



July 24, 2018

Mr. Brian Thomas, Standards Executive  
U.S. Nuclear Regulatory Commission  
Mail Stop 10 A36  
Washington, DC 20555-0001

Subject: Letter of notification of ANSI approved standards for NRC review and potential endorsement

Dear Tom:

The American Nuclear Society (ANS), a standards development organization under the auspices of the American National Standards Institute (ANSI), is pleased to provide you with electronic copies of ANS standards that have been recently approved by ANSI. We request that these standards be reviewed by NRC staff and considered for endorsement to facilitate use in the regulatory process. Accordingly, please feel free to distribute the electronic copies to your staff as necessary. If one or more of these standards are found to merit application in the regulatory framework, we would very much appreciate your informing us so we can update our records.

Recently approved standards include the following:

**ANSI/ANS-2.6-2018, “Guidelines for Estimating Present & Projecting Future Population Distributions,”** (new standard) received ANSI approval on March 16, 2018. This standard provides guidance for suitable procedures to develop estimates and forecasts of human population distribution around commercial and government-owned nuclear facility sites. This standard is intended to provide civilian and government professionals with methodologies that are generally acceptable in the demographic community and to facilitate the regulatory authority review of site suitability relative to population considerations.

NRC representatives on working group: Daniel Mussatti (Chair), Leah Parks (Vice Chair), Seshagiri Tammara

NRC representatives on consensus committee when approved: Jim Xu, Leah Parks, Peyton Doub

**ANSI/ANS-2.10-2017, “Criteria for Retrieval, Processing, Handling, and Storage of Records from Nuclear Facility Seismic Instrumentation,”** (revision of ANSI/ANS-2.10-2003 (W2013)) received ANSI approval on December 19, 2017. This standard provides criteria for the timely retrieval and the subsequent processing, handling, and storage of data obtained from nuclear power plant and non-power nuclear facility strong-motion analog and digital seismic instrumentation. Nuclear power plant seismic instrumentation requirements are specified in ANSI/ANS-2.2-2016, “Earthquake Instrumentation Criteria for Nuclear Power Plants.” Non-power nuclear facility seismic instrumentation, if required, is specified in facility-specific regulations, standards, and/or guidance documents. The principal function of the seismic instrumentation covered in this standard is to address issues that have a significant bearing on safety or mitigate the consequences of accidents that could result in potential off-site exposures. This standard does not address weak-motion instrumentation installed in some non-power nuclear facilities to measure small-magnitude ground accelerations or velocities.

NRC representatives on working group: Jim Xu (Chair), Vladimir Graizer

NRC representatives on consensus committee when approved: Jim Xu, Leah Parks, Peyton Doub

**ANSI/ANS-8.24-2017, “Validation of Neutron Transport Methods for Nuclear Criticality Safety Calculations,”** (revision of ANSI/ANS-8.24-2007 (R2012) (W2017)) received ANSI approval on December 12, 2017. This standard provides requirements and recommendations for validation, including establishing applicability, of neutron transport calculational methods used in determining critical or subcritical conditions for nuclear criticality safety analyses.

NRC representatives on working group: Christopher Tripp

NRC representatives on consensus committee when approved: Thomas Marenchin

**ANSI/ANS-57.3-2018, “Design Requirements for New Fuel Storage Facilities at Light Water Reactor Plants,”** (revision of historical standard ANSI/ANS-57.3-1983 (W1993)) received ANSI approval on February 27, 2018. This standard defines the required functions of dry storage facilities for new fuel at light water reactor nuclear power plants. It provides minimum design requirements for safe storage of new nuclear fuel and control components at such plants. The fuel storage facilities covered by this standard are used for receiving, inspecting, and storing fuel containing new and recycled uranium and mixed oxides. The basis of this standard is to ensure that the design of the facility will be performed in an efficient and economical manner to (a) preclude criticality; (b) ensure protection of new fuel assemblies, control components, plant personnel, and the public; and (c) maintain radiation exposures as low as reasonably achievable. Storage of new fuel assemblies in a spent fuel pool is covered in ANSI/ANS-57.2-1983 (W1993), “Design Requirements for Light Water Reactor Spent Fuel Storage Facilities at Nuclear Power Plants.”

NRC representatives on working group: None

NRC representatives on consensus committee when approved: Harry Felsher

The following American National Standards were reviewed and found to remain sufficiently current for reaffirmation (reapproval without change). The following standards have been reaffirmed as American National Standards this year:

- ANSI/ANS-3.4-2013 (R2018), “Medical Certification and Monitoring of Personnel Requiring Operator Licenses for Nuclear Power Plants” (reaffirmation approved 7/2/2018)
- ANSI/ANS-15.8-1995 (R2018), “Quality Assurance Program Requirements for Research Reactors” (reaffirmation approved 7/18/2018)
- ANSI/ANS-15.1-2007 (R2018), “The Development of Technical Specifications for Research Reactors” (reaffirmation approved 4/10/2018)
- ANSI/ANS-15.21-2012 (R2018), “Format and Content for Safety Analysis Reports for Research Reactors” (reaffirmation approved 2/27/2018)
- ANSI/ANS-58.3-1992 (R2018), “Physical Protection for Nuclear Safety-Related Systems and Components” (reaffirmation approved 1/11/2018)

*Electronic copies of recently reaffirmed standards available upon request.*

If you have any questions or would like hard copies of these standards, feel free to contact me or Ms. Pat Schroeder, ANS Standards Manager, by telephone at 708-579-8269 or by e-mail at [pschroeder@ans.org](mailto:pschroeder@ans.org).

Sincerely,



Steven A. Arndt, Ph.D., P.E., Chair  
ANS Standards Board

Attachments (4 e-standards)

Cc: Thomas Boyce, NRC, Chief for the Regulatory Guide and Generic Issues Branch, DE, RES  
John Nakoski, NRC, Chief, Probabilistic Risk Assessment Branch, DRA, RES  
Peyton Doub, NRC  
Thomas Marenchin, NRC  
Shivani Mehta, NRC  
Daniel Mussatti, NRC  
Leah Parks, NRC  
Ruth Reyes-Maldonado, NRC  
Jim Xu, NRC  
Donald Eggett, ANS Standards Board Vice-Chair  
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