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10 CFR 50.90
10 CFR 50, Appendix E, IV.E.8.b

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

Brunswick Steam Electric Plant, Unit Nos. 1 and 2
Docket Nos. 50-325, 50-324
Renewed License Nos. DPR-71 and DPR-62

Catawba Nuclear Station, Unit Nos. 1 and 2
Docket Nos. 50-413, 50-414
Renewed License Nos. NPF-35 and NPF-52

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

McGuire Nuclear Station, Unit Nos. 1 and 2
Docket Nos. 50-369, 50-370
Renewed License Nos. NPF-9 and NPF-17

Oconee Nuclear Station, Unit Nos. 1, 2 and 3
Docket Nos. 50-269, 50-270, and 50-287
Renewed License Nos. DPR-38, DPR-47, and DPR-55

H. B. Robinson Steam Electric Plant, Unit No. 2
Docket No. 50-261
Renewed License No. DPR-23

William States Lee III Nuclear Station, Units 1 and 2
Docket Nos. 52-018 and 52-019
License Nos. NPF-101 and NPF-102

SUBJECT: License Amendment Request to Relocate the Duke Energy Emergency Operations Facility

Ladies and Gentlemen:

Pursuant to 10 CFR 50.90 and 10 CFR 50, Appendix E, IV.E.8.b, Duke Energy Carolinas, LLC and Duke Energy Progress, LLC (collectively referred to as Duke Energy) is submitting a request to the Nuclear Regulatory Commission (NRC) for Brunswick Steam Electric Plant Units 1 and 2 (BNP), Catawba Nuclear Station Units 1 and 2 (CNS), Shearon Harris Nuclear Power Plant, Unit 1 (HNP), McGuire Nuclear Station Units 1 and 2 (MNS), Oconee Nuclear Station

Units 1, 2, and 3 (ONS), and H. B. Robinson Steam Electric Plant, Unit 2 (RNP) to change the Duke Energy Common Emergency Plan, CNS Site Annex, and MNS Site Annex. Specifically, Duke Energy is relocating the Common Emergency Operations Facility (EOF) from 526 South Church Street, Charlotte, NC, to 9700 David Taylor Drive, Charlotte, NC. The new location is approximately 9 air miles from the current location.

The proposed change does not result in a Reduction in Effectiveness (RIE) of the Duke Energy Common Emergency Plan or site annexes and does not require NRC approval under 10 CFR 50.54(q). Since the proposed change to the EOF's location results in the EOF being greater than 25 miles from any of the Duke Energy nuclear sites, NRC approval is required per 10 CFR 50 Appendix E, IV.E.8.b.

It is noted that a combined license (COL) application has been approved by the NRC for William States Lee III Nuclear Station (WLS) that would also use the Common EOF. Subsequent to approval of this amendment, Duke Energy recognizes that prior to commencing operation at WLS, an additional license amendment would need to be approved by the NRC regarding changes to the WLS Emergency Plan to allow implementation of WLS into the Common EOF.

Enclosure 1 provides a description and evaluation of the proposed change. Enclosures 2, 3, and 4 provide the revised pages of the Duke Energy Common Emergency Plan (EP-ALL-EPLAN), CNS Site Annex (EP-CNS-EPLAN-ANNEX), and MNS Site Annex (EP-MNS-EPLAN-ANNEX), respectively. Enclosure 5 contains signed letters of concurrence from the state offsite response organizations impacted by this change.

The proposed change has been evaluated in accordance with 10 CFR 50.91(a)(1) using criteria in 10 CFR 50.92(c), and it has been determined that the proposed change involves no significant hazards consideration. The bases for these determinations are included in Enclosure 1.

Approval of the proposed amendment is requested within one year of NRC acceptance of this submittal, with a 120-day implementation period following NRC approval.

This submittal contains no new regulatory commitments.

In accordance with 10 CFR 50.91, Duke Energy is notifying the states of North Carolina and South Carolina of this license amendment request by transmitting a copy of this letter to the designated state officials.

Should you have any questions concerning this letter, or require additional information, please contact Lee Grzeck, Fleet Licensing Manager (Acting), at (980) 373-1530.

I declare under penalty of perjury that the foregoing is true and correct. Executed on December 14, 2021.

Sincerely,

Shawn Gibby
Vice President – Nuclear Engineering

Enclosures:

1. Evaluation of the Proposed Change
2. Duke Energy Common Emergency Plan (EP-ALL-EPLAN) Mark-up
3. CNS Site Annex (EP-CNS-EPLAN-ANNEX) Mark-up
4. MNS Site Annex (EP-MNS-EPLAN-ANNEX) Mark-up
5. Offsite Response Organization Concurrence

cc:

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J. D. Austin, USNRC Senior Resident Inspector – CNS
J. Zeiler, USNRC Senior Resident Inspector – HNP
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ENCLOSURE 1: Evaluation of the Proposed Change

Enclosure 1

License Amendment Request

Brunswick Steam Electric Plant, Unit Nos. 1 and 2
Docket Nos. 50-325, 50-324
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William States Lee III Nuclear Station, Units 1 and 2
Docket Nos. 52-018 and 52-019
License Nos. NPF-101 and NPF-102

Evaluation of the Proposed Change

Subject: License Amendment Request to Relocate the Duke Energy Emergency Operations Facility

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1.0 SUMMARY DESCRIPTION

Pursuant to 10 CFR 50.90 (Reference 6.3), and 10 CFR 50, Appendix E, IV.E.8.b (Reference 6.6), Duke Energy requests amendments to the licenses for Brunswick Steam Electric Plant Units 1 and 2 (BNP), Catawba Nuclear Station Units 1 and 2 (CNS), Shearon Harris Nuclear Power Plant, Unit 1 (HNP), McGuire Nuclear Station Units 1 and 2 (MNS), Oconee Nuclear Station Units 1, 2, and 3 (ONS), and H. B. Robinson Steam Electric Plant, Unit 2 (RNP) to relocate the Duke Energy Common Emergency Operations Facility (EOF) approximately 9 air miles away from the current location and change the Duke Energy Common Emergency Plan, CNS Site Annex, and MNS Site Annex to reflect this change.

The proposed change does not result in a Reduction in Effectiveness (RIE) of the capabilities or functions as they exist in the current EOF, the Duke Energy Common Emergency Plan or the site annexes, and does not require NRC approval under 10 CFR 50.54(q) (Reference 6.2). Since the proposed change to the EOF's location results in the EOF being greater than 25 miles from any of the Duke Energy nuclear sites, NRC approval is required per 10 CFR 50 Appendix E, IV.E.8.b.

2.0 DETAILED DESCRIPTION

2.1 Current Duke Energy Common Emergency Plan and Site Annex Requirements

The Duke Energy Common EOF is currently located at 526 South Church Street, Charlotte, NC (herein referred to as 'current EOF'). The Duke Energy Common Emergency Plan describes the current EOF as a dedicated, central facility for management of offsite emergency response, coordination of radiological assessment, management of initial recovery operations, and is capable of accommodating Duke Energy personnel and offsite county, state and federal responders, including NRC and FEMA. The current EOF serves the operating fleet of BNP, CNS, HNP, MNS, ONS, RNP, and the future William States Lee III Nuclear Station (WLS), as approved by the NRC in the safety evaluation dated August 21, 2017 (Reference 6.10). This safety evaluation consolidated the EOFs serving BNP, HNP, and RNP with the Common EOF in Charlotte, NC that already served CNS, MNS, ONS, and the future WLS site. Prior to this, the Common EOF has served CNS and MNS since 1987, ONS since 2006, and the future WLS site since 2016. It has been relocated twice since 1987, but has remained in Charlotte, NC. The future WLS site is included in this amendment as affected dockets because the Emergency Plan as referenced in the Combined Licenses issued for Unit 1 and Unit 2 refers to the current EOF. Note that WLS is not an operational facility and is not expected to begin activities that would require physical or operational implementation into the EOF within the implementation period of this license amendment request.

