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March 19, 2008  
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Chief, Rulemaking, Directives and Editing Branch  
Office of Administration  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

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**Comments on Proposed Interim Staff Guidance COL/DC-ISG-003**

Ref. 1: Federal register Notice (73FR9359), "Interim Staff Guidance; Probabilistic Risk Assessment Information to Support Design Certification and Combined License Applications; Solicitation of Public Comment."

The NRC solicited comments on Interim Staff Guidance COL/DC-ISG-003, "Probabilistic Risk Assessment Information to Support Design Certification and Combined License Applications," in the referenced Federal Register notice. The NRC requested comments by March 20, 2008. AREVA NP Inc. (AREVA NP) appreciates the opportunity to provide comments on the proposed interim staff guidance. The AREVA NP comments on the proposed interim staff guidance are included as an enclosure to this letter.

If you have any questions related to this submittal, please contact Mr. Mark J. Burzynski, Corporate Regulatory Affairs. He may be reached by telephone at 434-832-4695 or by e-mail at [mark.burzynski@areva.com](mailto:mark.burzynski@areva.com).

Sincerely,

  
Ronnie L. Gardner, Manager  
Site Operations and Corporate Regulatory Affairs  
AREVA NP Inc.

Enclosure

cc: L. Mrowca  
Project 733

SUNSI Renew Complete  
Template = ADM-013

E-RIDS = ADM-03  
Cell = D. Clarke (DLC3)  
L. MROWCA (LXM4)

**AREVA NP INC.**  
An AREVA and Siemens company

## Enclosure

### **AREVA NP Comments on Proposed Interim Staff Guidance COL/DC-ISG-003, "Probabilistic Risk Assessment Information to Support Design Certification and Combined License Applications"**

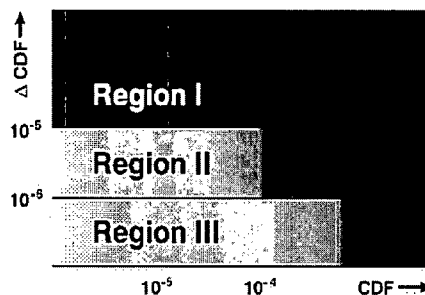
1. Proposed Interim Staff Guidance, Point 2e (page 7) has the following criterion for assessing the significance of a design change:

RG 1.206, Section C.III.1 addresses the COL applications that reference a design certification. Any individual important change or departure from the design that results in a significant impact on the PRA quantitative results (i.e. more than 5% either positive or negative change to the CDF or LRF) or PRA qualitative results should be reported to the NRC.

The new generation ALWRs, which are now applying for design certifications and combined licenses, have

- Core damage frequencies (CDF) in the ranges of  $1\text{E-}6/\text{yr}$  to  $5\text{E-}8/\text{yr}$ ,
- 5% of the CDF in the ranges of  $5\text{E-}8/\text{yr}$  to  $2.5\text{E-}9/\text{yr}$
- Uncertainty in the range of two orders of magnitude (i.e., error factors  $>10$ )

The significance criteria currently used in the risk-informed application is defined in Regulatory Guide (RG) 1.174 as illustrated on the figure below, and summarized in "calculated increase in CDF is very small, which is taken to as being less than  $1\text{E-}6/\text{yr}$ ..."



The proposed 5% significance criterion proposed in COL/DC ISG-003 will likely lead to different conclusions than the RG 1.174 significance criterion.

In addition, a definition of a significant change on the order of  $1\text{E-}8/\text{yr}$  would have little meaning given the typical uncertainty ranges.

For the small CDF and large release fraction values (LRF) for new ALWR plants, AREVA NP suggests the following criteria as better measures of significance:

RG 1.206, Section C.III.1 addresses the COL applications that reference a design certification. Any individual important change or departure from the design that results in a significant impact on the PRA quantitative results or PRA qualitative results should be reported to the NRC based on the following criteria:

The change in the CDF either positive or negative:

- Greater than 25%: Report
  - 5% through 25%: Report if larger than  $1E-7$ /yr for CDF or  $1E-8$ /yr for LERF
  - Less than 5%: No need to report
2. Proposed Interim Staff Guidance, Point 9 (page 9) should be revised to align with 10 CFR 50.71(h). PRA updates should "cover initiating events and modes of operation contained in NRC-endorsed consensus standards" rather than "reflect" which could imply more scope changes than those implied by the requirement.