UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
245 PEACHTREE CENTER AVENUE NE, SUITE 1200
ATLANTA, GEORGIA 30303-1257

October 29, 2012

Mr. Dominique Grandemange
Site Manager
AREVA NP, Inc.
2101 Horn Rapids Road
Richland, WA 99354-0130

SUBJECT: AREVA NP, INC. (RICHLAND) – NRC INTEGRATED INSPECTION REPORT NO. 70-1257/2012-004

Dear Mr. Grandemange:

This refers to the inspections completed during the third quarter of calendar year 2012, at the AREVA NP, Inc., facility in Richland, Washington. The purpose of the inspections was to determine whether activities authorized under the license were conducted safely and in accordance with Nuclear Regulatory Commission (NRC) requirements. The enclosed report presents the results of these inspections. The findings were discussed with members of your staff at exit meetings held on July 12 and 26, 2012.

During the inspections, the NRC staff examined activities conducted under your license as they related to public health and safety and to confirm compliance with the Commission's rules and regulations and with the conditions of your license. Areas examined during the inspections are identified in the enclosed report. The inspections consisted of facility walk-downs; selective examinations of relevant procedures and records; interviews with plant personnel; and plant observations. Throughout the inspections, observations were discussed with your staff.

The inspections covered the following areas: Radioactive Waste Management, Transportation, Fire Protection, and Operational Safety. No significant findings were identified.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure 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.

If you have any questions, please call me at (404) 997-4629.

Sincerely,

/RA/
Marvin D. Sykes, Chief
Fuel Facility Inspection Branch 3
Division of Fuel Facility Inspection

Docket No. 70-1257
License No. SNM-1227

Enclosure:
NRC Inspection Report 70-1257/2012-004
w/Attachment: Supplementary Information

cc w/encl: (See page 3)

If you have any questions, please call me at (404) 997-4629.

Sincerely,

/RA/

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cc w/encl: (See page 3)

Distribution w/encl:
M. Thomas, RII
O. López, RII
M. Baker`, NMSS
M. Diaz, NMSS
M. Sykes, RII

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NAME	M. Thomas	O. Lopez	M. Crespo	M. Toth	G. Goff	J. Parrot	R. Temps
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cc w/encl:
Loren J. Maas, Manager
Licensing and Compliance
Areva NP, Inc.
2101 Horn Rapids Road
Richland, Washington 99352

Thomas Scott Wilkerson, Vice President
Engineering
Areva NP, Inc.
3315 Old Forest Road
Lynchburg, Virginia 24501

Ron Land, Vice President
Manufacturing
Areva NP, Inc.
3315 Old Forest Road
Lynchburg, Virginia 24501

Calvin D. Manning, Manager
Nuclear Criticality Safety
Areva NP, Inc.
2101 Horn Rapids Road
Richland, Washington 99352

Robert E. Link, Manager
Environmental, Health, Safety & Licensing
Areva NP, Inc.
2101 Horn Rapids Road
Richland, Washington 99352

Gary L. Robertson, Director
Division of Radiation Protection
Department of Health, Bldg. 5
PO Box 47827
7171 Cleanwater Lane
Olympia, Washington 98504-7827

Earl Fordham
Eastern Regional Director
Office of Radiation Protection
Department of Health
309 Bradley Boulevard, Suite 201
Richland, Washington 99352

U.S. NUCLEAR REGULATORY COMMISSION
REGION II

Docket No.:	70-1257
License No.:	SNM-1227
Report No.:	70-1257/2012-004
Licensee:	AREVA NP, Inc.
Facility:	Richland, Washington
Dates:	July 1, 2012 to September 30, 2012 (Third Calendar Quarter)
Inspectors:	M. Thomas, Senior Fuel Facility Inspector (Section B.1 and B.2) O. López, Senior Fuel Facility Inspector (Section A.1) M. Crespo, Senior Fuel Facility Inspector (Section A.3) R. Temps, Senior Safety Inspector (Section B.2) J. Parrott, Senior Safety Inspector (Section B.2) M. Toth, Fuel Facility Inspector (Section A.3) G. Goff, Fuel Facility Inspector (Section A.2) T. Vukovinsky, Fuel Facility Inspector-In-Training (Section A.1)
Approved by:	M. Sykes, Chief Fuel Facility Inspection Branch 3 Division of Fuel Facility Inspection

Enclosure

EXECUTIVE SUMMARY

AREVA NP, Inc.
NRC Inspection Report No. 70-1257/2012-004

Inspections were conducted by headquarters and regional inspectors during normal shifts in the areas of safety operations and radiological controls. The inspectors performed a selective examination of licensee activities that were accomplished by direct observation of safety-significant activities and equipment, tours of the facility, interviews and discussions with licensee personnel, and a review of facility records.