In accordance with 10 CFR 50, Appendix E, IV.E.8.b, the BNP, HNP, ONS, and RNP Site Annexes to the Duke Energy Common Emergency Plan, Element H.3.a, specify near-site facilities for NRC and offsite responders since the current EOF is located greater than 25 miles from those sites. The CNS and MNS Site Annexes do not specify a near-site facility since the current EOF is between 10 and 25 miles from those sites. In Element H.4 of the CNS and MNS Site Annexes, the current EOF is designated as the Alternate Emergency Facility for Duke Energy Emergency Response Organization (ERO) personnel responding to a hostile action based event, in accordance with 10 CFR 50, Appendix E, IV.E.8.d.

2.2 Proposed Changes

2.2.1 New EOF Location

The proposed change is to relocate the EOF approximately 9 air miles to a Duke Energy office building at 9700 David Taylor Drive, Charlotte, NC (herein referred to as 'new EOF'). As discussed in Section 3.0, the new EOF will provide the same functions and capabilities as the current EOF. Table 2-1 shows a comparison of approximate straight line distances (i.e., air miles) from the Duke Energy nuclear sites to the current EOF and new EOF.

Table 2-1

Site / Location	Current EOF (miles)	New EOF (miles)
Brunswick	184	183
Catawba	18	26
Shearon Harris	110	104
McGuire	15	12
Oconee	120	126
H.B. Robinson	69	73
NRC Region II Office (Atlanta, GA)	225	233

2.2.2 CNS Near-site NRC and Offsite Responder Location

The current CNS Site Annex to the Duke Energy Common Emergency Plan does not designate a location near CNS for NRC and offsite responders to meet NUREG-0654 Revision 2, Element H.3.a (Reference 6.7). The current EOF is located closer than 25 miles from CNS, therefore Element H.3.a does not apply to CNS. As shown in Table 2-1, the new EOF will be located greater than 25 miles from CNS. Concurrent with relocation to the new EOF, the Duke Energy Corporate Headquarters located in Uptown Charlotte, NC will be designated as the near-site location for NRC and offsite responders and is approximately 18 air miles from CNS.

2.2.3 CNS Alternate Emergency Response Facility

The current CNS Site Annex to the Duke Energy Common Emergency Plan designates the current EOF as the CNS Alternate Emergency Facility to meet NUREG-0654 Revision 2, Element H.4. Element H.4 requires an alternate facility be established, using currently endorsed guidance, that could be accessed by site ERO personnel responding to a hostile action based event. As shown in Table 2-1, the new EOF is farther from CNS than the current EOF, but is within 30 miles of CNS as allowed by NSIR/DPR-ISG-01, *Emergency Planning for Nuclear Power Plants* (Reference 6.9), Section IV.D. Since the new EOF distance from CNS is within 30 miles, it will be designated as the new CNS Alternate Emergency Facility.

2.2.4 MNS Alternate Emergency Response Facility

The current MNS Site Annex to the Duke Energy Common Emergency Plan designates the current EOF as the MNS Alternate Emergency Facility to meet NUREG-0654, Revision 2, Element H.4. Element H.4 requires an alternate facility be established, using currently endorsed guidance, that could be accessed by site ERO personnel responding to a hostile action based event. As shown in Table 2-1, the new EOF will be closer to MNS than the current EOF and will be designated as the MNS Alternate Emergency Facility.

2.3 Reason for the Proposed Changes

The EOF is being relocated due to Duke Energy's planned sale of the 526 South Church Street building that houses the current EOF. Sale of the property is being made as part of a broader effort to consolidate Duke Energy's real estate footprint.

Relocating the EOF will provide an opportunity to update technology used by ERO staff. Equipment such as workstations, telephones, display screens, among others, will all be updated with new hardware. In addition, the David Taylor building for the proposed new EOF is a newer building than the current EOF's location inside the Energy Center at 526 South Church Street. The newer building is expected to provide more reliable infrastructure and therefore require less maintenance.

The new location is also outside of Uptown Charlotte, away from major sports venues and large events typical of downtown urban locations. The new location is nearby several major U.S. interstate highways and the Charlotte beltway, allowing access from multiple directions. Overall, the new EOF location provides an updated working environment for the EOF staff without any reduction in the capabilities or functions of the EOF.

3.0 TECHNICAL EVALUATION

NUREG-0696, *Functional Criteria for Emergency Response Facilities* (Reference 6.8), as updated by NSIR/DPR-ISG-01, *Emergency Planning for Nuclear Power Plants* (Reference 6.9), provides an acceptable method of complying with 10 CFR 50, Appendix E, IV.E.8. Sections 3.1 through 3.9 below use the NUREG-0696 criteria to demonstrate acceptability for the new EOF.

3.1 Functions

The new EOF will have the following facilities and capabilities for:

1. Management of overall licensee emergency response

The current EOF has functioned as a consolidated EOF for CNS, MNS, and ONS since 2006, adding BNP, HNP, and RNP in 2017. The EOF staff has successfully demonstrated the ability to manage emergency response for each of the sites in several evaluated exercises and numerous drills. Duke Energy has well-established procedures and practices in place for emergency management that will continue to be used with the new EOF. While revisions to some EOF-related procedures are anticipated (e.g. for address and telephone number changes), the relocation will not alter the overall approach to emergency response.

The new EOF will continue to be the central location for management of offsite emergency response, coordination of radiological assessment, and management of initial recovery operations. This includes offsite notification of events, protective action recommendations (PARs), and dose assessment, as described in the Duke Energy Common Emergency Plan. The Technical Support Center (TSC) at each site will maintain the responsibility for event classification.

2. Coordination of offsite radiological and environmental assessments

ERO staff in the new EOF will have the capability to coordinate field team activities to monitor offsite radiological conditions and perform dose assessments. Personnel, staffing, equipment, and functions remain the same as described in the Duke Energy Common Emergency Plan for the current EOF. Communication and dose assessment capabilities are discussed in Sections 3.6 and 3.8, respectively.

3. Determination of recommended public protective actions

ERO staff in the new EOF will have the capability and responsibility to develop and provide PARs to offsite agencies based upon plant conditions and dose assessments. There are no changes to procedures used in determining PARs as a result of the new EOF location.

4. Notification to offsite agencies

The current EOF staff make notifications to state and local agencies during emergencies, drills, and exercises. These messages include initial notifications, changes in emergency classification or PARs, and periodic updates. The new EOF will continue to provide capability to make notifications to state and local agencies during emergencies, drills, and exercises. The new EOF will have a sufficient number of workstations and personnel designated to communicate with offsite agencies in order to support communications for more than one site simultaneously. Communication systems are discussed in Section 3.6.

5. Coordination of event, plant, and response information provided to public information staff for dissemination to the media and public

Staff within the new EOF will continue to provide event, plant, and response information to public information staff for dissemination to the media and public through the Joint Information System (JIS). The JIS provides the necessary structure and mechanism for organizing, developing, integrating, and delivering coordinated interagency messages via established plans, procedures and strategies. JIS functions are not impacted by the EOF relocation.

6. Staffing and activation of the facility within time frames and at emergency classification levels defined in the licensee emergency plan

The current EOF is required to activate within 75 minutes following the declaration of an Alert or higher emergency classification. EOF activation is met when the minimum staff is present, performing their designated functions, and the transfer of Command and Control of non-delegable responsibilities from the Main Control Room (MCR) has occurred. Relocation of the EOF does not affect the requirements for EOF activation, minimum staff, or functions performed in the EOF. The new EOF will continue to meet the activation and staffing requirements as described in the Duke Energy Common Emergency Plan.

