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U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Director, Office of Nuclear Material Safety
and Safeguards
11555 Rockville Pike
One White Flint North
Rockville, MD 20852

Subject: Response to Notice of Violation (70-1257/2010-010)

Ref.: 1. Notice of Violation and Nuclear Regulatory Commission Inspection Report Number 70-1257/2010-010; M.D. Sykes to R.J. Land, December 30, 2010

Attached are AREVA NP's (AREVA's) responses to the violations described in the referenced letter.

If you have questions or require further information, please contact me at 509-375-8409 or C. D. Manning of my staff at 509-375-8237.

Very truly yours,

R. E. Link, Manager
Environmental, Health, Safety, & Licensing

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Reply to Notice of Violation
NRC Inspection Report 70-1257 / 2010-010; AREVA NP Inc.

Violation VIO 70-1257/2010-010-01

The violation as stated in the referenced Notice of Violation (NOV) is as follows:

> Safety Condition No. S-1 of Special Nuclear Material (SNM) License No.: SNM-1227 requires that material be used in accordance with the statements, representations, and conditions in the license application dated October 24, 2006, and supplements dated: December 13, 2006 (License Application and RAI Responses); December 10, 2008 (Revised License Renewal Application); e-mail from R.E. Link titled: "Compliance Plan," dated March 5, 2009; June 12, 2008, August 22, 2008, June 5, 2009, July 13, 2009, November 11, 2009, December 4, 2009, February 4, 2010, e-mail and attachment submitted by C.D. Manning on April 16, 2010, April 28, 2010, and July 1, 2010.
>
> 1. Section 11.1.1, Configuration Management Policy, of Revised License Renewal Application; License No. SNM-1227, dated December 10, 2008, states that "It is management's policy to control facilities and processes so that the safety basis is maintained and that changes to facilities and processes are evaluated according to approved written procedures and consistent with 10 CFR 70.72."
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> Section 6.5, Permit Duration, of facility procedure MCP-30149 Version (V) 3.0, "Equipment Interlock Bypass," states in part, that the duration of the permit is a function of the severity of the bypass and the maximum durations allowed for a safety related bypass permit are seven days.
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> Section 6.7, Renewals, of facility procedure MCP-30149 V 3.0, "Equipment Interlock Bypass," states in part, that permits may be renewed by issuing a new permit with the same approvals as the original permit and it is expected that the condition requiring an interlock bypass should normally be resolved within the original duration.
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> Contrary to the above,
> a) from August 7, 2009 to November 30, 2010, the licensee failed to properly implement procedure MCP-30149 V 3.0 Sections 6.5 and 6.7, by allowing Interlock Bypass Permit # 326, for item relied on for safety (IROFS) #4722, a mass/ moderation control, to remain open for a period in excess of seven days and by not properly renewing the permit.
>
> b) from March 23, 2009 to December 1, 2010, the licensee failed to properly implement procedure MCP-30149 V 3.0 Sections 6.5 and 6.7, by allowing Interlock Bypass Permit # 322 for IROFS #4703, a moderation control, to remain open for a period in excess of seven days and by not properly renewing the permit.

This is a Severity Level IV violation. (VIO 70-1257/2010-010-01)

Position Statement

AREVA does not dispute the violation in that Interlock by-pass permits 322 and 326 were not executed in complete compliance with MCP-30149 Version 3.0. However, AREVA needs to clarify certain aspects of the referenced inspection report.

First, in reference 1, interlock by-pass permit 326 is described as remaining open one year and four months beyond the expiration date. It is important to note that the interlock by-pass permit has an initiation and expiration date on the permit and on the permit log. The permit is posted in the field at the location of the bypass. Each permit and the permit log also have a close out date. The procedure version in effect at the time of the inspection required the permit to remain open until such time as the equipment has been functionally checked and is placed back into service. In the case of this permit, the responsible individual failed to sign and date the close-out block on the permit and on the permit log. AREVA notes that all required functional checks and lockout/tagout requirements were met prior to placing the equipment back into service.

AREVA agrees that the individual's failure to sign and date the close-out block on permit 326 when it was removed from the field, and failure to sign and date the permit log on the closeout line for this permit is a violation of procedure MCP-30149.

