American Nuclear Society

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Foreword

(This Foreword is not a part of American National Standard "Reload Startup Physics Tests for Pressurized Water Reactors," ANSI/ANS-19.6.1-2011.)

It is the intent of this American National Standard to provide guidance for verifying the nuclear characteristics of a commercial pressurized water reactor core. This standard is intended to cover the physics tests that are performed following a refueling or other alteration of the reactor core for which nuclear design calculations are required. This standard provides the minimum acceptable startup physics test program; however, the standard recognizes that additional tests may be required by special design features for a particular core. This standard does not reflect all test programs that have been approved by the U.S. Nuclear Regulatory Commission. This standard specifies the minimum testing required to confirm that the reconstructed core is the same as the designed core.

Compliance with the intent of this standard can be demonstrated by meeting the following requirements:

(1) Perform the physics tests described herein using an acceptable test method;

(2) Determine if the test results agree with the predicted results within the previously established test criteria;

(3) Document the above in accordance with the requirements of Sec. 7 of this standard.

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

Following is a summary of changes that were made to the 2005 version:

(1) The list of acceptable methods for each physics test has been moved to the Appendix;

(2) The overall bases for performing a startup test program has been added;

(3) The bases for performing each physics test has been added in the Appendix;

(4) Several clarifications and editing changes were made.

This standard was developed by Working Group ANS-19.6.1 of the American Nuclear Society, which had the active participation of the following members in preparing the current version:

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