Safety Operations

- Items relied on for safety (IROFS) reviewed were properly implemented and maintained in order to perform their intended safety function. (Paragraph A.1)

- The Fire Protection program was implemented in accordance with the license application and regulatory requirements. (Paragraphs A.2 and A.3)

Radiological Controls

- The Waste Management program was implemented in accordance with the license application and regulatory requirements. (Paragraph B.1)

- The Transportation program was implemented in accordance with the license application and regulatory requirements. (Paragraph B.2)

Special Topics

- Unresolved Item (URI) 70-1257/2012-002-01 was closed. (Paragraph C.1)

- Violation (VIO) 70-1257/2010-010-001 was closed. (Paragraph C.1)

- Enforcement Action (EA)-10-041 was closed. (Paragraph C.1)

- Event Notification 47908 was reviewed. (Paragraph C.2)

Attachment

Key Points of Contact
List of Items Opened and Closed
Inspection Procedures Used
Documents Reviewed

REPORT DETAILS

Summary of Plant Status

The AREVA Richland facility converts uranium hexafluoride (UF_6) into uranium dioxide for the fabrication of low-enriched fuel assemblies used in commercial nuclear power reactors. During the inspection period, normal production activities were ongoing.

A. Safety Operations

1. Plant Operations (Inspection Procedure (IP) 88020)

a. Inspection Scope and Observations

The inspectors performed an operational safety review of selected systems in the Uranium Oxide (UO_2) Building, specifically System 350 – Powder Drum Warehouse, System 380 – UO_2 Pellet Sintering, System 380 – UO_2 Pellet Grinding, and System 186 – Supercritical CO_2 ($SCCO_2$). The inspectors determined that the specific items relied on for safety (IROFS) reviewed were implemented and properly communicated as described in the Integrated Safety Analysis (ISA) summary. The inspectors determined that the systems were operated safely and in compliance with requirements.

The inspectors confirmed that engineered controls reviewed were present and capable of performing their intended safety function(s). Specifically, the inspectors verified the physical presence of passive and active engineered safety controls, evaluated the safety controls to determine their capability and operability, and verified that potential accident scenarios were covered.

The inspectors reviewed the ISA summary, nuclear criticality safety specifications, chemical hazard analyses, licensee policies, and operating procedures to determine the existing process safety controls. The inspectors also reviewed management measures, required programs, and supporting documentation, including system and logic drawings, functional tests, surveillances, calibrations, maintenance, and condition reports (CRs) for designated IROFS to ensure that safety controls were available and reliable to function when needed. The inspection also included interviews of licensee personnel and plant walk-downs.

The inspectors reviewed CR 2012-2009, the associated Apparent Cause Evaluation, and reportability determination associated with a $SCCO_2$ process fluid leak which occurred on March 7, 2012. The inspectors noted that the ISA Summary credited IROFS 6903 and 6904 to prevent potential exposures that could exceed the 10 CFR 70.61 performance requirements. The ISA Summary described IROFS 6903 as an enhanced administrative control which prevents significant personnel exposure to process fluids by actuating an evacuation alarm if the HVAC exhaust system for the subject area becomes inoperable. If a significant leak occurred, the alarm would sound in the affected room and all of the adjacent rooms judged subject to significant process fluid entry, prompting personnel in those areas to evacuate immediately.

During the March 7, 2012, process upset, the HVAC system associated with IROFS 6903 remained in operation during the process fluid leak and process fluid escaped the secondary containment and was deposited on the floor in the $SCCO_2$ room without initiating an alarm. The leak was visually identified and upon notification of the leak, the operators depressed the emergency stop to secure the equipment and evacuated the room. The inspectors determined that IROFS 6903 was not able to perform the intended safety function as

described in the ISA Summary. As a corrective action, the licensee was in the process of modifying IROFS 6903 (ECN 8632C) to reconfigure the HVAC and the containment design to prevent further releases of process fluids to the room.

Redundant controls, IROFS 6904 (CO_2 detector) and IROFS 813 (sense and flee), remained in place through the process upset condition to ensure that the performance requirements of 10 CFR 70.61 were maintained. To enhance reliability of the controls, IROFS 6904 was also modified to increase CO_2 detector capability to sense a CO_2 leak and provide alarms to the operators. The inspectors reviewed the physical modification of IROFS 6903 and IROFS 6904 and agreed that the changes were adequate. No issues of significance were identified.

