WITHDRAWN
October 7, 2005
ANSI/ANS-3.8.1-1995

criteria for radiological emergency response functions and organizations

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 This standard may contain outdated material or may have been superseded by another standard.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
American National Standard
Criteria for Radiological Emergency
Response Functions and Organizations

Secretariat
American Nuclear Society

Prepared by the
American Nuclear Society
Standards Committee
Working Group ANSI-3.8

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

Approved November 15, 1995
by the
American National Standards Institute, Inc.
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 Ameri-
can 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 volun-
tary. 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 develop-
ments 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 It may be reaffirmed, revised, or withdrawn at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 inter-
pretation.

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 © 1995 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-3.8.1-1995 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 Criteria for Radiological Emergency Response Functions and Organizations, ANSI/ANS-3.8.1-1995.)

Every nuclear power plant owner organization is required by federal regulations to have a detailed radiological emergency response plan. The plant operators are required to perform routine, abnormal, and emergency actions in a manner to reduce to the extent feasible the likelihood of any particular event developing into an emergency condition. An objective of sound operations is to prevent emergency conditions. The objective of an emergency response program is emergency mitigation. The plant operators are the key to emergency prevention and mitigation at all times.

If a situation arises which activates the radiological emergency response plan, the plant operators identify developing trends and take the appropriate action to prevent or mitigate a radiological release. The plant operators identify the need for emergency support, make initial contact with emergency response organizations, and activate the radiological emergency response plan. As the emergency develops, the administrative, notification, and coordinating functions are transferred from the plant operators to other individuals within the emergency organization as defined in the radiological emergency response plan. Regardless of the functions shifted from the plant operators to the emergency organization, the responsibility for placing the plant in a safe configuration remains with the plant operators.

The ANS-3.8 series of standards provides guidance to nuclear power plant utilities pertaining to radiological emergency response plan preparation based upon the experience of the licensed nuclear facilities. The American National Standards in this series are:

ANSI/ANS-3.8.3-1995 - Criteria for Radiological Emergency Response Plans and Implementing Procedures
ANSI/ANS-3.8.4-1995 - Criteria for Maintaining Radiological Emergency Response Capability
ANSI/ANS-3.8.5-1992 - Criteria for Emergency Radiological Field Monitoring, Sampling, and Analysis

Working Group ANS-3.8 of the American Nuclear Society Standards Committee had the following members at the time this standard was processed and approved:

C. K. Brown, Chairman, Southern Nuclear Operating Company  
D. M. Barss, U. S. Nuclear Regulatory Commission  
A. R. Chesley, Vermont Yankee Nuclear Power Corporation  
D. I. Fawcett, Associated Technical Training Services, Inc.  
A. G. Grosjean, New York Power Authority  
J. J. Hawkhurst, Yankee Atomic Electric Company  
M. A. Hobe, Consumers Power Company  
S. P. LaVie, Duquesne Light Company  
E. E. M. Lloyd, EXITECH Corporation  
E. J. Michael, Stone and Webster Engineering Corporation  
R. W. Myers, Myers & Early, Ltd.  
C. D. Pond, Tennessee Valley Authority  
C. L. Row, U. S. Department of Energy  
A. C. Sanders, Carolina Power & Light Company  
H. I. Sakinski, Duquesne Light Company  
E. D. Testa, U. S. Nuclear Regulatory Commission  
W. E. Webb, Jr., Tennessee Valley Authority  
W. A. Weckstein, Public Service Electric & Gas Company
At the time of the approval of the standard, Subcommittee ANS-3, Reactor Operations and Support Activities, of the American Nuclear Society Standards Committee had the following membership:

