

UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION II

245 PEACHTREE CENTER AVENUE NE, SUITE 1200 ATLANTA, GEORGIA 30303-1257

July 29, 2011

Ms. Michelle Moore Interim Site Manager AREVA NP, Inc. Lynchburg Manufacturing Facility P. O. Box 11646 Lynchburg, VA 24506-1646

SUBJECT: AREVA NP, INC. (LYNCHBURG) - NRC INTEGRATED INSPECTION REPORT

NO. 70-1201/2011-003

Dear Ms. Moore:

The U.S. Nuclear Regulatory Commission (NRC) conducted announced, routine inspections at your Lynchburg, Virginia fuel facility. The enclosed report presents the results of the inspections. The purposes of the inspections were to perform routine reviews of the implementation of the radiation protection, environmental, radioactive waste management, transportation of radioactive materials, emergency preparedness. This review was performed to determine whether activities authorized by the license were conducted safely and in accordance with NRC requirements. At the conclusion of the inspections, the findings were discussed with members of your staff at exit meetings held on April 14, and June 21, 2011.

The inspections were an examination of activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. 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 managers and staff. Based on the results of the inspections, no violations of regulatory requirements 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 athttp://www.nrc.gov/NRC/ADAMS/index.html http://www.nrc.gov/reading-rm/adams.html.

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Should you have any questions concerning this letter, please contact me at 404-997-4629.

Sincerely,

/RA/

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

Docket No 70-1201 License No. SNM-1168

Enclosure:

NRC Inspection Report No. 70-1201/2011-003

cc w/encl:

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

Robert W. Sharkey, Manager Environmental, Health, Safety & Licensing Areva NP, Inc. P. O. Box 11646 Lynchburg, VA 24506-1646

Leslie P. Foldesi, CHP, Director Department of Health James Madison Building 109 Governor Street, Room 730 Richmond, VA 23219 M. Moore 2

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Leslie P. Foldesi, CHP, Director Department of Health James Madison Building 109 Governor Street, Room 730 Richmond, VA 23219

 $\sqrt{}$ PUBLICLY AVAILABLE \square NON-PUBLICLY AVAILABLE \square SENSITIVE $\sqrt{}$ NON-SENSITIVE

ADAMS: $\sqrt{\text{Yes}}$ ACCESSION NUMBER: ML112130449 $\sqrt{\text{SUNSI REVIEW COMPLETE }}\sqrt{\text{FORM 665 ATTACHED}}$

OFFICE	RII:DFFI	RII:DFFI								
SIGNATURE	/RA for MR by	/RA/								
	MThomas/									
NAME	MRoberts	MThomas								
DATE	7/29/2011	7/29/2011	8/	/2011	8/	/2011	8/	/2011	8/	/2011
E-MAIL COPY?	YES NO	YES NO	YES	NO	YES	NO	YES	NO	YES	NO

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Letter to Ms. Michelle Moore from Marvin D. Sykes dated July 29, 2011

SUBJECT: AREVA NP, INC. (LYNCHBURG) - NRC INTEGRATED INSPECTION REPORT

NO. 70-1201/2011-003

Distribution w/encl:

M. Sykes, RII

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R. Thompson, NMSS

M. Diaz, NMSS

M. Roberts, RI

J. Joustra, RI

PUBLIC

U.S. NUCLEAR REGULATORY COMMISSION REGION II

Docket No.: 70-1201

License No.: SNM-1168

Report No.: 70-1201/2011-003

Licensee: AREVA NP, Inc. - Lynchburg

Location: Lynchburg, Virginia

Dates: April 11 through14, 2011 and

June 21, 2011

Inspector: Mark Roberts, Senior Health Physicist, Region I

Mary Thomas, Senior Fuel Facility Inspector, Region II

Approved by: Marvin D. Sykes, Chief

Fuel Facility Inspection Branch 3 Division of Fuel Facility Inspection

EXECUTIVE SUMMARY

AREVA NP, Inc. - Lynchburg NRC Integrated Inspection Report No. 070-01201/2011-003