7. Coordination of emergency response activities with Federal, State, tribal, and local agencies

The new EOF will continue to be capable of accommodating designated Duke Energy personnel and offsite county, state and federal responders including NRC and FEMA. It is anticipated that representatives from the states of North Carolina and South Carolina, depending on the affected site, may be dispatched to the EOF. Local agencies are not expected to respond to the new EOF, which is the same as the current EOF. There are no tribal organizations within any of the Duke Energy nuclear sites' 10 mile Emergency Planning Zone (EPZ). Systems used in the new EOF for communication and coordination with Federal, state, and local agencies will be the same as described in the Duke Energy Common Emergency Plan for the current EOF. Communication systems are discussed in Section 3.6.

In accordance with 10 CFR 50.47(b)(3) (Reference 6.1), the new EOF will have work space available for NRC and state responders. There is a dedicated conference room for the NRC and there is dedicated space for state representatives in the main EOF area, the dose assessment area, and the offsite field monitoring area. Co-locating the state personnel with Duke Energy personnel performing these functions facilitates accurate and efficient communication of radiological information. This is the same as the current EOF.

8. Locating NRC and offsite agency staff closer to a site if the EOF is greater than 25 miles from the site

As established in Section 2.1, BNP, HNP, ONS, and RNP have designated near-site facilities for NRC and offsite responders since the current EOF is located greater than 25 miles from those sites. CNS and MNS have not designated a near site facility since the current EOF is between 10 and 25 miles from those sites.

As shown in Table 2-1, the new EOF will be located less than 25 miles from MNS, therefore no near-site facility will be designated in the MNS Site Annex.

As discussed in Section 2.2.2, since the new EOF is located greater than 25 miles from CNS, the Duke Energy Corporate Headquarters located in Uptown Charlotte, NC will be designated as the near-site location for NRC and offsite responders. This location will provide adequate space and access to supplies and plant information for NRC and offsite responders as listed in Table 3-1.

Table 3-1

Duke Energy Corporate Headquarters Characteristics	
Distance from CNS (approx. air miles)	18
Distance from new EOF (approx. air miles)	9
Conference area with whiteboards	Yes
Separate briefing/debriefing area	Yes
Telephones available	Yes
ERO telephone contact lists	Yes
Computers with internet access	Yes
Access to photocopier	Yes
Office supplies available	Yes
Radiation monitoring capability (i.e., access to plant radiological information)	Yes

Procedural guidance will ensure the CNS near-site facility is made operational and available in a timely manner for the NRC and offsite agencies.

9. Obtaining and displaying key plant data and radiological information for each unit or plant the EOF serves

The new EOF will provide data acquisition equipment that will allow display of key plant data, parameters, and radiological information from each plant, in near real time. This information will be displayed in the new EOF in a manner comparable to the current EOF. Sufficient equipment will be available to permit access to information from more than one site simultaneously.

10. Analyzing plant technical information and providing technical briefings on event conditions and prognosis to licensee staff and offsite agency responders for each type of unit or plant

The new EOF will have the capability to access key plant parameters for all sites, as described in Sections 3.7 and 3.8, in a manner comparable to the current EOF. Knowledge of these parameters allows the EOF staff to assess the severity of an accident, project the accident's course, and provide utility management with information needed for mitigation, recovery, and protective action recommendations. The new EOF will have a sufficient number of workstations to monitor conditions at more than one site simultaneously. The new EOF is also equipped with conference rooms for technical briefings of licensee staff and offsite agency responders. Telephone conferencing capability is available for briefing responders not located in the EOF.

11. Effectively responding to and coordinating response efforts for events occurring simultaneously at more than one site for a consolidated EOF

The new EOF will maintain the current EOF ability to support events occurring simultaneously at up to two sites. The Duke Energy Common Emergency Plan includes a requirement to perform a multi-site event scenario within each eight-year exercise cycle. The new EOF will participate in the multi-site event and the participating sites will be varied. The new EOF will be equipped with facilities to monitor and analyze events at more than one site. A sufficient number of workstations will be available for data retrieval and the facility will have adequate display capability to simultaneously present this information to the EOF staff. In addition, the capability will be provided to support communications to offsite agencies for more than one event. If the new EOF must respond to an event at more than one site simultaneously, the normal EOF staff complement is augmented with additional personnel as needed.

3.2 Location, Structure, and Habitability

The new EOF is located at 9700 David Taylor Drive, Charlotte, North Carolina, within a Duke Energy owned building. The David Taylor building was constructed in 1991 and is capable of withstanding wind loads and live loads equal to or greater than those specified in the 1978 North Carolina State Building Code (most recent at time of construction). No major building modifications have been performed since original construction. Power supplies for the David Taylor building are discussed in Section 3.7.

Access to the David Taylor building is controlled by electronic card readers. Access to the new EOF itself is also controlled by electronic card readers that only allows entry for authorized personnel. The David Taylor building will have Security personnel on site at all times. These Security personnel can assist state, FEMA, and NRC responders with access to the building and EOF.

As shown in Table 2-1, the new EOF will be located greater than 10 miles from any of the Duke Energy nuclear stations. There are no specific NUREG-0696 habitability criteria for an EOF greater than 10 miles from a site, other than providing a well-engineered structure, and a backup facility is not required. Thus, EOF functions would not be interrupted during radiation releases for which it was necessary to recommend protective actions for the public to offsite officials.

3.3 ERO Staffing and Training

The ERO staff in the new EOF will remain the same as the current EOF as described in the Duke Energy Common Emergency Plan. The EOF roles, responsibilities, and augmentation times will not change and the functions of the EOF remain the same as described in Section 3.1.

Since Duke Energy has utilized a Common EOF for many years, the ERO personnel assigned to the EOF are experienced in emergency response activities and coordination with offsite agencies. Therefore, an advantage of locating the new EOF within 9 air miles of the current EOF is that the current pool of EOF ERO staff can continue to be leveraged to fulfill ERO roles as required by the Duke Energy Common Emergency Plan. This includes experienced Duke Energy corporate personnel such as those in the Corporate Nuclear Operations organization, Nuclear Engineering, Emergency Preparedness, Regulatory Affairs, and others.

No revisions to the staffing and training requirements in the Duke Energy Common Emergency Plan are necessary due to the relocation of the EOF. Specific lesson plans and training materials are not impacted, except for minor administrative changes (e.g. change of address, telephone numbers, etc.)

3.4 Size

The total usable space and working space of the new EOF is sized to meet the criteria in NUREG-0696 to provide for the ERO staff as specified in the Duke Energy Common Emergency Plan, including state, FEMA, and NRC responders, at the expected full staffing of a two site event without crowding.

As with the current EOF, space in the new EOF will be allocated for the functional activities of accident assessment, radiation assessment, offsite monitoring, offsite communications, command and control, services, conferences, NRC personnel, and storage. Space is sufficient for service of equipment, displays, and instrumentation within the new facility. Phones and special communications equipment will be provided as needed throughout the new facility at personnel workstations. Individuals needing plant data will be provided workstations capable of accessing the information. Functional displays of EOF data will be made available through use of computer monitors and video display monitors.

The EOF facilities and equipment for the new EOF remain as described in the Duke Energy Common Emergency Plan and no revisions are necessary.

Attachment 1 provides a floorplan drawing of the new EOF for illustrative purposes and information only.

3.5 Radiological Monitoring

As shown in Table 2-1, the new EOF will be located greater than 10 miles from any of the Duke Energy nuclear sites. Therefore, no specific habitability criteria described in Section 4.2, Table 2, of NUREG-0696 are applicable and specialized ventilation systems and radiological monitoring are not required.