Reference 1 also describes interlock by-pass permit 322 as having three different permits with the same number. Procedure MCP-30149 states "Permits may be renewed by issuing a new permit with the same approvals as the original permit." The procedure does not specifically state that a new permit number must be obtained. AREVA acknowledges that the permit form has a block titled "Original Permit No." and that the intent was to obtain a new permit number when renewing a permit. AREVA's expectation is that the responsible individual should have obtained new permit numbers when the permit was renewed. AREVA agrees the individual's failure to obtain a new permit number is a violation of the intent of procedure MCP-30149.

Regarding these two violations, the NOV makes the following statements:

"Contrary to the above,

a) "...Interlock Bypass Permit #326, for item relied on for safety (IROFS) #4722, a mass/moderation control, to remain open for a period in excess of seven days..."
b) "...Interlock Bypass Permit # 322 for IROFS #4703, a moderation control, to remain open for a period in excess of seven days..."

These two statements are also emphasized in the inspection report details:

"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."

AREVA disagrees with these two statements. Expiration of a permit and the administrative action of closing a permit are two distinct actions under MCP-30149 Version 3.0. While MCP-30149 Version 3.0 caps the duration of a permit at 7 days (without renewal), it does not require a bypass permit to be "closed" within seven days. The procedure specifically states in section 6.8, Closure, "When the equipment has been returned to its normal condition and functionally tested, the permit shall be closed." A permit closed prior to the equipment being functionally tested and placed back into service would be in direct violation of MCP-30149 Version 3.0.

Contrary to the statements in the NOV, an expired permit that remains administratively "not closed" does not necessarily constitute a violation of the procedure.

The inspection report details (pg 2) regarding Interlock by-pass permit #322 state:

"In addition, the licensee failed to renew or issue a new interlock bypass permit." This statement incorrectly implies that AREVA may have operated equipment with an expired interlock by-pass permit. This is not the case. In each of the above instances, written permissions (valid/non-expired permits) were granted to cover each time frame the equipment was operated with the interlock bypassed.

Reason for the Violation

The reason for the violation is that the individual who obtained interlock by-pass permits 322 and 326 was not fully familiar with all the administrative requirements in MCP-30149. Additionally, the version of this procedure at the time the non-compliance occurred was not clear regarding instructions on permit renewals and permit closeouts.

Corrective Actions Taken

A number of actions were taken in direct response to this plant condition, as follows:

- The condition was entered into AREVA's corrective action program (CR 2010-9222).
- AREVA commissioned an Apparent Cause Analysis (ACA) to evaluate the cause of this plant condition.
- This violation was discussed with appropriate personnel.
- The Justification for Continued Operation (JCO) and Interlock by-pass permit procedures E12-01-007 and MCP-30149, respectively, were modified, and are currently in the review/approval process, in an effort to error-proof these procedures and to clarify expectations and responsibilities. Among the modifications to the Interlock by-pass permit procedure is the elimination of the "close out" signature requirement. The permit is issued with an expiration date and requiring a close out signature does not strengthen the AREVA configuration control program. Current tag out requirements for equipment that is unable to perform its safety function adequately prevent such equipment from being used without a valid permit.

Actions to Avoid Future Violations

In addition to the actions listed above that have already been taken, the following actions are also expected to prevent a repeat of this condition:

- Procedures E12-01-007 and MCP-30149 will be issued when they complete the approval process.
- These procedures will be added to the appropriate personnel's learning plans, assuring their being trained to these revised procedures.

These corrective actions are expected to be completed by April 30, 2011.

Date of Full Compliance

AREVA believes that it is in full compliance with the subject license requirements.

Violation VIO 70-1257/2010-010-02

The violation as stated in the referenced Notice of Violation (NOV) is as follows:

> "Section 11.6, Incident Investigation and Corrective Action, of Revised License Renewal Application; License No. SNM-1227, dated December 10, 2008, states in part, that the incident investigation and corrective action programs will be implemented via formally approved procedures.
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> "Section 11.6.2, Issue Investigation and Causal Analysis, of Revised License Renewal Application; License No. SNM-1227, dated December 10, 2008, states, in part, that more significant safety-related incidents or conditions require formal investigation and cause analysis as dictated by an approved issue investigation/causal analysis procedure. This section also defines requirements relative to identification of cause and generic implications.
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> "Step 7.1of facility procedure 1703-76 "Issue and Causal Analysis Procedure" Revision 013, states, in part, that during the investigation, the licensee will determine if the event might have generic safety consequences that warrant further evaluation under Part 21 or other regulations; evaluate for potential extent of condition; and "Site NRC licenses and NRC regulations require specific information be reported and collected regarding IROFS. When the apparent cause analysis (ACA) investigating an IROFS failure or potential failure, the Issue Investigator will collect this information and report it on a specific page on the ACA form".
>
> "Contrary to the above, as of December 2, 2010, the licensee failed to properly implement procedure 1703-76 Step 7.1 by not performing an extent of condition and generic implication review while conducting an ACA to investigate an IROFS failure or potential failure. Specifically, the licensee failed to identify and document the cause, extent of condition, and generic implications for criticality drain 100DR10 failing to perform its design function. Criticality drain 100DR10 is a mass control item relied on for safety, IROFS # 6303."

