

SAFETY EVALUATION REPORT

Docket No. 71-9157
Model No. IR-100
Certificate of Compliance No. 9157
Revision No. 16

SUMMARY

By letter dated February 16, 2017, Industrial Nuclear Company Co., Inc., (INC) submitted an amendment request to revise the certificate of compliance (CoC) for the Model No. IR-100 package.

The applicant added the ER308LSi weld filler material to the Model No. IR-100 and revised the licensing drawing No. IR-100-1B accordingly to reflect this change.

Based on the statements and representations in the application, as supplemented, the staff agrees that this change does not affect the ability of the package to meet the requirements of 10 CFR Part 71.

EVALUATION

An inspection of INC (ADAMS Accession No. ML16075A380) determined that, contrary to Note 9 on Drawing No. IR 100-1B, Rev. 2, the ER308LSi filler material was used during gas tungsten arc welding to weld the lock boxes on the Model No. IR-100 packages, instead of the ER308L filler material specified on the licensing drawing.

A review of the properties of the materials found that, with the exception of the silicon content, both filler materials have the exact same chemical composition requirements per Table 1 of ASME B&PV Code, Section II, Part C, Subsection SFA-5.9/SFA-5.9M. The increased silicon content in the ER308LSi filler material increases the weld pool fluidity, but does not affect the strength of the fillet weld joint. Thus, it was determined that both materials were identical and the use of the ER308LSi weld filler material had no negative impact on the package's design qualification testing or on the package performance during both normal conditions of transport and hypothetical accident conditions.

INC issued a new welding procedure specification WPS-LSC-001 to include all sizes and types of weld wires in use at INC, including the use of the ER308L Si weld wire. INC submitted Revision No. 3 of drawing No. IR-100-1B and identified this material as qualified for use on the package in Note 9 to the drawing.

Based on its review of the statements and representations provided in the application, the staff has reasonable assurance that the Model No. IR-100 package meets the regulatory requirements of 10 CFR Part 71.

CONDITIONS

The following changes were made to the CoC:

Item No. 3(b) references the consolidated application of 2015, as supplemented. The June 8, 1999, application and its 1999, 2003, 2004, and 2007 supplements were removed.

Condition No. 5(a)(3) was revised to incorporate Revision No. 3 of the IR 100- !B drawing.

Condition No. 10 was modified to allow the use of Revision No. 15 of this certificate until February 28, 2018.

The expiration date of the certificate did not change. The References section of the Certificate has been updated to include the 2015 consolidated application, its supplements and this request.

CONCLUSIONS

Based on the statements and representations contained in the application, as supplemented, and the conditions listed above, the staff concludes that the design has been adequately described and evaluated, and the Model No. IR-100 package meets the requirements of 10 CFR Part 71.

Issued with Certificate of Compliance No. 9157, Revision No. 16 on March 16, 2017.