

**NRC Staff Supplemental Request for Information on GE's Partial Response to  
ESBWR RAI 15.3-23 (MFN 07-011 dated January 26, 2007)**

Note that the following references of the DCD were used in the follow-up to the response of RAI 15.3-23.

- a Subsection 15A.3.8.2, regarding probability analysis of safety relief valve malfunction,
- b Subsection 15A.3.10, regarding the probability of a stuck open relief valve,
- c Subsection 15.3.15, regarding stuck open relief valve event summary description,
- d Subsection 3.9.1.4, regarding evaluation of faulted conditions,
- e Enclosure from MFN 07-011,

RAI 15.3-23 covered most of the questions raised in the RAI but concluded that no DCD changes are necessary. Please consider the following two instances and modify the DCD to provide the justification of the following comments:

- 1 Reference (d) above, regarding ASME Class 2 and 3 Valves states: "Elastic analysis methods and standard design rules are used for evaluating faulted loading conditions....  
...are obtained from NC/ND-3400 the Code. These allowables are above elastic limits."

Reference (e) above states: "The acceptance criteria.... require... that after testing ....the valve shall not exhibit any deformation that would degrade its performance beyond the specification prescribed limits." The main cause of valve malfunction after opening is failure to reseat properly due to deformation. If the allowable criteria are beyond the elastic limit how do you expect the valve to reseat properly?

Please clarify these statements.

- 2 Reference (a) above, discussing operator error states: "He should not be opening the SRVs inadvertently and he cannot do it accidentally because a deliberate action is required to open the SRVs." This statement does not make sense, please revise the DCD to clarify this statement and to provide justification to support the conclusion that the probability of an inadvertent opening of a relief valve resulting from operator action is judged to be negligible.