From:

Hoyes, Jonathan

To:

Bailey, Marissa; Coffin, Stephanie

Cc:

Kahler, Robert; Anderson, Joseph; Greten, Timothy; Quinn, Vanessa; Burnside, Conrad

Subject:

[External\_Sender] DIR for Brunswick NPP (Hurricane Matthew)

Date:

Wednesday, October 12, 2016 8:59:32 AM

Attachments:

DIR for Brunswick - 10-11-16.pdf

Importance:

High

## Marissa, Stephanie:

On Oct 10, 2016, a comprehensive investigation and collection of field data was performed by a joint FEMA/NRC Disaster Initiated Review (DIR) Team, in accordance with the FEMA Post Disaster Assessment of Offsite Capabilities checklist. Based on our review of all information gathered, FEMA has concluded that offsite radiological emergency preparedness remains adequate to provide "Reasonable Assurance" and that appropriate measures can be taken to protect the health and safety of the public in the event of a radiological emergency at the Brunswick Nuclear Power Plant (NPP).

This is the third DIR performed as a result of Hurricane Matthew (St. Lucie 10/09/16, H. B. Robinson 10/10/16, and Brunswick, 10/11/16). We should hear back later today whether a fourth DIR, at Harris NPP, is necessary. We appreciate NRC's coordination and support. Please let me know if you have any questions.

Regards,

Jonathan

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October 11, 2016

Memorandum For:

Jonathon Hoyes, Director

Technological Hazards Division

Through:

Vanessa Quinn, Chief

Radiological Emergency Preparedness Section

Conrad Burnside, Chief

Technological Hazards Branch

From:

Kevin Keyes, Section Chief

Technological Hazards Branch

Subject: Disaster Initiated Review - Hurricane Matthew - Brunswick Nuclear Plant

## Background

Hurricane Matthew made landfall on Saturday October 8, 2016, in South Carolina bringing floods and strong winds to the State of North Carolina. Heavy rain and localized flooding impacted the risks counties of Brunswick and New Hanover that surround the Brunswick Nuclear Plant. The plant continued to operate during the storm. North Carolina continues to effectively respond to the impacts of Hurricane Matthew.

#### Assessment

# **Operational Coordination**

The State of North Carolina, the risk counties of Brunswick and New Hanover 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. On October 11, 2016, Brunswick County's emergency operations center in Bolivia is currently operating at partial activation monitoring potential flooding in the southern part of the county. New Hanover County emergency operations center in Wilmington deactivated October 10<sup>th</sup> and is currently in normal operations. The emergency operation centers were not compromised and are capable of coordinating emergency response operations in support of the Brunswick Nuclear Plant.

## **Operational Communications**

Primary and secondary communication systems are operable and functioning. During the storm there were intermittent lapses of the primary communications link, due to fluctuating internet connectivity, however the secondary satellite mode functioned as designed. Redundant tertiary communication systems are also available.

## **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 38 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 risk counties have the resources to conduct physical backup route alerting if needed. The state IPAWS and NOAA radio alerting capability are functional. The state's joint information center is activated and currently coordinating emergency public information supporting the Hurricane Matthew response and recovery operations.

#### 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 necessary law enforcement assets to perform the duties required of them. Primary evacuation routes inside of the 10-mile emergency planning zone remain open with only a few secondary streets affected. Traffic management within the area has established intermediate detours to address hurricane created impediments.

# **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.

#### **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. New Hanover activated two shelters in support of displaced citizens and Brunswick County activated three. All shelters have closed and remain available.

# Public Health, Healthcare and Emergency Medical Services

Dosher Memorial Hospital and New Hanover Regional Medical Center facilities are operational and capable to provide treatment to radiological contaminated injured individuals in accordance with plans and procedures. The emergency medical services are capable and available 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 for the Brunswick Nuclear Power Plant.

FEMA evaluated the Brunswick Nuclear Plant offsite emergency preparedness exercise on July 26, 2016. FEMA based 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 Brunswick Nuclear Power Plant granted on March 17, 1982, will continue. The results of this disaster initiated review have not impacted this original finding.