

# 10 CFR 71.95 REPORT EVALUATION FORM

**Docket No.:** 71-9225

**Package Model No.:** 9225

**Report Submitted By:** Mr. Wren Fowler, Director, Licensing Engineering

**Report Date:** December 18, 2015

**Report ADAMS Accession No.:** ML16005A115

Review the incoming report to determine if additional Commission or staff action is warranted. The review should consider whether the report identifies a generic defect or problem with the package design and the safety significance of the issue. Note that a high safety significance represents a potential for significant radiation exposure, medium safety significance represents a potential for some moderate radiation exposure, and low safety significance represents little or no potential for radiation exposure.

## 1. The report identifies:

- Significant reduction in the effectiveness of a package during use;
- Defect with a safety significance;
- Shipment in which conditions of the approval were not observed.

2. What is the safety significance?  High  Medium  Low

## 3. Summary of the report:

By letter dated December 18, 2015 (ADAMS Accession No. ML16005A115), NAC International LLC (the certificate of compliance (CoC) holder or NAC) submitted a report under 10 CFR 71.95, "Reports," to inform the United States (U.S.), Nuclear Regulatory Commission (NRC) about an incident related to the Model No. NAC-LWT (docket No. 71-9225) during loading operations at the Canadian Nuclear Laboratories (CNL). The CoC holder informed the NRC that on November 2, 2015, the "Canadian Nuclear Laboratories (CNL) informed NAC of an issue with a caddy assembly [licensing drawing 315-40-175, Revision 1] in the CNL rod bay pool during the loading operation." The CNL loaded an NRX fuel element into the NAC-LWT caddy assembly and a weld joint failed when the NRX fuel element contacted the bottom of the caddy assembly. This resulted in both the bottom of the plate of the caddy assembly and the NRX fuel element falling to the fuel pool floor.

The licensing drawing 315-40-175, Revision 1, Note 1, specifies the weld inspection acceptance criteria for this weld joint. The package fabricator [Columbiana Hi Tech (CHT)] and NAC entered this issue into their corrective action programs as CAR-15-052 and SIR-15-011, respectively. An investigation of the issue revealed that CHT failed to comply with the acceptance criteria in license drawing 315-40-175, Revision 1, Note 1, by using two welders without the qualifications required to fabricate the "caddy assembly bottom plate to tube weld joint configuration." NAC suspended future NRX fuel shipments until all caddy assemblies were either in compliance with the CoC or new caddy assemblies comply with the licensing drawing requirements.

**3. Summary of the report (Continue):**

The CoC holder reported this issue under 10 CFR 71.95(a)(3) "because two shipments of NRX fuel in similar caddies were completed with conditions of approval in the Certificate of Compliance (CoC) were not observed in making a shipment." NAC did not report failure of these packages (or components) during the aforementioned shipments in the letter dated December 18, 2015.

**5. Staff comments:**

This report was submitted by the CoC Holder. Currently, regulations under 10 CFR 71.95 specify that package users are to submit 10 CFR 71.95 Reports.

**6. Staff conclusion:**

- The report does NOT identify generic design or license/certificate issues that warrant additional Commission or staff action. This report is considered closed.
- There is a need to take additional action. Provide a summary of the bases and recommended actions:

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