3.6 Communications

The new EOF will contain communication methods and equipment as described in the Duke Energy Common Emergency Plan, Section F. These are the same methods and equipment used by the current EOF, and the testing frequency of these systems remains unchanged, therefore no revision to the Duke Energy Common Emergency Plan, Section F, is required. The new EOF will have sufficient communication systems and equipment to support EOF functions for events occurring simultaneously at more than one site. The following voice communication systems will be available for use in the new EOF for performing emergency communications:

1. Duke Energy Emergency Management Network (DEMNET) is the primary means of communication for the EOF when contacting Offsite Response Organizations (ORO). DEMNET consists of equipment and circuits linking Duke Energy nuclear sites with the offsite agencies involved in initial emergency notifications. This system can quickly conference the offsite agencies for notifications.

2. Private Branch Exchange (PBX) is the primary means of communication between Duke Energy site Emergency Response Facilities (ERF) and the EOF. PBX is also the alternate means of communication for the EOF when contacting OROs. PBX is the primary means of communication with the NRC with extensions designated for NRC communications located in the EOF. A PBX is a full featured telephone system that provides internal calling services for one or more locations. The PBX terminates commercial phone lines from a carrier (AT&T, Verizon, CenturyLink, etc.) to provide inbound and outbound calling capabilities between Duke Energy and external parties. PBX systems have a number of mechanisms which make them resistant to failure including, redundant power connections, redundant network connections, and server hardware installed in geographically diverse locations.

3. Satellite phones are an alternate means of communication between the site ERFs and EOF, an alternate means of communication for the EOF when contacting OROs, and an alternate means of communication for the EOF when contacting Field Monitoring Teams (FMTs). A satellite phone is any mobile telephone capable of sending and receiving phone calls through orbiting satellites.

4. Cellular phones are an alternate means of communication between the site ERFs and EOF, an alternate means of communication for the EOF when contacting OROs, and are the primary means of communication for the EOF when contacting FMTs. A cellular phone is any mobile telephone (non-Duke Energy or Duke Energy provided) capable of sending and receiving phone calls through ground based cell sites.

3.7 Instrumentation, Data System Equipment, and Power Supplies

The new EOF will have data communication networks installed to provide secure access to plant data and parameters for display in the new EOF in the same manner as the current EOF. There is no change to the Duke Energy Common Emergency Plan descriptions of instrumentation, data system equipment, or power supplies. These networks will be installed in accordance with the criteria of NUREG-0696, Sections 4.7 and 4.8, and 10 CFR 73.54, the cybersecurity rule. Data acquisition will be achieved through a secure proxy server. The server will allow the new EOF to access to the same data points that are available to the Operators in the MCR and emergency responders in the TSC and OSC, including the Safety Parameter Display System (SPDS), via the Duke Energy Wide and Local Area Networks (WAN and LAN). Duke Energy has established an availability goal for the LAN/WAN that exceeds the 0.01 unavailability goal identified in NUREG-0696. The new EOF video display system will display the plant data on screens in the main EOF Area. Commercial broadband connections are provided at various locations to allow ORO and NRC responders to have access to the internet.

Since the new EOF is located offsite, its electrical equipment loads will not affect any safety related power source at a site. Loss of primary commercial power would not cause loss of any stored data vital to EOF functions. Historical data from the site will be accessible from a historical data base. This information could be accessed by the new EOF, as needed, once power is restored to the LAN.

Primary power to the David Taylor building is provided by a single feeder using commercial power from the Duke Energy Mineshaft Retail circuit to each of the building's switchgears. Backup power to the David Taylor building is achieved using two 100% capacity diesel generators that provide redundant power to both of the building's switchgears. Each diesel generator is capable of carrying the electrical load of the entire David Taylor building, including the EOF, and all electrical outlets, HVAC, lighting fixtures, and the wiring closet that supports both the voice and data communications in the new EOF. There is enough fuel on-site to operate at least one backup diesel generator for several days.

The workstations and related LAN/WAN equipment require AC power to operate. A loss of AC power to the equipment, located at numerous locations throughout the Duke Energy system, will cause a loss of this capability. Backup power is available for the LAN equipment supporting the new EOF and the core network equipment in the David Taylor building, as described above. In addition, the voice and data communications equipment supporting the new EOF is connected to an Uninterruptable Power Supply (UPS) system. The UPS system ensures electrical power is supplied to the voice and data equipment after a loss of commercial power, but before the backup diesel generators begin carrying the electrical load of the building. Thus, a loss of commercial power will not cause a loss of, or interruption in, any of the voice or data communications equipment located in the new EOF.

3.8 Technical Data and Data System

The new EOF will have the capability to receive, store, process, and display vital plant data and radiological information for each site and unit, in near real time, to be used by knowledgeable individuals responsible for providing technical briefings on plant conditions, event prognosis, and for management of overall emergency response in the same manner as the current EOF. The proxy server described in Section 3.7 will allow the display of data points that cover Type A, B, C, D, and E variables discussed in NUREG-0696, Section 4.8. In addition, the meteorological variables required for dose assessment will be made available through the proxy server. This data will also be accessible from a historical data base. There is no change to the Duke Energy Common Emergency Plan description of technical data or the data system.

Offsite dose assessment will continue to be performed in the new EOF, same as the current EOF, for all operating Duke Energy sites using the Unified RASCAL Interface (URI) software. URI is used by qualified EOF staff in the event of an actual or potential release of airborne radioactivity to the environment for evaluation of emergency action levels and PARs. There is no change to the Duke Energy Common Emergency Plan description of the methods, models, or performance of dose assessment.

3.9 Records Availability and Management

The new EOF will have access to site reference materials that may be needed for supporting emergency response, in the same manner as the current EOF. Typically, reference materials are accessed electronically. Examples of these documents include:

- Plant Technical Specifications
- Plant operating procedures
- Emergency operating procedures
- Emergency Plan Implementing Procedures
- Final Safety Analysis Reports
- Emergency plans – Common Plan, Site Annexes, and state emergency plans
- Evacuation Time Estimate Reports – contain offsite population data and evacuation plans
- Licensee employee radiation exposure history
- Drawings, diagrams, and other design information for each site

Copies of reference materials and procedures required for the EOF to perform its function as described in the Duke Energy Common Emergency Plan will be available.

3.10 Conclusion for New EOF Location

As shown in Sections 3.1 through 3.9, the new EOF will provide the same capabilities and functions during drills, exercises, and actual emergencies, as the current EOF. No impact on the EOF's ability to perform its functions will occur due to the new EOF location.

Facility walk-through activities and familiarization drills will be conducted prior to implementation of this license amendment request, to provide existing EOF staff an opportunity to occupy and activate the facility. In addition, Duke Energy is planning a two-site simultaneous demonstration drill, currently scheduled for April 27, 2022, using CNS and HNP. The drill at each site will involve activation of the emergency response organization and facilities, offsite notifications, dose assessment, protective action recommendations, and field monitoring team coordination. Duke Energy will provide the opportunity for offsite response organizations to participate and for NRC and FEMA to observe the drill at the new EOF.

3.11 Establish New EOF as CNS Alternate Emergency Response Facility

The current CNS Site Annex to the Duke Energy Common Emergency Plan designates the current EOF as the CNS Alternate Emergency Facility to meet NUREG-0654, Revision 2, Element H.4. Element H.4 requires an alternate facility be established, using currently endorsed guidance, that could be accessed by site ERO personnel responding to a hostile action based event. As shown in Table 2-1, the new EOF is farther from CNS than the current EOF, but is within 30 miles of CNS as allowed by NSIR/DPR-ISG-01, *Emergency Planning for Nuclear Power Plants* (Reference 6.9), Section IV.D. Sections 3.1 through 3.9 establish the new EOF has the same functions and capabilities as the current EOF, which meets the 10 CFR 50, Appendix E, IV.E.8.d requirements to provide the capability for communications between the EOF, control room, and plant security, the capability to perform offsite notifications, and the capability for engineering assessment activities including damage control team planning and preparation. Since the new EOF distance is within 30 miles, and will provide the same functions and capabilities as the current EOF, the new EOF is designated as the CNS Alternate Emergency Facility.

