



FRAMATOME ANP

An AREVA and Siemens company

FRAMATOME ANP, Inc.

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Response to Request for Comments on SRP 15.0.2

Ref.: 1. Draft Standard Review Plan Section 15.0.2, Review of Transient and Accident Analysis Methods, 68 Federal Register 4524.

Framatome ANP has reviewed the draft Standard Review Plan, Section 15.0.2, on the review of transient and accident analysis methods and offers several specific comments. We have also reviewed the companion draft regulatory guide, DG-1120, on transient and accident analysis methods; comments on this document are provided in a separate letter. Comments on each of these documents apply generally to the other document, and specific references are made in the following text to comments on the draft guide.

Framatome ANP believes the draft regulatory guide (DG-1120) provides no significant safety-related or quality-related guidance for the development of non-LOCA safety analysis methods and should not be promulgated. Without the existence of this proposed guide, it would not be necessary for the Standard Review Plan to be augmented to address these particular methods. The requirements contained in this review guide are generally not applicable to non-LOCA models, including the QA plan, the concept of an evaluation model, the use of uncertainties, the range of applicability, and plant changes.

Model-Specific Quality Assurance Plan Unnecessary

Companies that develop system codes and methods are required to have a quality assurance plan that meets the requirements of 10 CFR 50, Appendix B; these plans are reviewed and approved by the NRC. These QA plans are applicable to many activities, including the development of codes and methods used to perform safety analyses. It is inappropriate and unnecessary to develop or approve a special QA program for the specific purpose of code development. Such a process would not be a prudent investment of time for either the company or the NRC, and this requirement should be deleted.

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Requirements are Excessive

The application of the concept of a LOCA-type evaluation model to these system-type codes is excessive and unnecessary. This position is more fully explained in the companion letter commenting on the draft regulatory guide, DG-1120, under the headings "Requirements are Excessive" and "Simplicity of Non-LOCA Models Obviates Need for Requirements." The application of this concept should be deleted from the review plan.

Uncertainties Not Applicable to Deterministic Methods

This draft standard review plan appears to require the establishment of code uncertainties for deterministic methods. If that is the intent, such a requirement is not justified or appropriate for deterministic methods. Uncertainties are relevant only to best estimate models that can be benchmarked against experiments. Deterministic methods are demonstrated to be conservative, and there is no basis for the development of uncertainties. The concept of developing uncertainties for deterministic methods is not suitable and should not be included.

Range of Applicability Not Pertinent

The idea of assessing or establishing ranges of applicability is not pertinent to system-type codes. First, there are few if any experiments that could be used as integral or separate effects tests for non-LOCA events. Second, the methods are generally simplistic in nature with no need to prove the adequacy of the individual models being applied. Additional comments are included in the companion letter commenting on the draft regulatory guide, DG-1120 under the headings "Range of Applicability not Pertinent" and "Simplicity of Non-LOCA Models Obviates Need for Requirements."

Field Equations Not Derived

The draft review plan asserts that field equations used in safety analysis methods are rigorously derived equations. This is an overstatement of the process generally used in establishing models. In those limited number of cases where field equations are used, the developer typically assumes simplified forms of the governing equations and successively tests these formulations against appropriate experiments until a suitable approximation is established. No attempt is made to rigorously derive the equations used.

Concept of Scaling Inappropriately Applied

The concept of scaling is not well defined in the draft review plan. Since only a limited attempt is made to compare non-LOCA methods to experiments (since there are few, typically), the idea of scaling has no application to these methods. Therefore, there is no scaling evaluation that could be done; nor is there a need to do so for these types of methods.

Plant Changes Not Applicable

The idea of reviewing plant-specific changes does not apply to the review of methods and codes. No specific plant parameters or changes are identified in a topical report on methods, and therefore there is nothing to review in this area. This section should be deleted.

NEI is also providing a set of cogent comments on this draft standard review plan, which Framatome ANP endorses.

Very truly yours,

A handwritten signature in black ink, appearing to read "James F. Mallay for".

James F. Mallay, Director
Regulatory Affairs

cc: D. G. Holland
Project 728