Radiation Protection and Chemistry Analysis in Table 4 for the SGTR event, based upon Change 10 described above.

Change 18 includes an update to the Probable Aircraft Threat event tasks and timing. The action for the CT to 'Perform surveillances' was removed. The action for the CT to perform

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surveillances was determined to be unnecessary for the Probable Aircraft Threat event immediate response. AOP-038, Rapid Downpower, contains guidance for an operator to direct Chemistry to initiate surveillances required by RST-204, Reactor Coolant System Chemistry and Radiochemistry Surveillance, and RST-211, Gaseous Effluent Radiochemistry Surveillance. However, these surveillances may be completed after personnel have been called out to support a response to this event. The shortest timeframe for Chemistry completing these surveillances is six hours following the event (that would involve a thermal power change exceeding 15 percent).

Change 19 includes updates to the on-shift positions in Table 1 for the Probable Aircraft Threat event, based upon Change 18 described above.

Change 21 includes updates to the Radiation Protection and Chemistry Analysis in Table 4 for the Probable Aircraft Threat event, based upon Change 18 described above.

Change 3 removed Chemistry Technician, Mechanic, and I&C Technician from the bulleted list of on-shift personnel and their respective locations in Section 3.4. Change 24 updated the title of Table 4 to remove Chemistry for various analysis events. These updates are based upon other changes to event tasks and responsibilities described under changes 6, 10, and 18 described above. The Chemistry Technician, Mechanic, and I&C Technician do not have tasks in the proposed Revision 1 of the EP-HNP-OSSA and are not required on-shift per the emergency plan, technical specifications, or the UFSAR.

The changes listed above do not change ERO staffing as required by the EP-ALL-EPLAN, Duke Energy Common Emergency Plan and the changes do not reduce on-shift staffing for ERO functions. On shift staffing responsibilities for emergency response remain unambiguously defined, and adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, therefore the changes continue to meet the requirements as identified in 10 CFR 50.47 (b)(2).

Section XI: Description of Impact of the Proposed Change on the Effectiveness of Emergency Plan Functions

Address each function identified in **Section IX. Continue to Section XII.**

Justification:

Change 6 includes updates to the Reactor Coolant Pump Rotor Seizure event tasks and timing. The first update adds the RP technician 2 as a position available to perform a sample per AOP-032. Plant procedural guidance allows for either a Chemistry technician or RP technician to perform sampling in accordance with AOP-032 and CRC-821. Therefore, this change aligns personnel responsibilities to responsibilities governed by AOP-032 and CRC-821. The second update removes an action for the I&C technician (ICT) to 'Check pressure switches for MFP reset/Drain Pumps'. The action for the ICT to check pressure switches for MFP reset/Drain Pumps was determined to be unnecessary for the Reactor Coolant Pump Rotor Seizure event

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immediate response. GP-006 contains instructions for the ICT to check pressure switches for MFP reset/Drain Pumps, however this action may be completed after personnel have been called out to support a response to this event. The third change removes an action for the mechanic (MT) to 'Station at Turbine coastdown/ensure proper turning gear ops'. The action for the MT to station at Turbine coastdown/ensure proper turning gear ops was determined to be unnecessary for the Reactor Coolant Pump Rotor Seizure event immediate response. This action may be completed after personnel have been called out to support a response to this event.

Change 7 includes updates to the on-shift positions in Table 1 for the Reactor Coolant Pump Rotor Seizure event, based upon Change 6 described above.

Change 8 includes updates to the Plant Operations & Safe Shutdown Analysis in Table 2 for the Reactor Coolant Pump Rotor Seizure event, based upon Change 6 described above.

Change 9 includes updates to the Radiation Protection and Chemistry Analysis in Table 4 for the Reactor Coolant Pump Rotor Seizure event, based upon Change 6 described above. Change 10 includes updates to the Steam Generator Tube Rupture (SGTR) event tasks and timing. The first update removes an action for the RP technician 1 to 'Notify CT for sampling CVPET'. The action for the RP technician 1 to notify CT for sampling CVPET was determined to be unnecessary for the SGTR event immediate response. The second update removes an action for the CT to 'Sample CVPET'. The action for CT to sample the CVPET was determined to be unnecessary for the SGTR event immediate response. The CVPET sampling activity may be completed if necessary after personnel have been called out to support a response to this event.

Change 11 includes updates to the on-shift positions in Table 1 for the SGTR event, based upon Change 10 described above.

Change 13 includes updates to the Radiation Protection and Chemistry Analysis in Table 4 for the SGTR event, based upon Change 10 described above.

