U.S. Department of Homeland Security
Region V
536 South Clark Street, Floor 6
Chicago, IL 60605

FEMA

July 27, 2012

Ms. Kris Eide
Director, Minnesota Homeland Security
and Emergency Management Division
Minnesota Department of Public Safety
444 Cedar Street, Suite 223
St. Paul, Minnesota 55101-6223

Dear Ms. Eide:

This is to inform you of the U.S. Department of Homeland Security/Federal Emergency Management Agency's (DHS/FEMA) identification of a Deficiency finding during the Prairie Island Nuclear Generating Plant (PINGP) Radiological Emergency Preparedness (REP) Full Participation Plume Exposure Pathway Exercise, conducted on July 10, 2012.

A Deficiency is defined in DHS/FEMA REP Program Manual, Page III-21, dated April 2012, as an observed or identified inadequacy of organizational performance in an exercise that could cause a finding that offsite emergency preparedness is not adequate to provide reasonable assurance that appropriate protective measures can be taken in the event of a radiological emergency to protect the health and safety of the public living in the vicinity of a nuclear power plant.

The State of Minnesota received a Deficiency finding under ***Protective Action Implementation*** Criterion 3.d.2 – an implementation process involving identification and resolution of impediments to evacuation.

The Health & Safety of the General Public was potentially compromised during the PINGP REP Full Participation Plume Exposure Pathway Exercise on July 10, 2012. The Deficiency resulted from the failure of the Minnesota State Police (MSP), the Minnesota Department of Transportation (MNDOT) and the State Emergency Operations Center (SEOC) staff to take the plume direction into account, resulting in their making the decision to re-route evacuating traffic into the radioactive plume instead of away from or around the plume.

The MSP and MNDOT agreed to detour traffic off of US Hwy 61 N at Route 316, and send traffic north on Route 316 to rejoin US Hwy 61 near Hastings. The evacuation routes selected were included in an on-going Media Briefing and released to the public in a special news bulletin.

FEMA Region V and Headquarters staffs have reviewed the additional documentation forwarded by your staff, and briefed on a July 17, 2012 conference call. The technical aspects addressed in your documentation were reviewed by both Headquarters and contractual technical staff to assist in our final determination.

The Deficiency assessed was based on our findings that individual performance, as well as the decision making process used by the State to implement protective action decisions, contributed to the general public being directed into and through the center of the plume. Protective actions were required for the General Emergency Classification Level declared by the utility concurrent with a release of radioactive material. Subsequently, the general public potentially received unnecessary radiological contamination and exposure, thus compromising their health and safety. Additional detailed information regarding Criterion 3.d.2 performance is included in the enclosed narrative.

In accordance with 44 CFR 350.9(d), we have thoroughly reviewed and discussed this issue with the U.S. Nuclear Regulatory Commission.

Because of the potential impact this finding has on public health and safety, it should be corrected within 120 days after the exercise date (November 8, 2012) through appropriate remedial actions, including exercises, drills, or other actions. These issues were presented to the exercise participants, including the State of Minnesota, Dakota County, and Goodhue County Staff during the post-exercise Participant's Meeting conducted on July 13, 2012, and through more detailed discussions with your staff.

Please coordinate with this office regarding a Schedule of Corrective Actions (SCA), including the date, time and identification of those organizations and participants by title participating in a remedial exercise, and any other actions no later than 20 days after the exercise briefing, which is August 8, 2012.

A copy of this letter has been forwarded to Headquarters DHS/FEMA, the U.S. Nuclear Regulatory Commission Headquarters, and NRC Region III.

Your cooperation in this matter is sincerely appreciated. If you have any questions, please contact William E. King, Chairman, Regional Assistance Committee, at (312) 408-5575.

Sincerely,

Andrew Velasquez III
Regional Administrator

cc: NRC Headquarter
NRC Region III

Enclosure (1)

Prairie Island REPEX July 10, 2012

EVALUATION AREA 3: Protective Action Implementation

Sub-element 3.d - Impediments

Criterion 3.d.2: Impediments to evacuation are identified and resolved.