The inspectors interviewed three operators to evaluate their knowledge of these specific IROFS and determined that the operators were familiar with these safety controls and associated management measures. The inspectors completed plant tours and observed operator activities within the plant and noted adherence to applicable safety procedures. The inspectors reviewed the facility postings and operator aids applicable to the observed tasks and determined that these postings and operator aids were current, reflected safety controls, and were followed by the operators.

Through interviews and document reviews, the inspectors verified that the licensee conducted preventive maintenance, calibration, and periodic surveillance as required by the ISA Summary for the selected safety controls.

b. Conclusion

No significant findings were identified.

2. Fire Protection – Annual (IP 88055)

a. Inspection Scope and Observations

The inspectors reviewed licensee procedures, drawings, work orders, and toured plant areas containing IROFS and other safety controls to assess the material condition of fire protection equipment, systems, and features. The areas covered were the Dry Conversion Facility (DCF), UO_2 Building, Engineering Laboratory Operations (ELO) Building, Specialty Fuels (SF) Building, Central Guard Station, and Warehouses 1, 2, 3, 6, and 7.

The inspectors verified that flammable materials were stored properly in marked cabinets as specified in approved procedures. In addition, the inspectors noted that housekeeping practices, the control of combustible materials and ignition sources, and oil collection systems were appropriate and consistent with the approved procedures. Through reviews of hot work permits, the inspectors verified that the cutting, welding, and hot work program were implemented in accordance with approved procedures.

The inspectors reviewed records and interviewed licensee personnel to verify that fire protection systems had been properly tested to demonstrate their readiness to perform the intended safety functions. Specifically, the inspectors observed the layout of fire detection and suppression systems and reviewed the supporting documentation such as functional testing records and applicable procedures. The inspectors determined that fire dampers, doors, and penetration seals were being maintained in a condition that would ensure they

were available and reliable to perform their intended safety function(s). The inspectors also verified that fire hoses and portable extinguishers were in designated locations, in acceptable condition, and that access was unobstructed.

The inspectors reviewed the licensee's fire protection system out-of-service records and determined that adequate compensatory measures had been put in place for out-of-service, degraded, or inoperable fire protection equipment, systems, or features.

The inspectors reviewed the licensee's corrective action program (CAP) entries for the past 12 months and determined that the licensee was proactively identifying equipment and procedural issues for resolution at an appropriate threshold and entering them into the CAP to ensure continued safe operation. Also, the inspectors evaluated the corrective actions associated with CR 2012-5165-FA, CR 2011-9451-FA, CR 2012-5525-FA, and determined that the completed corrective actions were adequate.

The inspectors reviewed the evaluation of the annual fire drill (PM, CG06P011, Fire Alarm Bldg Evac 12 MO SA (Annual Fire Drill)) and verified that noted deficiencies were promptly entered into the licensee corrective action system for timely resolution.

b. Conclusion

No significant findings were identified.

3. Fire Protection - Triennial (IP 88054)

a. Inspection Scope and Observations

The inspection areas focused on the DCF, UO_2 Building processes, and the SF Building, but also included a general tour of other areas such as warehouses, maintenance shops, and the ELO Building.

The inspectors reviewed the Fire Hazards Analysis (FHAs) for the ELO Building, UO_2 Building, SF Building, and the DCF. The inspectors noted no discrepancies between the FHAs and the actual conditions of the buildings. The licensee did inform the inspectors that the FHAs were under revision and would obtain a more robust engineering analysis and justification for the limits used in the analysis. The inspectors also reviewed the pre-fire plans (referred to on-site as Pre-Emergency Plans) for the above buildings and identified no significant differences or deficiencies. As part of the Pre-Emergency Plan walk-down, the inspectors verified the condition of passive fire protection features, primarily the designated firewalls. The inspectors noted that the licensee had performed an assessment of the condition of the firewalls, Engineering Information Record (EIR) Document No. 51-9174438-000, "HRR Fire Barrier Function List" and EIR Document No. 51-9178844-000, "HRR Facility Penetration Seal Analysis," to determine if any of the remaining penetrations needed to be sealed. No issues were noted with the condition of the firewalls or the assessments performed. The inspectors also evaluated the preventative maintenance records and procedures for the fire dampers in the process areas.

The inspectors reviewed the licensee's combustible and flammable material control and ignition source programs. The inspectors noted that the combustible and flammable control program included IROFS 4502, which limited the amount and proximity of combustible and flammable materials, and IROFS 4503, which provided an independent procedure

verification to verify compliance with the combustible control program. The inspectors selected a sample of designated loading zones in DCF, the UO_2 process areas, and the SF building and verified that they were below the allowable combustible material storage amounts designated in drawing CSA-607.590. The inspectors reviewed the hot work permit program and determined that the licensee established adequate measures to control ignition sources throughout the facility. The inspectors verified that postings for water fire-fighting restrictions were in effect for a sample of applicable process areas for fire/criticality safety per E04-NCSS-G06. No significant issues were identified.

