

From: [Carolyn Lauron](#)
To: [Justin Hawkins](#)
Cc: [Greg Cranston](#); [Michael Dudek](#); [Andrew Brenner](#)
Subject: NRC Staff Response to SMR (Holtec) Clarification Question re: Turbine Missiles
Date: Tuesday, November 29, 2022 8:51:00 AM

Hi Justin –

Please find the staff’s response to the question regarding the subject topic.

The staff is responding to one of two questions submitted on the topic.

The second question, clarified as a question re: the scope of the PRA, is under staff review. A response to the second question will be provided separately.

If you have questions or need additional information, please let us know.

Thanks,
Carolyn

Question:

1. RG 1.115, Section C, Position 5 states that, “The NRC will review turbine designs that are significantly different from the current 1,800-rpm machines on a case-by-case basis to determine the applicability of the strike zones.”

What does this mean? If an applicant plans to use a 3600-rpm machine, does this mean that the RG methodology does not apply? Does it mean the strike zone is significantly different?

NRC Staff Response:

1. Regulatory Guide (RG) 1.115, “Protection Against Turbine Missiles,” Revision 2, dated January 2012, reflects the NRC staff experience with the review of 1,800-rpm turbines. (ML101650675) An applicant may propose to use other turbines, such as a 3600-rpm turbine, and the RG could still apply if the applicant has determined that the proposed turbine is not significantly different from the 1,800-rpm machines referenced in the RG. However, if the proposed turbine is significantly different than the 1,800-rpm turbines referenced in the RG, then the NRC staff review of the proposed turbine would need to account for the significant differences in the turbine design, on a case-by-case basis.