

American Nuclear Society

**subcompartment pressure and temperature transient
analysis in light water reactors**

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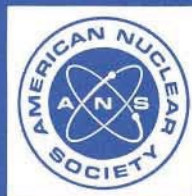
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**American National Standard
for Subcompartment Pressure and Temperature
Transient Analysis in Light Water Reactors**

**Secretariat
American Nuclear Society**

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Foreword

(This Foreword is not a part of American National Standard for Subcompartment Pressure and Temperature Transient Analysis in Light Water Reactors, ANSI/ANS-56.10-1982.)

The ANS-56.10 Working Group held its first meeting in August 1980. During the development of the first drafts of the standard, the working group was faced with the problem of how to write a standard dealing with analytical treatment of physical phenomena. There is a tendency to produce either a textbook or a document that has virtually no technical content. The group decided on the goal of providing guidance for the analyst in the text of the standard and insight in the appendices.

There was the continual search for the right amount and type of information to include within the text of the standard. Several assumptions were made by the group to this end. First, it was assumed that the analyst using this standard already had computer codes at his disposal and, therefore, the governing equations were not included in the standard. Second, guidance was interpreted to mean necessary or required information for the performance of the desired analysis by either hand or computer methods. A method for a hand calculation of the short-term mass and energy release determination is presented within the standard. Third, the working group endeavored to keep the end use of the analysis in mind while writing the prescription for the various analyses and their associated assumptions covered in the standard.

This standard will aid the analyst in his execution of an acceptable analysis for the determination of pressure and temperature histories resulting from high-energy line breaks and other events.

During the preparation of this standard, the ANS-56.10 membership was as follows:

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