UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET, SW, SUITE 23T85
ATLANTA, GEORGIA 30303-8931

May 7, 2007

Mr. R. P. Cochrane, General Manager
BWX Technologies, Inc.
Nuclear Products Division
P. O. Box 785
Lynchburg, VA 24505-0785

SUBJECT: NRC INSPECTION REPORT NO. 70-27/2007-002 AND NOTICE OF VIOLATION

Dear Mr. Cochrane:

This refers to the inspection conducted from February 25, through April 7, 2007, at the Nuclear Products Division facility. The purpose of the inspection was to determine whether activities authorized by the license were conducted safely and in accordance with NRC requirements. At the conclusion of the inspection, the findings were discussed with those members of your staff identified in the enclosed report.

Areas examined during the inspection included: plant operations, management organization and controls, maintenance and surveillance, radiation protection, material control and accounting, and physical protection. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observation of activities in progress.

Based on the results of this inspection, the NRC has determined that three (3) violations of NRC requirements occurred. The violations are cited in the enclosed Notice of Violation (Notice) and the circumstances surrounding them are described in detail in the subject inspection report. If you contest these violations or their significance, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with copies to the Regional Administrator, Region II, the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001, and the NRC Senior Resident Inspector at your facility.

You are required to respond to this letter and should follow the instructions specified in the 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.

[redacted]

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

Sincerely,

*/RA/*
David J. Hartland, Acting Chief
Fuel Facility Inspection Branch 1
Division of Fuel Facility Inspection

Docket No. 70-27
License No. SNM-42

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

cc w/encls:
Leah R. Morrell
Manager, Licensing and Safety Analysis
BWX Technologies
P. O. Box 785
Lynchburg, VA 24505-0785

Leslie P. Foldesi, Director
Bureau of Radiological Health
Division of Health Hazards Control
Department of Health
1500 East Main Street, Room 240
Richmond, VA 23219

Distribution w/encls: (See page 3)

[redacted]

[redacted]

Distribution w/encls:
D. Hartland, RII
J. Munday, RII
A. Gooden, RII
G. Wertz, RII
M. Galloway, NMSS
B. Gleaves, NMSS

[redacted]

ADAMS: x Yes ACCESSION NUMBER:_____

| OFFICE | RII:DFFI | RII:DFFI | RII:DFFI | RII:DFFI | RII:DFFI | | |
|---|---|---|---|---|---|---|---|
| SIGNATURE | GW 5/4/07 | CT 5/4/07 | OL/7/07 | DH for 5/7/07 | DMC 5/4/07 | | |
| NAME | GWertz | CTaylor | OLopez | AGooden | [redacted] | | |
| DATE | 5/ /2008 | 5/ /2008 | 5/ /2008 | 5/ /2008 | 5/ /2008 | 5/ /2008 | 5/ /2008 |
| E-MAIL COPY? | YES NO | YES NO | YES NO | YES NO | YES NO | YES NO | YES NO |

OFFICIAL RECORD COPY DOCUMENT NAME: C:\FileNet\ML071280015.wpd

[redacted]

[redacted]

NOTICE OF VIOLATION

BWX Technologies, Inc.
Lynchburg, Virginia

Docket No. 70-27
License No. SNM-42

During NRC inspection activities conducted between February 25, and April 7, 2007, three violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions," NUREG-1600, the violations are listed below:

A. Safety Condition S-1 of NRC License SNM-42 authorizes the use of nuclear materials in accordance with Chapters 1-11 of the License Application submitted on March 24, 2006, and supplements thereto.

Section 11.1.3 of the License Application states that modifications or additions to the facilities, processes, and equipment, used for handling, processing, or storing licensed material, shall be evaluated and approved before the change is made and the integrated safety analysis summary is modified.

Contrary to the above, in August 2006, the licensee removed a work table and the nuclear criticality safety posting that implemented the required item relied on for safety from a process area. This modification to the facility and equipment used for the handling and storing of licensed material was performed without being evaluated and approved before the change was made and the integrated safety analysis summary modified.

This is a Severity Level IV violation (Supplement VI).

B. Safety Condition S-1 of NRC License SNM-42 authorizes the use of nuclear materials in accordance with Chapters 1-11 of the License Application submitted on March 24, 2006, and supplements thereto. Section 11.4 of the License Application states that activities at the site involving licensed material shall be conducted in accordance with written and approved procedures.