L. E. Davis, Chairman, Commonwealth Edison Company
E. Callan, Philadelphia Electric Company
J. Doering, Philadelphia Electric Company
F. Dougherty, Tenera, L.P.
C. Eldridge, Pacific Gas & Electric Company
R. Gallo, U.S. Nuclear Regulatory Commission
J. A. Honey, American Nuclear Insurers
C. H. Moseley, Jr., Performance Development Corporation
S. M. Quennos, Portland General Electric Company
D. Roth, General Physics Corporation
W. J. Rudolph II, Quality Applications, Inc.
G. Scholander, Westinghouse Electric Corporation
R. N. Smith, Argonne National Laboratory
W. T. Ulrich, United Energy Services Corporation
P. Waizer, 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 .................................................. UE&C Nuclear
(for the Institute of Electrical and Electronics Engineers, Inc.)
P. Ballinger ................................................. Nebraska Public Power District
F. Boorboor .................................................. Nuclear Placement Services, Inc.
J. C. Bradford .............................................. Bechtel Power Corporation
T. W. Burnett .................................................. Westinghouse Electric Corporation
J. D. Cohen .................................................. Westinghouse Savannah River Company
J. D. Cotton .................................................. Philadelphia Electric Company
T. A. Daniels .................................................. Rochester Gas & Electric Corporation
W. H. D'Ardenne .............................................. GE Nuclear Energy
L. E. Davis .................................................. Commonwealth Edison Company
S. B. Gerges .................................................. Halliburton NUS Corporation, Inc.
D. L. Gillispie .............................................. Institute of Nuclear Power Operations
R. W. Hardy .................................................. 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. Lake .................................................. Liberty Consulting Group
J. F. Mallay .................................................. Raytheon UE&C
J. A. Neveshmal .............................................. Electric Power Research Institute
W. B. Reuland ............................................... Southern Company Services, Inc.
J. C. Salzarini ............................................... Ebasco Services, Inc.
R. E. Scott .................................................. Scott Enterprises
D. J. Spellman ............................................... Oak Ridge National Laboratory
S. L. Stamm .................................................. Stone & Webster Engineering Corporation
J. D. Stevenson ............................................... Stevenson & Associates
C. D. Thomas, Jr. ........................................... Yankee Atomic Electric Company
G. P. Wagner ............................................... Commonwealth Edison Company
N. Weber ..................................................... Sargent & Lundy
R. Weir ..................................................... Tennessee Valley Authority


### Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Scope</td>
<td>1</td>
</tr>
<tr>
<td>2. Definitions</td>
<td>1</td>
</tr>
<tr>
<td>3. Emergency Response Functions</td>
<td>2</td>
</tr>
<tr>
<td>3.1 Basic Functions</td>
<td>3</td>
</tr>
<tr>
<td>3.2 Support Functions</td>
<td>3</td>
</tr>
<tr>
<td>4. Emergency Response Organization</td>
<td>8</td>
</tr>
<tr>
<td>4.1 Control Room Organization</td>
<td>8</td>
</tr>
<tr>
<td>4.2 Technical Support Center Organization</td>
<td>15</td>
</tr>
<tr>
<td>4.3 Operations Support Center Organization</td>
<td>18</td>
</tr>
<tr>
<td>4.4 Emergency Operations Facility Organization</td>
<td>18</td>
</tr>
<tr>
<td>4.5 Emergency News Center Organization</td>
<td>21</td>
</tr>
<tr>
<td>4.6 Supplemental Support</td>
<td>21</td>
</tr>
<tr>
<td>5. References</td>
<td>21</td>
</tr>
</tbody>
</table>

### Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1</td>
<td>Function vs. Emergency Classification</td>
<td>4</td>
</tr>
<tr>
<td>Table 2</td>
<td>Support Function vs. Basic Function</td>
<td>5</td>
</tr>
<tr>
<td>Table 3</td>
<td>Function vs. Emergency Response Facility</td>
<td>6</td>
</tr>
<tr>
<td>Table 4</td>
<td>Function vs. Responsible Position</td>
<td>9</td>
</tr>
</tbody>
</table>

### Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>Typical Control Room Emergency Organization</td>
<td>10</td>
</tr>
<tr>
<td>Figure 2</td>
<td>Typical Technical Support Center Organization</td>
<td>11</td>
</tr>
<tr>
<td>Figure 3</td>
<td>Typical Operations Support Center Organization</td>
<td>12</td>
</tr>
<tr>
<td>Figure 4</td>
<td>Typical Emergency Operations Facility Organization</td>
<td>13</td>
</tr>
<tr>
<td>Figure 5</td>
<td>Typical Emergency News Center Organization</td>
<td>13</td>
</tr>
<tr>
<td>Figure 6</td>
<td>Typical Emergency Response Organization (Fully Activated)</td>
<td>14</td>
</tr>
</tbody>
</table>