SC-3 WG 3.4 22-04 Meeting Minutes Jul 26, 2022 Chattanooga, TN Hybrid Meeting

Call to Order

WG 3.4 Chair, Rebecca Steinman, called the meeting to order at 3:11 pm EDT.

Roll Call

Meeting attendees are documented in Attachment 1. Both in-person and WebEx attendees provided brief introductions due to the number of guests in attendance.

Approve Minutes of Prior Meeting

No draft minutes for 22-03 meeting available. Rebecca will create and post to iMeet. Will use a voting poll to approve the 22-03 minutes. Will need quorum of people to respond to count as an approval.

IEEE Policy Statement Review

Rebecca stated the IEEE-SA Standards Board position on Patents and inappropriate topics for WG meetings.

Start Clause 4 Discussion

Rebecca corrected the formatting of the Clause 3.1 definitions prior to the start of the meeting, incorporating the previously agreed upon definitions of design life, equipment, and synergistic effects into the reformatted list.

Discussed the usage of the phrasing "nuclear generating stations and other nuclear facilities" and agreed to use "nuclear facilities" in all instances where appropriate. Added new sentence to the scope section: "Nuclear facilities is intended to be a generic term which encompasses nuclear power generating stations, as well as enrichment, fuel manufacturing, research, and medical facilities." to clarify intent of terminology. WG will need to process a PAR revision in 2023 (prior to balloting revised standard) to change title, scope, and purpose of the standard. Rebecca will make universal updates for this wording prior to the next monthly phone call.

Reviewed Clause 4.1 and made the following edits:

- Added storage as an environment where stressors could exist
- Included pressure as an example of an environmental stressor
- Revised "internal heating from electrical or mechanical loading" to "heating

effects from electrical or mechanical loading"

• Revised guidance to "consider" as opposed to "consult" references in Annex G for additional information on synergistic effects. Discussed NUGEQ feedback and determined no additional edits were required.

Reviewed Clause 4.2 and made the following edits:

- Clarified that high temperature increases the rate at which organic insulating materials can become brittle from list item a
- Deleted "or circuit drift" from list item g

Discussed the NUGEQ comments about the definition of "significant aging mechanisms" being removed from 627-2010 with the intent of being put into 1205. Rebecca will attempt to fit that wording into Clause 4.2 before the next monthly meeting.

Decided it is best to review and/or revise Figure 1 at the end of the revision process to ensure it matches with the rest of the standard once we have completed all other edits.

Started review of Clause 5 with the remaining meeting time even though it was not on the agenda. This Clause was left largely intact as written with only the following minor edits being made.

- Clarified intent to replace any component prior to failure as opposed to only aged components prior to failure as a means to reduce forced outages.
- Added "changes in environmental conditions" as a basis for when to consider the need for an aging assessment.
- Revised the title of Clause 5.2
- Clarified that the goal for recurring inspections or testing is to assess agerelated degradation to determine whether the component can be expected to remain in service until the next scheduled inspection or test.

Discussed the potential need to discuss the aging impacts of design extension conditions in this standard, specifically where would it be appropriate to address this topic. Specific aspects to be considered PAM instrumentation or TS 5.8.6 items for batteries.

Next call date/time

August 11, 2022 11:00 am EDT.

Action Item Recap

- 1. Review Figure 1 after all main sections of the standard have been revised for consistency with the changes.
- 2. Rebecca to pull 627-2010 words that NUGEQ wants back into 1205 and propose a home for those words in Clause 4.2.
- 3. Rebecca to update "nuclear power generating stations and other facilities" to "nuclear facilities" as much as possible throughout the standard.

SC-3 WG 3.4 Meeting Minutes Jul 26, 2022 22-04 Web Conference

4. Process a PAR revision in early 2023 to allow revision of the standard title, scope, and purpose to replace "nuclear generating stations and other nuclear facilities" with simply "nuclear facilities."

Meeting adjourned at 5:14 pm EDT.

Prepared By: Rebecca Steinman, WG 3.4 Chair

Attachments:

- 1. WG 3.4 July 26, 2022 Meeting Attendees Roster
- 2. IEEE meeting standards and positions

WG 3.4 July 26, 2022 Meeting Attendees Roster

Members:

| Name | Affiliation | Attendance |
|---------------------------|----------------------------------|------------|
| Chris Abernathy | TVA | WebEx |
| George Ballassi | Electric Boat | WebEx |
| Suresh Channarasappa (VC) | Westinghouse | In-Person |
| Jim Gleason | | WebEx |
| Steven Graham | Duke Energy | |
| John Kickhofel | Apollo+ Nuclear | |
| Robert (Bob) Konnik | Marmon | In-Person |
| Thomas Koshy | DNSFB | In-Person |
| Jacob Kulangara | DOE/NASA | In-Person |
| George Kyle (S) | | |
| Gurcharan Matharu | US NRC | |
| Eric Rasmussen | R-SCC | In-Person |
| Bert Spear | Duke Energy | |
| Rebecca Steinman (C) | Self (employed by Constellation) | In-Person |
| Peter Waber | Framatome | |

Guests:

| Name | Affiliation | Attendance |
|--------------------|-----------------|------------|
| Jonathan Cornelius | TE Connectivity | In-Person |
| Tom Crawford | Self | In-Person |
| James Parello | Self | In-Person |
| Jigar Patel | NRC | In-Person |
| Jim Reddy | Framatome | In-Person |
| Mark St. Onge | RSCC | In-Person |
| Phil Ward | SNC | In-Person |
| Khadijah West | NRC | WebEx |
| Yvonne Williams | Self | WebEx |

IEEE-SA Standards Board Bylaws on Patents in Standards

6. Patents

IEEE standards may include the known use of essential patents and patent applications provided the IEEE receives assurance from the patent holder or applicant with respect to patents whose infringement is, or in the case of patent applications, potential future infringement the applicant asserts will be, unavoidable in a compliant implementation of either mandatory or optional portions of the standard [essential patents]. This assurance shall be provided without coercion. The patent holder or applicant should provide this assurance as soon as reasonably feasible in the standards development process. This assurance shall be provided no later than the approval of the standard (or reaffirmation when a patent or patent application becomes known after initial approval of the standard). This assurance shall be either:

- a) A general disclaimer to the effect that the patentee will not enforce any of its present or future patent(s) whose use would be required to implement either mandatory or optional portions of the proposed IEEE standard against any person or entity complying with the standard; or
- b) A statement that a license for such implementation will be made available without compensation or under reasonable rates, with reasonable terms and conditions that are demonstrably free of any unfair discrimination.

This assurance is irrevocable once submitted and accepted and shall apply, at a minimum, from the date of the standard's approval to the date of the standard's withdrawal.



Inappropriate Topics for IEEE WG Meetings

- Don't discuss the validity/essentiality of patents/patent claims
- Don't discuss the cost of specific patent use
- Don't discuss licensing terms or conditions
- Don't discuss product pricing, territorial restrictions, or market share
- Don't discuss ongoing litigation or threatened litigation
- Don't be silent if inappropriate topics are discussed... do formally object.

If you have questions, contact the IEEE-SA Standards Board Patent Committee
Administrator at patcom@ieee.org or visit
http://standards.ieee.org/board/pat/index.html

This slide set is available at http://standards.ieee.org/board/pat/pat-slideset.ppt



Slide #2 Approved by IEEE-SA Standards Board – March 2003 (Revised February 2006)