Section 6.2 of Procedure NCSE-02, "Nuclear Criticality Safety Analyses & Quality Assurance Reviews," Revision 30, states that a nuclear safety release may be used to justify changes to the proposed requirements, but the identified changes must be reviewed by Quality Assurance, and concurred on by the Change Request Board Chairman and identified evaluators.



[redacted]

Contrary to the above, on July 31, 2006, the licensee used a nuclear safety release to justify changes to the proposed requirements identified in Safety Evaluation Request 05-080, without having the changes reviewed by Quality Assurance and concurred on by the Change Review Board chairman and identified evaluators.

This is a Severity Level IV violation (Supplement VI).

C. 10 CFR Part 70.61(b) states that the risk of each credible high-consequence event must be limited. Engineered controls, administrative controls, or both, shall be applied to the extent needed to reduce the likelihood of occurrence of the event so that, upon implementation of such controls, the event is highly unlikely or its consequences are less severe than those in paragraphs (b)(1)-(4) of this section.

10 CFR Part 70.61(e) states that each engineered or administrative control or control system necessary to comply with paragraphs (b), (c), or (d) of this section shall be designated as an item relied on for safety.

Contrary to the above, as of March 22, 2007, the licensee did not designate items relied on for safety required to reduce the likelihood of a high consequence event (criticality) in the press section of the [redacted] glove box lines. Specifically, the licensee did not establish controls to prevent [redacted] fluid (moderator) from accumulating in the [redacted] section of the glove box lines so that, upon implementation of such controls, a criticality is highly unlikely or its consequences are less severe than those in paragraphs (b)(1)-(4) of this section.

This is a Severity Level IV violation (Supplement VI).

Pursuant to the provisions of 10 CFR 2.201, BWX Technologies, Inc., is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555 with a copy to the Regional Administrator, Region II, and a copy to the NRC Resident Inspector at BWX Technologies, Inc., 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 the 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 previously 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 not be modified, suspended, or revoked, or why such other action as may be proper should 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, with the basis for your denial, to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001.

[redacted]

[redacted]

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

Dated this 7th day of May 2007

[redacted]

U. S. NUCLEAR REGULATORY COMMISSION

REGION II

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|---|---|
| Docket No.: | 70-27 |
| License No.: | SNM-42 |
| Report No.: | 70-27/2007-002 |
| Licensee: | BWX Technologies, Inc. |
| Facility: | Nuclear Products Division |
| Location: | Lynchburg, Virginia |
| Dates: | February 25, through April 7, 2007 |
| Inspectors: | G. Wertz, Senior Resident Inspector<br>D. Hartland, Senior Fuel Facility Inspector<br>O. Lopez, Fuel Facility Inspector<br>C. Taylor, Fuel Facility Inspector |
| Approved by: | David Hartland, Acting Chief<br>Fuel Facilities Inspection Branch 1<br>Division of Fuel Facility Inspection |

Enclosure 2

[redacted]

## EXECUTIVE SUMMARY

BWX Technologies, Inc., Nuclear Products Division
NRC INSPECTION REPORT NO. 70-27/2007-002

This inspection included periodic observations conducted by the Senior Resident Inspector during normal and off-normal shifts in the areas of plant operations, management organization and controls, maintenance and surveillance, material control and accounting, and physical protection. A specialized inspection and review of documentation were conducted by regional inspectors in the areas of radiation protection (March 5-9) and operations and maintenance (March 19-22).

Plant Operations

- High enriched uranium processing operations were properly evaluated for safety. Items relied on for safety were properly implemented and material processing was performed in accordance with the approved procedure (Paragraph 2.a).

- Two violations were identified for the failure to properly evaluate a facility change before removing an item relied on for safety and for not following the requirements of the nuclear safety release procedure when the discrepancy was identified (Paragraph 2.b).

- A violation was identified for the failure to establish controls to prevent [redacted] fluid (moderator) from accumulating in the [redacted] section of the [redacted] glove box lines (Paragraph 2.b).

Management Organization and Controls

- The root cause investigation of the January 11, 2007, service water line break attributed the failure to soil settling. The inspectors questioned the consequences of an internal flood which had not been evaluated within the integrated safety analysis. An inspector followup item was identified for completion of the review for the internal flooding scenario (Paragraph 3.a).