3.12 Establish New EOF as MNS Alternate Emergency Response Facility

The current MNS Site Annex to the Duke Energy Common Emergency Plan designates the current EOF as the MNS Alternate Emergency Facility to meet NUREG-0654, Revision 2, Element H.4. Element H.4 requires an alternate facility be established, using currently endorsed guidance, that could be accessed by site ERO personnel responding to a hostile action based event. As shown in Table 2-1, the new EOF will be closer to MNS than the current EOF. Sections 3.1 through 3.9 establish the new EOF has the same functions and capabilities as the current EOF, which meets the 10 CFR 50, Appendix E, IV.E.8.d requirements to provide the capability for communications between the EOF, control room, and plant security, the capability to perform offsite notifications, and the capability for engineering assessment activities including damage control team planning and preparation. Since the new EOF distance is closer, and will provide the same functions and capabilities as the current EOF, the new EOF is designated as the MNS Alternate Emergency Facility.

4.0 REGULATORY EVALUATION

4.1 Applicable Regulatory Requirements and Criteria

The following NRC requirements and guidance documents are applicable to the proposed change.

10 CFR 50.47

10 CFR 50.47(b)(1) requires that primary responsibilities of emergency response for the licensee, state, local, and supporting organizations have been assigned/established and each organization has staff to respond and to augment on a continuous basis. Compliance with this requirement is discussed in Sections 3.1 item 7 and 3.3.

10 CFR 50.47(b)(2) requires timely augmentation of response capabilities is available and the interfaces among various onsite response activities and offsite support and response activities are specified. Compliance with this requirement is discussed in Section 3.1 items 6 and 7, and Section 3.3.

10 CFR 50.47(b)(3) requires that arrangements to accommodate state and local staff at the licensee's Emergency Operations Facility (EOF) have been made. Compliance with this requirement is discussed in Section 3.1 item 7 above.

10 CFR 50.47(b)(8) requires that adequate emergency facilities and equipment to support the emergency response are provided and maintained. The new EOF will continue to provide effective direction and control during an emergency. Furthermore, the new EOF meets the EOF criteria in NUREG-0696, as discussed below.

10 CFR 50.47(b)(9) requires that adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use. This requirement is encompassed in the EOF criteria in NUREG-0696, as discussed below.

10 CFR 50 Appendix E

10 CFR 50, Appendix E, IV.E.8.b requires a licensee desiring to locate an EOF more than 25 miles from a nuclear reactor site to request prior Nuclear Regulatory Commission approval by submitting an application for an amendment to its license. For the purposes of the proposed change, this requirement clearly applies because the new EOF exceeds the 25-mile limit as described in Section 2.2.1. In addition, a backup facility to the new EOF is not required because this regulation only requires a backup for EOFs that are less than 10 miles from the site.

Section IV.E.8.b of Appendix E also requires that, for an EOF located more than 25 miles from a nuclear reactor site, provisions be made for locating NRC and offsite responders closer to the reactor site to facilitate face-to-face interaction with emergency personnel entering and leaving the site. This regulation also describes the requirements for space and equipment:

- Space for members of an NRC site team and Federal, state, and local responders
- Additional space for conducting briefings with emergency response personnel
- Communication with other licensee and offsite emergency response facilities
- Access to plant data and radiological information
- Access to copying equipment and office supplies

Utilizing the clarification of the above items contained in NSIR/DPR-ISG-01, a near-site response location for CNS will be established to meet this requirement, as described in Section 3.1 item 8.

Section IV.E.8.c of Appendix E establishes requirements for data acquisition and display, technical analysis of event conditions, and support response for multiple reactor sites. Compliance with these requirements, as applicable to the proposed change, is discussed in Sections 3.1 through 3.9.

Section IV.E.8.d of Appendix E requires an alternate emergency facility be designated for a site undergoing threat of or experiencing hostile action, to function as a staging area for augmenting ERO staff to the site. The facility shall have the capability to perform offsite notifications and engineering assessment activities, including damage control team planning and preparation. The Duke Energy Common Emergency Plan specifies the EOF is responsible for offsite notifications. The new EOF is designated the alternate emergency facility to meet the applicable requirements for CNS, as described in Section 3.11, and MNS, as described in Section 3.12.

NUREG-0654

NUREG-0654 Revision 2 contains evaluation criteria to address those elements and attributes of emergency plans and preparedness programs that are directly tied to meeting the planning standards in 10 CFR 50.47(b). NUREG-0654 states an EOF be established, using current Federal guidance, as the primary base of emergency operations for the licensee during a radiological incident to facilitate the management and coordination of the overall emergency response, including the sharing of information with Federal, state, local, and tribal government authorities. It also states an EOF that is located more than 25 miles away from the site, provisions are made for locating NRC and offsite responders closer to the nuclear power plant site. Compliance with this guidance is discussed in Sections 3.1 through 3.9.

NUREG-0696

NUREG-0696 describes the facilities and systems to be used by nuclear power plant licensees and establishes criteria for the EOF to ensure the requirements of 10 CFR 50, Appendix E, IV.E.8 are met.

Section 4 of NUREG-0696 provides guidance on the overall criteria for the EOF:

- Functions
- Location, structure, and habitability
- Staffing and training
- Size
- Radiological monitoring
- Communications
- Instrumentation, data system equipment, and power supplies
- Technical data and data system
- Records availability and management

Compliance with these criteria is discussed in Sections 3.1 through 3.9.

NUREG-0696 expands on the Function criteria by providing the following additional guidance (this is the expanded list included in NSIR/DPR-ISG-01):

- Management of overall licensee emergency response
- Coordination of radiological and environmental assessment
- Determination of recommended public protective actions

- Notification of offsite agencies
- Coordination of event, plant, and response information provided to public information staff for dissemination to the media and public
- Staffing and activation of the facility within time frames and at emergency classification levels defined in the licensee emergency plan
- Coordination of emergency response activities with Federal, state, tribal, and local agencies
- Locating NRC and offsite agency staff closer to a site if the EOF is greater than 25 miles from the site
- Obtaining and displaying key plant data and radiological information for each unit or plant the EOF serves
- Analyzing plant technical information and providing technical briefings on event conditions and prognosis to licensee staff and offsite agency responders for each type of unit or plant
- Effectively responding to and coordinating response efforts for events occurring simultaneously at more than one site for a consolidated EOF

Compliance with each of these items is discussed in Section 3.1.

4.2 Precedent

The most recent applicable precedent is the Southern Nuclear Company (SNC) license amendment request to relocate the consolidated EOF due to a move of the SNC corporate headquarters. SNC proposed only a relocation of the EOF, not a change in capabilities or functions, same as the proposed change in this request. The NRC approved this change after a vote by the Commission and with issuance of the safety evaluation dated July 26, 2018 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML18183A073) (Reference 6.11).

Another applicable precedent is the Duke Energy license amendment request to consolidate the BNP, HNP, and RNP EOFs into the Common EOF in Charlotte, NC. With respect to the sites' EOF relocation, there was no change in the capabilities or functions of the EOFs, same as the proposed change in this request. The NRC approved this change after a vote by the Commission and with issuance of the safety evaluation dated August 21, 2017 (ADAMS Accession No. ML17188A387) (Reference 6.10).

