American Nuclear Society

WITHDRAWN

May 14, 2017

ANSI/ANS-55.6-1993 (R2007) (W2017)

liquid radioactive waste processing system for light water reactor plants

an American National Standard

REAFFIRMED

May 14, 2007

ANSI/ANS-55.6-1993 (R2007)

This standard has been reviewed and reaffirmed with the recognition that it may reference other standards and documents that may have been superseded or withdrawn. The requirements of this document will be 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 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.
This 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.

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 This standard may contain outdated material or may have been superseded by another standard.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

ANSI/ANS-55.6-1993

American National Standard for Liquid Radioactive Waste Processing System for Light Water Reactor Plants

Secretariat
American Nuclear Society

Prepared by the
American Nuclear Society
Standards Committee
Working Group ANS-55.6

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

Approved July 16, 1993
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 the 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 60525 USA

Printed in the United States of America

Foreword

(This foreword is not a part of American National Standard for Liquid Radioactive Waste Processing System for Light Water Reactor Plants, ANSI/ANS-55.6-1993, but is included for information purposes only.)

Management of the liquid radioactive waste generated as a by-product of nuclear power plant operation constitutes a major responsibility of management. Quantities of liquid radioactive waste generated during operation are dependent upon several factors, including design conditions, type of equipment, equipment arrangement, and operating philosophy.

The purpose of this standard is to establish uniform practices and set forth minimum requirements for design, construction, and performance, with due consideration for operation, for acceptable liquid radioactive waste handling and processing systems. Adherence by system designers to the criteria contained in the standard will enable the operator: (a) to control to within regulatory levels radiation exposures to operating personnel; (b) to assure a low probability of accidental release of radioactivity from the system; and (c) to control system releases of radioactivity to levels as low as reasonably achievable.

In accordance with ANS policy to maintain standards on a five-year basis, the standard was revised to update its contents and to reflect changes in industry practices. Members of Working Group 55.6, and their affiliations at the time of their approval of this standard, were as follows:

F. W. Hartley, Chairman, *Management Analysis Company*
J. A. Battaglia, *Westinghouse Electric Corporation*
D. H. DaCosta, *Ergenics, Inc.*
S. A. Lamanna, *The Babcock & Wilcox Company*
G. A. Tidrick, *Pacific Gas & Electric Company*

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

W. T. Ullrich, Chairman
M. D. Weber, Secretary

W. M. Andrews ..... Southern Company Services, Inc.
F. Boorboor ..... Impell Corporation
C. O. Coffer ..... Pacific Gas & Electric Company
L. J. Cooper ..... Nebraska Public Power District
J. D. Crawford ..... Combustion Engineering
W. H. D'Ardenne (Vice Chairman) ..... General Electric Company
S. N. Ehrenpreis ..... Westinghouse Electric Company
S. B. Gerges ..... NUS Corporation
C. J. Gill ..... Bechtel International Corporation
M. L. Hellum ..... Tennessee Valley Authority
C. E. Johnson ..... U.S. Nuclear Regulatory Commission
R. T. Lancet ..... Rockwell International Corporation
J. C. McCall ..... Tennessee Valley Authority
J. F. Mallay ..... Advanced Technology Engineering Systems, Inc.
R. E. Miller ..... Duke Power Company
J. A. Nevshemal ..... Toledo Edison Company
P. T. Reichert ..... Stearns Catalytic, Inc.
B. M. Rice ..... Duke Power Company (retired)
(for the Institute of Electrical & Electronics Engineers, Inc.)
J. C. Saldarini ..... Ebasco Services, Inc.
M. O. Sanford ..... GPU Nuclear Corporation
S. L. Stamm ..... Stone & Webster Engineering Corporation
J. D. Stevenson ..... Stevenson & Associates
(for the American Society of Civil Engineers)
T. J. Sullivan ..... Institute of Nuclear Power Operations
C. D. Thomas, Jr. ..... Yankee Atomic Electric Company
W. T. Ullrich ..... Philadelphia Electric Company
(for the American Nuclear Society)
G. P. Wagner ..... Commonwealth Edison Company
G. L. Wessman ..... Torrey Pines Technology
G. J. Wrobel ..... Rochester Gas & Electric Corporation

Contents