- An operator who received an acid burn due to contact with [redacted] solution was properly treated with calcium gluconate. After review of the completed corrective action, the inspectors found that leaks were still present in the piping. The system was shutdown until the leaks were repaired (Paragraph 3.b).

Maintenance and Surveillance

- [redacted] load testing was performed in accordance with the maintenance procedure and the results were satisfactory. Maintenance work observed on the Facility Alarm System was performed adequately to ensure items relied on for safety were available and reliable (Paragraph 4).

[redacted]

Radiation Protection

- The external and internal exposure monitoring program was implemented in a manner that maintained doses as low as reasonably achievable (Paragraph 5.a).

- Radiological control practices such as postings, radiation work permits, and labeling, and the radiation survey program were properly implemented (Paragraph 5.b).

- An unresolved item was opened to further review the licensee's determination that the consequences of acid solution events were below the requirements necessary for implementing items relied on for safety (Paragraph 5.c).

Material Control and Accounting

[redacted]

Physical Protection

[redacted]

Attachment:
Partial Listing of Persons Contacted
List of Items Opened, Closed and Discussed
Inspection Procedures Used

[redacted]

REPORT DETAILS

1. **Summary of Plant Status**

Routine fuel manufacturing operations and maintenance activities were conducted in the fuel manufacturing process areas and in the [redacted] facility. Uranium recovery was conducted in the [redacted] facility.

2. **Plant Operations (Inspection Procedure (IP) 88135 and 88020)**

a. High Enriched Uranium Operations

(1) Inspection Scope and Observations

The inspectors reviewed the licensee's safety review and preparation for processing [redacted] The [redacted] material characteristics were evaluated in Safety Evaluation Request (SER) 2007-007 and Nuclear Criticality Safety (NCS) Analysis 2007-048, and the inspectors verified that the associated NCS requirements were properly implemented. Changes to the processing equipment and items relied on for safety (IROFS) were reviewed with the responsible [redacted] manager and NCS engineer. The inspectors observed processing operations being performed in accordance with Operating Procedure (OP) 0061101. No issues were identified.

(2) Conclusions

[redacted] processing operations were properly evaluated for safety. IROFS were properly implemented and [redacted] processing was performed in accordance with the approved procedure.

b. Operational Safety (IP 88020)

(1) Identification of Safety Controls and Related Programs (O2.01), Implementation of Safety Controls (O2.02), and Safety Control Support Programs (O2.03)

The inspectors reviewed safety analysis reports (SARs) for [redacted], fuel manufacturing, and the [redacted] process areas to assess whether IROFS were properly identified and documented in the safety analyses. The inspectors reviewed the supporting documentation and toured the process areas to assess whether IROFS were properly implemented and maintained. Three violations were identified.

Failure to Properly Evaluate a Facility Change Affecting an IROFS

The inspectors noted that SAR 15.22 included an NCS posting, identified as an IROFS, for a work table used to store special nuclear material (SNM). However, the inspectors observed that neither the work table nor the NCS posting were present during their

[redacted]

walkdown. Upon further investigation, it was revealed that the work table and posting had been removed during implementation of Safety Evaluation Request (SER) 05-080 which had replaced some plant equipment. The inspectors reviewed the SER and noted that it did not address removal of the work table or the NCS posting. The inspectors discussed this with the NCS manager who agreed that the work table and NCS posting were removed without proper evaluation and authorization.

Section 11.1.3 of the License Application stated that modifications to the facilities, processes, and equipment used for handling, processing, or storing licensed material shall be evaluated and approved before the change was made and the ISA Summary was modified. Failure to evaluate the removal of the work table and related NCS posting was a violation of NRC requirements. (VIO 70-27/2007-02-01, Failure to evaluate facility change affecting IROFS)

Failure to Follow Procedure

During the review of the issue described above, the inspectors noted that the nuclear safety release (NSR) for SER 05-080 required replacement of the existing NCS posting on the work table with a new posting reflecting the SER changes. The NCS engineer assigned to perform the NSR pre-operational walk down and replace the NCS posting identified that the work table and existing NCS posting had been removed. The NCS engineer authorized the NSR even though the SER NCS posting requirements could not be implemented.

