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**RA06-11**

**February 27, 2006**

**United States Nuclear Regulatory Commission  
Attention: NRC Region III Administrator  
2443 Warrenville Road  
Suite 210  
Lisle, Illinois 60532-4352**

**LaSalle County Station, Units 1 and 2  
Facility Operating License Nos. NPF-11 and NPF-18  
NRC Docket Nos. 50-373 and 50-374**

**Reference: NRC Letter from Cynthia D. Pederson to Christopher Crane  
(Exelon), "NRC Integrated Inspection Report No. 05000374/2005002  
And NRC Office of Investigations Report No. 3-2005-007"**

**Subject: Response to Apparent Violation EA-06-022**

Enclosed is the Exelon Generation Company, LLC, (EGC) response to apparent violation EA-06-022. EGC acknowledges that two craft workers and their foreman entered a posted high radiation area without signing the required radiation work permit or receiving the required high radiation area briefing. The enclosure contains our response, including the reason for the apparent violation, the corrective steps that have been taken and the results achieved, the corrective steps taken to avoid further violations, and the date when full compliance will be achieved. The enclosure also contains the EGC justification why this apparent violation should not be considered for escalated enforcement.

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Should you have any questions concerning this letter, please contact  
Mr. Terrence Simpkin, Regulatory Assurance Manager, at (815) 415-2800.

Respectfully,

A handwritten signature in black ink that reads "Susan R. Landahl". The signature is written in a cursive style with a large, looped initial "S".

Susan R. Landahl  
Site Vice President  
LaSalle County Station

Enclosure:

cc: *Regional Administrator - NRC Region III*  
NRC Senior Resident Inspector - LaSalle County Station

## ENCLOSURE

### RESPONSE TO AN APPARENT VIOLATION, EA-06-022

#### APPARENT VIOLATION:

"On February 13, 2005, a contractor pipefitter foreman and two contractor pipefitters entered a posted HRA [high radiation area] in the Unit 2 condenser pit to conduct repairs to a sprinkler head and did not sign the required HRA RWP [radiation work permit] or receive the required briefing by radiation protection technicians (RPT) for work in a HRA. The HRA was properly posted and barricaded with a fence gate and with a swing gate to preclude inadvertent entry. A licensee contractor RPT identified the apparent inappropriate actions by the contractor pipefitter foreman and contractor pipefitters. The inappropriate entries into the HRA were an apparent violation of Technical Specification 5.4.1.a and Exelon Procedure RP-AA-460, Revision 4."

#### REASON FOR APPARENT VIOLATION:

The reason for the apparent violation was miscommunication during a radiation protection control point briefing between the contractor pipefitter foreman and the contract radiation protection technicians. This resulted in the pipefitters making an erroneous assumption that they had received permission to enter a HRA. It was not realized at the time of the briefing that neither work group recognized they were discussing two different locations, resulting in the contractor personnel not receiving the proper required briefing. Additionally, the contract pipefitters made a rule-based error in that, contrary to the known rules, the individuals believed permission had been granted to proceed.

#### CORRECTIVE ACTIONS TAKEN AND RESULTS ACHIEVED:

The two craft workers and the foreman were not allowed back into the Radiologically Controlled Area. Following an investigation of the circumstances surrounding the issue, their employment was terminated.

#### CORRECTIVE ACTIONS TAKEN TO AVOID FURTHER VIOLATIONS:

Corrective actions from a 2004 HRA event were in the process of being implemented which include, but are not limited to:

- use of Radiation Worker Pocket Data Sheets. These data sheets have the worker document RWP information such as the RWP number, dose, dose rate, contamination levels, job exposure estimate, and whether or not the task is to be performed in a HRA and are now required by RP-AA-460-1003, Radiation Work Pocket RWP Data Sheets;
- expectations provided by the Radiation Protection Manager that the RPTs use a RP briefing checklist for HRA entries that is now required by RP-AA-460, Controls for High and Very High Radiation Areas; and

- a Radiation Worker Dynamic Learning Activity (DLA) developed base on the 2004 event that required personnel to successfully pass prior to allowing entry into a HRA.