The inspectors reviewed the material condition, operational lineup, and design of fire suppression and detection systems within DCF, the incinerator room in the SF building, and in miscellaneous maintenance and storage shops to verify that the systems were reliable and available. The inspectors walked down the fire water loop around the facility property and verified position indicating valves (PIVs) were properly posted and aligned to satisfy operational readiness. The inspectors also verified the operational lineup of several building fire mains in DCF, UO_2, and maintenance workshops for availability. The inspectors reviewed building design calculations for water suppression systems for DCF and the incinerator room within the SF Building and determined the sprinkler systems provided adequate coverage for the specified area. No significant issues were identified.

The inspectors reviewed the process building layouts to determine if the automatic fire suppression systems would cause water to flow to the Water Exclusion Zones present in various part of the building. The inspectors found the suppression systems to be adequately isolated from the exclusion zones. In addition, the inspectors noted that the exclusion zones were adequately marked to communicate to emergency responders that no water suppression was authorized in the area, unless it was a life saving action. The inspectors also evaluated the licensee's equipment used to isolate drains from fire suppression system runoff (or other water based run off from process buildings). No issues were noted.

The inspectors reviewed the licensee's program regarding fire response capability. The inspectors examined the different types of training offered to licensee employees in response to a small, incipient fire. The inspectors noted that not all employees participated in the 'Hands-On' training exercises offered annually, and that the expected response for most employees to a fire was to evacuate and notify. The inspectors verified the operational readiness of on-site communication radios in the event of an emergency. The inspectors also verified that the site emergency lights preventive maintenance program comported with NFPA 101, Life Safety Code requirements regarding periodic operational and functional tests. The inspectors reviewed the AREVA Memorandum of Agreement (MOA) with the Richland Fire Department and also interviewed a battalion chief at the Richland Fire Department. The inspectors determined that the off-site fire department had been offered opportunities for site orientation and training and that a pre-emergency plan had been maintained by the licensee at the fire station. No significant issues were identified.

The inspectors reviewed several corrective action reports to determine if the licensee was adequately identifying, assessing, and resolving issues. The inspectors also reviewed the Horn Rapids Road (HRR) Facility 2010 Fire Protection Assessment report and the corrective action reports it generated. The inspectors determined that the licensee was adequately identifying and correcting issues.

b. Conclusion

No significant findings were identified.

B. Radiological Controls

1. Waste Management (IP 88035)

a. Inspection Scope and Observations

The inspectors evaluated whether the licensee has established and maintained adequate procedures and quality assurance programs to ensure compliance with the requirements of 10 CFR 20 and 10 CFR 61 applicable to low-level radioactive waste form, classification, stabilization, and shipment manifests/tracking.

The inspectors reviewed procedures related to radioactive waste. The procedures were clearly written and adequately delineated responsibilities related to radioactive waste management. No waste packaging operations were on-going at the time of the inspection.

The inspectors reviewed the quality assurance program for radioactive waste management and determined that the licensee was performing the required audits. The findings from these audits were entered into the licensee's corrective action program for resolution.

The inspectors reviewed the licensee's program for classifying low-level radioactive waste. The inspectors reviewed the procedures for classifying waste as well as records relating to waste. The inspectors reviewed the licensee's program for ensuring that waste was properly packaged to ensure the waste form met the requirements of 10 CFR 61.56.

The inspectors reviewed the licensee's procedures for labeling waste shipments and tracking radioactive waste. The procedures were adequate to ensure that radioactive waste was properly labeled and specified actions to be taken should the shipments not reach the intended destination in the time specified. Additionally, the inspectors reviewed the procedures for placement, inspection, and repackaging of radioactive waste.

The inspectors performed walk-downs of selected radioactive material storage areas. These areas had adequate postings for the materials being stored in the area and the material was safely stored in accordance with the nuclear criticality safety requirements. The containers were properly labeled to reflect their contents and were in good physical condition.

b. Conclusion

No significant findings were identified.

2. Transportation (IP 86740)

a. Inspection Scope and Observations

The inspectors evaluated the licensee's program and associated procedures to ensure radiological and nuclear safety during the receipt, packaging, delivery, and private transport of licensed radioactive materials. The inspector also evaluated licensee compliance with the applicable transport regulations by reviewing shipping records involving the shipment and receipt of special nuclear material products and waste disposal. The licensee ensured that

the appropriate documentation accompanied the packages being shipped. The licensee recorded the required information on the packaging and shipping orders including the transportation index, package activity, labeling, and placards.

