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Document Control Desk
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852-2738

Subject: PWR Owners Group
**Transmittal of Interim Guidance for Addressing Accelerated Guide Card
Wear Issue Described in NSAL-17-1 (PA-MSC-1471)**

The purpose of this letter is to transmit the approved "Needed" interim guidance per the NEI 03-08 initiative to the NRC for information only. The guidance supplements existing MRP-227 and WCAP-17451-P requirements. The interim guidance is not being submitted for NRC review and approval pursuant to the provisions of 10 CFR 170.11(a)(1)(iii)(A) and a separate TAC number should not be opened.

The interim guidance contained herein provides a revision to the NEI-03-08 "Needed" guidance established in WCAP-17451-P, Rev. 1 to address the accelerated guide card wear issue described in Westinghouse NSAL-17-1, Revision 0. The Westinghouse technical team is presently revising WCAP-17451-P, Rev. 1 to address the operating experience (OE) concerns. Therefore, the interim guidance established in this letter shall be used by the utilities until the revised requirements are incorporated in the future revision of WCAP-17451-P, Rev. 1.

In this interim guidance, the NEI 03-08 "Needed" requirements in paragraphs a and b of Section 6 of WCAP-17451-P, Rev. 1 are being revised. "Needed" requirements c-f in Section 6 of WCAP-17451-P, Rev. 1 remain unchanged at this time, but may be affected by the on-going work funded through PA-MSC-1471 expected to finish in 2018.

If you have any questions, please do not hesitate to contact Chris Wax by email at Christopher.Wax@aps.com or by telephone at (623) 393-6871. You may also contact Jim Molkenthin in the PWROG Project Office at molkenjp@westinghouse.com or by phone at (860) 731-6727.

Sincerely yours,

Ken Schrader, Chief Operating Officer and Chairman
PWR Owners Group

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cc: PWROG Executive Committee Representatives
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Guide Card Wear Interim Guidance

WCAP-17451-P, Revision 1, Section 6, Guidance 'a': Baseline Inspection Recommendation

Current Requirement:

Each utility shall perform an initial "baseline" examination measurement based on the schedule in Section 5.4 or, if applicable to a utility's plant, Table 5-14 of Section 5.3, or, if beyond the ranges given below, the first refueling outage commencing after December 31, 2014. The generic inspection schedule is:

- 14x14 Guide Tubes – 38 to 42 EFPY
- 15x15 Guide Tubes – 40 to 44 EFPY
- 17x17AS Guide Tubes – 34 to 38 EFPY
- 17x17XL Guide Tubes – 32 to 36 EFPY
- 17x17 Standard Guide Tubes, Four-Loop Plants – 24 to 28 EFPY
- 17x17 Standard Guide Tubes, Three-Loop Plants – 30 to 34 EFPY

Inspections shall be performed earlier than the above generic schedule for plants as noted in Section 5.4. No wear measurements prior to 2015 are required.

Each utility may develop an optional guide card wear screening procedure as described in Section 5.5.1, Table 5-15, to be performed prior to the initial inspection measurement schedule from which an alternate wear measurement schedule can be based.

As an alternative to the above table, utilities that have already inspected in accordance with MRP-227-A prior to December 31, 2013 may develop a re-inspection schedule based on data obtained and the requirements of this document.

Modified Requirement:

Each utility shall perform an initial "baseline" examination measurement based on the schedule below or, if applicable to a utility's plant, Table 5-14 of Section 5.3, or, Appendix B. For the plants listed in Table 5-14, an alternative initial inspection measurement can be performed during an outage within a time range from the listed EFPY up to four additional EFPY (except for Plant F). The recommended inspection schedule is:

- 14x14 Guide Tubes – no later than 42 EFPY
- 15x15 Guide Tubes – no later than 44 EFPY
- 17x17 Standard Guide Tubes, Four-Loop Plants – no later than 28 EFPY
- 17x17 Standard Guide Tubes, Three-Loop Plants – no later than 34 EFPY

17x17A/AS Guide Tubes:

- Catawba Unit 1 – no later than Fall, 2018 refueling outage
- McGuire Unit 2 – no later than Fall, 2018 refueling outage
- Millstone Unit 3 – no later than Fall, 2020 refueling outage
- Comanche Peak Unit 1 – no later than 29 EFPY
- Comanche Peak Unit 2 – no later than 29 EFPY
- Vogtle Units 1 – no later than 29 EFPY
- Vogtle Units 2 – no later than 29 EFPY
- Plants with FME Videos Analyzed in Table 5-14 – According to Table 5-14 Schedule

17x17AXLR Guide Tubes:

- Plants with FME Videos Analyzed in Table 5-14 – According to Table 5-14 Schedule
- South Texas Unit 2 – no later than 29 EFPY

For plants that fall under the 17x17 A/AS/AXLR guide tube category above, with the exception of Catawba Unit 1, McGuire Unit 2 and Millstone Unit 3, may alternatively perform the baseline inspections at the first refueling outage after December 31, 2019, if 29 EFPY is reached prior to this date. Additionally, for these plants, if foreign material exclusion (FME) video tapes are available and of sufficient quality, they may be reviewed in accordance with the guidelines of Section 5.5.1 to determine an alternative baseline inspection schedule. Utilities can inspect at an earlier date to the proposed inspection timeline above to reduce asset management risk.

WCAP-17451-P, Revision 1, Section 6, Guidance 'b': Baseline Inspection Scope

Current Requirement:

The baseline inspection scope shall include the minimum number of guide tubes for initial wear measurements (without screening) or for initial screening inspections as outlined in Table 5-16 for capturing outliers at the probability level chosen. The number corresponding to 95 percent probability of capturing outlier wear is highly recommended unless specific circumstances prevent this number from being measured or inspected. Alternatively, a minimum scope of 20 percent of the guide tubes may be initially measured or screen inspected if the maximum wear level, as derived in Section 5.5.2, permits more than 10 years of continued operation to the Yellow Zone. If less than 10 years results, the inspection scope per Table 5-16 may be deferred until that time.

Modified Requirement:

The baseline inspection scope shall include the minimum number of guide tubes for initial wear measurements (without screening) or for initial screening inspections as outlined in Table 1 below. Inspecting the recommended quantity below will ensure that the maximum wear observed in the sample will be greater than or equal to the second highest wear in the population at the probability level chosen. The sample size to achieve at least 95% confidence from Table 1 is recommended for baseline inspection scope.

Table 1

**Minimum Sample of Guide Tubes for Guide Card Wear Inspections to
Ensure that the Sample Contains at Least the Penultimate Wear Magnitude
with at Least a Given Confidence**

Number of Loops	Number of Guide Tubes with RCCAs (N)	Minimum Sample (n) to Ensure at Least:	
		95% Confidence	99% Confidence
2	29	23	26
2	33	26	30
3	45	35	40
3	48	37	43
3	52	40	47
4	53	41	48
4	57	44	51
4	61	47	55