# **American Nuclear Society**

### WITHDRAWN

July 23, 2012 ANSI/ANS-3.4-1996 (R2002) medical certification and monitoring of personnel requiring operator licenses for nuclear power plants

## an American National Standard

No longer being maintained as an American National Standard. This standard may contain outdated material or may have been superseded by another standard. Please contact the ANS Standards Administrator for details.



published by the American Nuclear Society 555 North Kensington Avenue La Grange Park, Illinois 60525 USA

### Addendum to Foreword

ANSI/ANS-3.4-1996; R2002

Medical Certification and Monitoring of Personnel Requiring Operator Licenses for Nuclear Power Plants

This standard has been reviewed and reaffirmed by the ANS Nuclear Facilities Standards Committee (NFSC) with the recognition that it may reference other standards and documents that may have been superseded or withdrawn. The requirements of this document are met by using the version of the standards and documents referenced herein. It is the responsibility of the user to review each of the references cited and to determine whether the use of the original references or more recent versions is appropriate for the facility. Variations from the standards and documents referenced in this standard should be evaluated and documented.

The standard does not necessarily reflect recent industry initiatives for risk informed decision-making or a graded approach to quality assurance. Users should consider the use of these industry initiatives in the application of this standard.

American National Standard for Medical Certification and Monitoring of Personnel Requiring Operator Licenses for Nuclear Power Plants

Secretariat
American Nuclear Society

Prepared by the American Nuclear Society Standards Committee Working Group ANS-3.4

Published by the American Nuclear Society 555 North Kensington Avenue La Grange Park, Illinois 60526 USA

Approved February 7, 1996 by the **American National Standards Institute, Inc.** 

#### American National Standard

Designation of this document as an American National Standard attests that the principles of openness and due process have been followed in the approval procedure and that a consensus of those directly and materially affected by the standard has been achieved.

This standard was developed under procedures of the Standards Committee of the American Nuclear Society; these procedures are accredited by the American National Standards Institute, Inc., as meeting the criteria for American National Standards. The consensus committee that approved the standard was balanced to ensure that competent, concerned, and varied interests have had an opportunity to participate.

An American National Standard is intended to aid industry, consumers, governmental agencies, and general interest groups. Its use is entirely voluntary. The existence of an American National Standard, in and of itself, does not preclude anyone from manufacturing, marketing, purchasing, or using products, processes, or procedures not conforming to the standard.

By publication of this standard, the American Nuclear Society does not insure anyone utilizing the standard against liability allegedly arising from or after its use. The content of this standard reflects acceptable practice at the time of its approval and publication. Changes, if any, occurring through developments in the state of the art, may be considered at the time that the standard is subjected to periodic review. It may be reaffirmed, revised, or withdrawn at any time in accordance with established procedures. Users of this standard are cautioned to determine the validity of copies in their possession and to establish that they are of the latest issue.

The American Nuclear Society accepts no responsibility for interpretations of this standard made by any individual or by any ad hoc group of individuals. Requests for interpretation should be sent to the Standards Department at Society Headquarters. Action will be taken to provide appropriate response in accordance with established procedures that ensure consensus on the interpretation.

Comments on this standard are encouraged and should be sent to Society Headquarters.

Published by

American Nuclear Society 555 North Kensington Avenue La Grange Park, Illinois 60526 USA

Copyright © 1996 by American Nuclear Society. All rights reserved.

Any part of this standard may be quoted. Credit lines should read "Extracted from American National Standard ANSI/ANS-3.4-1996 with permission of the publisher, the American Nuclear Society." Reproduction prohibited under copyright convention unless written permission is granted by the American Nuclear Society.

Printed in the United States of America

#### Foreword

(This Foreword is not a part of American National Standard for Medical Certification and Monitoring of Personnel Requiring Operator Licenses for Nuclear Power Plants, ANSI/ANS-3.4-1996.)

The organization that operates a nuclear power plant has the responsibility for safe and efficient operation of the plant. Inherent in this overall function is the responsibility to select and retain operators and senior operators who are physically and mentally capable of such operations. The selection of operators and senior operators is of great importance since they perform and direct the manipulations of mechanisms and controls that affect the safe operation of the reactor. This standard provides the minimum requirements necessary for an examining physician to determine that the physical condition and general health of the operators is acceptable, in the sense that the operators' condition and health would not themselves cause operational errors.

