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**To:** [NRR DMLR MVIB Distribution](#)  
**Cc:** [James, Lois](#); [Brady, Bennett](#); [Alley, David](#); [Donoghue, Joseph](#); [Hiser, Allen](#); [Rudland, David](#); [Wilson, George](#); [Oesterle, Eric](#)  
**Subject:** RE: SLRA Fatigue TLAAs Reviews- Verification that NUREG-0609, Revision 1 and RG 1.207, Revision 1 Have Been Issued as Publically Available NRC Records  
**Date:** Tuesday, June 05, 2018 9:56:00 AM

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DMLR Staff, Managerial, and SL Staff Members:

Allen Hiser, On Yee, and Mark Yoo worked with me as part of the previous subsequent license renewal (SLR) expert panel for updating the contents of NUREG-2192 (i.e., SRP-SLR) Section 4.3 on fatigue TLAAs. This SRP-SLR section includes our guidance on processing environmentally-assisted fatigue TLAAs for subsequent license renewal applications (SLRAs). The last action we (as DMLR) had to complete was to make sure the NRC's Office of Research (RES) had formally issued NUREG/CR-6909, Revision 1, and Regulatory Guide 1.207, Revision 1 as publically available NRC records in ADAMS. This action was needed in order to ensure that our referencing of the report and RG in SRP-SLR Section 4.3 was accurate.

On Yee and I just verified that NUREG/CR-6909, Revision 1, "Effects of LWR Water Environments on the Fatigue Life of Reactor Materials" was formally issued as a publically available record in ADAMS Accession No. ML16319A004. Similarly, Regulatory Guide (RG) 1.207, Revision 1, "Guidelines for Evaluating the Effects of Light-Water Reactor Water Environments in Fatigue Analyses of Metal Components," was formally issued as a publically available record in ADAMS Accession No. ML16315A150.

For your knowledge, we referenced this NUREG report and the RG in multiple subsections of SRP-SLR Section 4.3, including SRP-SLR Section 4.3.2.1.2 where we made the following guidance statement for environmentally-assisted fatigue TLAAs:

*"For metal components evaluated for  $CUF_{en}$ , the acceptance criteria depend on the applicant's choice of 10 CFR 54.21(c)(1)(i), (ii), or (iii).*

*Applicants should also include  $CUF_{en}$  calculations for additional component locations if they are considered to be more limiting than those previously evaluated. This sample set includes the locations identified in NUREG/CR-6260 and additional plant-specific component locations in the reactor coolant pressure boundary if they may be more limiting than those considered in NUREG/CR-6260. Plant-specific justification can be provided to demonstrate that calculations for the NUREG/CR-6260 locations do not need to be included. Environmental effects on fatigue for these critical components can be evaluated using the positions described in Regulatory Guide (RG) 1.207, Revision 1; NUREG/CR-6909, Revision 0 (with "average temperature" used consistent with the clarification that was added to NUREG/CR-6909, Revision 1); or other subsequent NRC-endorsed alternatives."*

Thus, incoming SLR applicants may use the report or RG as part of their bases for evaluating and dispositioning their environmentally-assisted fatigue TLAAs under the §54.21(c)(1) requirements. However, based on the second quoted SRP-SLR paragraph above, the RG and report are not the only methodologies that may be used to evaluate or disposition these types of TLAAs under the requirements of 10 CFR 54.21(c)(1)(i), (ii), or (iii).

There is no further action of the DMLR managerial or SL members that needs to be taken relative to the contents of NUREG-0609, Revision 1 or RG 1.207, Revision 1. Specifically, the DMLR staff previously provided RES with commentary on the draft versions of the documents during the staff's internal review phases of the draft documents, and RES has addressed and resolved those comments. Therefore, this closes our action to verify that RES has formally issued these documents as publically available NRC records in ADAMS and our referencing of RG 1.207, Revision 1 and NUREG/CR-6909, Revision 1 in SRP-SLR Section 4.3 is now accurate.

Thanks,

Jim Medoff

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Previous DMLR Expert Panel Lead for Updating the Contents of NUREG-2192, Section 4.3