AREVA

August 22, 2014
TJT:14:004

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

Gentlemen:

Subject: Reply to a Notice of Violation (70-1257/2014-003-001)

Reference: Letter, Marvin D. Sykes to D. Grandemange; "NRC Integrated Inspection Report No. 070-01257/2014-003 and Notice of Violation," July 29, 2014

Attached is AREVA Inc's (AREVA's) response to the violation described in the referenced letter.

AREVA accepts this violation; please find our complete response attached to this transmittal.

AREVA would like to clarify the record as how the NRC characterized the violation in the NOV may not be completely accurate. Specifically the NOV states:

> "...on or before October 27, 2013 the licensee failed to implement management measures such as configuration control for IROFS. Specifically, the licensee failed to require the use of an ECN for changes affecting criticality safety and IROFS."

This characterization implies that prior to the specified date AREVA did not implement management measures as part of the integrated safety program in place at AREVA. This implication is not correct. AREVA has implemented management measures, including configuration control for IROFS, since October 18, 2004 when it became a requirement to do so.

What AREVA failed to do in this instance, as is correctly described in the inspection report, was to correctly follow its configuration control procedure when a particular IROFS was replaced with a different but similar component.

Also, the wording in the NOV implies that AREVA's integrated safety program allowed "changes affecting criticality safety and IROFS" without requiring use of an ECN. Use of "changes" (plural) would indicate a general practice beyond the particular change noted

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in this NOV. The NRC inspection report beyond this instance provides no evidence to support this implication. AREVA's procedures require the use of an ECN for all changes affecting criticality safety and IROFS. What AREVA failed to do was use an ECN when a particular IROFS was replaced with a different but similar component.

AREVA considers these clarifications of the record to be important. AREVA may have had a deficiency in following an established procedure in a particular instance; however this is significantly different than failing to establish key components of an integrated safety program or not following established procedures on multiple occasions.

If you have questions or require further information, please contact me at 509-375-8550 or C. D. Manning of my staff at 509-375-8237.

Very truly yours,

T. J. Tate, Manager
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c:

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Reply to Notice of Violation
NRC Inspection Report 70-1257 / 2014-003; AREVA Inc.

Violation VIO 70-1257/2014-003-001

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

> 10 CFR 70.61(e) states, in part, the safety program established in 70.62 of this subpart, shall ensure that each item relied on for safety (IROFS) will be available and reliable to perform its intended function when needed and in the context of the performance requirements of this section.
>
> 10 CFR Part 70.62(d) states, in part, that each licensee shall establish management measures to ensure compliance with the performance requirements. These measures shall ensure that IROFS will be available and reliable to perform its intended function when needed, to comply with performance requirements. One such management measure is configuration control, also known as an engineering change notice.
>
> Section 11.4, Procedures Development and Implementation, states, in part, AREVA conducts its licensed activities in accordance with a system of written operating procedures. Activities involving licensed SNM and/or IROFS will be conducted in accordance with approved procedures.
>
> Section 4.1.1, Criteria Required for Engineering Change Notice (ECN) Initiation, of Management Control Procedure MCP-30379, Management Control Procedure Operations Projects — Manufacturing Engineering Procedures Construction or Modification Change Control — Initiation, requires the use of an ECN if the change directly affects criticality safety or IROFS.
>
> Contrary to the above, on and before October 27, 2013, the licensee failed to implement management measures such as configuration control for IROFS. Specifically, the licensee failed to require the use of an ECN for changes affecting criticality safety and IROFS. Failure to classify the change as an ECN resulted in the failure to perform the required ISA reviews and approvals for the change as well as the corresponding 10 CFR 70.72(b) evaluation. The NRC concluded that failure to treat the change as an ECN contributed to the failure of IROFS 3526 to meet it intended performance requirements in accordance with 10 CFR 70.61(e).

This is a Severity Level IV violation (Section 6.2.a).

Reason for the Violation

About a year ago, AREVA replaced a Kadant-Johnson model VB8-51-SS-T-S-E vacuum breaker with a Watson McDaniel model WVBSS vacuum breaker. This change was made for industrial safety reasons because the Kadant-Johnson model VB8-51-SS-T-S-E vacuum breaker would pass steam into the room when the elastomer seat degraded. This is a failsafe state for the IROFS function but had some negative potential industrial safety impacts.

The engineer responsible for the steam supply system and the safety reviewers all agreed that the WVBSS vacuum breaker was a good fit for this application and appeared to be at least as reliable as the Kadant Johnson vacuum breaker. The vendor advertises a typical application of

the WVBBS vacuum breaker for steam systems as follows: "The WVBSS allows air to enter the steam or liquid system in order to 'break the vacuum' caused by the condensing of steam or draining of liquid from a system." All vendor recommendations regarding installation were followed, i.e. the vacuum breaker was installed in a vertical position and placed at an elevated location relative to the boiler.

However, the change was wrongly made without an Engineering Change Notice and instead was made using the spare parts replacement process because the individual making the change believed this process was allowed because the replacement vacuum breaker had the same "fit, form, and function." Using the spare parts replacement process in place at the time did not require a peer review of the "same form, fit and function" determination nor did it require a change impact evaluation (70.72 evaluation) to be documented.

The Watson McDaniel model WVBSS vacuum breaker failed because minor amounts of iron deposits that originated in the boiler coated a small ¼" stainless steel ball, and caused it to become adhered to the stainless steel seating surface such that, when subjected to approximately 24-inches of Hg vacuum, it did not open to break the vacuum as designed/ required. An extent of condition investigation and evaluation show that this occurrence was an isolated incident.

Corrective Actions Taken

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

1. The condition was entered into AREVA's corrective action program (CR 2013-8342).
2. A careful review of the event timeline was conducted.
3. Correct functioning of other safety-related equipment associated with accident scenarios involving reverse flow of uranium-bearing solutions into the UO2 steam generator was confirmed.
4. Appropriate internal and regulatory notifications were made.
5. An apparent cause analysis (ACA) was initiated.
6. The vacuum breaker, a Watson McDaniel model WVBSS, was replaced with a functional device from spare parts prior to restarting the system. This new vacuum breaker was later replaced with a Kadant-Johnson model VB8-51-SS-T-S-E vacuum breaker which, based on previous plant performance history, appears to be more reliable for this specific application.

Actions to Avoid Future Violations

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

1. The procedures for performing facility modifications and spare parts changes were modified to more clearly state when an ECN is required and to require a peer review and change impact evaluation whenever a spare is replaced with a different component judged to have the same "fit, form and function".

2. Appropriate AREVA personnel were trained to these changes and the reasons for the changes relative to this NRC violation.

The corrective and preventive actions listed above are expected to prevent a repeat of this condition.

Date of Full Compliance

AREVA believes that it is in full compliance with the cited license condition.