The inspectors questioned the process for resolving NSR discrepancies and learned that Section 6.2 of Procedure NCSE-02, "Nuclear Criticality Safety Analyses & Quality Assurance (QA) Reviews," Revision 30, allowed minor changes if they were: (1) reviewed by QA; (2) concurred on by the Change Request Board (CRB) chairman and all CRB evaluators; and, (3) provided to the licensing department to update the SAR. Since the SAR had not been updated, the inspectors questioned the NCS manager who indicated that the NCSE-02 requirements had not been performed. The inspectors determined that proper adherence to the NCSE-02 procedure would have resulted in identification of the previous violation. Failure to follow Procedure NCSE-02 is considered a violation of NRC requirements. (VIO 70-27/2007-02-02, Failure to follow NCS QA procedure)

Failure to Establish Items Relied on For Safety

The inspectors reviewed IROFS for the [redacted] and [redacted] glove box lines, as documented in the integrated safety analysis (ISA) summary, which included NCS controls for the amount of mass and moderating material allowed in each glove box line. The glove box lines were divided into sections that were linked together by transfer ports. One section in each line included a [redacted] box which had IROFS to limit the number of [redacted] and the volume of [redacted] fluid available in the system [redacted]

The inspectors noted that the documented basis for limiting the volume of the [redacted] fluid was to prevent the fluid from leaking out of the [redacted] and into the adjacent section of the glove box line. However, although the inspectors observed that the existing configuration of the press box would not have allowed [redacted] fluid to accumulate in it and moderate SNM that was being processed in the box, the licensee had not established IROFS to prevent it from occurring. The inspectors discussed the issue with NCS staff, who provided a copy of an NCS technical work record, dated August 16, 1988, that indicated that no criticality safety problem existed in the [redacted] section, even if fully flooded, as long as the limit for number of [redacted] was not exceeded.

However, the licensee was unable to produce a formal NCS analysis that demonstrated that double contingency existed in the [redacted] section of the glove boxes. As a result, the licensee removed the affected glove boxes from service and locked them out. The licensee also reported the event to the NRC (Event Notification 43255) as an unanalyzed ISA condition, as required by 10 CFR 70 Appendix A(b)(1).

10 CFR Part 70.61(b) stated, in part, that the risk of each credible high-consequence event must be limited. Engineered controls, administrative controls, or both, shall be applied to the extent needed to reduce the likelihood of occurrence of the event so that, upon implementation of such controls, the event is highly unlikely or its consequences are less severe than those in paragraphs (b)(1)-(4) of this section. 10 CFR Part 70.61(e) stated, in part, that each engineered or administrative control or control system necessary to comply with paragraphs (b), (c), or (d) of this section shall be designated as an IROFS. Failure to establish IROFS to prevent [redacted] fluid (moderator) from accumulating in the press section of the gloveboxes is a violation of NRC requirements. (VIO 70-27/2007-02-03, Failure to establish IROFS)

(2) Conclusions

Two violations were identified for the failure to properly evaluate a facility change before removing an IROFS and for not following the requirements of the NCS NSR procedure when the discrepancy was identified. Another violation was identified for the failure to establish controls to prevent [redacted] fluid (moderator) from accumulating in the SNM [redacted] section of the glove box lines.

[redacted]

3. **Management Organization and Controls (IP 88135)**

a. Root Cause and Corrective Action Review of Service Water Line Failure

(1) Inspection Scope and Observations

The inspectors reviewed the investigation report for the January 11, 2007, service water line break (see NRC Inspection Report 70-27/2007-01 for event description). The cause of the break was attributed to soil settling beneath the line. The licensee's corrective action (CA) involved a visual examination of the roof drains which identified no obstructions.