Transition to Areva Transnuclear

The inspectors held discussions with personnel from ANP and Transnuclear, Inc., (TN) regarding the status of the transition of several ANP Certificates of Compliance (CoCs) to TN's possession and assumption of certain transportation activities by TN for ANP shipments. The team determined that implementation of the process is nearing completion. Several CoCs have been reissued in TN's name (ANP will retain some CoCs) and TN personnel stationed at ANP are performing package shipment logistical activities in support of ANP. The inspectors noted improved use of checklists and development of systematic processes to ensure packages are properly maintained and physically acceptable for transport, and that all transport logistics, including foreign approvals for export shipments, are addressed prior to the introduction of packages for transport.

The inspectors reviewed the shipping records for several domestic and export shipments in a variety of NRC CoC packages and Department of Transportation (DOT) revalidated packages (for exports). The inspectors determined that ANP/TN met the requirements of 10 CFR 71.17, 71.21, and 71.87 for the shipments reviewed. No significant concerns were identified.

No shipments of radioactive material occurred during the inspection. The inspectors reviewed the training records to ensure that the licensee had administered 49 CFR 172.704 hazardous materials transportation training as required by the Department of Transportation and their license. The inspectors reviewed shipping records and procedures for the various types of shipments and packages the licensee uses.

The inspectors verified that the licensee met the 10 CFR 71.21 conditions required to use the general license provision for transport of licensed material. The inspector reviewed audits of the transportation program and determined the licensee was performing periodic audits of the program as required. The results of the audits were appropriately addressed in the corrective action program.

The inspectors reviewed ANP's corrective actions for concerns identified in the June 2011 inspection in the area of transportation activities. These concerns (along with others) were entered into the WebCAP system as Condition Report 2011-4460-FA. The transportation related concerns involved: 1) the TNF-XI re-use acceptance report did not contain all required inspection actions from the associated TNF-XI SAR Chapter 7, and required temperature measurements and thermal generation calculations were not being made, 2) CoC referenced drawings were not in ANPs possession, and 3) ANP was to discuss with DOT whether it was acceptable for packages to be introduced into transport pending approval of certain documents on the receiving end. The team reviewed the corrective actions for these concerns and assessed that the actions taken were adequate and addressed the underlying concerns.

In addition, the inspectors reviewed the TNF-XI operating procedures to determine if the change in the operating procedures described in the most recent NRC Safety Analysis Report (SAR) Revision (Rev.) 7, Chapter 7 "Operating Procedures," Section 7.1.1 "Preparation of the TNF-XI for Loading," was reflected in the site implementing procedure. It

was not. The site implementing procedure, Controlled Form FRM-20147, "TNF-XI Shipping Container Re-use Acceptance Report," Version 2.0, described one of the overchecks for shipping container re-use of the TNF-XI shipping container as a visual inspection of the four outer plug bayonets (locking devices) for damage. This was the description of the number of outer plug bayonets given in the SAR Rev. 3. However, there are actually six outer plug bayonets, as described in the design drawings for the TNF-XI. The inner lid has four bayonets.

Revision 7 of the SAR states that rather than inspecting a given number of bayonets on either the outer plug or inner lid, it states to inspect "all" of the bayonets thus eliminating any confusion of how many bayonets to inspect and on which of the covers.

Upon identification of this issue by the NRC, Areva TN, as the holder of the Competent Authority Certification from the US DOT for domestic use of the TNF-XI, which incorporates the SAR, issued a condition report (2012-5414-FA EHS&L) identifying the issue and directing a change to the implementing procedure for packaging re-use inspections to reflect the most recent version of the SAR.

No safety significance is associated with this issue.

Non-Conforming Packages

During a walk-down to inspect packages stored on site, the inspectors noted a variety of white hold tags that appeared faded or illegible attached to packages and in some cases lying on the ground attached to rope barriers. In some instances, for the tags that were legible, not all required information was entered as required by the procedure governing the use of the hold tags, Standard Operating Procedure (SOP)-40855, "Tagging of Potential Nonconforming Items and Nonconforming Items," Version 5.0. These issues were brought to ANP's attention and entered in WebCAP system as Condition Report 2012-5298-FA. In Areva's review of SOP-40855, and in discussion with ANP quality assurance (QA) personnel, the inspectors concluded that the SOP does not provide adequate instructions to personnel on the processing of white potential nonconformance tags once they are hung in that no guidance is provided on how issues that led to hanging of the tag (or the time frame for their resolution) are to be conducted. As the use of the white tags under SOP-40855 is considered to be an activity affecting quality, and as the SOP as reviewed at the time of the inspection did not prescribe how potentially nonconforming conditions are to be resolved once identified, the lack of procedural guidance is not considered to be a violation of 10 CFR 71.111, "Instructions, procedures, and drawings." While 10 CFR 71.111 states, in part, that the licensee (ANP) shall prescribe activities affecting quality by documented instructions or procedures of a type appropriate to the circumstances, no safety significance is identified with this issue.