This is a Severity Level IV violation (VIO 70-1257/2010-010-02)

Position Statement

AREVA does not dispute the violation in that the extent of condition evaluations of ACAs can be improved. However, the extent of condition evaluation was conducted for CR 2010-2822, albeit rather poorly documented within the CR and associated ACA.

Additionally, two points need to be clarified:

1. 1703-76 step 7.1, under Significance Determination, does not require an "extent of condition evaluation" unless "... the event might have generic safety consequences that warrant further evaluation under Part 21 or other regulation." In this case, AREVA did not have a Part 21 issue and no other regulations required a further evaluation for "generic safety consequences."

2. The inspection report concludes that the ACA did not include an extent of condition evaluation based on interviews with the Manager, Nuclear Criticality Safety, and Manager, Uranium Conversion and Recovery. In each case these individuals agreed that the block for "Potential Extent of Condition; Other" stated "No extended impact from the condition". Based on this statement both indicated that they believed it was unclear that an adequate extent of condition evaluation had been performed.

However, the author of the ACA was not interviewed by the inspectors. The author of the ACA does not report to either of the managers interviewed by the inspectors. The AREVA managers who were interviewed should have directed the inspector to discuss the ACA with the author to determine what, if any, extent of condition considerations were made.

When, in response to this NOV, the author was interviewed, he pointed out some discussion in the ACA text that indicates that the "evaluation" had been performed, but that he had concluded no additional actions needed to be taken due to his evaluation and that is why the Potential Extent of Condition block indicated "no extended impact from the condition."

Reason for the Violation

The reason for this violation is that the author of the ACA as well as those who approved the ACA, did not assure that the information in the "Potential Extent of Condition; Other" block clearly described the extent of condition evaluation performed and assure that this evaluation was of sufficient breadth and depth.

Corrective Actions Taken

A number of actions were taken in direct response to this plant condition, as follows:

- The condition was entered into AREVA's corrective action program. (CR 2011-506)
- AREVA commissioned an Apparent Cause Analysis (ACA) to evaluate the cause of this plant condition.
- This violation was discussed with appropriate personnel.

Actions to Avoid Future Violations

In addition to the actions provided above, which are now complete, the following additional action is expected to prevent a repeat of this condition:

1. A briefing package that reflects the issues associated with this violation will be prepared and placed in the learning plans of all potential Richland ACA preparers and approvers.
2. Other actions as developed within the completed ACA when completed. These will be assigned expected completion dates and tracked within our Corrective Action Program.

It is expected that corrective action #1 will be completed by April 30, 2011. Other actions as developed in action # 2 above will be tracked in accordance with our Corrective Action Program.

Date of Full Compliance

AREVA believes that it is in full compliance with the subject license requirements.

Violation VIO 70-1257/2010-010-03

The violation as stated in the referenced Notice of Violation (NOV) is as follows:

> Section 11.6, Incident Investigation and Corrective Action, of Revised License Renewal Application; License No. SNM-1227 dated December 10, 2008, states "AREVA will implement and maintain an integrated incident investigation/corrective action program to assure that safety-adverse incidents or conditions are appropriately identified, evaluated, and reported, and that suitable corrective actions are identified and applied. This integrated program will include incidents and adverse conditions involving the control and processing of licensed materials, including those with actual or potential adverse impacts to items relied on for safety (IROFS). The incident investigation and corrective action programs will be implemented via formally approved procedures."
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> Contrary to the above, on and before November 30, 2010, the licensee failed to implement the integrated incident investigation/corrective action program by not identifying, evaluating, and reporting two conditions involving the control and processing of licensed materials, including those with actual or potential adverse impacts to IROFS, that were identified during the performance of IROFS preventative maintenance (PM) activities C090P021 "Calciner L2 Lubricate 1 MO MWHZ" and C323P002 "Powder Receipt Interlock 6 MO RE".

