

**From:** Bird Peter <peter.bird@siemens.com>  
**To:** "BJB@nrc.gov" <BJB@nrc.gov>  
**Date:** 4/3/03 4:42PM  
**Subject:** RE: NRC Acceptance of SWPC Missile Analysis Methodology on GE Rotors

Brian,

I would like to document our discussion today and the conclusion reached, since it may be several months before our Topical Report is submitted. This is what I understand we agreed to today:

The NRC has agreed with the summary presented in the e-mail below. No additions or changes were made. The Safety Evaluation (SE) report sent with the cover letter will stand as written. The NRC has asked, when we submit our Topical Report to document this whole process, that we present both the Westinghouse Method and the Siemens Method as agreed to.

Since the SE will not be revised, could you please send me back a brief confirmation of this agreement.

Thanks,  
Pete Bird  
Siemens Westinghouse

> -----Original Message-----

> From: Bird Peter  
> Sent: Thursday, April 03, 2003 9:04 AM  
> To: 'BJB@nrc.gov'  
> Cc: Barsness Gene; McCracken James; Auman Jim  
> Subject: NRC Acceptance of SWPC Missile Analysis Methodology on GE  
> Rotors  
>  
>  
> Brian,  
>  
> Could you please clarify application of the recent NRC acceptance of the  
> SWPC missile analysis methodology on GE rotors provided in References 1  
> and 2.  
>  
> In the Preface to Reference 3, SWPC stated "we have decided not to pursue  
> the methodology described in Attachment 6 but, instead, to return to the  
> traditional methodologies previously reviewed and approved by the NRC".  
> These two methodologies are:  
>  
> 1. The Westinghouse Method, which was submitted during the 1981 through  
> 1984 period and approved by the NRC in 1987 (Attachments 1-4).  
>  
> 2. The Siemens Method, which was submitted in 1997 and approved on a plant  
> specific basis by the NRC in 1998 (Attachments 5 and 5a).  
>  
>  
> Our understanding is that the Westinghouse Method for missile analysis is  
> accepted by the NRC for use on GE rotors as limited by the criteria given  
> in Reference 2, Sections 3.1.4 (Fracture Toughness Values) and 3.1.5  
> (Shrink Fits).

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- > Our understanding is that the Siemens Method for missile analysis is
- > accepted by the NRC for use on GE rotors as limited by the criteria given
- > in Reference 2, Sections 3.0 and 4.0.
- >
- > It is SWPC's intention to be able to apply either the Westinghouse Method
- > or the Siemens Method when performing P1 calculations on GE rotors. Would
- > you please confirm that our understanding is correct or advise otherwise?
- > Should Reference 2 be revised to make this understanding clearer? Please
- > advise.
- >
- > Thanks,
- > Pete Bird
- >
- >
- > References:
- > 1) Letter from Herbert N. Berkow (NRC) to Stan Dembkowski (SWPC) dated
- > April 2, 2003 (TAC No. MB5679)
- > 2) Safety Evaluation by the Office of Nuclear Reactor Regulation, Siemens
- > Westinghouse Topical Report "Missile Analysis Methodology for General
- > Electric (GE) Nuclear Steam Turbine Rotors by the Siemens Westinghouse
- > Power Corporation (SWPC), Project No. 721
- > 3) SWPC letter to NRC dated October 11, 2002 in response to RAI Questions
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