The inspectors were concerned about the potential safety significance of a leak occurring in another area of the facility and questioned an ISA specialist who indicated that the internal flooding scenario had not been evaluated within the ISA. The inspectors considered internal flooding a credible event since it had just occurred. The inspectors discussed the issue with the Safety and Licensing Manager, who agreed to perform the review and submitted a commitment to CA 2013928. Completion of the ISA review for the internal flooding scenario is an inspector followup item. (IFI 70-27/2007-02-04)

(2) Conclusions

The root cause investigation of the January 11, 2007, service water line break attributed the failure to soil settling. The inspectors questioned the consequences of an internal flood which had not been evaluated within the ISA. An IFI was identified for completion of the ISA review for the internal flooding scenario.

b. Corrective Action Review of Acid Injury Event

(1) Inspection Scope and Observations

The inspectors reviewed CA 2014343 involving a UR operator who received an acid burn on January 22, 2007. The operator was performing an inspection of ventilation ductwork when a mist of [redacted] solution sprayed his face and ears. He was properly treated with calcium gluconate and returned to work. As a CA, the leaking pipe was replaced and the license planned to evaluate and replace other susceptible piping in the future. The inspectors reviewed the CA and observed that the newly installed replacement piping had evidence of active leakage. The inspectors discussed this with the UR manager who decided to isolate the system until the leaks were repaired.

(2) Conclusions

An operator who received an acid burn due to contact with [redacted] solution was properly treated with calcium gluconate. After review of the completed CA, the inspectors found that leaks were still present in the piping. The system was shutdown until the leaks were repaired.

4. **Maintenance and Surveillance (IP 88135 and 88025)**

a. Maintenance Implementation (F1.01), and Surveillance and Calibration Testing Implementation (F1.02)

(1) Scope and Observations

The inspectors reviewed the results of the [redacted] load test done on March 21, 2007. The test was performed in accordance with Maintenance Procedure GEN006 and Work Order 20019923. The inspectors also observed calibration and testing of portions of the Facility Alarm System (FAS). The testing ensured that the IROFS were maintained. No discrepancies were identified.

(2) Conclusions

[redacted] load testing was performed in accordance with the maintenance procedure and the results were satisfactory. Maintenance work observed on the FAS was performed adequately to ensure IROFS were available and reliable.

5. **Radiation Protection (IP 88030)**

a. Exposure Control Program (R1.04 and R1.05)

(1) Scope and Observations

The inspectors reviewed personnel exposures data to verify compliance with 10 CFR 20.1201 limits and that exposures were maintained as low as reasonably achievable (ALARA). Table 1 displays the maximum assigned exposure data for calendar years (CY) 2005 and 2006. CY 2006 external and internal exposures were slightly higher due to changes in production levels. The shallow dose extremity (SDE) at the Lynchburg Technology Center (LTC) was significantly higher due to the [redacted]. The highest derived air concentration (DAC) valued for CY 2006 was 290 DAC-hours in [redacted] This was equivalent to 0.725 roentgen-equivalent man (rem) which was well below the regulatory requirement of 5 rem. The offsite dose to the nearest public receptor was 0.040 mrem which was well below the 100 mrem threshold. The inspectors determined the exposure control program was adequately implemented.

[redacted]

**Table 1. Maximum Annual Dose Data**

| Year/Facility Location | | Deep Dose Equivalent (DDE)-rem | Shallow Dose Extremity (SDE)-rem | Total Effective Dose Equivalent (TEDE)-rem | Collective TEDE (person-rem) | Committed Effective Dose Equivalent (CEDE) - rem |
|---|---|---|---|---|---|---|
| 2005 | NPD | 0.093 | 0.123 | 0.543 | 26.5 | 0.374 |
| | LTC | 1.164 | 5.696 | 1.164 | 7.316 | 0.016 |
| 2006* | NPD | 0.190 | 0.081 | 0.734 | 32.152 | 0.734 |
| | LTC | 1.557 | 9.264 | 1.565 | 6.158 | 0.008 |

* Reporting period from 1/1/06 through 12/31/06, the data for CY 2006 is interim data only and has not been validated

The inspectors reviewed the licensee's respiratory and bioassay program and concluded that it was effectively maintained to control internal exposure. The inspectors reviewed the calculations for the use of the International Council for Radiation Protection (ICRP) 68 methodology in calculating internal doses. The licensee had calculated the new inhalation and ingestion allowable limit intakes (ALI) and DAC values for the Nuclear Products Division facility (Technical Work Record 01-009 and 02-011), but had not calculated the ingestion ALIs for the LTC. The inspectors noted that the internal exposure to personnel in the LTC was very small compared to the external exposure received. The licensee intended to perform the calculation by September 2007.