The inspectors did not find any examples when the licensee had used a non-conforming packaging for shipping.

b. Conclusion

No significant findings were identified.

C. Special Topics

1. Follow-up on Previously Identified Issues (IP 92702)

a. Unresolved Item (URI) 70-1257/2012-002-01: Review of the licensee chemical exposures recalculations to verify compliance with performance requirements. The licensee revised the chemical hazards analyses to include updated PAC/TEEL values and added Washington state STEL values into the analyses methodology. In addition, the licensee removed the reference to outdated chemical exposure limits values. The inspectors reviewed selected chemical exposure calculations and determined that the licensee complied with the performance requirements. This item is considered closed.

b. Violation (VIO) 70-1257/2010-010-001: Failure to close and renew interlock bypass permit in accordance with procedure MCP-30149 V 3.0. The licensee failed to properly implement procedure MCP-30149 Version 3.0 by allowing a permit to remain open past its expiration date and not renewing or issuing a new interlock bypass permit, as required in Sections 6.5 and 6.7. Specifically, the licensee failed to close Interlock Bypass Permit # 326 for IROFS #4722 and Permit # 322 for IROFS #4703 within the required seven days. In addition, the licensee failed to renew or issue a new interlock bypass permit. During the inspection, a review of open permits and the permit log was completed and all permits were performed in accordance with procedure MCP-30149. This item is considered closed.

c. Enforcement Action (EA)-10-041: A violation of an Advisory Engineer who deliberately falsified international transportation documents which are material to the NRC. On December 9, 2008, and on March 11 and 18, 2009, a licensee employee deliberately altered (falsified) the date stamp on three documents entitled “Approval to Transit a UK [United Kingdom] Port”. These actions violated the requirements of 10 CFR 71.5(a), and 49 CFR 172.204(a), associated with the transportation of Class 7 (radioactive) material. Because the DfT transit approvals were falsified, the licensee failed to comply with 49 CFR 172.204(a) which requires the licensee to attest to the fact that the contents of the consignment (shipment) were in all respects in proper condition for transport according to applicable international and national governmental regulations. This item is considered closed.

2. Event Follow-up

Event Notification (EN) 47908: Licensee Event Report (LER) 70-1257/2012-002-0: Improperly Analyzed Condition. On May 8, 2012, the licensee reported that based on a letter issued by the NRC dated May 7, 2012 from John D. Kinneman to Janet R. Schlueter, they concluded that the facility ISA was not adequate because unacceptable consequences resulting from some process upsets were determined to be "not credible" based on plant conditions or features that were not declared IROFS.

The licensee put in place a justification of continued operation under compensatory safety measures (E12-01-007). The compensatory measures instituted include:

- All proposed changes to the facility will continue to be evaluated for potential impact to the facility ISA before they are made.

- NCS audit and walk through activities will focus on changes to process areas to assure continued compliance with 70.72 and will verify the confined presence of design features used as baseline inputs or assumptions in the present ISA.

In addition, although these items are not individually identified as IROFS, the ISA Summary states that general criticality safety program elements are considered IROFS. However, they are not always individually identified and used in specific accident sequences. Examples of these items are: equipment dimensions, criticality safety analysis assumptions, and bounding assumptions. This item remains open.

D. Exit Meeting

The inspection scope and results were presented to you and members of your staff at various meetings throughout the inspections and summarized at exit meetings on July 12 and 26 to you and your staff. No dissenting comments were received. Proprietary information was discussed but not included in this report.

