



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET, SW, SUITE 23T85
ATLANTA, GEORGIA 30303-8931

July 20, 2007

Mr. David Edwards
Plant Manager
Honeywell Specialty Chemicals
P.O. Box 430
Metropolis, IL 62690

SUBJECT: NRC INSPECTION REPORT NO. 40-3392/2007-003 AND NOTICE OF VIOLATION

Dear Mr. Edwards:

This letter refers to the inspection conducted from June 18 - 21, 2007, at the Honeywell Specialty Chemicals facility. The purpose of the inspection was to perform a review of the plant's emergency response programs to determine whether activities authorized by the license were conducted in accordance with NRC requirements. Reactive inspection activities were also carried out in response to the Distributed Control System malfunction you experienced on June 18, 2007. In addition, the inspection examined the actions carried out by Honeywell to prepare for a potential strike by operations and maintenance personnel represented by the United Steelworkers of America (USW), Local 7-669. At the conclusion of the inspection on June 21, 2007, the findings were discussed with you and those members of your staff identified in the enclosed report.

The inspection consisted of an examination of activities conducted under the license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of the license. Areas examined during the inspection are identified in the enclosed report. Within these areas, the inspection consisted of a selective examination of procedures and representative records, observations of activities in progress, and interviews with personnel.

Based on the results of these inspections, the NRC has determined that a Severity Level IV violation of NRC requirements occurred. The violation was evaluated in accordance with the NRC Enforcement Policy that may be found on the NRC's web site at <http://www.nrc.gov/what-we-do/regulatory/enforcement/enforce-pol.html>. The violation cited in the enclosed Notice of Violation (Notice), and the circumstances surrounding the violation are described in the subject inspection report. The examples of this violation involve the failure to provide emergency training to a member of the Emergency Response Organization and the failure to maintain specified emergency response equipment at various locations within your facility. With regard to the failure to provide emergency training to a member of the Emergency Response Organization, the NRC documented the actions taken to correct this issue and to prevent its recurrence. Accordingly, the NRC does not require any further information regarding this example of the violation or the associated corrective actions.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. The NRC will use your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosures, and your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

Should you have any questions concerning this inspection, please contact us.

Sincerely,

Michael Layton for */RA/*

Jay L. Henson, Chief
 Fuel Facility Inspection Branch 2
 Division of Fuel Facility Inspection

Docket No. 40-3392
 License No. SUB-526

- Enclosures: 1. Notice of Violation
 2. NRC Inspection Report

cc w/encls:
 Gary Wright
 Emergency Management Agency
 Division of Nuclear Safety
 1035 Outer Park Dr., 5th Floor
 Springfield, IL 62704

Distribution w/encls:

J. Henson, RII
 J. Pelchat, RII
 B. Smith, NMSS
 M. Raddatz, NMSS

PUBLICLY AVAILABLE NON-PUBLICLY AVAILABLE SENSITIVE NON-SENSITIVE

ADAMS: Yes ACCESSION NUMBER: _____

OFFICE	RII:DFFI	RII:DFFI	RII:DFFI	RII:DFFI			
SIGNATURE	<i>/RA/</i>	<i>/RA/</i>	P Starz for	M. Layton for			
NAME	P. Startz	P. Yarsky	J. Pelchat	J. Henson			
DATE	07/20/2207	July 25, 2007					
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

During an NRC inspection conducted on June 18-21, 2007, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the violation is listed below.

License Condition 10 of NRC License No. SUB-526, Amendment No. 16, authorizes, in part, the use of licensed materials in accordance with the statements, representations, and conditions in Chapters 1 through 7 of the license application dated January 30, 2003.

Chapter 2, Section 2.6 of the license application, dated January 30, 2003, requires that "plant written procedures shall be reviewed, revised, approved, and implemented in accordance with Plant Policy titled "Procedure Control Policy."

Procedure Control Policy AD-7, states, in part, that procedures written after March 1, 2004, shall be reviewed, revised, approved, and implemented in accordance with Procedure MTW-ADM-PRO-0100, "Development and Implementation of Policies And Administrative Procedures."

Step 4.11.2 of procedure MTW-ADM-PRO-0100 require that policies and procedures be followed as written.