4.3 No Significant Hazards Consideration

Pursuant to 10 CFR 50.90, and 10 CFR 50, Appendix E, IV.E.8.b, Duke Energy requests amendments to the licenses for Brunswick Steam Electric Plant Units 1 and 2 (BNP), Catawba Nuclear Station Units 1 and 2 (CNS), Shearon Harris Nuclear Power Plant, Unit 1 (HNP), McGuire Nuclear Station Units 1 and 2 (MNS), Oconee Nuclear Station Units 1, 2, and 3 (ONS), and H. B. Robinson Steam Electric Plant, Unit 2 (RNP) to relocate the Duke Energy Common Emergency Operations Facility (EOF) and change the Duke Energy Common Emergency Plan, CNS Site Annex, and MNS Site Annex to reflect this change.

The proposed change does not result in a Reduction in Effectiveness (RIE) of the Duke Energy Common Emergency Plan or the site annexes and does not require NRC approval under 10 CFR 50.54(q). Since the proposed change to the EOF's location results in the EOF being greater than 25 miles from any of the Duke Energy nuclear sites, NRC approval is required per 10 CFR 50 Appendix E, IV.E.8.b.

Duke Energy has evaluated the proposed changes and determined that those changes do not involve a Significant Hazards Consideration. In support of this determination, an evaluation of each of the three (3) standards, set forth in 10 CFR 50.92 (Reference 6.4) is provided below.

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

   Response: No.

   The proposed change to relocate the Common EOF from 526 South Church Street, Charlotte, NC to 9700 David Taylor Drive, Charlotte, NC, requires no change to the required staff response time for supplementing onsite personnel in response to a radiological emergency. The new EOF is approximately 9 air miles from the current EOF and is nearby major U.S. interstate highways and the Charlotte beltway. Response personnel will be able to access the new EOF using one of several roadways coming from multiple directions. The license amendment does not request a change to the response time and the new EOF will be activated within the same timeframe as the current EOF. The functions and capabilities of the new EOF will continue to meet the applicable regulatory requirements. The newly designated CNS near-site location for NRC and offsite responders and alternate emergency facility will meet applicable regulatory requirements. The new EOF will continue to serve as the MNS near-site location for NRC and offsite responders and as the alternate emergency facility to meet the applicable regulatory requirements. The proposed change has no effect on normal plant operation or on any accident initiator or precursors and does not impact the function of plant structures, systems, or components. The proposed change does not alter or prevent the ability of the emergency response organization to perform its intended functions to mitigate the consequences of an accident or event.

   Therefore, the proposed change does not increase the probability or consequences of an accident, impact the function of plant Structures, Systems, or Components (SSCs), affect accident initiators or accident precursors, nor does the change alter design assumptions.

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

   Response: No.

   The proposed change only concerns implementation of the Duke Energy Common Emergency Plan and associated CNS and MNS Site Annexes by relocating the Common EOF approximately 9 air miles from its current location. The new EOF location will not change the time the facility will be activated and providing emergency response. The functions and capabilities of the new EOF will continue to meet the applicable regulatory requirements. The newly designated CNS near-site location for NRC and offsite responders and alternate emergency facility will meet applicable regulatory requirements. The new EOF will continue to serve as the MNS near-site location for NRC and offsite responders and as the alternate emergency facility to meet the applicable regulatory requirements. The proposed change will not change the design function or operation of SSCs. The change does not impact the accident analysis for any of the Duke Energy nuclear plants. The change does not involve a physical alteration of any of the plants, a change in the method of plant operation, or new operator actions. The proposed change does not introduce failure modes that

could result in a new accident, and the change does not alter assumptions made in safety analyses.

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

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

Response: No.

The proposed change only concerns implementation of the Duke Energy Common Emergency Plan and associated CNS and MNS Site Annexes by relocating the Common EOF approximately 9 air miles from its current location. The new EOF location will not change the time the facility will be activated and providing emergency response. The functions and capabilities of the new EOF will continue to meet the applicable regulatory requirements. The newly designated CNS near-site location for NRC and offsite responders and alternate emergency facility will meet applicable regulatory requirements. The new EOF will continue to serve as the MNS near-site location for NRC and offsite responders and as the alternate emergency facility to meet the applicable regulatory requirements. Margin of safety is associated with confidence in the ability of the fission product barriers (i.e., fuel cladding, reactor coolant system pressure boundary, and containment structure) to limit the level of radiation dose to the public. The proposed change is associated with the emergency plan and does not impact operation of the plant or its response to transients or accidents. The change does not affect Technical Specifications. The change does not involve a change in the method of plant operation, and accident analyses will not be affected by the proposed change. Safety analyses acceptance criteria are not affected. The Duke Energy Common Emergency Plan and the Site Annexes will continue to provide the required response staff for performing major tasks for the functional areas of the emergency plans.

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

Based on the above, Duke Energy concludes that the proposed change presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

4.4 Conclusions

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

5.0 ENVIRONMENTAL CONSIDERATION

The proposed change would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed change does not involve (i) a significant hazards consideration, (ii) a significant change in the types or a significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed change meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9) (Reference 6.5). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed change.

6.0 REFERENCES

6.1 10 CFR 50.47, *Emergency Plans*

6.2 10 CFR 50.54, *Conditions of licenses.*

6.3 10 CFR 50.90, *Application for amendment of license, construction permit, or early site permit*

6.4 10 CFR 50.92, *Issuance of amendment*

6.5 10 CFR 51.22, *Criterion for categorical exclusion; identification of licensing and regulatory actions eligible for categorical exclusion or otherwise not requiring environmental review.*

6.6 10 CFR 50 Appendix E, *Emergency Planning and Preparedness for Production and Utilization Facilities*

6.7 NUREG-0654/FEMA-REP-1, *Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants*, Revision 2, December 2019 (ADAMS Accession No. ML19347D139)