Actions following this event included:

- The Venture (Venture) management discussed the seriousness of the event during subsequent briefings with craft personnel, emphasizing radiological safety, reinforcing expectations to understand the job, know the radiological conditions, and the correct RWP number;
- LaSalle County Station (LSCS) management implemented increased supervisor and management oversight of radiation area / HRA field communications to reinforce standards and expectations;
- RP-AA-460-1002, "High Radiation Area (HRA) and Locked High Radiation Area (LHRA) Briefing Form," was revised to require the use of survey or location maps during RP briefings to ensure that the location of the work is clearly understood;
- the lessons learned from this event were communicated throughout Exelon Nuclear via the Exelon Generation Company (EGC) Nuclear Event Report process. The communication provided a description of the event, cause and corrective actions;
- binary maps (crosshatched / non-crosshatched) were developed and implemented. Areas requiring a RP briefing appear as crosshatched on these maps. If the location is in a crosshatched area, the worker was required to contact RP and RP is required to give an RP briefing using a survey map, if available. If the survey map is not available, RP will provide radiological information by escorting the worker or by performing a survey of the area and communicating the results; and
- the Radiation Worker DLA was revised to include the lessons learned from this event. Specifically, the limits of RP authority and roles, responsibilities for HRA entries, and use of Radiation Worker Pocket Data Sheets.

In preparation for upcoming outages, LSCS management has implemented the following additional actions.

EGC has documented the following items in LSCS procedures or training material to include the following:

- initial radiation worker training material has been revised to highlight HRA entry requirements and consequences for the radiation worker if requirements are not met;
- RWP instructions that allow HRA entry have been revised to state "high radiation entry brief required;"
- warnings have been added on the computer screen during the access control electronic dosimetry log-in process for the worker to acknowledge;
- a radiation protection aid has been added for HRA briefings; and
- a signature from transient refueling outage workers is required prior to issuance of dosimetry that acknowledges their understanding of HRA entry requirements and the consequences for violating them.

During at least the first 10 days of the next two refueling outages (L1R11 – 2006 and L2R11 – 2007), LSCS will have greeters at primary access points to the radiologically controlled area to enhance awareness of radiological controls.

For the next two refueling outages (L1R11 – 2006 and L2R11 – 2007), all transient refueling outage workers, except as specifically authorized by the Radiation Protection Manager, will be required to attend and pass a dynamic learning activity on proper HRA entry.

Venture has revised its operating procedures to further assure compliance with HRA entry requirements and to specifically include the following requirements:

- a discussion of pertinent radiological practices be conducted at each daily shift brief;
- Venture employees who will work in radiation areas will read, understand, and sign a pledge to attest to his/her commitment to follow all radiological requirements. (Each pledge will be co-signed by the Venture site manager, project superintendent, or site as low as reasonably achievable (ALARA) coordinator and will be retained for a period of one year.);
- Venture superintendents will be present at select pre-job briefs involving HRA entries; and
- Venture will participate in Exelon Radiation Protection Manager peer group meetings at least semi-annually to evaluate and take action on radiation protection issues.

EGC will conduct a review of the implementation and effectiveness of its and Venture's corrective actions covered in the Confirmatory Order, dated November 22, 2005. This review shall be conducted for at least the next two refueling outages at LSCS (L1R11 – 2006 and L2R11 – 2007). The results of each review will be made available for NRC review upon request. The review shall be conducted by knowledgeable individuals independent of the LSCS facility.

The LSCS Plant Manager or Site Vice President will meet with contract leadership prior to the next two refueling outages to establish personnel expectations in following radiological work requirements.

**DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:**

Full compliance was achieved on February 16, 2005, when the craft workers and their foreman were removed from the RCA and barred from further entry.

**SEVERITY LEVEL OF APPARENT VIOLATION:**

EGC does not dispute that a violation occurred and that it could be characterized as willful. EGC recognizes that willful violations are, by definition, of particular concern to the NRC and are of particular concern to EGC as well. Accordingly, EGC has taken significant remedial action in responding to the violation and implemented a number of corrective actions in an effort to prevent violations of RP procedures, including actions to prevent willful violations. Those actions are described above.

This apparent violation of LaSalle County Station's Technical Specification (excluding the willfulness aspect) is appropriately characterized under the NRC's Reactor Oversight Process as being of very low safety significance (i.e., green) under the Significance Determination Process (SDP). The characterization of the apparent violation as green is consistent with the NRC's characterization of a similar violation documented in LSCS, Units 1 and 2 NRC Integrated Inspection Report 05000373/2004002; 05000374/2004002, dated April 16, 2004. As documented in that inspection report, two technicians entered a HRA inside the 1B Residual Heat Removal (RHR) room without signing onto a RWP that *authorized entry into the HRA and without receiving a briefing prior to entry into the HRA.* Similar to the apparent violation on February 13, 2005, the individuals entering the HRA were wearing electronic dosimeters. The NRC *determined that the violation was green.*

The NRC's Enforcement Policy, Section IV.A, states that Severity Level IV (SL IV) violations and violations associated with green SDP findings are normally dispositioned as Non-Cited Violations (NCV). Accordingly, had the February 13, 2005, apparent violation not been characterized as willful, it would have been dispositioned as a NCV. Since the apparent violations characterized as willful, additional factors must be addressed prior to determining that the apparent violation should still be dispositioned as a NCV.