Contrary to the above, the licensee failed to follow policies and procedures as written as described in the following two examples:

1. Emergency Plan Implementing Procedure EPIP-008 Section 5.3.2.1 states Emergency Response Training will be provided to all individuals prior to assignment to a position in the Emergency Response Organization (ERO) and annually thereafter.

Between April 18, 2007 and June 20, 2007, Emergency Response Training was not provided to the individual assigned to the ERO role of Security Officer prior to their assignment to that position.

2. Emergency Plan Implementing Procedure EPIP-008 Section 5.6.1 states "Dedicated emergency equipment and supplies are provided in specified locations as listed in Attachments 2 – 7." Emergency Plan Implementing Procedure EPIP-008, Attachment 4, specifies the minimum acceptable inventory of emergency equipment to be maintained in Emergency Equipment Storage Cabinets.

As of June 21, 2007, the licensee failed to maintain the minimum acceptable inventory of emergency equipment in Emergency Equipment Storage Cabinets. Specifically, two oxygen therapy units were not available in the emergency equipment storage cabinet located in the Ore Storage area. In addition, required equipment including various sizes of spare face masks for the Self Contained Breathing Apparatus were not available in the emergency equipment storage cabinet located adjacent to the product cylinder area door.

The above two examples constitute a single Severity Level IV violation (Supplement VI).

Pursuant to the provisions of 10 CFR 2.201, Honeywell Speciality Chemicals is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region II, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include: (1) the reason for each violation, or, if contested, the basis for disputing the violation or severity level, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

If you contest this enforcement action, you should also provide a copy of your response to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, D.C. 20555-0001.

Because your response will be made publically available, to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be made publically available without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld, and provide in detail the basis for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information). If safeguard's information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

In accordance with 10 CFR 19.11, you may be required to post this Notice within two working days.

Dated this 20th day of July, 2007

U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket No.: 40-3392

License No.: SUB-526

Report No.: 40-3392/2007-003

Licensee: Honeywell International, Inc.

Facility: Metropolis Works

Location: P. O. Box 430
Metropolis, IL 62960

Dates: June 18 - 21, 2007

Inspectors: John M. Pelchat, Senior Fuel Facility Inspector
Mary L. Thomas, Senior Resident Inspector

Accompanied by: Paul Startz, Fuel Facility Inspector (in training)
Peter Yarsky, General Engineer (in training)
Mark Chitty, Resident Inspector

Approved by: Jay L. Henson, Chief
Fuel Facility Inspection Branch 2
Division of Fuel Facility Inspection

EXECUTIVE SUMMARY

Honeywell International, Inc.
NRC Inspection Report No. 40-3392/2007-003

The purpose of this routine core inspection was to observe and evaluate the licensee's emergency preparedness programs to determine whether activities authorized by the license were conducted in accordance with NRC requirements. The inspection involved observation of work activities, a review of selected records, and interviews with plant personnel and the representatives of offsite support organizations. The inspection identified the following aspects of the program as outlined below:

Emergency Preparedness

- Changes to the Emergency Response Plan and the Radiological Contingency Plan (ERP/RCP) were minor and did not adversely impact effectiveness. Review of recent audit documentation has shown that audits have been comprehensive and conducted in accordance with the appropriate check list. (Paragraph 2.a).
- The revised emergency procedures continued to adequately implement the ERP/RCP (Paragraph 2.b).
- A violation was identified for the failure to provide Emergency Response Organization (ERO) training to the individual designated in the licensee's emergency plan as the Security Officer, in accordance with Section 5.3.2.1 of Emergency Plan Implementing Procedure (EPIP)-008. Prior to the conclusion of the inspection the licensee had implemented corrective actions to track the training requirements of personnel assigned to the ERO as well as their alternates. In addition, the security officer and his alternate both received the required ERO training (Paragraph 2.c).
- The licensee maintained adequate interfaces with offsite support groups. (Paragraph 2.d).
- The licensee conducted exercises in accordance with the requirements of the ERP/RCP. The performance of quarterly hands-on-drills using realistic scenarios provided sufficient challenges to maintain the proficiency of the response organization (Paragraph 2.e).
- The reliability of selected pieces of emergency equipment was adequate and the equipment was maintained in a state of operational readiness. A violation was identified for the failure to maintain specified emergency response equipment at various locations within the plant (Paragraph 2.f).