This is a Severity Level IV violation (VIO 70-1257/2010-010-03).

Position Statement

AREVA does not dispute the violation. The inspection reveals that AREVA management's expectations regarding the integrated incident investigation/corrective action program are not being consistently met with respect to IROFS issues identified under the preventative maintenance program.

However, we need to clarify certain aspects of the referenced NOV and associated inspection report.
Section 11.6, Incident Investigation and Corrective Action, of Revised License Renewal Application; License No. SNM-1227 dated December 10, 2008 states "AREVA will implement and maintain an integrated incident investigation/corrective action program **to assure that safety-adverse incidents or conditions are appropriately identified, evaluated, and reported** and that suitable corrective actions are identified and applied. This integrated program will include incidents and adverse conditions involving the control and processing of licensed materials, including those with actual or potential adverse impact to items relied on for safety (IROFS). The incident investigation and corrective action program will be implemented via formally approved procedures." (emphasis added)

Relative to PM C090P021 the inspection report correctly states "the purpose of the PM is to alert NCS to abnormally high grease consumption rate". The inspection of the grease level had been correctly performed. This is the most important aspect of the PM. The grease dispenser

was not refilled because the airline from the grease supply had been removed. Not filling the grease dispenser with grease does not have any impact on the grease addition rate to the calciner. The craftsman had correctly identified the fact that he had not refilled the greaser and noted the level that he had observed.

The inspection report states that "the PM had been closed with no work done and had not been rescheduled, which implies that the "performance function" which is "alerting NCS to abnormally high grease consumption" had not been completed. In this case the "performance function" i.e. measuring/recording the grease consumption, had been completed, and the worst potential outcome of not filling the greaser is that the next month NCS may have been notified erroneously and conservatively that the grease consumption rate was excessively high, and an unneeded investigation would have taken place.

It is noted that in fact this condition was appropriately identified and documented on the PM, reported to engineering via the PM review, and evaluated by engineering with the determination that no additional documentation was required. This specific example does not constitute a violation of the stated requirement.

Relative to PM C323P002, the NRC inspection report details state "during performance of PM C323P002 'Powder Receipt Interlock 6 MO RE' when the PM was performed, however, the comments in the Maintenance Performed or Required And/Or Unusual Conditions section stated that a loose wire was found on the BLEU Powder Receipt Moisture Analyzer Sample flow switch, FSL-B145B, which prevented the flow switch to indicate flow. The loose wire was repaired prior to completion of the PM."

The function of the Powder Receipt Moisture Analyzer is to stop powder transfer in the event that powder with unacceptable moisture content is being transferred. Unless FSL-B145B indicates acceptable flow to the analyzer, the transfer of powder is blocked/prevented. The safety function of the IROFS was not compromised.

This condition did not have "actual or potential adverse impact to IROFS". However, such a condition, i.e. a loose wire on safety equipment may in some instances have an adverse safety impact. AREVA agrees that failure to document the condition of a loose wire on safety equipment does not meet management's expectations and a CR should have been prepared as required by Section 11.6, Incident Investigation and Corrective Action, of Revised License Renewal Application; License No. SNM-1227 dated December 10, 2008.

Reason for the Violation

The reason for the violation is that the criteria for when a CR is needed to document findings during the performance of a preventative maintenance / instrument repetitive maintenance (PM/IRM) activity are not sufficiently clear to ensure craftsman performance meets management expectations.

Corrective Actions Taken

A number of actions were taken in direct response to this identified condition to assure that management's expectations relative to the "integrated incident investigation/corrective action program" will be fully met."

These actions are as follows:

- These two conditions were entered into AREVA's corrective action program (CR 2010-8712 and CR 2010-9084).

- AREVA commissioned an Apparent Cause Analysis (ACA) to evaluate the cause of this non-compliance.

- This violation was discussed with appropriate personnel.

Actions to Avoid Future Violations

In addition to the actions listed above, which are now complete, the following additional action is expected to prevent a repeat of this condition:

1. Complete a self assessment on PM/IRMs execution and CR generation as a result of observations made during PM/IRM execution.

2. Communicate expectations to planner/scheduler the expectations for incomplete PM's/IRM's.

3. Communicate the results of the self assessment to all TS & M personnel and clarify the expectations going forward.

These corrective actions are expected to be completed by April 30, 2011.

Date of Full Compliance

AREVA believes that it is in full compliance with the subject license requirements.