

From: [Carolyn Lauron](#)
To: [Justin Hawkins](#)
Cc: [Greg Cranston](#); [Michael Dudek](#); [Andrew Brenner](#)
Subject: NRC Staff Response to SMR (Holtec) Clarification Question re: Aircraft Impact Assessment
Date: Tuesday, November 29, 2022 8:44:00 AM

Hi Justin –

Please find the staff’s response to questions regarding the subject topic.
If you have questions or need additional information, please let us know.

Thanks,
Carolyn

Questions:

We noted that in DNRL-ISG-2022-01, Safety Review of Light-Water Power Reactor Construction Permit Applications (CP), the ISG stated that:

“The regulations in 10 CFR 50.150 require CP applicants to perform a realistic design-specific assessment of how the impact of a large commercial aircraft would affect the facility and to identify and incorporate into the design those design features and functional capabilities that show that (with reduced operator actions) the criteria in 10 CFR 50.150(a)(1)(i)–(ii) are satisfied. SRP section 19.5, “Adequacy of Design Features and Functional Capabilities Identified and Described for Withstanding Aircraft Impacts,” provides guidance acceptable to the staff for performing the licensing review. Note that 10 CFR 50.150 requires applicants to perform aircraft impact assessments at both the CP and [operating license] OL stages and include the required information in both applications, based on the level of design information available at the time of each application. The NRC’s decision on an application subject to 10 CFR 50.150 will be separate from any NRC determination that may be made with respect to the adequacy of an impact assessment, which is not required to be submitted to the NRC (74 FR 21820; June 12, 2009) (Ref. 11).”

1. Can the staff clarify the above further? Is there a difference in the level of detail for this assessment at each stage (CP and OL)?
2. Also, when would this assessment be inspected? We have noted that for design certifications the inspection for this AIA assessment occurred ~1 to 1.5 years after submittal. How would this be done for a CPA?

NRC Staff Response:

1. There is not a difference in the level of detail of the aircraft impact assessment between the CP and OL stage. The intent of the AIA rule is to address the potential of an aircraft strike at the design stage. The above statement recognizes that the design at the CP stage is most likely not final and subject to change. The

assessment must be maintained as the design evolves; therefore, if the assessment is originally performed based on preliminary design information at the CP stage it will need to be updated prior to submittal of an OL application to account for the final design of the facility.

2. While the assessment is subject to NRC staff inspection, it is not required to be inspected prior to any licensing decision. Any licensing determination necessary for a CP or OL (e.g., compliance with 50.150(b)) is separate and independent from the staff's inspection of the assessment. As a best practice, the staff has historically inspected the assessments prior to issuance of a design certification, and as early in the review process as practical, such that any design or assessment issues identified during the inspection can be resolved prior to a final licensing decision. After receipt of a CP application, the NRC staff will work with the applicant to determine the timing of the AIA inspection that considers this best practice.