

**REQUESTS FOR ADDITIONAL INFORMATION**

Prairie Island Nuclear Generating Plant, Units 1 and 2

License Amendment Request (LAR) dated December 28, 2009 for

Measurement Uncertainty Recapture Power Uprate

Docket Nos. 50-282 and 50-306

TAC Nos. ME3015 and ME3016

Office of Nuclear Reactor Regulation  
Division of Engineering  
Mechanical & Civil Engineering Branch (EMCB)

EMCB RAI 1

Section IV.1.B.ii in Enclosure 2 of Reference 1 indicates that the cumulative usage factors (CUFs) for the Prairie Island Nuclear Generating Plant (PINGP) systems, structures, and components (SSCs) within the scope of the license amendment request (LAR) are bounded by the current licensing basis under the proposed measurement uncertainty recapture (MUR) power uprate conditions.

Based on the fact that the PINGP operating license is currently being considered for renewal by the NRC staff, please indicate whether consideration has been given to the impact of the proposed MUR power uprate conditions on the fatigue evaluations for the SSCs which are within the scope of this LAR.

Please provide justification that demonstrates that the 60 year plant life, for which review has been requested, has been accounted for in the fatigue evaluations of the SSCs included within the scope of the MUR power uprate LAR.

EMCB RAI 2

As a result of higher-than-design moisture carryover (MCO) percentages for the Unit 2 steam generators, which would be realized at MUR uprate conditions, Section IV.B.i in Enclosure 2 of Reference 1 (for balance of plant piping and components) indicates that "...a revision of the MS [main steam] stress analysis to ensure MSSV [main steam safety valve] thrust force is acceptable at the higher-than-design MCO condition" was initiated in support of the proposed MUR power uprate.

Please provide justification which demonstrates that the Unit 2 MS piping, MS piping supports, and MS system components remain acceptable by comparison to the design-basis code allowable values (or other design-basis qualification standard) when considering the MSSV thrust forces at the higher-than-design MCO conditions.

### EMCB RAI 3

Section IV.1.A.ii in Enclosure 2 of Reference 1 states that operation at the proposed MUR conditions will not adversely affect the structural integrity of the reactor vessel internals and core support structures.

Please verify whether the current analysis of record (AOR) remains bounding for the reactor vessel internals and core support structures at the proposed MUR uprate conditions. If the AOR is not bounding, wholly or in-part, please provide the updated analyses results for the core support structures and/or reactor vessel internals which are not bounded under the proposed MUR uprate conditions.

### References

- 1) Letter from M. A. Schimmel, Northern States Power Company - Minnesota, to NRC Document Control Desk, "Prairie Island Nuclear Generating Plant Units 1 and 2, Dockets 50-282 and 50-306, License Nos. DPR-42 and DPR-60, License Amendment Request for Measurement Uncertainty Recapture - Power Uprate," dated December 28, 2009. (ADAMS Accession No.: ML090900055)