Licensee Strike Contingency Plans

- The licensee developed adequate strike contingency plans that had been reviewed by the facility's safety staff. The licensee had developed adequate plans to maintain sufficient onsite shift staffing of the facility. The licensee had developed adequate plans to meet regulatory requirements in the areas of plant management; operations; maintenance; security; chemistry and radiation protection; surveillance and calibrations; and, administrative controls. Licensee management and representatives of USW, Local 7-669 successfully negotiated a new contract averting a possible strike (Paragraph 3).

Distributed Control System Malfunction Review

- The licensee was taking adequate measures to assess the root cause and prevent recurrence of the Distributed Control System malfunction that occurred on June 18, 2007. (Paragraph 4).

Attachment:

Persons Contacted

Inspection Procedures

Items Opened, Closed, and Discussed

Acronyms

REPORT DETAILS

1. Summary of Plant Status

At the time of the inspection, the licensee had discontinued UF₆ production to address a malfunction in the Distributed Control System (DCS) (See paragraph 4).

2. Emergency Preparedness (IP 88050)

a. Review of Program Changes (F3.01)

(1) Scope and Observations

Changes to the Emergency Response Plan and Radiological Contingency Plan (ERP/RCP), organization, facilities, and equipment were reviewed to assess their impact on the effectiveness of the program. The adequacy of the emergency preparedness audit required by Section 7.4 of the ERP/RCP was also evaluated.

Since the last routine emergency preparedness inspection, changes were made to the ERP including implementation of an automated community alert network system (CANS). The CANS system is activated during plant emergencies and drills to notify appropriate plant personnel, relevant off site agencies, and the public. The inspectors reviewed records regarding the testing of the CANS system and found that it automatically notified the appropriate plant personnel. ERP changes were properly completed and documented in accordance with licensee procedures.

Section 7.4 of the ERP/RCP requires that the "emergency response program be audited on an annual basis to ensure that the program is being adequately maintained." The licensee provided the inspectors with the calendar year 2006 audit documentation. The results of the audit identified three corrective actions. The inspectors noted that the audits were comprehensive in identifying corrective actions. The licensee provided the inspectors with the emergency response program audit procedure and the auditor's notes. The inspectors reviewed the check list against the requirements of Section 7.4 of the ERP/RCP as well as the auditor's notes and found the implementation of the audit according to the check list to be adequate. This closes inspector follow up item IFI 40-3392/2005-05-01.

(2) Conclusion

Changes to the ERP/RCP were minor and did not adversely impact the effectiveness of the programs. Review of recent audit documentation has shown that audits have been comprehensive and conducted in accordance with the appropriate check list.

b. Implementing Procedures (F3.02)

(1) Scope and Observations

Emergency Preparedness Implementing Procedures (EPIPs) were reviewed to determine if procedures were adequate and to ensure that revised procedures continued to implement the ERP/RCP. From the review of procedures, the inspectors determined that there had not been any significant procedure changes since the last inspection. The inspectors reviewed a representative sample of procedure changes and determined that the changes were procedure updates or enhancements. The inspectors also determined that the licensee's current procedures continued to effectively implement the ERP/RCP requirements. All changes were developed, reviewed, and approved in accordance with the licensee's procedural requirements.

(2) Conclusions

The inspectors concluded, from a review of records and interviews with licensee representatives, that the emergency procedures continued to adequately implement the ERP/RCP. No violations of NRC requirements were observed.

c. Training and Staffing Emergency Organization (F3.03)

(1) Scope and Observations

Emergency response training was reviewed to determine if the licensee had provided adequate training to all personnel designated as primaries and/or alternates to the Emergency Response Organization (ERO). In addition, emergency response training was reviewed for a small sampling of personnel assigned to the Emergency Response Team (ERT), also referred to as "red hats."

Step 4.11.2 of procedure MTW-ADM-PRO-0100 requires that policies and procedures be followed as written. Emergency Plan Implementing Procedure EPIP-008 Section 5.3.2.1 states that Emergency Response Training will be provided to all individuals prior to assignment to a position in the ERO and annually thereafter. Interviews of licensee personnel indicated that the Wackenhut Corporation project manager who provided on-site management of the licensee's contract guard force filled the position of the Security Officer in the licensee's ERO. Review of records and interviews of licensee personnel records indicated that the security project manager began his employment at the licensee's facility on April 18, 2007 and that as of June 19, 2007, the individual had not completed the required ERO training. Further, discussions with licensee personnel determined that the individual designated to serve as the Alternate Security Officer had not been provided with ERO training. The failure to provide ERO training to the individual designated in the licensee's emergency plan as the Security Officer, in accordance with Section 5.3.2.1 of EPIP-008 was identified as one example of a violation of regulatory requirements. (VIO 40-3392/2007-003-01).