6.8 NUREG-0696, *Functional Criteria for Emergency Response Facilities*, February 1981 ADAMS Accession No. ML051390358)

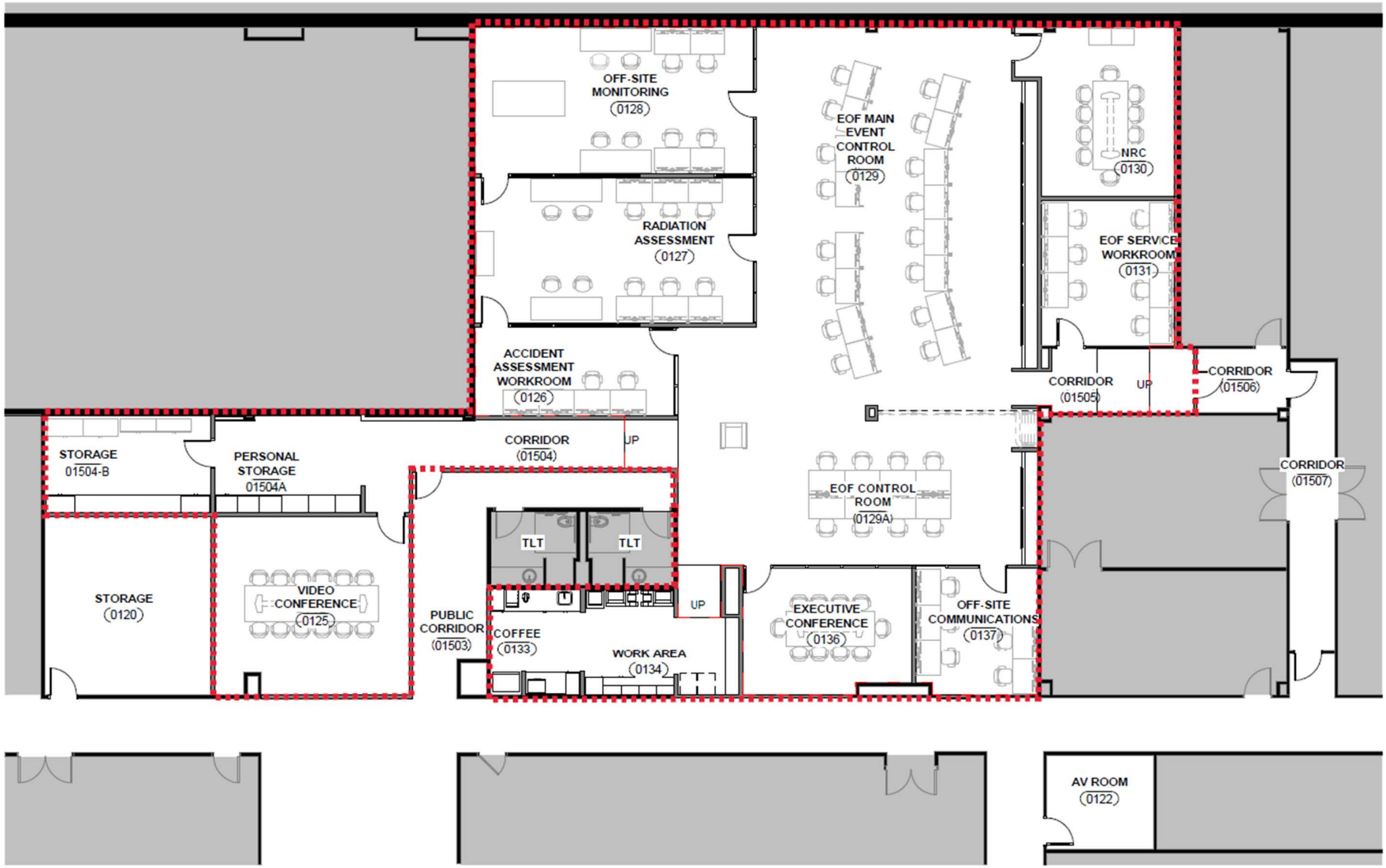
6.9 NSIR/DPR-ISG-01, *Emergency Planning for Nuclear Power Plants*, Revision 0, November 2011 (ADAMS Accession No. ML113010523)

6.10 Letter from NRC to Duke Energy, *Brunswick Steam Electric Plant, Units 1 and 2; Shearon Harris Nuclear Power Plant, Unit 1; H. B. Robinson Steam Electric Plant Unit 2; and Oconee Nuclear Station, Units 1, 2, and 3 – Issuance of Amendments to Consolidate Emergency Operations Facilities and Associated Emergency Plan Changes*, dated August 21, 2017 (ADAMS Accession No. ML17188A387)

6.11 Letter from NRC to Southern Nuclear Company, *Joseph M. Farley Nuclear Plant, Units 1 and 2; Edwin I. Hatch Nuclear Plant, Units 1 and 2, and Vogtle Electric Generating Plant, Units 1, 2, 3, and 4; Issuance of Amendments Regarding the Relocation of the Emergency Operations Facility (CAC Nos. MG0188, MG0189, MG0190, MG0191, MG0192, MG0193, MG0194, and MG0195; EPID L-2017-LLA-0293)*, dated July 26, 2018 (ADAMS Accession No. ML18183A073)

Attachment 1 – David Taylor EOF Floorplan

For Information Only



Enclosure 2
RA-21-0197

ENCLOSURE 2: Duke Energy Common Emergency Plan (EP-ALL-EPLAN) Mark-up

10.0 SECTION H - Emergency Facilities and Equipment (continued)

H.3	An EOF is established, using current Federal guidance, as the primary base of emergency operations for the licensee during a radiological incident. The EOF facilitates the management and coordination of the overall emergency response, including the sharing of information with Federal, state, local, and tribal government authorities.

The Duke Energy Common EOF is the central location for management of the offsite emergency response, coordination of radiological assessment, and management of initial recovery operations. The EOF is a dedicated facility located at ~~526 South Church Street~~9700 David Taylor Drive, Charlotte, North Carolina, and serves as the EOF for all operating Duke Energy nuclear sites (BNP, CNS, HNP, MNS, ONS, and RNP). Access to the EOF is controlled through the use of electronic card readers. If the ~~Church street~~David Taylor location cannot be used, the EOF can be set-up and operated at either MNS or CNS.

The EOF is capable of accommodating designated Duke Energy personnel and offsite county, state and federal responders including NRC and FEMA. It is anticipated that representatives from the state(s) of North Carolina, and South Carolina, may be dispatched to the EOF for an event at specific Duke Energy site(s).

The EOF is required to be activated within 75 minutes following the declaration of an Alert or higher classification.

The EOF provides for:

- Overall management of emergency response
- The capability to analyze plant technical information and provide technical briefings on event conditions and prognosis to licensee and offsite response organizations
- Coordination of emergency response activities with federal, state, and county agencies
- Coordination of offsite radiological and environmental assessments
- Development of PARs
- Notification of offsite agencies
- Management of recovery operations
- Communications with the NRC

10.0 SECTION H - Emergency Facilities and Equipment (continued)

- Response to and coordination of response efforts for events occurring simultaneously at more than one site

Because the EOF is located outside the plume exposure Emergency Planning Zone for all Duke Energy nuclear sites, specialized ventilation systems and radiological monitoring are not required. The EOF ventilation system is consistent in design with standard building codes.

Normal power to the EOF is from reliable offsite sources. Backup power for the EOF is supplied by onsite diesel generation. Essential equipment is backed up by the diesel generation system.

The EOF has the capability to display vital plant data and radiological information for each site and unit, in near real time, to be used by knowledgeable individuals responsible for providing technical briefings on plant conditions, event prognosis, and for management of overall emergency response.

The EOF provides reliable voice communications to each site's MCR, TSC, OSC, the NRC, and state and county warning points and EOCs.

The EOF has access to site reference materials that may be needed for supporting emergency response.

H.3.a	For an EOF that is located more than 25 miles away from the NPP site, provisions are made for locating NRC and offsite responders closer to the NPP site.

The EOF is greater than 25 miles from BNP, CNS, HNP, ONS, and RNP. Duke Energy maintains space for members of an NRC Site Team and federal, state and county responders at a location near those sites. The location and provisions of the near-site facilities is described in the site-specific annexes to the Duke Energy Common Emergency Plan.

H.4	An alternative facility (or facilities) is established, using currently provided and/or endorsed guidance, which would be accessible even if the NPP site is under threat of or experiencing hostile action.

An Alternate Emergency Facility for staging of ERO personnel has been designated for each Duke Energy nuclear site. The Alternate Emergency Facility may also serve as an evacuation location for TSC and OSC personnel should those facilities become uninhabitable. The location of Alternative Emergency Facility for each site is provided in the site-specific annexes to the Duke Energy Common Emergency Plan. The alternate location for the EOF is described in element H.3.

Enclosure 3
RA-21-0197

ENCLOSURE 3: CNS Site Annex (EP-CNS-EPLAN-ANNEX) Mark-up

6.0 SECTION H - EMERGENCY FACILITIES AND EQUIPMENT (continued)

H.2	An OSC is established, using current Federal guidance, from which repair team activities are planned and teams are dispatched to implement actions.

The OSC is located in the Service Building on the 609 elevation with the OCC. It is a permanent facility.

If the OSC becomes unavailable, a backup location has been designated in the Administrative Building.

H.3.a	For an EOF that is located more than 25 miles away from the NPP site, provisions are made for locating NRC and offsite responders closer to the NPP site.

