APPENDIX 19C   ADDITIONAL ASSESSMENT OF AP1000 DESIGN FEATURES

The AP1000 PRA model, like many other conventional PRA models, is an evolving model. It is revised, as needed, to keep up with design changes and to implement revisions identified by various reviews, applications, and related analyses. Due to the iterative nature of the interface between the PRA analysts and the plant designers, it is not always possible to incorporate all differences identified between the plant design and the PRA model in a timely manner. This appendix is intended to summarize known differences between the two, and identify any future changes planned to the current PRA model to address these differences.

Planned Revisions to AP1000 PRA Model

Several changes to the PRA were previously considered by preliminary evaluations. These evaluations indicated the changes are of low importance to the PRA results. These changes are listed here for consideration and include the following:

1.   Containment isolation event trees.

2.   Correction of ADR fault tree top logic to reflect the success criteria (logic was conservative).

3.   Success criteria for medium LOCA (including CMT and DVI line breaks) will be modified to credit the PRHR heat exchanger for those instances when the accumulators are assumed to fail. The impact on the overall PRA results for this change is not expected to be significant.

Preliminary quantification shows that the plant CDF is not affected by this revision. The large release frequency (LRF) is not expected to be affected either.