(2) Conclusions

The external and internal exposure monitoring program was implemented in a manner that maintained doses ALARA.

b. Postings, Labeling and Control (R1.07), and Surveys (R1.08)

(1) Inspection Scope and Observations

The inspectors reviewed radiation work permits (RWPs), radiological surveys, radiological precautions, and general work practices during plant walk downs. The inspectors observed that radiological signs and procedures were properly posted or readily available. Equipment and devices used to confine and contain radioactive contamination and airborne radioactivity were in proper working condition and personnel protective equipment (PPE) and dosimetry were properly worn as required by the RWPs. Radioactive containers were properly labeled in compliance with 10 CFR 20.1902. The inspectors reviewed survey documentation and observed technicians performing surveys in accordance with the procedures.

[redacted]

(2) Conclusions

Radiological control practices such as postings, RWPs, and labeling, and the radiation survey program were properly implemented.

c. Followup Safety Review

(1) Inspection Scope and Observations

The inspectors reviewed the potential safety significance of a condition related to a previous violation (VIO 70-27/2007-01-01) regarding the failure to use a face-shield when transporting open containers of [redacted] solution through [redacted]. The inspectors were concerned about serious eye injuries due to accident spills and collisions involving individuals who were not required to wear face-shields but worked in the same area. The inspectors expressed their concern that this may represent an unanalyzed condition, based on chemical exposure rather than inhalation, that could cause serious and irreversible health effects as discussed in 10 CFR 70.61. The licensee disagreed with this assessment based on a review of previous events that had occurred in the industry involving spills which did not result in serious eye injuries. The licensee believed other credible scenarios bounded this issue and would not result in the likelihood of an intermediate or highly intermediate credible scenario. The inspectors' further review of the licensee's determination that the consequences of acid solution events were below the requirements necessary for implementing IROFS will be tracked as an unresolved item (URI 70-27/2007-02-05).

(2) Conclusions

An unresolved item was opened to further review the licensee's determination that the consequences of acid solution events were below the requirements necessary for implementing IROFS.

6. **Material Control and Accounting (IP 88135)**

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

7. **Physical Protection (IP 88135)**

[redacted]

[redacted]

[redacted]

[redacted]

8. **Exit Meeting**

The inspection scope and results were summarized on March 9, March 22, and April 7, 2007, with R. Cochrane, General Manager, and other members of the licensee's staff. Although proprietary information and processes were reviewed during this inspection, proprietary information was not included in this report. Dissenting comments were received from the licensee regarding the unresolved item identified in Paragraph 5.c of the report.

[redacted]

[redacted]

ATTACHMENT

1. **LIST OF PERSONS CONTACTED**

J. Burch, Manager, Operations
R. Cochrane, Manager, General Manager
J. Creasey, Manager, Uranium Processing
R. Hogg, Acting Manager, Nuclear Criticality Safety
L. Morrell, Manager, Licensing & Safety Analysis
T. Nicks, Manager, Security
S. Schilthelm, Manager, Safety and Licensing
D. Spangler, Manager, Radiation Protection
M. Suwala, Manager, Nuclear Materials Control
D. Ward, Manager, Environment, Safety, Health and Safeguards

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

2. **LIST OF ITEMS OPENED AND CLOSED**

| Item Number | Status | Description |
|---|---|---|
| 70-27/2007-02-01 | Open | VIO - Failure to evaluate facility change affecting IROFS (Paragraph 2.b). |
| 70-27/2007-02-02 | Open | VIO - Failure to follow NCS QA procedure (Paragraph 2.b). |
| 70-27/2007-02-03 | Open | VIO - Failure to establish IROFS (Paragraph 2.b). |
| 70-27/2007-02-04 | Open | IFI - Completion of the ISA review for the internal flooding scenario (Paragraph 3.a). |
| 70-27/2007-02-05 | Open | URI - Further review of licensee's determination that the consequences of acid solution events were below the requirements necessary for implementing IROFS (Paragraph 5.c). |

3. **INSPECTION PROCEDURES USED**

| | |
|---|---|
| IP 88135 | Resident Inspection Program for Category I Fuel Cycle Facilities |
| IP 88020 | Operational Safety |
| IP 88025 | Maintenance and Surveillance of Safety Controls |
| IP 88030 | Radiation Protection |

[redacted]