



UNITED STATES
NUCLEAR REGULATORY COMMISSION
LISLE, ILLINOIS 60532

April 23, 2009

Mr. Charles G. Pardee
Senior Vice President, Exelon Generation Company, LLC
President and Chief Nuclear Officer (CNO), Exelon Nuclear
4300 Winfield Road
Warrenville IL 60555

SUBJECT: DEPARTMENT OF HOMELAND SECURITY/FEDERAL EMERGENCY
MANAGEMENT AGENCY STATE OF ILLINOIS AND GRUNDY COUNTY
EXERCISE DEFICIENCY FINDINGS TRANSMITTAL LETTER TO
DRESDEN NUCLEAR POWER STATION, UNITS 2 AND 3

Dear Mr. Pardee:

We have received the enclosed Department of Homeland Security/Federal Emergency Management Agency (FEMA) Region V letter, dated April 7, 2009, for the March 25, 2009 plume exposure pathway exercise at the Dresden Nuclear Power Station (ADAMS Accession No. ML091060677).

Two Deficiency findings were identified by FEMA Region V staff. The State received a Deficiency finding under Protective Action Decision Making (Criterion 2.b.2) and Grundy County received a Deficiency finding under Emergency Notification and Public Information (Criterion 5.b.1). These issues were presented to the exercise participants, including State and Grundy County staff during the post-exercise Participant's Meeting on March 27, 2009.

We fully recognize that any corrective actions to be implemented may involve parties and political institutions which are not under your direct control. Nonetheless, we expect that assistance, if appropriate, will be extended.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records System (PARS) component of NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA by Michael Bielby Acting for/
Hironori Peterson, Chief
Operations Branch
Division of Reactor Safety

Docket Nos. 50-237; 50-249; 72-037
License Nos. DPR-19; DPR-25

Enclosure: As stated

See Attached Distribution

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Letter to Charles G. Pardee from Hironori Peterson dated April 23, 2009

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MANAGEMENT AGENCY STATE OF ILLINOIS AND GRUNDY COUNTY
EXERCISE DEFICIENCY FINDINGS TRANSMITTAL LETTER TO
DRESDEN NUCLEAR POWER STATION, UNITS 2 AND 3

cc w/encl: Site Vice President - Dresden Nuclear Power Station
Plant Manager - Dresden Nuclear Power Station
Manager Regulatory Assurance – Dresden Nuclear Power Station
Senior Vice President - Midwest Operations
Senior Vice President - Operations Support
Vice President - Licensing and Regulatory Affairs
Director - Licensing and Regulatory Affairs
Manager Licensing - Clinton, Dresden, and Quad Cities
Associate General Counsel
Document Control Desk - Licensing
Assistant Attorney General
J. Klinger, State Liaison Officer,
Illinois Emergency Management Agency
Chairman, Illinois Commerce Commission
Patrick Quealy, Dresden Emergency Preparedness Manager
Kevin Appel, Exelon Corporate Emergency Preparedness Manager

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Patrick Quealy, Dresden Emergency Preparedness Manager
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FEMA

APR 07 2009

Mr. Andrew Velasquez, Director
Illinois Emergency Management Agency
2200 S. Dirksen Parkway
Springfield, Illinois 62703

Dear Mr. Velasquez,

This is to inform you of the U.S. Department of Homeland Security/Federal Emergency Management Agency's identification of two Deficiency findings during the Dresden Nuclear Power Station's Radiological Emergency Preparedness (REP) Full Participation Plume Exposure Pathway Exercise, conducted on March 25, 2009.

A Deficiency is defined by FEMA 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 received a Deficiency finding under **{Protective Action Decision Making}** Criterion 2.b.2 – a decision-making process involving consideration of appropriate factors and necessary coordination is used to make PADs for the general public including KI if ORO policy. Grundy County received a Deficiency finding under **{Emergency Notification and Public Information}** Criterion 5.b.1 – OROs provide accurate emergency information and instructions to the public and the news media in a timely manner.

The Deficiencies assessed were based on our findings that individual performance, as well as the decision making process used jointly by the State and County to determine and implement protective action recommendations and decisions, contributed to a delay in notification of the public. Protective actions were required for the GE ECL declared by the utility concurrent with a release of radioactive material. Subsequently, the general public received unnecessary radiological exposure, thus potentially compromising their Health & Safety.

More detailed information regarding Criterion 2.b.2 and Criterion 5.b.1 process and performance is included in enclosed narratives.


Because of the potential impact this finding has on public health and safety, it should be corrected within 120 days after the exercise date (March 25, 2009) through appropriate remedial actions, including exercises, drills, or other actions. These issues were presented to the Exercise participants, including State and Grundy County Staff during

the post-exercise Participant's Meeting conducted on March 27, 2009, 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 April 17, 2009.