The Duke Energy Common EOF is ~~not~~ located greater than 25 miles from the site. The Corporate Headquarters located in Charlotte, North Carolina, has been designated for use as a near site location for the NRC and other off-site agency staff.~~Therefore, this element does not apply to CNS.~~

This location provides conference areas with white boards, separate briefing/debriefing areas, telephones, ERO telephone contact lists, computers with internet access, necessary office supplies and photocopier access, and access to plant radiological information

H.4	An alternative facility (or facilities) is established, using currently provided and/or endorsed guidance, which would be accessible even if the NPP site is under threat of or experiencing hostile action.

The Common EOF, located ~~in the Duke Energy Corporate Headquarters~~at 9700 David Taylor Drive, Charlotte, North Carolina has been designated as the CNS Alternate Emergency Facility.

Enclosure 4
RA-21-0197

ENCLOSURE 4: MNS Site Annex (EP-MNS-EPLAN-ANNEX) Mark-up

H.3.a	For an EOF that is located more than 25 miles away from the NPP site, provisions are made for locating NRC and offsite responders closer to the NPP site.

The Duke Energy Common EOF is not located greater than 25 miles from the site. Therefore, this element does not apply to MNS.

H.4	An alternative facility (or facilities) is established, using currently provided and/or endorsed guidance, which would be accessible even if the NPP site is under threat of or experiencing hostile action.

The Common EOF, located ~~in the Duke Energy Corporate Headquarters~~at 9700 David Taylor Drive, Charlotte, North Carolina has been designated as the MNS Alternate Emergency Facility.

H.8	Provisions are made to acquire data from offsite monitoring and analysis equipment, including data on geophysical phenomena (e.g., meteorological, hydrologic, and seismic monitors) and radiological data (e.g., from FMTs, environmental dosimeters, and laboratory analyses).

1. Meteorological Monitoring

The meteorological parameters measured at MNS include wind speed and wind direction measured at high and low levels, delta-temperature and sigma theta for stability classification, ambient air and dew point temperature, and precipitation.

Meteorological data consists of a primary digital recording/storage system and a secondary analog chart recording system both of which meet system accuracies and other specifications as suggested in Regulatory Guide 1.23, Proposed Revision 1. In the digital system meteorological variables are sampled at varying time (1-60 seconds) intervals from which 15 minute total, average and/or standard deviation quantities are computed. Digital data is placed on an external PI server accessible to computers that are used for emergency effluent dispersion modeling and dose calculation. The chart recording system is maintained as a backup to the digital system.

2. Hydrologic Monitoring

A hydrological description of MNS is located in the UFSAR Section 2.4.

3. Seismic Monitoring

A description of the seismic monitoring instrumentation and area seismology studies for MNS are found in UFSAR Sections 3.7 and 2.5 respectively.

ENCLOSURE 5: Offsite Response Organization Concurrence

DUKE ENERGY.

David A Thompson
526 S. Church Street
Charlotte, NC 28202

Mailing Address:
Mail Code ECII07H/PO Box 1006
Charlotte, NC 28201-1006

910-382-6773

November 3, 2021

William Ray, Director
State of North Carolina
1636 Gold Star Drive
Raleigh, North Carolina 27607

Ref: Concurrence with Duke Energy Common Emergency Operations Facility (EOF) Move

Director Ray,

Duke Energy proposes to move the location of the Charlotte EOF to a location outside of the Charlotte city proper. Prior to seeking approval from the Nuclear Regulatory Commission (NRC), Duke Energy hereby requests that your agency provide written concurrence to Duke Energy regarding the proposed move of the Charlotte EOF (approvals from the NRC can take up to 12 months from time of Duke Energy's submittal). This concurrence includes that you have reviewed any impact this change may have on your Radiological Emergency Preparedness (REP) plan.

Duke Energy has secured a location outside that provides easy access from Interstate 85, and provides the similar resources as the existing Charlotte EOF, such as:

- The EOF continues to remain outside of the 10-mile emergency planning zone from each Duke Energy Nuclear site to minimize the disruption of EOF operation in the event of a site radiological release, loss of electrical power, or security threat.
- The EOF will include state-of-the-art technological equipment, promoting reliability and functionality for the long-term future.
- The EOF will continue to have backup power and communications capabilities.
- Continued seating capacity to support State EMD, and radiological support staff.
- Common EOF procedures and training continue to provide consistent staff response to any emergency.

If you have any questions regarding the proposed move or the request, please feel free to contact David Thompson, Director, Nuclear Emergency Preparedness, or Eric White, Emergency Preparedness Specialist, at 980-373-1105. Otherwise, if you concur with the proposed move of the Charlotte EOF to the new location at 9700 David Taylor Drive, please evidence your agency's concurrence by countersigning an original copy of this letter and returning such copy to me at your convenience.

As always, your continued support of Duke Energy Emergency Preparedness program is greatly appreciated.

Sincerely,

David A Thompson, CHP
Director, Nuclear Emergency Preparedness

ACKNOWLEDGED AND AGREED

I, William Ray, Director of North Carolina Emergency Management, acknowledge concurrence with the proposed move of the Duke Energy Common Emergency Operations Facility from 526 South Church Street, Charlotte, NC to 9700 David Taylor Drive, Charlotte, NC, and have reviewed any impact this change may have on the State of North Carolina's Radiological Emergency Preparedness (REP) plan.

Will Ray

Signature

11/4/2021 | 09:57:25 EDT

Date

DUKE ENERGY

David A Thompson
526 S. Church Street
Charlotte, NC 28202

Mailing Address:
Mail Code EC11O7H/PO Box 1006
Charlotte, NC 28201-1006

910-382-6773

November 3, 2021

Kim Stenson, Director
State of South Carolina
2779 Fish Hatchery
West Columbia, South Carolina 29172

Ref: Concurrence with Duke Energy Common Emergency Operations Facility (EOF) Move

Director Stenson,

Duke Energy proposes to move the location of the Charlotte EOF to a location outside of the Charlotte city proper. Prior to seeking approval from the Nuclear Regulatory Commission (NRC), Duke Energy hereby requests that your agency provide written concurrence to Duke Energy regarding the proposed move of the Charlotte EOF (approvals from the NRC can take up to 12 months from time of Duke Energy's submittal). This concurrence includes that you have reviewed any impact this change may have on your Radiological Emergency Preparedness (REP) plan.

Duke Energy has secured a location outside that provides easy access from interstate 85, and provides the similar resources as the existing Charlotte EOF, such as:

- The EOF continues to remain outside of the 10-mile emergency planning zone from each Duke Energy Nuclear site to minimize the disruption of EOF operation in the event of a site radiological release, loss of electrical power, or security threat.
- The EOF will include state-of-the-art technological equipment, promoting reliability and functionality for the long-term future.
- The EOF will continue to have backup power and communications capabilities.
- Continued seating capacity to support State EMD, and radiological support staff.
- Common EOF procedures and training continue to provide consistent staff response to any emergency.

If you have any questions regarding the proposed move or the request, please feel free to contact David Thompson, Director, Nuclear Emergency Preparedness, or Eric White, Emergency Preparedness Specialist, at 980-373-1105. Otherwise, if you concur with the proposed move of the Charlotte EOF to the new location at 9700 David Taylor Drive, please evidence your agency's concurrence by countersigning an original copy of this letter and returning such copy to me at your convenience.

As always, your continued support of Duke Energy Emergency Preparedness program is greatly appreciated.

Sincerely,

David A Thompson, CHP
Director, Nuclear Emergency Preparedness

ACKNOWLEDGED AND AGREED

I, Kim Stenson, Director of South Carolina Emergency Management Division, acknowledge concurrence with the proposed move of the Duke Energy Common Emergency Operations Facility from 526 South Church Street, Charlotte, NC to 9700 David Taylor Drive, Charlotte, NC, and have reviewed any impact this change may have on the State of South Carolina's Radiological Emergency Preparedness (REP) plan.

K. [signature]
Signature

4 NOV 21
Date