This is a quarterly integrated inspection report that includes routine, announced inspections that was conducted by NRC regional inspectors during normal shift in the areas of radiation protection, environmental, radioactive waste management, transportation of radioactive materials, emergency preparedness. During these inspections fuel fabrication activities had ceased. Dismantlement of the pellet vault and pellet loading room was ongoing during the April inspection. Excavation of portions of the waste water system was ongoing during the June inspection. The inspections included field observations of work activities, review of selected records, and interviews with plant personnel.

Radiation Protection

The inspectors verified that the radiation protection program was in compliance with regulations, the license, and approved procedures. No issues of safety significance were identified.

Effluent Control and Environmental Protection

The inspectors verified that the environmental protection program was in compliance with regulations, the license, and approved procedures. No issues of safety significance were identified.

Radioactive Waste Management

Radioactive waste activities were performed in accordance with regulatory requirements and procedures.

Inspection of Transportation Activities

Shipments of radioactive materials were prepared and shipped in accordance with applicable regulations and plant procedures. Shipping records were properly completed and maintained in accordance with applicable regulations.

Emergency Preparedness

The emergency preparedness program was maintained in a state of operational readiness and was coordinated with offsite support agencies.

Decommissioning Inspection Procedure for Fuel Cycle Facilities

The inspectors verified that decommissioning and dismantling activities were safely conducted. No issues of safety significance were identified.

Attachment

List of Persons Contacted
List of Items Opened, Closed, and Discussed
Inspection Procedures Used
Documents Reviewed

REPORT DETAILS

1. Summary of Plant Status

The AREVA NP Lynchburg facility has ceased fuel fabrication activities. Dismantlement of the pellet vault and pellet loading room were ongoing during the April inspection and excavation of the waste water line was ongoing during the June inspection.

2. Radiation Protection (IP 88030)

a. Scope and Observations

The inspectors reviewed radiological survey records for accuracy and completeness. Inspectors verified radiological sign postings accurately reflected plant radiological conditions. The inspectors confirmed current radiological survey maps accurately described current radiological conditions in radiological work areas. Also, inspectors verified that current radiological work permits (RWPs) adequately prescribed radiological protective measures and were available to workers. No issues of safety significance were identified.

Inspectors confirmed that licensee personnel performed daily operational response checks on portable survey meters. Licensee personnel were knowledgeable of the daily response check requirements and associated procedural requirements. The inspectors verified that portable survey equipment available for use was within current calibration. Calibration records for portable survey meters were accurate with no concerns identified. Instrument response checks and calibration sources were appropriate for their intended function. Leak tests on sealed sources were performed as required. Daily operational checks of radiological laboratory equipment, utilized for the analysis of air samples and for determination of contamination levels, were performed in accordance with approved procedures.

Inspectors reviewed audits and self-assessments for the radiation protection program. Audit findings were entered into the licensee's corrective action program in accordance with approved procedures. The self-assessments were adequate with a low threshold for identifying issues. No issues of safety significance were identified.

Inspectors reviewed the latest annual (ALARA) As Low as Reasonably Achievable report. Based on a review of documentation and discussions with licensee personnel, no issues were identified. Inspectors noted that annual personnel exposures were well below regulatory exposure limits.

b. Conclusions

The inspectors verified that the radiation protection program was in compliance with regulations, the license, and approved procedures. No issues of safety significance were identified.

3. Effluent Control and Environmental Protection (IP 88045)

a. Scope and Observations

The inspectors reviewed procedures relating to the conduct and administration of the effluent and environmental control programs. The inspectors interviewed personnel regarding processes utilized by the licensee to evaluate, review, track and trend data associated with these programs. The inspectors found that adequate controls were in place to identify adverse trends and that appropriate action levels had been established to provide early indication of adverse trends. The inspectors reviewed and discussed with licensee personnel the most recent semi-annual effluent report and the 2010 Annual ALARA and Environmental Report. Effluent releases were noted to be well below regulatory limits. No adverse trends or issues of safety significance were identified.

b. Conclusions

The inspectors verified that the environmental protection program was in compliance with regulations, the license, and approved procedures. No issues of safety significance were identified.

