



**FEMA**

October 27, 2016

Marissa Bailey  
Director, Division of Preparedness and Response  
Office of Nuclear Security and Incident Response  
U.S. Nuclear Regulatory Commission  
Mail Stop T4D22A  
Washington, D.C. 20555

Dear Ms. Bailey:

This letter is to inform you that the Federal Emergency Management Agency (FEMA) has completed its Disaster Initiated Review (DIR) of the State of North Carolina and local offsite response organizations continued capability to adequately respond to an incident at the Harris Nuclear Plant following Hurricane Matthew that affected in and around the 10-mile Emergency Planning Zone communities' communication capabilities, Emergency Operations Center functionality, and possibly blocked evacuation routes.

On October 27, 2016, a comprehensive investigation and collection of field data was performed by the joint FEMA/Nuclear Regulatory Commission DIR Team, in accordance with FEMA's Post Disaster Assessment of Offsite Capabilities procedure.

Based on the review of this information, FEMA concludes that offsite radiological emergency preparedness is adequate to provide reasonable assurance that appropriate measures can be taken to protect the health and safety of the public in the event of a radiological emergency at the Harris Nuclear Plant. At this time, FEMA is not aware of any unresolved offsite emergency preparedness issues around Brunswick Nuclear Power Plant; and therefore, we have no objections to plant startup and full-power operations.

Please see attached the full report from FEMA Region IV. If you have questions, please contact me at (202) 212-2376, if you have any questions or require any further assistance on this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Jonathan Hoyes". To the right of the signature, there is a handwritten note in black ink that says "Tom Gretem for Jonathan Hoyes".

Jonathan Hoyes  
Director  
Technological Hazards Division

Attachment - Disaster Initiated Review – Harris Nuclear Plant



**FEMA**

October 27, 2016

Memorandum For: Jonathon Hoyes, Director  
Technological Hazards Division

Through: Vanessa Quinn, Chief  
Radiological Emergency Preparedness Section

Conrad Burnside, Chief  
Technological Hazards Branch

From: J.T. Ackermann, Sr. Site Specialist  
Technological Hazards Branch

Subject: Disaster Initiated Review – Hurricane Matthew – Harris Nuclear Plant

### **Background**

Hurricane Matthew made landfall on Saturday, October 8, 2016, in South Carolina bringing rain, strong winds and floods to the State of North Carolina, impacting the risk counties of Wake, Chatham, Harnett and Lee. The Harris Nuclear Plant was commencing day one of a scheduled refueling outage, and was notified by the Duke Energy Control Center to switch to emergency backup power due to grid perturbations. With this notification, it was deemed offsite power was unreliable and Harris switched to emergency backup power. All outage related activities were halted and the plant remained stable until grid reliability was assured from both offsite and onsite evaluations.

Exercising FEMA, RIV's due diligence regarding reasonable assurance of the offsite response organizations of the Harris Nuclear Plant, this disaster initiated review was made necessary. It was completed by members of the FEMA RIV REP staff, the State of North Carolina emergency management personnel, and meeting individually with representatives from each county's emergency management agencies October 24-27, 2016.

### **Assessment**

### **Operational Coordination**

The State of North Carolina, the risk counties of Wake, Chatham, Harnett and Lee activated their emergency operations centers in response to Hurricane Matthew. The State emergency operations center in Raleigh

continues to operate at level 1, full activation. All risk county emergency operations centers are currently in normal operations, completing recovery and restoration services. The emergency operation centers were not compromised and are capable of coordinating emergency response operations in support of the Harris Nuclear Plant.

### **Operational Communications**

Primary and secondary communication systems are operable and functioning. During the storm there were irregularities noted in the primary means of communication between Duke Energy, the State and risk counties, however the secondary and tertiary modes functioned as designed.

### **Public Information and Warning**

The prompt alert and notification system for the 10-mile emergency planning zone consists of a fixed siren system and the broadcast of emergency alert system messages. This system has 83 pole mounted sirens placed strategically throughout the emergency planning zone. As of this assessment, all sirens are operable on primary AC power with DC backup. The prompt alert and notification system of the 10-mile emergency planning zone is operable. The risk counties have the resources to conduct backup route alerting if needed. The State's Joint Information Center is capable of making emergency public information and instructions relative to the Harris Nuclear Plant in a timely manner.

### **Situational Assessment**

The Division of Health Service Regulation, Radiation Protection Section has the staff, equipment and resources available to provide independent radiological dose assessment and provide recommendations to decision makers on protective actions for the health and safety of the public.

### **Environmental Response, Health and Safety**

The Division of Health Service Regulation, Radiation Protection Section has the staff, equipment and resources available to deploy the state's radiological field monitoring teams to monitor and assess a radiological plume. Additionally, the risk counties ability to monitor and decontaminate the public and emergency workers remain intact.

### **On-Scene Security, Protection and Law Enforcement**

The State and risk counties maintain satisfactory law enforcement assets to perform the duties required of them. Primary evacuation routes inside of the 10-mile emergency planning zone are unaffected. The state and risk counties implemented numerous traffic and access control points relative to Hurricane Matthew

response. Evacuation route impediments were quickly identified and removed and there are currently no impacts to evacuation routes.

### **Critical Transportation**

The State and risk counties maintain enough transportation assets to fulfill requirements. Movement of transportation dependent populations to include disabled, access/functional needs and schools remain unencumbered. There is no degradation of this capability. It should be noted that Lee County validated their access/functional needs notification and evacuation of their REP plan with the precautionary movement/relocation of four people with access/functional needs. Chatham County implemented their Strategic Actions For Emergencies (SAFE) from their REP plan to check on the well-being of the county's access/functional needs before, during and after the event.

### **Mass Care Services**

The risk counties have the available resources to staff and operate reception and congregate care centers in accordance with their plans and procedures. Wake, Harnett and Lee activated shelters in support of their displaced populace. Chatham County did not have the need to activate a shelter. All shelters have closed and each county is capable to support the Harris Nuclear Plant 10-mile emergency planning zone.

### **Public Health, Healthcare and Emergency Medical Services**

Wake Medical Hospital, Wake Medical REX Hospital, and Betsy Johnson Hospital are operational and capable to provide treatment to radiological contaminated injured individuals in accordance with plans and procedures. Emergency medical services have not been degraded and are capable to respond, care and transport a radiological contaminated injured individual.

### **Findings**

These statements complete the disaster initiated review made necessary by the passage of Hurricane Matthew through the risk counties of the Harris Nuclear Plant.

FEMA evaluated the Harris Nuclear Plant offsite emergency preparedness exercise on October 27, 2015. FEMA determined that, based on the results of the exercise and analysis of North Carolina's annual letter of certification, the 44 CFR 350 approval of the State of North Carolina and associated local plans and preparedness site specific for the Harris Nuclear Plant granted on March 28, 1989, will continue. The results of this disaster initiated review have not impacted this original finding.