

CCF Susceptibility Analysis		CCF Malfunction Result Analysis	
Assessment	Likelihood Conclusion	Assessment	Conclusion
<p>Insignificant defensive measures exist. Limiting measures (e.g., watch dog timer) may exist to force a specific failure mode.</p> <p><b>When assessing 50.59 Q2, CCF may increase the likelihood of a malfunction.</b></p>	<p>CCF is as likely or the same order of magnitude as a CCF due to a single random hardware failure. CCF is expected during the life of the plant (~100 years).</p> <p><b>CCF is within the plant's design basis.</b></p>	<p>CCF malfunction analyzed with conservative methods and acceptance criteria. Method of coping is limited to safety systems.</p>	<p>CCF could produce same type of accidents (a 'No' answer to 50.59 Q5). CCF could be bounded by previous AOOs (a 'No' answer to 50.59 Q6). Or CCF could require a new analysis, FSAR update <b>and LAR.</b></p>
<p><u>Likelihood Reduction Measures</u> exist:</p> <ul style="list-style-type: none"> <li>Qualitative defensive measures to reduce likelihood of failure source. AND</li> <li>Deterministic measures to reduce likelihood that failure will propagate to become a CCF.</li> </ul> <p>Limiting measures may exist to force a specific failure mode.</p> <p><b>When assessing 50.59 Q2, CCF likelihood is an insignificant contributor.</b></p>	<p>CCF is significantly less likely than a CCF due to a single random hardware failure. CCF is not expected during the life of the plant.</p> <p><b>CCF is beyond design basis.</b></p>	<p>CCF malfunction is analyzed with best estimate methods and acceptance criteria. Method of coping can employ quality non-safety systems.</p>	<p>CCF could be bounded by previous AOOs or PAs (a 'No' answer to 50.59 Q5 and Q6), or could require a new analysis, FSAR update <b>and LAR.</b></p>
<p>For the two rows above, if the CCF component/system level malfunction is previously analyzed in the FSAR.</p>		<p>A CCF malfunction result analysis is not required (a 'No' answer to 50.59 Q5 and Q6).</p>	
<p><u>Preventive Measures</u> exist:</p> <ul style="list-style-type: none"> <li>Deterministic measures to eliminate failure source. OR</li> <li>Deterministic measures to ensure failure source does not become a CCF.</li> </ul> <p><b>When assessing 50.59 Q2, there is no likelihood contribution from CCF.</b></p>	<p>CCF is as unlikely as other sources of CCF that are not considered in deterministic accident analysis (e.g., earthquake/EMI exceeding design basis, maintenance error).</p> <p><b>CCF is not credible.</b></p>	<p>CCF is never expected (a 'No' answer to 50.59 Q5 and Q6). A CCF malfunction result analysis is not required. CCF should be analyzed in the Probabilistic Risk Assessment.</p>	