Under Section IV.A, willful SL IV violations and willful violations associated with green SDP findings may still be appropriately characterized as a NCV if:

- (1) The licensee identified the violation and the information concerning the violation, if not required to be reported, was promptly provided to appropriate NRC personnel, such as a Resident Inspector or Regional Branch Chief;
- (2) The violation involved the acts of a low-level individual (and not a licensee official as defined in Section IV.A);
- (3) The violation appears to be the isolated action of the employee without management involvement and the violation was not caused by lack of management oversight, adequate audits or supervision of employees; and
- (4) Significant remedial action commensurate with the circumstances was taken by the licensee such that it demonstrated the seriousness of the violation to other employees and contractors, thereby creating a deterrent effect within the licensee's organization.

For the reasons described below, the apparent violation should be dispositioned as a NCV.

- (1) LSCS personnel identified the apparent violation and promptly reported the event to the NRC resident staff.
- (2) The violation involved acts of low-level individuals, and not "licensee officials." Two of the individuals involved were non-supervisory craft workers, employed by an EGC contractor (i.e., The Venture). There should be no dispute that they are "low-level" and not "licensee officials." The other individual involved was their foreman. A Venture craft foreman does not meet the definition of "licensee official."

The NRC Enforcement Policy, Section IV.A.4, contains the following guidance for determining when someone is acting as a "licensee official."

"The term 'licensee official' as used in this policy statement means a first-line supervisor or above, a licensed individual, a radiation safety officer, or an authorized user of licensed material whether or not listed on a license. Notwithstanding an individual's job title, severity level categorization for willful acts involving individuals who can be considered licensee officials will consider several factors, including the position of the individual relative to the licensee's organizational structure and the individual's responsibilities relative to the oversight of licensed activities and to the use of licensed activities."

A foreman is a low-level position in the Venture organization and should not be considered a "licensee official" for purposes of NRC enforcement. The Venture foreman in this case reported to a Venture General Foreman, who reported to a Venture Piping Superintendent. As shown in Table 1 (attached), the foreman has no direct responsibilities relative to the oversight of licensed activities other than the expectation of complying with all appropriate procedures. In addition, the position of foreman is not permanent for any particular Venture individual, the foreman is a working member of the bargaining unit, and the foreman does not hire, fire, or discipline co-workers. Table 1 provides a comparison of the duties and responsibilities of EGC First Line Supervisors (FLSs), Venture Superintendents (FLS position), EGC craft senior mechanics and Venture foreman positions.

As detailed in Table 1, it would be consistent with the roles and responsibilities of a foreman to characterize the position as "low-level relative to the oversight of licensed activities," and not as a "licensee official."

- (3) This violation was the isolated action of the two craft workers and their foreman. The violation was not caused by a lack of management oversight. Prior to the violation that is the subject of this response, LSCS implemented multiple actions to ensure compliance with RP procedures. In addition, as acknowledged by the NRC in its January 27, 2006, letter, the HRA was properly posted and barricaded with a fence gate and swing gate and the personnel had participated in training, including a scenario similar to what happened in this event.
- (4) Both EGC and Venture implemented significant remedial action commensurate with the circumstances to demonstrate the seriousness of the violation to other employees and contractors, thereby creating a deterrent effect within both organizations. The workers were disciplined in accordance with the Venture discipline policy and were not retained for the remainder of the refueling outage work. Additional corrective actions are described in detail above.

Based on the above information, even though the apparent violation is characterized as willful, consistent with Section IV.A of the NRC Enforcement Policy, it meets the criteria to be characterized as a NCV.