SUPPLEMENTARY INFORMATION

1. KEY POINTS OF CONTACT

Name	Title/Area
S. Artzer	Design Technician (fire alarms and components)
S. Cline	Mechanical Maintenance Supervisor
J. Deist	Emergency Preparedness Coordinator & Fire Protection
D. Harris	Principal Mechanical Engineer (fire suppression)
W. Koglin	Principle Engineer (radiological oil containment)
P. Lee	Preventative Maintenance Administrator
B. Link	Environmental, Health, Safety and Licensing Manager
C. Manning	Criticality Safety Manager
J. Perryman	Principle Engineer (non-radiological oil containment)
T. Tate	Safety, Security, and Emergency Preparedness Manager
C. Ward	Principle Engineer (fire dampers)

2. LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Closed

70-1257/2012-002-01	URI	Review of the licensee chemical exposures recalculations to verify compliance with performance requirements. (Paragraph C.1)
70-1257/2010-010-001	VIO	Failure to close and renew interlock bypass permit in accordance with procedure MCP-30149 V 3.0. (Paragraph C.1)
70-1257/EA-10-041	VIO	A violation of an Advisory Engineer who deliberately falsified international transportation documents which are material to the NRC on December 9, 2008, and on March 11 and 18, 2009, a licensee employee deliberately altered (falsified) the date stamp on three documents entitled “Approval to Transit a UK [United Kingdom] Port”. (Paragraph C.1)

Discussed

70-1257/2012-002-0	LER	EN47908: Improperly Analyzed Condition

3. INSPECTION PROCEDURES USED

86740 Inspection of Transportation Activities
88020 Operational Safety
88035 Radioactive Waste Management
88054 Fire Protection (Triennial)
88055 Fire Protection (Annual)
92702 Followup on Corrective Actions for Violations and Deviations

Attachment

4. DOCUMENTS REVIEWED

Records:
Creighton Engineering, Inc, Hydraulic Design Information Sheet for Dry Conversion Bldg.
Creighton Engineering, Inc, Hydraulic Design Information Sheet for Specialty Fuels Bldg.
Hot Work Permits covering January – July, 2012
Operator Training Records - Various Positions
Training Curriculum Status and Data Reports - Various Positions

Procedures:
Resource Management - Quality Section, Rev. 003, dated January 26, 2012
US Fuel Business Training Process Procedure, Rev. 006, dated March 14, 2012

1703-76, Issue Investigation and Causal Analysis, Rev. 016, dated January 18, 2012
1703-77, US Fuel BU Corrective Action Program, Rev. 029, dated September 7, 2011

C774P001, Fire Sprinklers 3MO OU

CG06P001-005, Fire Hazard Inspection PM (IROFS 4503)
CG06P012, Fire Hydrant Flow Test 12 MO RE
CG06P013, Fire Door 12 MO MW
CG06P014, Fire Wall Inspection 6 MO SA
CG06P016, Fire Damper 12 MO MW
CG06P017, Door Fire SF 174 12 MO MW
CG06P018, Fire Damper 12 MO MW

E08-04-2.12, Richland Fire Department, Rev. 2
E-12-01-003, Environmental, Health, Safety and Licensing Audit and Assessment Program, Rev. 5
E12-01-007, Justification for Continued Operation under Compensatory Safety Measures, Rev. 4
E14-02-001, ELO Building Fire Hazards Analysis, Version 2
E14-02-003, SF Building Fire Hazards Analysis, Version 1
E14-02-004, UO_2 Building Fire Hazards Analysis, Version 4
E14-02-005, Dry Conversion Building Fire Hazards Analysis, Version 2
E14-04-002, HNO_3, CO_2, and TBP Exposure from Supercritical CO_2 Extraction Process Loss of Containment, Version 4.0

E04-NCSS-G06, Fire Prevention and Fire Fighting, Rev. 18
E04-NCSS-186, Supercritical CO_2
E04-NCSS-350 Powder Drum Warehouse (13A), Version 9.0
E04-NCSS-380, UO_2 Pellet Sintering, Version 11.0
E04-NCSS-390, UO_2 Pellet Grinding

MCP 30028, Confined Area Entry, Rev. 8
MCP 30031, Flammable and Combustible Liquids Storage and Handling, Rev. 9
MCP 30039, Hot Work Procedure, Version 6
MCP-30153, Guidelines for IROFS Design and Documentation Requirements, Version 5.0
MCP-30342, Boat Weight Verification, Version 3.0
MCP-30379, Construction or Modification Change Control, Version 10.0

PG: 000048, Hydrant Flush 6MO PF
PG: 000147, Sprinkler System – Dry 1MO PF
PG: 000148, Sprinkler System – Wet 1MO PF

PM000030, Annual Emergency Light Functional Test PM
PM000334, Water Valves 1MO PF
PM001868, Main Water Valves 12MO PF
PM003884, Monthly Emergency Light Operational Check PM
PM004392, Sprinkler Dry Pipe 5YR RE
PM005093, Supply Duct Smoke Func 12MO EL (Smoke detectors in the ducts for multiple buildings)
PM005112, FA UO_2/DRYCON Est3 Func 5Y EL (Heat detectors & pull-stations)
PM005126, FA Sup/Duct Smk K73 1 YR EL (Smoke detectors in the ducts for the south portion of UO_2
PM, CG06P011, Fire Alarm Bldg Evac 12 MO SA (Annual Fire Drill)
PM, CG06P014, Fire Wall Inspection 6MO SA, dated June 30, 2012
PM, CG06P014, Fire Wall Inspection 6MO SA, dated December 30, 2011

