

**Enclosure 3** WCAP-15030-NP-A, Rev. 0

Errata page 4-5 (Westinghouse Non-Proprietary)

(2 pages including cover page)

### 4.2.3.2 Best Estimate LOCA Analysis Methodology for Interior Assembly Fuel Grid Crush

In accordance with the approved BELOCA methodology (Reference 4-3), the following approach is to be taken for fuel grid crushing which affects in-board assemblies. "If in-board assemblies are also affected, a specific calculation would be performed to assess the effects. The flow resistance of the channel representing the assemblies on the periphery would be increased to reflect the calculated extent of crushing, at the elevations where crushing is calculated to occur. It will be conservatively assumed that the hot assembly is one of the affected in-board assemblies, and the flow resistance for the hot assembly would be modified in a similar manner. Finally, the same treatment would be applied to the average channels, with an assumption that the number of affected assemblies in each average channel is proportional to the number of assemblies in the channel. The calculation would be performed using the reference case transient (power shape 10), and the resulting change in PCT would be applied to the PCT<sup>50%</sup> and PCT<sup>95%</sup> calculated without grid deformation." If a PCT benefit is calculated, it will not be credited.

## 4.3 INTACT BAFFLE-BARREL BOLT LOAD ALLOWABLES

### 4.3.1 Replacement Bolts

The mechanical properties at operating temperatures for SA-193 B8M grade (type 316 CW SS) of the replacement bolts for the baffle-former assembly are provided in Tables A, B, and C of the ASME Code Case N-60-4. Also the mechanical properties for the type 347 SS replacement bolts are provided in Tables I-1.2, I-2.2, and I-3.2 of the 1989 Edition Section III, Division 1 of the ASME Code (Reference 4-4). The ASME code allowables for the replacement bolts are defined as:

#### Allowable Stress Limits for Normal and Upset Conditions

- a. Primary Membrane Stress,  $P_m$

$$P_m = S_m$$

- b. Primary Membrane Plus Secondary Membrane,  $P_m + Q_m$

$$P_m + Q_m = \text{Lesser of } 0.9 S_y \text{ or } 2/3 S_u$$

- c. Shearing Stress for Threads,  $\tau$

$$\tau = 0.6 S_y$$

- d. Bearing Stress Under Bolt Head,  $\sigma$

$$\sigma = 2.7 S_y$$