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FRAMATOME ANP, Inc.

April 2, 2003 NRC:03:016 Rev. 1

Rules and Directives Branch Office of Administration U.S. Nuclear Regulatory Commission Washington, D.C. 20555-0001 1/29/03 68 FR 1524 (1)

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Response to Request for Comments on DG-1120

Ref.: 1. Draft Regulatory Guide DG-1120, Transient and Accident Analysis Methods, 68 Federal Register 4524.

Framatome ANP has reviewed the draft regulatory guide, DG-1120, on transient and accident analysis methods and offers several specific comments. We have also reviewed the companion draft standard review plan, Section 15.0.2, on reviewing transient and accident analysis methods; comments on this document are provided in a separate letter. However, comments on each of these documents apply generally to the other document.

Framatome ANP believes the draft regulatory guide goes well beyond what is required to validate the adequacy of codes used to perform analyses of non-LOCA events. In addition to being unnecessary, many of the requirements proposed in the draft guide would be impossible to achieve. The effect of imposing the requirements proposed in the draft guide would be to discourage or eliminate the development of new or enhanced computer codes for safety analyses. We see no safety-related or quality-related reason for establishing this regulatory guide and strongly urge that it not be promulgated.

Requirements are Excessive

This draft guide appears to be modeled on guidance established for the development and validation of LOCA methods. While it could be argued that such detailed guidance is appropriate for LOCA analysis because of the potential consequences of a LOCA event, such detail is clearly not appropriate for non-LOCA events whose consequences range from much less serious than a LOCA to insignificant.

Even if these draft requirements could be met, the increase in NRC review time would be large and could not be justified by any reasonable cost-benefit analysis. In addition, attempting to meet these requirements would place a huge burden on organizations developing or revising these methods, a burden that violates the NRC's principle of burden reduction in situations in which little or no safety benefit would accrue. The continuing surveillance of the methods used for safety analysis would also require a substantial investment of NRC time, which is not commensurate with the consequences of the events analyzed.

Finally, establishing such detailed requirements would be a major disincentive to the development of new or enhanced models. F-RIDS = ADU-03

Hemplole = ADRI-013

J. Standenmeier (5154)

Range of Applicability Not Pertinent

The requirements that relate to the ranges of applicability are not pertinent to non-LOCA methods. Typically, parameter ranges are defined by the theoretical and numerical bases of the code. The only instance where the concept of range of applicability is relevant is in the use of correlations, which are empirically established based on specific experiments, such as DNB correlations. Otherwise, the physics of models are very well understood and are only limited by our understanding of the pertinent phenomena. Since correlations are not addressed in the draft guide, the entire text on range of applicability should be removed because it has no meaning in this context.

Simplicity of Non-LOCA Models Obviates Need for Requirements

The features of codes and methods used to analyze non-LOCA events are typically very simple, especially compared to a LOCA model. Framatome ANP does not understand why any guidance is believed to be appropriate for these methods, which have been accepted by users and the NRC for decades. Even the steam line break model, which is the most extensive model used, relies on simple physical phenomena, including well understood heat transfer modes. The development work anticipated in the draft guide bears no relationship to any possible benefit in code performance or assurance of safety.

Fuel Type and Core Loading are Irrelevant

The draft guide addresses system codes and methods. These system methods are almost completely independent of fuel type and core loading. The primary effect these two items have is on criteria such as DNB and centerline fuel melt, which are evaluated by codes and methods not even addressed in the draft guide. This part of the guide should be deleted.

NEI is also providing a set of cogent comments on this draft regulatory guide, which Framatome ANP endorses.

Very truly yours,

James F. Mallay, Director

Regulatory Affairs

cc: D. G. Holland Project 728