NFPA®851

Recommended Practice for Fire Protection for Hydroelectric Generating Plants

2010 Edition



NFPA, 1 Batterymarch Park, Quincy, MA 02169-7471 An International Codes and Standards Organization

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ISBN: 978-087765944-0 (Print) ISBN: 978-087765992-1 (PDF)

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NFPA® 851

Recommended Practice for

Fire Protection for Hydroelectric Generating Plants

2010 Edition

This edition of NFPA 851, *Recommended Practice for Fire Protection for Hydroelectric Generating Plants*, was prepared by the Technical Committee on Electric Generating Plants. It was issued by the Standards Council on October 27, 2009, with an effective date of December 5, 2009, and supersedes all previous editions.

This edition of NFPA 851 was approved as an American National Standard on December 5, 2009.

Origin and Development of NFPA 851

The Committee on Non-Nuclear Power Generating Plants was organized in 1979 to have primary responsibility for documents on fire protection for non-nuclear electric generating plants. The Hydroelectric Subcommittee was formed in 1982 to write this document. The first edition of NFPA 851 was issued in 1987 and revised in 1992. The 1996 edition contained minor changes to clarify the life safety recommendations and generator windings protection. The 2000 edition editorially revised Chapter 2 to be consistent with NFPA 850, Recommended Practice for Fire Protection of Electric Generating Plants and High Voltage Direct Current Converter Stations. In addition, the document was revised to clarify the requirements for fire suppression systems for generator windings of different composition.

The 2005 edition of NFPA 851 was restructured to conform to the requirements of the Manual of Style for NFPA Technical Committee Documents. There were changes made to clarify existing recommendations under 5.2.2.3 and 5.2.2.4 using new artwork. Other changes included coordination of similar recommendations from NFPA 850, Recommended Practice for Fire Protection for Electric Generating Plants and High Voltage Direct Current Converter Stations.

The 2010 edition of NFPA 851 now includes a chapter containing recommendations for a fire protection design process and a fire protection design basis document (new Chapter 4). An annex has been added showing an example of a Fire Protection Design Basis document. The chapter on Fire Risk Control Program has been moved to a new Chapter 9.

The use of compressed air foam systems and fast-depressurization systems has been recognized, and recommendations for the use of these systems are now included.