SOP-40382, Solid Waste Packaging Procedure, Version 25
SOP-40486, Richland Operations General Rules, Version 23
SOP-40857, Maintenance Hot Work Permit Procedure, Version 4
SOP-40336, UO_2 and NaF Sintering, Version 1.1
SOP-40343, Furnace Operator Guidance Lines 1-6, Version 7.0
SOP-40344, UO_2 and NaF Grinding, Version 29.0

Standard Operating Procedure, Fuel Bundle Inspection, Version 6.1
Standard Operating Procedure, Solvent Extraction Process, Version 17.0

Condition Reports:
CR-2012-400-FA
CR-2012-1554-FA
CR-2012-3025-FA
CR-2012-3094-FA
CR-2011-3213-FA
CR-2012-3342-FA
CR-2012-3365-FA
CR 2012-5165-FA
CR 2012-5525-FA
CR-2011-9377-FA
CR 2011-9451-FA
CR-2011-42299-FA

Preventive Maintenance Orders:
13100676, 13103365, 13122216, 13122450, 13122503, 13122599, 13125670, 13125759, 13125912, 13126072, 13126076, 13126077, 13126101, 13126190, 13126191, 13128372, 13128373, 13131186, 13133502, 13136108, 13138764, 13139093, 13139164, 13139165, 13139211

Maintenance Orders:
11167123, Replace Fire Sprinkler Drain Valve
11181832, Fire Alarm Device Repair
11181833, Fire Door Needs Repair

Work Notification:
Work Notification 7238537
Work Notification 7238551, 2012 2nd Quarter Fire Wall/Door Inspection, Fire Door Needs Repair

Drawings:
Areva Site General Arrangement:
DCF, 1st Floor Plan
NaF Pellet Fab Equipment Furnace
UO_2 Bldg

CSA- 607.590 – Combustible Loading Drawing for Process Areas

Drawing CSA 609,669, Line 1,2,3,4 & NAF ventilated sintering boat and plate, Rev. 15, dated April 2007
Drawing EMF-614,621, Sintering furnace Line 4 instrument location diagram, Rev. 0, dated July 2000

EMF 608,610 - Fire and Water Supply Arrangement Drawing

Flow chart for FIREWORKS (fire alarm system)

Pre-Emergency Building Plans, EMF-608, 623:
DCF (Floors 1-4),
ELO Building
SF Building
UO_2 Building (Floors 1 & 2),
Warehouses 1, 2, 3 Complex

Other Documents:
2012 PERT Training (Hazmat Spill Response and Decontamination) - Lesson Plan
Apparent Cause Analysis - CR 2011-321
Areva GET, Fire Extinguisher, and Hands-on Training slides
Areva Richland ISA Summary
Areva Richland License Application, Chapter 7, Fire Safety
Audit No. 12:03, Biannual Chemical Safety Audit, dated February 29, 2012
Audit No. 12:19, Fuel America Internal Audit Report 2012
Continuing Training Evaluation - Rod Bundle, Rev. 000, dated May 6, 2011
E-19-05-001, Richland Manufacturing Facility Environmental Health and Safety Policy, Rev. 3
Fire Damper and Door PM's
HRR Site Access Training
Instructor Guide - OJT Radiological Worker Safety Training Practical, Rev. 4, dated February 16, 2007

Nuclear Criticality Safety Training for New Fissile Workers-Instructors Guide, Rev. 3, June 2007
OJT Checklist - Rod Bundle, Rev. 001, dated February 24, 2012
OJT Checklist - Waste Operations, Rev. 001, dated February 24, 2012
PM print-out for sprinklers and water valves
Radiological Worker Initial Safety Training
Standard Work Instruction Grinder, Version 10.0
Training and Qualification Audit Report, dated December 22, 2011
U.S. Fuel Training Monthly Report, January 2012

Pre-Emergency Plans (Pre-Fire Plans) for:
DCF
ELO Building and Gadolinia Scrap Uranium Recovery Facility
SF
UO_2 Building

PIN 19411.63
PIN 19411.76
PIN 35783.00

PM C380P001
PM C380P003
PM C380P004
PM C380P005
PM C380P006
PM C380P007
PM C390I001
PM C390I003
PM C390I005
PM C390I006