Change 18 includes an update to the Probable Aircraft Threat event tasks and timing. The action for the CT to 'Perform surveillances' was removed. The action for the CT to perform surveillances was determined to be unnecessary for the Probable Aircraft Threat event immediate response. AOP-038 contains guidance for an operator to direct Chemistry to initiate surveillances required by RST-204 and RST-211. However, these surveillances may be completed after personnel have been called out to support a response to this event. The shortest timeframe for Chemistry completing these surveillances is six hours following the event (that would involve a thermal power change exceeding 15 percent).

Change 19 includes updates to the on-shift positions in Table 1 for the Probable Aircraft Threat event, based upon Change 18 described above.

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Change 21 includes updates to the Radiation Protection and Chemistry Analysis in Table 4 for the Probable Aircraft Threat event, based upon Change 18 described above.

Change 3 removed Chemistry Technician, Mechanic, and I&C Technician from the bulleted list of on-shift personnel and their respective locations in Section 3.4. Change 24 updated the title of Table 4 to remove Chemistry for various analysis events. These updates are based upon other changes to event tasks and responsibilities described under changes 6, 10, and 18 described above. The Chemistry Technician, Mechanic, and I&C Technician do not have tasks in the proposed Revision 1 of the EP-HNP-OSSA and are not required on-shift per the emergency plan, technical specifications, or the UFSAR.

These changes do not cause any of the major functional areas or major tasks identified in the emergency plan to be unassigned. The changes do not eliminate key positions identified in the emergency plan nor reassign the responsibilities of the eliminated positions to other key positions. The changes do not result in an ERO member being assigned duties that could be expected to be performed concurrently rather than sequentially. The changes do not reduce the effectiveness of the emergency plan as the on-shift ERO staffing complement is unaffected by these changes.

The proposed changes to HNP's On Shift Staffing Analysis continue to show the capability of implementing the site's emergency plan to address a spectrum initiating events and consequences. The key emergency response functions and tasks as described in NUREG-0654 include:

- Shutdown the reactor and maintain safe shutdown
- Mitigate event consequences
- Notify augmented ERO staff and Offsite Response Organizations (OROs)
- Determine Protective Action Recommendations (PARs) for site personnel and the public
- Perform firefighting
- Provide medical assistance if needed

The changes listed above do not change ERO staffing as set forth in EP-ALL-EPLAN, Duke Energy Common Emergency Plan as on-shift emergency response responsibilities are staffed and assigned. The changes do not reduce the availability of personnel relied upon in the plan. Therefore, the changes do not reduce the effectiveness of the Duke Energy Common Emergency Plan. These changes continue to provide assurance that the Emergency Response Organization has the ability and capability to:

- respond to an emergency;
- perform functions in a timely manner;
- effectively identify and take measures to ensure protection of the public health and safety; and
- effectively use response equipment and emergency response procedures.

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These change(s) continue (continues) to meet NRC requirements, as described in 10 CFR 50.47(b) and 10 CFR 50, Appendix E as well as the requirements of the Duke Energy Site's Emergency Plans as written and approved.

Section XII: 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 <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. Does the proposed change maintain the effectiveness of the emergency plan (i.e., no reduction in effectiveness)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
3. Does the proposed change maintain the current Emergency Action Level (EAL) scheme?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Section XII: Conclusion	
Questions 1, 2 and 3 are answered YES, complete step below to create a General CAS assignment, and then continue on to Section XIV and implement change(s).	<input checked="" type="checkbox"/>
General CAS assignment created- Licensing submit changes in accordance with 10 CFR 50.4(b)(5)(ii) within 30 days of change implementation	<input checked="" type="checkbox"/>
Questions 1 or 2 or 3 are answered NO, complete Sections XIII and Section XIV .	<input type="checkbox"/>

Section XIII: Disposition of Proposed Change Requiring Prior NRC Approval	
Will the proposed change be submitted to the NRC for prior approval?	Yes <input type="checkbox"/> No <input type="checkbox"/>
If No, reject the proposed change, or modify the proposed change and perform a new evaluation. Continue to Section XIV for this evaluation.	
If YES, then initiate a License Amendment Request in accordance 10 CFR 50.90, AD-LS-ALL-0002, Regulatory Correspondence, and AD-LS-ALL-0015, License Amendment Request and Changes to SLC, TRM, and TS Bases, and include the tracking number: _____ . Complete Section XIV .	

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Section XIV: Signatures:		
EP CFAM Final Approval is required for changes affecting Program Element 4a of Section VIII . If CFAM approval is NOT required, then mark the EP CFAM signature block as not applicable (N/A) to indicate that signature is not required. Section XIV as applicable.		
Preparer Name (Print): Sarah McDaniel	Preparer Signature: See NAS	Date: See NAS
Reviewer Name (Print): Jamey Sharlow	Reviewer Signature: See NAS	Date: See NAS
Approver Name (Print): William Gunter	Approver Signature: See NAS	Date: See NAS
Approver (EP CFAM, as required) Name (Print): N/A	Approver Signature: N/A	Date: N/A

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