Even if the NRC determines that the Venture foreman was a "licensee official," this matter should be characterized no higher than a SL IV violation. As discussed above, an identical violation was characterized as being of very low safety significance ("Green" under the SDP). This LSCS apparent violation is bounded by similar situations where there have been willful actions of "licensee officials" or "supervisors" that the NRC has determined are appropriately characterized as SL IV. Examples include:

- A SL IV violation was issued to the Duane Arnold Energy Center (EA-00-57, April 2000) when a fuel handling supervisor directed the transfer of two new fuel bundles from the spent fuel pool preparation machine to spent fuel pool rack locations without a reactor engineer present as part of the fuel moving crew in willful violation of refueling procedures causing a Technical Specification violation.
- Braidwood Station (OI-1999-26, April 2000), where a nurse (considered a supervisor by the NRC) detected the odor of alcohol on an individual and did not direct the individual to FFD testing in willful violation of licensee procedure.
- Beaver Valley (OI 1-2002-47, October 2003), where a senior reactor operator willfully failed to follow procedures when he did not initiate a required condition report in a timely manner.

The above represent examples of willful violations that bound those engaged in by the Venture employees at LSCS when they went into a HRA without a RP briefing and without obtaining the correct RWP on February 13, 2005. In addition, the apparent violation does not appear to be as significant as any of the examples found in the NRC Enforcement Policy, Supplement I – Reactor Operations or Supplement IV – Health Physics. Therefore, should the Venture foreman be considered as a FLS, the violations should be characterized no higher than SL IV.

Based on the above information, although the apparent violation is characterized as willful, consistent with Section VI of the NRC Enforcement Policy, the mitigation factors for this licensee identified issue have been met since the corrective actions were prompt and comprehensive addressing the underlying root causes, and should not result in the issuance of a Civil Penalty.

In conclusion, EGC has taken this matter seriously and has taken significant and lasting steps to ensure that there is no recurrence. Based on the above information, this apparent violation should not be categorized any higher than SL IV.

**Table 1**  
**Comparison of Duties and Responsibilities**

<b>EGC FLS – Management Position</b>	<b>Venture Superintendent – FLS Position</b>	<b>EGC Craft (Senior Mechanic) – Union Position</b>	<b>Venture Foreman – Union Position</b>
<b>Supervise craft personnel to ensure that all assigned maintenance activities are performed safely and effectively by qualified workers in accordance with plant procedures, NRC regulations, and the site schedule.</b>	<b>Instructs the General Foremen (union position) and accepts the accountability for overall performance.</b>	Duties include laying out the sequence work is to be performed, check arrangements, check the work of, and perform related work assignments.	Responsible for the safe implementation of fieldwork for their respective crew(s) and perform related work assignments.
<b>Administer coaching, mentoring and performance management, including initiation of disciplinary action.</b>	<b>Make recommendations for hiring and firing.</b>	Can instruct and train. They do not administer performance monitoring or initiate disciplinary action.	They do not hire, fire or discipline their co-workers.
<b>Communicate plant and personnel issues to management.</b>	<b>Communicates personnel issues to management.</b>	Communicate status of and issues with assigned tasks.	Communicate status of and issues associated with assigned tasks.
<b>Participates in work control process, coordination, scheduling, and meetings for on-line, load reduction and outage activities to ensure work is properly assigned, planned and ready to work.</b>	<b>Responsible for the planning and scheduling.</b>	Check preliminary work arrangement, seeing that required tools, parts, and equipment are on hand and that safety requirements are met.	Check preliminary work arrangements to make sure they have the right tools, parts and equipment for the task.

<b>EGC FLS – Management Position</b>	<b>Venture Superintendent – FLS Position</b>	<b>EGC Craft (Senior Mechanic) – Union Position</b>	<b>Venture Foreman – Union Position</b>
<b>Understands, supports and administers all maintenance processes and Corrective Action Program to ensure effective work practices.</b>	<b>Understands and administers affected maintenance processes to ensure effective work practices.</b>	Check work to ensure execution in accordance with safety rules, radiation surveys and instructions.	Execute work in accordance with safety rules, radiation surveys and instructions.
<b>Supervise vendor inspections and repair of plant equipment. Assure effective procurement and use of material, parts, tools, equipment and maintenance and test equipment (M&amp;TE).</b>	<b>Assure effective procurement and use of material, parts, tools, equipment and M&amp;TE.</b>	Proper use of material, parts, tools, equipment, and M&TE.	Proper use of material, parts, tools, equipment, and M&TE.
<b>Participate in all aspects of Maintenance Department Management to support safe and efficient operation of the plant, including the development, implementation and performance monitoring of all corporate, site and divisional business goals and objectives.</b>	<b>Participate in all aspects of Venture Management to support safe and efficient operations.</b>	Execute the tasks assigned to meet the Maintenance Department management goals and objectives.	Execute tasks assigned to meet the schedule in a manner that supports safe and efficient operations.