

**NFPA<sup>®</sup>**

# 804

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Standard for  
Fire Protection for  
Advanced Light Water Reactor  
Electric Generating Plants

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**2020**



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## NFPA® 804

### Standard for

# Fire Protection for Advanced Light Water Reactor Electric Generating Plants

### 2020 Edition

This edition of NFPA 804, *Standard for Fire Protection for Advanced Light Water Reactor Electric Generating Plants*, was prepared by the Technical Committee on Fire Protection for Nuclear Facilities. It was issued by the Standards Council on November 4, 2019, with an effective date of November 24, 2019, and supersedes all previous editions.

This edition of NFPA 804 was approved as an American National Standard on November 24, 2019.

### Origin and Development of NFPA 804

The need for fire protection in nuclear power facilities has been demonstrated in a number of incidents, including the Browns Ferry Fire in 1975 and other more recent incidents in the United States and abroad. Probabilistic risk assessments of existing plants have shown that fire represents one of the largest single contributors to the possibility of reactor damage. This document, first released in 1995, represents a comprehensive consensus of baseline fire protection requirements for all aspects of advanced light water reactor electric generating plants, including their design, construction, operation, and maintenance.

There were no technical changes made in the 2001 edition. All the changes were in the definitions section to comply with the NFPA Glossary of Terms.

The 2006 edition was reorganized to conform to the *Manual of Style for NFPA Technical Committee Documents*.

For the 2010 edition, the document scope was revised in order to coordinate with the release of and option to use a new risk-informed option for atomic power plants under NFPA 806, *Performance-Based Standard for Fire Protection for Advanced Nuclear Reactor Electric Generating Plants Change Process*. The 2010 edition was also harmonized with other documents in the field, and a new Annex B was added for best practice guidance for defense against fires and explosions.

The 2015 edition of the document was updated to remove references to NFPA 251, which was withdrawn. Changes also were made to include the definition and requirements from NFPA 101 and NFPA 1144 pertaining to combustible, noncombustible, and limited combustible materials.

Several changes have been made to the 2020 edition to comply with the *Manual of Style for NFPA Technical Committee Documents* and align terms with NFPA 801, 805, and 806. To ensure proper operation of all plant systems, a recommendation to use NFPA 4 to test integrated fire protection systems has been added in Annex A, Chapter 5. To ensure the proper selection of an extinguishing agent, additional consideration criteria that align with NFPA 801 have been included. Additional language from NFPA 101 has also been incorporated to more clearly identify materials that should be considered limited-combustible.

## Technical Committee on Fire Protection for Nuclear Facilities

**William B. Till, Jr.,** *Chair*  
Bernie Till & Associates LLC, SC [SE]

**James Bouche,** F. E. Moran, Inc., IL [M]  
Rep. National Fire Sprinkler Association  
**Seth S. Breitmaier,** American Nuclear Insurers, CT [I]  
**Craig P. Christenson,** US Department of Energy, WA [E]  
**David R. Estrela,** Orr Protection Systems, Inc., MA [IM]  
**Jack A. Gump,** Consolidated Nuclear Security, TN [SE]  
**Neal T. Hara,** Battelle-Pacific Northwest National Laboratory, WA [U]  
**Daniel J. Hubert,** Amerex/Janus Fire Systems, IN [M]  
**Eric R. Johnson,** Savannah River Nuclear Solutions, LLC, SC [U]  
**Steven W. Joseph,** Honeywell/Xtralis, Inc., OR [M]  
**Robert Kalantari,** Engineering Planning & Management, Inc. (EPM), MA [SE]  
**Elizabeth A. Kleinsorg,** JENSEN HUGHES, CA [SE]  
**Neal W. Krantz, Sr.,** Krantz Systems & Associates, LLC, MI [M]  
Rep. Automatic Fire Alarm Association, Inc.  
**Christopher A. Ksobiech,** We Energies, WI [U]

**John D. Lattner,** Southern Nuclear Company, AL [U]  
**Charles J. March,** Defense Nuclear Facilities Safety Board, DC [E]  
**Franck Orset,** European Mutual Association for Nuclear Insurance (EMANI), France [I]  
**Robert K. Richter, Jr.,** Richter Fire Risk Solutions, CA [U]  
Rep. Nuclear Energy Institute  
**Hossam Shalabi,** Canadian Nuclear Safety Commission, Canada [E]  
**Cleveland B. Skinker,** Bechtel Infrastructure and Power Corporation, VA [SE]  
**Donald Struck,** Siemens Fire Safety, NJ [M]  
Rep. National Electrical Manufacturers Association  
**William M. Sullivan,** Contingency Management Associates, Inc., MA [SE]  
**Carl N. Sweely,** Framatome, NC [U]  
**Gabriel Taylor,** US Nuclear Regulatory Commission, MD [E]  
**Jeffrey S. Tubbs,** Arup, MA [SE]  
**Ronald W. Woodfin,** TetraTek, Inc./AES Corporation, CO [SE]

### Alternates

**James G. Bisker,** US Department of Energy, DC [E]  
(Alt. to Craig P. Christenson)  
**Jason W. Butler,** Bernie Till and Associates LLC, SC [U]  
(Alt. to William B. Till, Jr.)  
**William V. F. Cosey,** Savannah River Nuclear Solutions, LLC, SC [U]  
(Alt. to Eric R. Johnson)  
**Timmy Dee,** Consolidated Nuclear Security Y-12, LLC, TN [SE]  
(Alt. to Jack A. Gump)  
**Mark E. Fessenden,** Johnson Controls, WI [M]  
(Alt. to James Bouche)  
**Daniel P. Finnegan,** Siemens Industry, Inc., IL [M]  
(Alt. to Donald Struck)  
**Michael Fletcher,** Ameren Corporation, MO [U]  
(Alt. to Robert K. Richter, Jr.)  
**Thomas K. Furlong,** Nuclear Service Organization, DE [I]  
(Voting Alt.)  
**David M. Hope,** TetraTek Inc. Fire Safety Technologies, TN [SE]  
(Alt. to Ronald W. Woodfin)

**Charles S. Logan,** American Nuclear Insurers, CT [I]  
(Alt. to Seth S. Breitmaier)  
**Parker J. Miracle,** Amerex/Janus Fire Systems, OH [M]  
(Alt. to Daniel J. Hubert)  
**David M. Nieman,** Bechtel Corporation, VA [SE]  
(Alt. to Cleveland B. Skinker)  
**Paul R. Ouellette,** Engineering Planning & Management, Inc. (EPM), MA [SE]  
(Alt. to Robert Kalantari)  
**Andrew R. Ratchford,** JENSEN HUGHES, CA [SE]  
(Alt. to Elizabeth A. Kleinsorg)  
**James R. Streit,** Los Alamos National Laboratory, NM [U]  
(Alt. to Neal T. Hara)  
**David W. Stroup,** Nuclear Regulatory Commission, MD [E]  
(Alt. to Gabriel Taylor)

### Nonvoting

**Tzu-sheng Shen,** Central Police University, Taiwan [SE]  
**Leonard R. Hathaway,** The Villages, FL [I]  
(Member Emeritus)

**Wayne D. Holmes,** HSB Professional Loss Control, NC [I]  
(Member Emeritus)

**Heath Dehn,** NFPA Staff Liaison

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**Committee Scope:** This Committee shall have primary responsibility for documents on the safeguarding of life and property from fires in which radiation or other effects of nuclear energy might be a factor.



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