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,



Janet M. Odesloo
Acting Regional Administrator

cc: DHS FEMA Headquarters
NRC Headquarters
NRC Region III

Enclosure (2)

Grundy County - Emergency Operations Center

EVALUATION AREA 5: Emergency Notification and Public Information

Sub-element 5.b - Emergency information and instructions for the public and the media

Criterion 5.b.1: OROs provide accurate emergency information and instructions to the public and the news media in a timely manner.

Narrative Summary

The Grundy County Public Information Officer (PIO) performs their duties at the Grundy County EOC located at 1320 Union Street, Morris, Illinois during radiological events. The PIO is responsible for assisting the County Board Chairman (CBC) and County Emergency Management Director (EMD) with preparing official statements and news releases, coordinating local press conferences, and monitoring questions regarding the county activities from the media and general public. A room adjacent to the County EOC is designated as the media center, effectively separating emergency operations from the media, press and public.

The PIO, also acting as the Media Manager, reviewed all incoming and outgoing messages to ensure their accuracy and compliance with Grundy County procedures, as outlined in the Illinois Plan for Radiological Accidents.

At 1154 hours the Grundy County CBC made a PAD to evacuate sub-area 1. At 1158 hours a pre-scripted EBS message prepared by the PIO/Media Manager was approved by the CBC. The EBS message advised the general public to begin preparation to evacuate sub-area 1. At 1158 hours, the Prompt Notification System (PNS) was initiated.

At 1200 hours the PIO/Media Manager e-mailed the EBS message to the WCSJ on-air news reporter and the station's Operations Manager. The PIO/Media Manager then attempted to telephone radio station personnel to orally read the EBS message for on-air broadcast to the general public. The PIO/Media Managers attempts were unsuccessful. Each of the three telephone numbers, listed in the PIO/Media Manager procedures, went unanswered.

At 1201 hours, the CBC made the decision to issue a second PAD to evacuate Sub-area 4.

At 1203 hours, the PIO/Media Manager received a confirmation email from the radio station that the previous e-mail sent at 1200 hours was received by the Operation's Manager.

At 1204 hours, the PIO/Media Manager had a second prescribed EBS message prepared for broadcast and approved by the CBC. The second EBS message provided the evacuation information for the general public located in sub-area 4.

At 1206 hours, the PIO/Media Manager e-mailed the second EBS message to the radio station's on-air news reporter and Operation's Manager. At 1207 hours, the PIO/Media Manager emailed the radio station again requesting confirmation of both EBS messages.

At 1214 hours, the PIO/Media Manager emailed the radio station on-air news reporter and Operation's Manager once again requesting confirmation of the EBS messages.

At 1215 hours, the EMA Director informed the Grundy County Sheriff EOC Liaison to activate the PNS for sub-area 4, and again for sub-area 1.

At 1216 hours, the radio station Operation's Manager responded to the PIO/Media Manager's request via e-mail that the EBS messages had been received.

At 1218 hours, the Grundy County Sheriff's dispatcher initiated the PNS.

At 1218 hours, the EBS was initiated. The radio station's on-air news reporter telephoned the PIO/Media Manager to initiate the recording and on-air broadcast of both EBS messages. The PIO/Media Manager recorded each EBS message consecutively, thus informing the general public to begin preparation to evacuate sub-areas 1 and 4, and be prepared to evacuate within 30 minutes.

A third PAD for the general public to evacuate sub-area 2 in Grundy County was made by the CBC at 1249 hours. The PNS was activated at 1253 hours. The EBS was initiated at 1300 hours notifying the general public to evacuate sub-area 2.

Condition

The initial release of radioactive materials from the DNPS began at 1107 hours. The peak release rates by scenario were between 1130-1145 hours, and actually occurred at 1140 hours. The meteorological data indicated a constant wind speed of 4 mph, the affected sub-areas needed to be evacuated as quickly as possible to protect the public from being immersed in a radioactive plume.

By 1210 hours, the plume segment which exceeded the PAGs traveled approximately 2.0 miles from the DNPS site boundary.

At 1144 Grundy County officials verified State NARS Message number 3, which included a recommendation to evacuate Grundy County sub-areas 1 and 4. A total of 34 minutes transpired before initiation of the EBS message including an evacuation recommendation for the General Public. This 34 minutes contributed to the overall 71 minutes that transpired from the release occurring to the time Grundy County began notification of the General Public through broadcast by EBS Station - WCSJ/WJDK at 1218 hours.

Possible Cause

The process used and performance demonstrated by the State and Grundy County to determine and implement protective action recommendations and decisions, contributed to a delay in the notification of the public to take action.

