Draft

Request for Additional Information No. 146 (909), Revision 0

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U. S. EPR Standard Design Certification
AREVA NP Inc.
Docket No. 52-020
SRP Section: 09.05.01 - Fire Protection Program
Application Section: 9.5.1

QUESTIONS for Fire Protection Team (SFPT)

09.05.01-53

U.S. EPR FSAR states that “Provisions are made to supply water at least to standpipes and hose systems for manual fire suppression capability in all plant areas containing systems and components required for safe plant shutdown in the event of an SSE. The piping system serving these hose stations are analyzed for SSE loading and are provided with supports to provide reasonable assurance of system pressure boundary integrity. The piping and valves for the portion of the standpipe and hose systems affected by this functional requirement, as a minimum, satisfy ASME B31.1 (Reference 32) and are capable of providing flow to at least two hose stations (approximately 75 gpm per hose station).” RG 1.189 Regulatory Position 3.2.1.j adds that “The water supply for this condition may be obtained by manual operator actuation of valves in a connection to the hose standpipe header from a normal seismic Category I water system such as the essential service water system.” U.S. EPR FSAR Table 9.5.1-1 shows that the seismic portion of the fire water distribution system SSCs are seismic class (category) II. The U.S. EPR design using seismic class (category) II pumps is not in accordance with RG 1.189 guidance. The U.S. EPR fire pumps should be designed to seismic category I to be capable of performing their functions during and following an SSE or provide justification for fire pumps not being seismic category I. Basis: RG 1.189 Regulatory Position 3.2.1