On June 19, 2007, licensee personnel provided the required ERO training to the security project manager as required by licensee procedure as well as to his alternate. Licensee personnel also described changes that had been made to ensure that newly

hired employees who were to be assigned to the ERO would be trained as required. These changes included addition of ERO training to the computerized database used by the licensee's training department to track the completion of required training.

The inspectors reviewed training records for selected ERT members. The inspectors found that the records indicated that two ERT members had not completed the required training. However, the licensee had adequately kept track of these individuals, noted the missing training in their personnel records, and would ensure retraining prior to ERT reassignment.

The inspectors encountered an opportunity to attend and evaluate an ERT-related training session that coincided with the plant visit. The licensee receives shipments of hydrofluoric acid for use in the production of fluorine products via rail tank car. The inspectors observed an on-site training session for new ERT members during which trainees used a Chlorine Kit (C-Kit) to cap the valves on a full scale mock-up of an HF railroad tank car dome. Afterwards, the inspectors observed the instructors conduct a frank and open critique of the exercise during which the instructors solicited each student to identify strengths and weaknesses that they had observed.

(2) Conclusion

The failure to provide ERO training to the individual designated in the licensee's emergency plan as the Security Officer, in accordance with Section 5.3.2.1 of EPIP-008 was identified as one example of a violation of regulatory requirements (VIO 40-3392/2007-003-01). Prior to the conclusion of the inspection, the licensee had already implemented corrective action to track the training requirements of personnel assigned to the ERO as well as their alternate. During the inspection, the security officer and alternate both received the required training. The NRC does not require any further information for this example of VIO 40-3392/2007-003-01 or the associated corrective actions.

d. Offsite Support (F3.04)

(1) Scope and Observations

Licensee activities in the areas of training, agreements, and exercises were reviewed to determine if the licensee was periodically involving offsite support groups.

The inspectors interviewed representatives of the principle offsite response organizations, including the Massac County Sheriff's Department, the Metropolis City Police Department, Metropolis Fire Department, the Massac Memorial Hospital Emergency Room, and the Illinois Department of Emergency Preparedness. The representatives of these organizations all indicated that the licensee offered regular opportunities to visit the facility for training and for site familiarization. All organizations had been provided with up-to-date copies of the licensee's ERP/RCP.

The Massac Memorial Hospital Emergency Room manager asked that the inspectors pass along a request to the licensee that they provide notification to the hospital in the event of any release so they may provide more effective treatment since the symptoms of HF inhalation are similar to an asthma attack, yet requiring very different treatments. The manager also indicated that such a notification would allow the hospital to

reconfigure the heating, ventilation and air conditioning system to prevent or reduce the amount of air-borne contaminants potentially drawn into the hospital in the event of an off-site release.

(2) Conclusion

Based on interviews and records reviewed, the inspectors concluded that the licensee maintained adequate interfaces with offsite support groups. No violations of NRC requirements were observed.

e. Drills and Exercises (F3.05)

(1) Scope and Observations

The ERP/RCP requires quarterly census drills. The inspectors reviewed the documentation regarding the first quarter census drill conducted on March 22, 2007. During the census drill, the licensee identified a problem with accounting for all of the contractors following an evacuation because with more than 50 on-site contractors being accounted for using paper documents, it created a severe back log. The incident report and summary both identified this as an issue. An action item was identified to investigate the use of another system to track the contractors.

The licensee informed the inspectors of a plant wide upgrade plan to begin using a proximity card identification system. The use of the system for identification will expedite the process for accounting for plant personnel and contractors.

(2) Conclusion

The licensee conducted exercises in accordance with the requirements of the ERP/RCP. The performance of quarterly hands-on-drills using realistic scenarios provided sufficient challenges to maintain the proficiency of the response organization. No violations of NRC requirements were observed.

f. Emergency Equipment and Facilities (F3.06)

(1) Scope and Observations

Emergency response equipment, instrumentation, vehicles and supplies used to evaluate and assess radiological conditions were examined to determine if they were maintained in a state of operational readiness.

