



***Status Update on
ANSI/ANS-3.11 Development***

***Nuclear Utility
Meteorological Data
Users Group
(NUMUG)***

Status Update on ANSI/ANS-3.11 Development

- **Purpose** *Report on the development of ANSI/ANS-3.11, a new Standard for Determining Meteorological Information at Nuclear Sites.*
- **Objective** *Develop a Standard which will reflect the current operational and regulatory climate and incorporate state-of-the-art data acquisition, processing, and recording technology for all nuclear facilities nationwide.*

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■ *Goals*

- *Integrate the meteorological monitoring requirements of the civilian nuclear power industry with those of Federal government nuclear facilities.*
- *Construct a new standard to replace ANSI/ANS-2.5 which will **clarify** existing issues and **provide** additional guidance **without** imposing new requirements.*
- *Develop the most technically sound, state-of-the-art standard without consideration of regulatory forcing functions.*

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■ ***Why Revise ANSI/ANS-2.5?***

- *No longer active*
- *Outdated technically*
- *Emphasizes siting, not operation of nuclear facilities*
- *Does not reflect current meteorological instrumentation standards*
- *Does not reflect state-of-the-art data acquisition, processing, and archiving technology*
- *Inconsistent with USEPA and ASTM guidance*
- *Addresses only nuclear power plants and not all nuclear facilities*

Status Update on ANSI/ANS-3.11 Development Chronology

Past:

- *April 1993: Comments on ANSI/ANS-2.5-1984 compiled from all NUMUG attendees.*
- *April 1994: Recommended revisions submitted jointly to Dr. Frank Congel, NRC, and ANS*
- *July 1994: NRC response*
- *October 1994: Survey of NUMUG members' interest in participating in ANSI process.*
- *January 1995: List of NUMUG members interested in serving on new ANS-2.5 Subcommittee submitted to ANS-2 Subcommittee, Site Evaluation.*
- *February 1995: Previous ANS-2.5 members contacted to determine interest in chairing new Subcommittee.*
- *February 1996: Stan Marsh appointed to ANS-2 Subcommittee.*

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Recent Past:

- *April 1996: San Francisco NUMUG Meeting - DMCC joined NUMUG in pursuing new standard.*
- *June 1996 - ANS -3.11 Working Group Co-Chairs Appointed*
- *August 1996 - ANS -3.11 Working Group Formed*
- *ANS-3.11 Working Group Meetings*
 - *June 1996 - Reno, NV*
 - *September 1996 - LaGrange Park, IL*
 - *January 1997 - Long Beach, CA*
 - *April 1997 - San Francisco, CA*
 - *October 1997 - South Bend, IN*
 - *January 1998 - Phoenix, AZ (future)*
- *Nov. 1996 - Scope of Work, PINS submitted to ANS*
- *March 1997 - Meteorological Monitoring Guidance compiled*
- *July 1997 - ANS-3.11 Outline finalized*
- *August 1997 - ANS-3.11 Working Group - Research/Technical Writing Assignments*

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Future:

- *First Draft of ANS-3.11*
- *Review/Comment by Working Group*
- *Second Draft of ANS-3.11*
- *Review/Comment by Working Group, NUMUG, DMCC*
- *Compile final document*
- *ANSI/ANS -3 Subcommittee approval*
- *NUPPSCO Committee approval*
- *Standards Committee approval*
- *Nuclear Standards Board approval*
- *Submit to USNRC for approval*

Status Update on ANSI/ANS-3.11 Development

■ NUMUG/DMCC recommended revisions

- General recommendations***
- Definitions***
- Meteorological parameters***
- Siting of meteorological instruments***
- Data presentation***
- System performance***
- Period of record, data reduction,
compilation, storage***
- Documentation***
- References***

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- ***Design Criteria for new ANSI/ANS-3.11 Standard***
 - *Replace ANSI/ANS-2.5, not just revise it.*
 - *Applicable to both civilian nuclear power industry and Federal Gov't nuclear facilities.*
 - *Applicable to meteorological monitoring supporting siting, licensing, operation, emergency preparedness, and decommissioning of nuclear facilities.*
 - *Reside in ANS-3.0, Operations.*
 - *Rely on existing, technically sound, meteorological guidance; develop new guidance only where necessary.*
 - *Stand alone, technically sound document.*

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■ **ANS-3.11 Outline-Technical Preparation Assignments**

- 1.0 INTRODUCTION - Marsh(*), Mazzola
- 2.0 GENERAL CONSIDERATIONS - Mazzola(*), Marsh
- 3.0 DEFINITIONS AND ACRONYMS - Harvey(*)
- 4.0 METEOROLOGICAL MONITORING SYSTEM
CRITERIA AND COMPONENTS - Parker(*), Bellinger,
Banta
- 5.0 SITING OF METEOROLOGICAL OBSERVATION
INSTRUMENTS - Fransioli(*), Bellinger, Banta
- 6.0 DATA ACQUISITION - Abrams(*), Harvey
- 7.0 SYSTEM PERFORMANCE - Fransioli(*), Harvey
- 8.0 QUALITY ASSURANCE PROGRAM - Wastrack(*)
- 9.0 DATA BASE MANAGEMENT - Abrams(*), Harvey
- 10.0 DOCUMENTATION - Wastrack(*)
- 11.0 REFERENCES - Marsh(*), Mazzola

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- *Economic considerations of a new standard*
 - *Costs of implementing revisions*
 - *Hardware*
 - *Software*
 - *Documentation*
 - *O&M*
- *Policy considerations*

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■ *Exhibits*

- 1 Working Group- 3.11 Membership***
- 2 ANS Approval Process***
- 3 NUMUG-DMCC Recommended
Revisions to ANSI/ANS-2.5***
- 4 Scope of Work***
- 5 PINS***
- 6 Meteorological Technical
Guidance Document***
- 7 ANS-3.11 Outline, Technical
Preparation Assignments***