

#### NRC / SGMP Steam Generator Task Force Meeting (Teleconference)

September 4, 2019





#### **Agenda**

### 9:00 am Introductions & Opening Remarks (NRC and Industry) SGMP Steam Generator Task Force Update (Industry)

- Summary of Recently Issued SGMP Technical Reports
- Status of Industry Guidelines, Interim Guidance, and NEI 03-08
   Deviations
- Recent Operating Experience
- 9:30 NRC items of discussion
- 9:45 Public comments/questions



#### **Deliverables Since Last Meeting** Helen Cothron

## Alloy 600TT Material Characterization, Rev 1 – 3002015936 – August 2019

- Update to Alloy 600TT Material Characterization report published in late 2018.
   What's new in this revision?: Grain boundary carbide data. Previous revision did not include this data.
- Report covers microstructure evaluations of different archive heats of Alloy 600TT looking for differences in microstructure characteristics
- Report Goal: Determine baseline microstructures and level of variability for Alloy 600TT heats
- Grain boundary carbide coverage was only microstructure feature that varied significantly
  - Operating experience suggests less-than optimal carbide coverage associated with reduced performance of Alloy 600TT
  - Substantial variation both within same manufacturer as well as between manufacturer
  - Plant experience likely best guide for plants to determine if significant population of increased susceptibly tubes are present



## Status of Industry Guidelines, Interim Guidance, NEI 03-08 Deviations

Lee Friant



#### **SGMP Guideline Document Status**

<b>Guideline Title</b>	Current	Report #	Last Pub	Imple-	Interim	Review	Comment
	Rev#		Date	mentation	Guidance	Date	
				Date(s)			
SG Integrity	4	3002007571	June	8/31/17	None		
Assessment			2016			2020	
Guidelines							
EPRI SG In Situ	5	3002007856	Nov	8/31/17	None		
Pressure Test			2016			2020	
Guidelines							
PWR SG	8	3002007572	June	8/31/17	SGMP 19-01		
Examination			2016		(3/14/2019)	2020	
Guidelines							
PWR SG Primary-	4	1022832	Sept	4/11/2012	None	2015	Rev 5 in
to-Secondary			2011	7/11/2012*			progress –
Leakage							Target 2020
Guidelines							for
							publication

<sup>\*</sup>If a utility has an outage during the time between the publish date and the 4/11 implementation date, the 7/11 implementation date can be used.



#### **SGMP Guideline Document Status**

Guideline Title	Current Rev #	Report #	Last Pub Date	Imple- mentation Date(s)	Interim Guidance	Review Date	Comments
PWR Primary Water Chemistry Guidelines	7	3002000505	April 2014	1/28/2015	In Progress	2020	
PWR Secondary Water Chemistry Guidelines	8	3002010645	Sept 2017	6/27/2018	SGMP 19-03 (5/12/2019)	2021	

NEI 03-08 Deviations: No active deviations



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## Summary of Interim Guidance for Examination Guidelines (SGMP-19-01)

- Utilities are required to demonstrate that generically qualified techniques can be used under their site conditions
  - Clarification that this demonstration can also be achieved done by an alternate method, i.e., based on voltage comparisons and normalizations rather than on specific essential variables
- Some of the tables in Section 6 needed to be modified to ensure consistent wording throughout the inspection industry
  - Calibration replaced normalization
  - Voltage replaced amplitude
  - Phase Calibration replaced lift off
- Clarified that utilities may also extend an inspection technique
  - For example, a technique that is qualified at a specific location may be extended to another, similar location (such as TTS, Dents)
- Requalification Flowchart in Appendix G (Figure G-2) was modified to match the text in Figure G-1
- Changed the reference for deviations to NEI 03-08 instead of SGMP Administrative Procedures



## Summary of Interim Guidance for Secondary Water Chemistry Guidelines (SGMP-19-03)

- Now references NEI 03-08 for deviation process instead of SGMP Admin Guidelines (replaced by Common Materials Program Administration Guidelines)
- Plans to also revise the Primary Water Chemistry Guidelines with this reference



## Operating Experience Westinghouse

## Westinghouse Nuclear Safety Advisory Letter 05-02, R1

- Some unreinforced secondary side closures 2.5" diameter or less have stress analyses that may be non compliant with ASME Code
- Initial conclusion is that it is not a safety issue
  - No Part 21
- SGMP investigating extent of condition and course of action for resolution
  - NSAL was provided to the other vendors and both communicated that their closures were not affected by this issue
  - Testing was performed that successfully addressed the issue at one plant
  - Utilities affected are working through the Westinghouse
     PWR Owners Group to resolve the issue



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