Emergency Plan Implementing Procedure EPIP-008 Section 5.6.1 states "Dedicated emergency equipment and supplies are provided in specified locations as listed in Attachments 2 – 7." Emergency Plan Implementing Procedure EPIP-008 Attachment 4 specifies the minimum acceptable inventory of emergency equipment to be maintained in Emergency Equipment Storage Cabinets. The licensee's emergency equipment and kits were inspected in the control room, on several floors of the FMB, pump houses, site vehicles and other designated areas at the facility. The inspectors observed that the required equipment was available and in good condition.

The inspectors observed an inventory and operability check of equipment at selected locations and observed that required pieces of emergency equipment including two oxygen therapy units were not available in the emergency equipment storage cabinet located in the Ore Storage area. In addition, required pieces of emergency equipment including various sizes of spare face masks for Self Contained Breathing Apparatus were not available in the emergency equipment storage cabinet located adjacent to the product cylinder area door. A licensee employee stated that he thought there had been discussion of not stocking oxygen therapy systems in the emergency equipment storage cabinets. However, discussions with members of the licensee's safety department staff indicated that the oxygen therapy units were required equipment and that there was no plan to remove the units. The failure to maintain the minimum acceptable inventory of emergency equipment in designated areas was identified as an example of a violation of regulatory requirements (VIO 40-3392/2007-003-01).

The inspectors also observed that respiratory protection equipment (except as identified above), air samplers, and supplies were checked for shelf-life, reliability and quantity, and found to be maintained in an adequate state of readiness. The inspectors also observed the successful completion of a periodic functional test of the hydrofluoric acid mitigation system. Documentation in support of the calibration and maintenance of the onsite meteorological system, the HF fence monitors, and monthly testing of the UF₆ evacuation alarm and the public warning system sirens were reviewed.

(2) Conclusion

Based on the equipment operability checks and documentation for maintenance and calibration, the inspectors determined that the reliability of selected equipment was good and the equipment was maintained in a state of operational readiness. A violation was identified for the failure to maintain specified emergency response equipment at various locations within the plant.

3. Licensee Strike Contingency Plans (IP 92709)

(1) Scope and Observations

At midnight on June 21, 2007, the contract between the USW, Local 7-669, representing about 250 hourly operations and maintenance employees, and the licensee was scheduled to expire. Negotiations began June 1 and concluded with a renewed contract.

The inspectors evaluated the licensee-developed contingency plans to shut down and then resume plant operations, initially at a reduced capacity using non-union and management personnel. In addition, the licensee discussed its contingency plans with Region II managers during a telephone conference call on June 1, 2007. The licensee indicated that it had begun the process to identify sufficient staff to continue plant operations in the event of a strike.

On June 8, 2007, NRC inspectors reviewed the readiness of the licensee's strike contingency plans including the program the licensee had implemented to train a sufficient amount of staff to safely resume plant operations. Through interviews of licensee personnel, the inspectors determined that the licensee's safety staff had participated in the development and review of the strike contingency plans. Interview of

licensee managers indicated that the licensee had developed and was implementing adequate plans to maintain sufficient onsite shift staffing of the facility. The inspectors observed training and reviewed the training syllabus. Although training was still ongoing at the time of the inspection, the inspectors determined that the observed training activities met regulatory requirements.

The licensee had developed adequate plans to meet regulatory requirements in the areas of plant management; operations; maintenance; chemistry and radiation protection; surveillance and calibrations; and, administrative controls. In addition, the licensee verified that continuity of the facility security program would not be adversely impacted by a strike. The inspectors contacted site union officials to discuss strike related issues such as the role of the NRC during a job action and to address NRC concerns regarding unfettered site access for NRC inspectors.

(2) Conclusion

The licensee had developed adequate contingency plans that had been reviewed by the facility's safety staff. The licensee had developed adequate plans to maintain sufficient onsite shift staffing of the facility. The licensee had developed adequate plans to meet regulatory requirements in the areas of plant management; operations; maintenance; security; chemistry and radiation protection; surveillance and calibrations; and, administrative controls. Licensee management and representatives of USW, Local 7-669 successfully negotiated a new contract averting a possible strike.