During the Prairie Island Nuclear Generating Plant (PINGP) Radiological Emergency Preparedness Exercise on Tuesday, July 10, 2012, the Minnesota State Patrol (MSP) and the Minnesota Department of Transportation (MNDOT) Emergency Operations Center staff at the Minnesota State Emergency Operations Center (SEOC) identified and resolved impediments to evacuation in a manner which could have increased radiation exposure and contaminated the general public when Protective Action Decisions for evacuation were implemented.

The MSP and the MNDOT representatives at the SEOC identified real time road closures and construction projects following the notification of the Alert Emergency Classification Level at the PINGP. It was determined that two local road closures would not affect any potential evacuations. At 0944 hours, MNDOT suspended and ordered clear all state road construction projects in the Emergency Planning Zone (EPZ) area. It was determined that all evacuation routes and lanes would be open if needed.

The first PAD occurred at 1144 hours, which required evacuation of the Sub-Areas 2, 5N, 5S, 5W, and 5E. The Estimated Time Evacuation (ETE) for evacuation of the 2 and 5 mile Sub-Areas is 160 minutes. The public received notification of the first PAD at 1153 hours, via the Emergency Alert System (EAS). The second PAD expanded the evacuation zone to 10 miles downwind, adding Sub-Areas 10W and 10SW. The public received notification of this PAD at 1325 hours, via EAS. At 1335 hours, or 102 minutes after the first evacuation was ordered, evacuation routes were closed and the public was directed towards the plume in Goodhue County by the MSP. This resulted in possibly 60 minutes or more of increased exposure to the population still evacuating in the 2 and 5 mile Sub-Areas.

At 1329 hours, two controller injects were provided to the MSP and MNDOT which contained a roadblock on an established evacuation route. Controller Message 08 for Dakota County stated that the intersection of US Hwy 61 and County Road 62 south of Hastings was blocked with all traffic unable to get through. The intersection would remain blocked for the remainder of the exercise. The MSP and the MNDOT agreed to detour traffic off of US Hwy 61 N at Route 316 to rejoin US Hwy 61 near Hastings. Controller Message 07 for Goodhue County stated that the intersection of US Hwy 52 and CR 1 was impassable. Both roads were completely blocked and unable to be cleared for the remainder of the exercise. The MSP and the MNDOT agreed to block traffic from entering CR 1 and detour it onto 61 N to 52 N, or onto 316 N then back to 61N. CR 1 would be closed between 61 and 52. Both actions were completed at 1335 hours. Traffic already on CR 1, Route 58, and US Hwy 52 south of the blockage would be re-routed onto CR 9 to CR 14 and back onto US Hwy 52 north of the blockage. The MSP and MNDOT did not take into consideration the direction of the plume nor consult with the Planning Assessment Center (PAC) personnel and directed the evacuees into the plume instead of away from it or around it. Additionally, the re-routing actions were not discussed with either County before being implemented by the MSP. The re-routed evacuation routes were included in an on-going Media Briefing and released to the public.

CONDITION (describe the inadequacy):
Revised evacuation route selection was done without consideration of plume direction. It led to re-routing of evacuating traffic into the plume instead of away from and around the plume.

POSSIBLE CAUSE (what is responsible):
There was insufficient coordination between the personnel responsible for revising evacuation routes and technical staff to insure plume/radiological release consideration /impact was taken into account when making the decision to revise evacuation routes.

REFERENCE (cite the specific NUREG-0654 element, regulation, etc.):
NUREG-0654/FEMA-REP-1, J.10.k

EFFECT (what resulted, or could have resulted, from this issue):
The lack of coordination when implementing the decision to revise evacuation routes lead to an unnecessary increase in radiation exposure to the evacuating public.

Recommendation:
Assure that plume and exposure considerations are taken into account when making evacuation decisions for the public.