

Proposed License for Main Control Room Dose

Main Control Room Dose:

NRC regulations require that the **AP1000** Main Control Room (MCR) design comply with 10 CFR Part 50, Appendix A, General Design Criteria (GDC) 19. GDC-19 sets out criteria for maintaining a control room to safely operate the plant in normal and accident conditions. A design change is required since the original main control room dose analysis was found to be inadequate because it did not include radiation contributions from MCR emergency habitability system (VES) filter, radiation contributions from MCR penetrations for the AP1000 MCR design and because it used non-conservative values for radiation contributions from the main steam line break analysis.

PROPOSED LICENSE CONDITION:

After a Combined License is issued, the licensee shall, prior to construction of affected SSCs, obtain a license amendment providing such assurance of compliance with GDC 19 through a departure from the Generic DCD or by implementation of a DCD amendment that:

- (1) Accounts for
 - a) the direct dose contribution from ventilation system filter shine,
 - b) a conservative release rate from a main steam line break prior to isolation, and
 - c) completed, as-designed shielding differences

and
- (2) Uses the methodology established in Regulatory Guide 1.183 "Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors, Revision 0, 7/00.