4. Radioactive Waste Management (IP 88035)

a. Scope and Observations

The inspectors reviewed written procedures and observed operators performing tasks related to radioactive waste. The procedures were clearly written and delineated responsibilities related to radioactive waste management. The operators were cognizant of their responsibilities and the requirement to perform tasks in accordance with facility procedures. No issues were identified relating to management controls.

The inspectors reviewed the quality assurance program for radioactive waste management and determined that the licensee was performing audits as specified in the license application. The findings from these audits were appropriately being entered into a corrective action program for resolution.

The inspectors reviewed the licensee's program for classifying low-level radioactive waste. The inspectors looked at the procedures for classifying waste as well as records relating to waste. The inspectors determined that the licensee had an effective program for determining the classification of low-level waste.

The inspectors reviewed the licensee's program for ensuring that the waste form meets the requirements of 10 CFR 61.56. The licensee had adequate procedures in place to ensure that waste was packaged in compliance with the regulations.

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 based on the contents of the shipment, and the procedures specified actions to be taken should the shipments not reach the intended destination in the time specified. No radioactive waste shipments were made during the inspection.

The inspectors reviewed the procedures for placement, inspection, and repackaging of radioactive waste. The licensee had programs in place to ensure that solid waste was being placed in specific storage areas based on the type of waste. The licensee also had requirements for periodic inspection and repackaging of waste, if required. No issues were identified.

The inspectors performed walk-downs of selected licensee radioactive storage areas. The storage areas had adequate postings to ensure that the proper material was being stored in the area and the material was safely stored in regard to nuclear criticality safety requirements. The containers were properly labeled to reflect the material within the containers and the containers were generally in good physical condition. The containers were being stored in a manner that provided immediate access for inspections. No issues were identified.

b. Conclusions

Radioactive waste activities were performed in accordance with regulatory requirements and procedures.

5. <u>Inspection of Transportation Activities (IP 86740)</u>

a. Scope and Observations

The inspectors reviewed a number of shipping records involving the shipment and receipt of special nuclear material (SNM) products and waste disposal. The licensee ensured that the appropriate documentation accompanied all 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. No shipments of SNM or radioactive waste occurred during the inspection.

The inspectors interviewed personnel responsible for the shipment and receipt of material and verified they were knowledgeable of U.S. Nuclear Regulatory Commission and U.S. Department of Transportation requirements in addition to plant procedures for the transport of radioactive materials. The inspectors reviewed the training of the transportation staff to ensure they had received the proper training as specified by the license. No issues were identified.

The inspectors reviewed audits of the transportation program and determined the licensee was performing periodic audits of the transportation program as required. The results of the audits were being appropriately addressed in the corrective action program. No issues were identified.

The inspectors concluded that the transportation activities reviewed were conducted in accordance with requirements.

b. Conclusions

Shipments of radioactive materials were prepared and shipped in accordance with applicable regulations and plant procedures. Shipping records were properly completed and maintained in accordance with applicable regulations.

6. <u>Emergency Preparedness (IP 88050)</u>

a. Scope and Observations

The inspectors reviewed emergency equipment and supply locations maintained by the licensee. Equipment and supplies were maintained in accordance with approved procedures and readily available for use. Equipment requiring routine calibration was within current calibration.

The inspectors reviewed the emergency response team roster to evaluate the availability of sufficient numbers of suitably trained and qualified individuals to fulfill key emergency response positions. The inspectors discussed staffing requirements and aspects of the training and qualification program for emergency response personnel with responsible individuals. No concerns were identified.

No significant changes had been made to emergency response program procedures since the last inspection. Emergency response procedures were found to be current.