4. Distributed Control System Malfunction Review (IP 88003)

(1) Scope and Observations

The licensee recently completed an upgrade of their Feed Materials Building (FMB) process control system. The new distributed control system (DCS) represents the initial phase of implementing and automated chemical process control system. The DCS consists of the following subsystems:

- Dedicated computer servers in the administration building.
- DCS programmable logic controllers in the FMB.
- Computer work stations in the FMB.
- Communication networks that tie the subsystems together.
- DCS operating system software.
- DCS process control software, unique to the process.

On June 18, 2007, the single uninterruptible power supply (UPS) that provided power to the multiple computer work stations and communication network equipment in the FMB failed. The failed UPS also provided power to the DCS controllers, but these controllers had a secondary UPS which continued to provide power to the controllers. The servers in the administration building were on a separate UPS and continued to function.

When the UPS failed, FMB production operators were unable to monitor or control production operations via their work stations and the servers were unable to interact with the DCS controllers. However, the DCS controllers continued to operate according to their on-board programming.

After diagnosing the problem, the operators were able to bypass the failed UPS and restore power to the FMB work stations and communications network equipment. When the servers reestablished communications with the DCS controllers, the DCS controllers were programmed to reinitialize. As programmed, when reinitialized, the DCS reconfigured the production equipment for a "cold start", which placed all chemical reactor vessel valves in the closed position. The plant had been operational when the UPS failed, so the chemical reactor vessels were in a heated and active state, which caused their pressure to rise when the valves closed. The operators noted the increasing vessel pressure and manually placed the plant in a safe condition.

The licensee and the UPS vendor determined the UPS failure was due to UPS internal control hardware and was repaired. The licensee's staff had not recognized that reestablishing communications between the servers and the DCS controllers after a loss-of-communication event would result in a "cold start" plant configuration, no matter what the status of the plant.

(2) Conclusion

The licensee completed an initial assessment of the DCS malfunction and took prompt actions to prevent a recurrence. Corrective actions included: installation of a second UPS to eliminate the single-point vulnerabilities at the FMB, and revisions to the DCS process software that will maintain critical valves in an as-was configuration upon a recurrence of a similar failure scenario. The licensee had completed its root cause analysis and the results of that investigation were being reviewed by licensee management.

5. Exit Meeting Summary

The inspection scope and results were summarized on June 21, 2007, and discussed with the licensee. The inspectors described the areas inspected and discussed in detail the inspection results. Although proprietary documents and processes were reviewed during this inspection, the proprietary nature of these documents or processes is not included in this report. No dissenting comments were received from the licensee.

ATTACHMENT

1. PARTIAL LIST OF PERSONS CONTACTED

D. Edwards, Plant Manager
S. Patterson, Health Physics Supervisor
D. Mays, Environmental, Health and Safety Manager
L. Parscale, Regulatory Affairs Manager
R. Erickson, Operations Manager
M. Millman, Engineering Manager

Other licensee employees contacted included engineers, technicians, and office personnel.

LIST OF OFF-SITE PERSONS CONTACTED

M. Childers, Massac County/Metropolis Fire Chief
B. Griffey, Massac County Sheriff
R. Newcomb, Manager Massac County Hospital
O. Troutman, Illinois (Massac County) Emergency Preparedness
M. Worthen, Metropolis Police Chief

2. INSPECTION PROCEDURES USED

IP 88050 Emergency Preparedness
IP 92709 Licensee Strike Contingency Plans
IP 88003 Reactive Inspection for Events at Fuel Cycle Facilities

3. ITEMS OPENED, CLOSED, AND DISCUSSED

40-3392/2005-005-01	IFI	Closed	Verified the performance of a 2005 comprehensive audit.
40-3392/2005-005-02	IFI	Open	Follow up to multiple corrective actions involving EP.
40-3392/2007-003-01	VIO	Open	Example of failure to provide security project manager with ERO training. Example of failure to maintain specified emergency response equipment at various locations within the plant.

4. LIST OF ACRONYMS USED

ADAMS Agency Document Access and Management System
ALARA As Low As Reasonably Achievable
CFR Code of Federal Regulations
DAW Dry Active Waste
DCS Distributed Control System
FMB Feed Materials Building
HF Hydrofluoric acid

HP	Health Physicist
IFI	Inspector Followup Item
IP	Inspection Procedure
NRC	Nuclear Regulatory Commission
UF ₆	Uranium Hexafluoride
VIO	Violation