The major changes made as a result of the revision of this standard are the following:

- In Section 5, 5.3 now includes only those items where specific criteria are given. General disqualifying conditions have been incorporated into 5.4.
- The standard has been made consistent with existing federal regulations, based on technical considerations.
- In Section 3, a passage on temporary restrictions (3.3) has been added.

This standard was developed by Working Group ANS-3.4 of the American Nuclear Society Standards Committee, which had the participation of the following members during the period it prepared and approved the standard:

- G. W. Scholand, Chairman, G.W.S. III
- L. E. Davis, Commonwealth Edison Company
- D. J. Lange, U.S. Nuclear Regulatory Commission
- D. L. McCain, U.S. Nuclear Regulatory Commission
- M. Quarum, M.D., Columbia Occupational Health Associates
- S. Rosen, M.D., Southern California Edison Company
- J. Woodburn, M.D., Northern States Power Company

At the time of its approval of this standard, Subcommittee ANS-3, Reactor Operations and Support Activities, had the following membership:

- L. E. Davis, Chairman, Commonwealth Edison Company
- C. K. Brown, Southern Nuclear Operating Company
- F. Dougherty, Tenera, L.P.
- C. Eldridge, Pacific Gas & Electric Company
- S. Floyd, Nuclear Management and Resources Council
- R. Gallo, U.S. Nuclear Regulatory Commission
- C. H. Moseley, Jr., Development Analysis Corporation
- S. M. Quennoz, Portland General Electric Company
- D. R. Roth, General Physics Corporation
- W. J. Rudolph, Quality Applications, Inc.
- G. W. Scholand, G.W.S. III
- R. N. Smith, Argonne National Laboratory
- W. T. Ullrich, Consultant
- P. Walzer, Public Service Electric & Gas Company
- M. J. Wright, Entergy Operations, Inc.

The American Nuclear Society's Nuclear Power Plant Standards Committee (NUPPSCO) had the following membership at the time of its approval of this standard:

#### W. H. D'Ardenne, Chairman

#### M. D. Weber, Secretary

R. E. Allen	
	(for the Institute of Electrical and Electronics Engineers)
P. Ballinger	Nebraska Public Power District
F. Boorboor	Nuclear Placement Services, Inc.
J. C. Bradford	Bechtel National, Inc.
T. W. Burnett	Westinghouse Electric Corporation
J. D. Cohen	Westinghouse Savannah River Company
J. B. Cotton	Philadelphia Electric Company
	Rochester Gas & Electric Corporation
W. H. D'Ardenne	GE Nuclear Energy
	(for the American Nuclear Society)
P. H. Hepner	ABB/Combustion Engineering Nuclear Power
C. E. Johnson, Jr.	U.S. Nuclear Regulatory Commission
J. T. Luke	Florida Power & Light Company
J. F. Mallay	Liberty Consulting Group
	Halliburton NUS Corporation, Inc.
J. A. Nevshemal	
	Electric Power Research Institute
T. T. Robin	Southern Company Services, Inc.
	Ebasco Services, Inc.
R. E. Scott	
	Oak Ridge National Laboratories
	Stone & Webster Engineering Corporation
	Stevenson & Associates
C. D. Thomas, Jr.	Yankee Atomic Electric Company
G. P. Wagner	Commonwealth Edison Company
	Sargent & Lundy
R. Weir	Tennessee Valley Authority

Contents	Section	Page
	1. Scope	1
	2. Definitions	1
	3. Health Evaluation Responsibility 3.1 General Aspects 3.2 Facility Licensee's Report (FLR) 3.3 Temporary Licensee Duty Restrictions	1
	4. Medical Examination Frequency	2
	5. Health Requirements and Disqualifying Conditions 5.1 Basis of Requirements 5.2 Health Requirements 5.3 Specific Minimum Requirements for Medical Qualification 5.4 Disqualifying Conditions	$1 \dots 2$ $1 \dots 2$ $1 \dots 2$
	6. Medical Waiver and Cinditional Licenses 6.1 Medical Waiver 6.2 Conditional Licenses	5
	7. References	6
	Appendix Appendix A Contraindications for Aerobic Tests	7
	Table Table 1 Respiratory Restrictions	3