The inspectors reviewed the mutual aid letters for offsite support agencies, and interviewed the Fire Chief for the Concord Volunteer Fire Department, the Sheriff for Campbell County, and the Managing Director for Support Services for the Centra Health – Lynchburg General Hospital (Lynchburg General). The inspectors also toured the Support Services areas at Lynchburg General. Lynchburg General had a room to treat an injured contaminated individual; and was supplied with equipment to respond to a radiological or chemical emergency, including such items as respirators, decontamination equipment, and triage tents.

b. Conclusions

The emergency preparedness program was maintained in a state of operational readiness and was coordinated with offsite support agencies.

7. <u>Decommissioning Inspection Procedure for Fuel Cycle Facilities (IP 88104)</u>

a. Scope and Observations

The inspectors reviewed procedures relating to the conduct and administration of decommissioning activities that were conducted in the Main Plant and removal of sections of a buried waste water line. The inspectors interviewed personnel regarding processes utilized by the licensee to monitor work activities associated with excavating the waste water line and dismantling equipment in the main plant. The inspectors found that adequate radiological and industrial controls were in place to safely conduct these operations. A review of licensee sampling data from interior excavations of the waste water line did not identify any elevated activity in the soil. Samples of the waste water line excavation material were taken during the June inspection from exterior locations. Results will be reviewed and discussed in a subsequent inspection report. No adverse trends or issues of safety significance were identified.

b. <u>Conclusions</u>

The inspectors verified that decommissioning and dismantling activities were safely conducted. No issues of safety significance were identified.

8. <u>Exit Meeting</u>

Exit meetings were held on April 14 and June 21, 2011, with M. Moore and members of her staff.

ATTACHMENT

1. List of Persons Contacted

Name <u>Title</u>

M. Moore Interim Site Manager

D. Barger Facilities and Maintenance Manager

T. Blanks Security & Transportation, Environmental Management – Manager

R. Sharkey Licensing Manager
T. Osborne Health Physics

G. Powers Material Control and Accounting

2. List of Open, Closed, and Discussed Items

<u>Item Number</u> <u>Status</u> <u>Description</u>

None

3. Inspection Procedures Used

IP 88030 Radiation Protection

IP 88035 Radioactive Waste Management

IP 88045 Effluent Control and Environmental Protection

IP 88050 Emergency Preparedness

IP 88104 Decommissioning Inspection Procedure for Fuel Cycle Facilities

4. List of Documents Reviewed

Procedure SL-1160, Configuration Management and Operational Change Request Program

Procedure SL-1201, Radiological Work Permit Program

Procedure SL-1220, Surface Contamination

Procedure SL-1235, Contaminated Waste Gamma Scanning

Procedure SL-1270, Environmental Monitoring

Procedure SL-1285, Isotopic Calculation Activity Method

Procedure SL-1290, Radiological Surveys

Procedure SL-1308, Emergency Response Procedure. Rev. 21

Procedure SL-1308, Addendum 5, Unscheduled Loss of Utilities, Rev. 6

Procedure SL-1308, Addendum 8, Adverse Weather/Seismic Conditions, Rev. 5

Procedure SL-1311, Waste Control, Rev. 12

ProcedureSL-1600, Shipment and Receipt of Radioactive Material, Rev. 17

Procedure SL-1600, Addendum 5, Radioactive Shipments to Processor, Rev. 10

Mutual Aid Agreement with Concord Volunteer Fire Department, Inc., dated January 10, 2011

Mutual Aid Agreement with Centra Health – Lynchburg General Hospital, dated

January 13, 2011

Sealed Source Inventory Record, February 3, 2011

Sealed Source Survey Record, February 3, 2011

AREVA MAR Facility – Radiation Protection Audit, October, 2010

2010 ALARA and Environmental Report – Mount Athos Road, March 21, 2011

RWP 11-062, February 28, 2011 - Pre-job Checklist