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# **American Nuclear Society**

### **WITHDRAWN**

February 27, 2016 ANSI/ANS-57.5-1996 (R2006) light water reactors fuel assembly mechanical design and evaluation

## an American National Standard

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reviewed and reaffirmed with the recognition that it may reference other standards and documents that may have been superseded or withdrawn.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.

## **REAFFIRMED**

February 28, 2006 ANSI/ANS-57.5-1996; R2006

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## **ERRATUM**

ANSI/ANS-57.5-1996 (R2006)
Light Water Reactors Fuel Assembly Mechanical Design and Evaluation

An error was identified in Section 5.4.1.3 on page 6. The preceding explanatory text is not consistent with the equation. Section 5.4.1.3 should read as follows:

5.4.1.3 For time-dependent effects, the summation of actual time (t) at a given stress level divided by the time of failure ( $t_f$ ) at that stress level shall be less than 1.0. Also, the summation of creep strain incurred ( $\epsilon^c$ ) divided by the creep strain to failure

 $(\varepsilon^{c}_{f})$  shall be less than 1.0.

$$\sum \frac{t_i}{(t_f)_i} < 1.0$$
 and  $\sum \frac{\varepsilon^c_i}{(\varepsilon^c_f)_i} < 1.0$ 

American National Standard for Light Water Reactors Fuel Assembly Mechanical Design and Evaluation

Secretariat
American Nuclear Society

Prepared by the American Nuclear Society Standards Committee Working Group ANS-57.5

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Approved February 8, 1996 by the American National Standards Institute, Inc.

#### American National Standard

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

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#### Foreword

(This Foreword is not a part of American National Standard for Light Water Reactors Fuel Assembly Mechanical Design and Evaluation, ANSI/ANS-57.5-1996.)

This American National Standard provides a procedure for determining the mechanical adequacy of fuel assembly designs for light water nuclear reactors. Specific requirements for design and specific rules for demonstrating compliance are also included.

It is not the intent of this standard to endorse any design feature, material, material property information, analysis method, or other procedure, or in any way to inhibit development or innovation in any of these areas. However, this standard does include certain requirements intended to ensure that the methods or material properties which are used are appropriate and adequately documented.

Suggestions for improvement of this standard are welcome. They should be sent to the American Nuclear Society, 555 North Kensington Avenue, La Grange Park, Illinois 60526.

The membership of Working Group ANS-57.5, at the time it submitted this revision of this standard, was as follows:

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