



FEMA

NRC Headquarters Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

To Whom It May Concern:

Enclosed is one copy of the After Action (AAR) / Improvement Plan (IP) for the February 6, 2014, Radiological Emergency Preparedness Partial Participation Plume Exposure Pathway Exercise for the Byron Station. The State of Illinois; Ogle and Winnebago Counties; and the utility owner/operator, Exelon Nuclear participated in this exercise. The AAR/IP was prepared by the U.S. Department of Homeland Security/Federal Emergency Management Agency (DHS/FEMA) Region V, Radiological Emergency Preparedness Program.

There was one Deficiency identified during this exercise for Ogle County. There were no Deficiencies identified for the State of Illinois or Winnebago County.

Ogle County received a Deficiency finding under *Protective Action Implementation* Criterion 3.d.2 – An implementation process involving identification and resolution of impediments to evacuation.

The Deficiency assessed was based on our findings that individual performances as well as the decision-making process used by Ogle County to implement protective action decisions failed to take into account radiological aspects, including the plume direction, when re-routing traffic after a controller injected traffic impediment was introduced. The Ogle County Representatives relayed the re-routing information (directions that had evacuees travel through the plume) to the Joint Information Center for release to the public. Evacuees were directed into and through the centerline of the plume exposing them to radiological material, compromising their health and safety unnecessarily as alternate routes free from contamination and dose were available.

The Deficiency was resolved during a re-demonstration exercise conducted with appropriate Ogle County personnel on April 2, 2014.

There were two Areas Requiring Corrective Action (ARCA) identified during this exercise for Ogle County. There were no ARCAs identified for State of Illinois or Winnebago County. There was one ARCA from a previous exercise for Ogle County that was successfully re-demonstrated.

The first ARCA for Ogle County was identified under Criterion 1.a.1 - OROs use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner. It was observed that the Ogle County E911 contacted the Winnebago County Emergency Operations Center and never notified the Winnebago County E911 Center as per the plan.

The second ARCA for Ogle County was identified under Criterion 5.b.1 - OROs provide accurate emergency information and instructions to the public and news media in a timely manner. Several instances of inaccurate information being provided to the public, and a lack of timeliness were noted during the exercise. Additionally, public inquiry rumors, and a trend analysis were not fully addressed. The time between the end of siren sounding (three minutes after activation) and the beginning of the broadcast of the emergency message to the public was excessive.

There was one ARCA resolved from a previous exercise for Ogle County. Prior ARCA 09-11-3c2-A-02 - OROs/school officials implement protective actions for schools.

There was one Plan Issue identified during this exercise for Ogle County. There were no Plan Issues identified for the State of Illinois or Winnebago County.

The Plan Issue identified during this exercise for Ogle County was identified under Criterion 5.b.1 - OROs provide accurate emergency information and instructions to the public and news media in a timely manner. Illinois Plan for Radiological Accidents (IPRA) Volume VI emergency messages contained confusing information. The messages in IPRA Volume VI that cover evacuation of Sub-Areas 19 and 23 (combined) include the entire City of Byron and all Byron Schools, even though they were part of Sub-Area 17 (Chapter 2A pages 58, 64 and 66). The IPRA Volume VI Plan notes that schools are located in Sub-Area 19, when in fact the Byron Schools are located in Sub-Area 17. Also the introduction of the Shelter-in-Place and Evacuation messages reference personnel in Ogle County but, do not mention that parts of Winnebago County could be included in the affected area.

Based on the results of the February 6, 2014 exercise and the successful re-demonstration of the Ogle County Deficiency on April 2, 2014, the offsite radiological emergency response plans and preparedness for the State of Illinois and affected local jurisdictions site-specific to the Byron Station can be implemented and are adequate to provide reasonable assurance that appropriate measures can be taken offsite to protect the health and safety of the public in the event of a radiological emergency at the site.

Therefore, the Title 44 CFR, Part 350, approval of the offsite radiological emergency response plans and preparedness for the State of Illinois site-specific to the Byron Station, granted on November 15, 1983, remains in effect.

Copies of this Report were transmitted to the DHS/FEMA National Office, Nuclear Regulatory Commission (NRC) Region III, and the State of Illinois.

If you have any questions, please contact William E. King, Chairman, Regional Assistance Committee, DHS/FEMA, Region V, at (312) 408-5575.

Sincerely,



 Andrew Velasquez III
Regional Administrator

Enclosure (1)