Effect

The public could have been unnecessarily exposed to additional radiation released from the Dresden Nuclear Power Station.

Reference

NUREG-0654, E.5., 7., G.3.a, G.4.a.b.c

State of Illinois – Emergency Operations Center/Incident Response Center

EVALUATION AREA 2: Protective Action Decision Making

Sub-element 2.b - Decisions for the Plume Phase -PADs

Criterion 2.b.2: A decision-making process involving consideration of appropriate factors and necessary coordination is used to make PADs for the general public including KI if ORO policy.

Narrative Summary

The Governor or an authorized representative for the State of Illinois makes Protective Action Recommendations (PARS) to Grundy County. The Illinois Emergency Management Agency (IEMA) is the authorized representative for the Governor in the State of Illinois. Protective Action Decisions are made by the Counties, discussed with the State and implemented by the State and Counties. The State of Illinois does not provide Potassium Iodine (KI) or make recommendations for the use of KI for the general public.

At 1030 hours, the State of Illinois issued a precautionary protective action decision through the Joint Information Center (JIC) which stated "that all livestock within 10-mile EPZ should be sheltered and placed on stored feed and water". At 1044 hours, through a press release, the JIC disseminated the livestock advisory information to the public.

At 1116 hours REAC received notification of a GE-ECL declared by the Dresden Nuclear Power Station (DNPS) at 1107 hours, which included a PAR to evacuate sub-areas 1, 3, 4, 6, 7, 9, 12, and 13, via the Nuclear Accident Reporting System (NARS), followed by a fax containing a hardcopy of the same information.

The NARS call was completed and verified by the REAC at 1120 hours. The same NARS call was also received concurrently by the Communication Room adjacent to the State Incident Response Center (SIRC) and verified by Utility NARS message number 3 at 1123 hours. The message also contained information that a release was occurring, and that wind direction was from 190 degrees at 4 miles per hour (mph).

At 1128 hours, the REAC manager conferred with the State EOC manager regarding Utility NARS message number 3. Based on the fact that sub-areas 7 and 9 were upwind of the plume, the REAC manager recommended they not be evacuated. After reviewing the sub-area map and additional discussion, the State EOC Manager agreed. At 1133 hours the State EOC Manager made the decision to recommend sub-areas 1, 3, 4, 6, 12 and 13 be evacuated. State NARS message number 3, including the PARS, was sent to the Counties at 1141 hours. Grundy County verified receipt of State NARS message number 3 at 1144 hours, Kendall County verified receipt at 1144 hours, and Will County verified receipt at 1150 hours.

The REAC received the fourth NARS message from DNPS at 1216 hours, verified by the State at 1218 hours indicating a wind shift from 190 degrees to 132.7 degrees, which added sub-area 2 for evacuation. The REAC manager concurred with the Utility recommendation and added an emergency worker turnback clarification of a 1 R parameter. This clarification addressed emergency worker turn-back values provided in State NARS number 3, which had caused some confusion.

After reviewing the sub-area map, the State EOC Manager concurred with the REAC Manager, and at 1230 hours the State EOC Manager made the decision to recommend that sub-areas 1, 2, 3, 4, 6, 12 and 13 be evacuated.

At 1239 hours, the State SIRC recommended sub-areas 1, 2, 3, 4, 6, 12 and 13 be evacuated, and transmitted this information to the Counties via State NARS message number 4. The PAR was received by Grundy County at 1249 hours.

Condition

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By 1210 hours, the plume segment which exceeded the PAGs traveled approximately 2.0 miles from the DNPS site boundary. From the time the State verified the Release occurring at 1123 hours until the time Grundy County had verified receipt of the State's recommended PAR at 1144 hours a total of 21 minutes had elapsed. During this time it took 11 minutes to transmit the State's PAR to the Counties. These 11 minutes contributed to the overall 71 minutes that transpired from the release occurring to the time Grundy County began notification of the General Public through broadcast by EBS Station - WCSJ/WJDK at 1218 hours.

Possible Cause

The process used and performance demonstrated by the State and Grundy County to determine and implement protective action recommendations and decisions, contributed to a delay in the notification of the public to take action.

Effect

The public could have been unnecessarily exposed to additional radiation released from the Dresden Nuclear Power Station.

Reference

NUREG 0654/FEMA-REP-1, J.9

NUREG 0654/FEMA-REP-1, J.10.f, m

Recommendation

Review process and performance and make necessary changes to assure that the General Public receives PARs in a timely manner.



FEMA

Mr. Andrew Velasquez, Director
Illinois Emergency Management Agency
2200 S. Dirksen Parkway
Springfield, Illinois 62703

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Acting Regional Administrator

cc: DHS FEMA Headquarters
NRC Headquarters
NRC Region III

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