

Request for Supplemental Information
DAHER NUCLEAR TECHNOLOGIES GmbH
Docket No. 71-9362
Model No. DN30 Package

By letter dated August 2, 2018, Daher Nuclear Technologies GmbH (Daher) submitted an application for Certificate of Compliance No. 9362, Revision No. 0, for the Model No. DN30 package.

This request for supplemental information (RSI) identifies information needed by the U.S. Nuclear Regulatory Commission staff (the staff) in connection with its acceptance review of the Model No. DN30 package application to confirm whether the applicant has submitted a complete application in compliance with regulatory requirements.

The requested information is listed by chapter number and title in the package application.

Chapter 2 – Materials Evaluation

RSI Provide the dose rates in the seal regions and the foam in the DN30 package.

In order to assess the cumulative radiation effects on polymer-based materials such as the seals and foams in the DN30 package, the dose rates at these regions are needed.

This information is required to determine compliance with 10 CFR 71.43 (d) and 71.47(a).

Chapter 6 – Criticality Evaluation

Observation

Provide applicable benchmarks for the criticality evaluation.

The validation cases are all drawn from a single benchmark set, LEU-COMP-THERM-033, at enrichments of 2 and 3 wt% ²³⁵U. The applicant did not provide any discussion of trends in the bias or for the extrapolation to 5 wt% ²³⁵U, which is needed for the package. The benchmarking does not appear to meet standard industry practice since the 3% benchmarks are outside the range of what has traditionally been considered applicable up to 5 wt%.

This information is required to determine compliance with 10 CFR 71.55(d)(1) and 71.55(e).

Chapter 7 – Operating Procedures

Observation

Provide non-proprietary appendices for the handling instruction and test instructions.

Enclosure

The following appendices are proprietary, "Handling Instruction No. 0023-HA-2015-001-Rev 2," "Periodical Inspections of DN30 PSP, Test Instruction 0023-PA-2015-015-Rev1," and, "Inspection Criteria and Maintenance of the DN30 PSP, Test Instruction, 0023-PA-2015-016-Rev1. These documents include procedures, tests, and maintenance programs that are described in Chapter 7, "Operating Procedure Review," and Chapter 8, "Acceptance Tests and Maintenance Program Review." Since Chapters 7 and 8 of the application are conditions of the Certificate of Compliance, these should not be proprietary.

This information is required to determine compliance with 10 CFR 71.31(c), 71.35(c), 71.37(b), 71.87, and 71.89.