3.4 Skid-Mounted Components and Component Subassemblies

The Code-class piping systems at a plant may include skid-mounted components or component subassemblies, such as valves in diesel air-start subassemblies, diesel skid-mounted fuel oil pumps and valves, steam admission and trip throttle valves for HPCI or auxiliary feedwater pump turbine drivers, steam traps, and air supply system check valves and solenoid-operated valves for main steam isolation valves. If the licensee's safety analysis report (SAR) identifies these components as ASME Code Class 1, 2, or 3, they are subject to IST.
By contrast, if the SAR does not identify these components as ASME Code Class 1, 2, or 3 (or indicates that they are maintained as Code class, but are not required to be Code class), they are not subject to IST in accordance with 10 CFR 50.55a. Nonetheless, these components may be subject to periodic testing in accordance with Appendices A and B to 10 CFR Part 50.

NRC Recommendation

Subsections ISTB 1200(c) and ISTC 1200(c) define the components that are subject to IST. The staff has determined that testing the major component is an acceptable means to verify the operational readiness of the skid-mounted components and component subassemblies if the licensee discusses this approach in the IST program document. Licensees should consider and document the specific measurements and attributes of major component testing which relate to the assessment of skid-mounted component condition. In addition, various continuous and periodic observations of the major components (such as System Monitoring Walkdowns or Operator Logs) may also support assurance of skid-mounted component readiness.
This is acceptable for both Code class components and non-Code class components that are tested and tracked by the IST program.

Basis for Recommendation

Various pumps and valves that are procured as part of larger component subassemblies are often not designed to meet the requirements for components in ASME Code Classes 1, 2, and 3. In Draft Regulatory Guide 1.26, "Quality Group Classifications and Standards for Water-,Steam-, and Radioactive-Waste-Containing Components of Nuclear Power Plants," the NRC gives guidance on classifying components for quality groups A, B, C, and D (Code Classes 1, 2, and 3, and ASME VIII/ANSI B31.1, respectively). (For additional guidance, licensees should review Section 3.9.6 of NUREG-0800, the NRC's Standard Review Plan.) When many of the components were procured, the requirements for IST did not apply and, thus, the components may not have included features for IST. Licensees may, therefore, elect to use the IST program for testing these components and state in the IST program document that the surveillance tests of the major components adequately test the skid-mounted components.
The OM Code addresses both components that are physically mounted on the skid, and those that are not mounted on the skid but function the same as skid-mounted components (e.g., check valves in the service water system that supply cooling water to a pump), provided that testing the major component is adequate to test the function of the system component.
For components that are outside the scope of 10 CFR 50.55a, relief requests are not necessary. The NRC's position concerning testing components that are outside the scope of 10 CFR 50.55a

is discussed in Section 2.2.3. Testing of skid mounted check valves are specifically discussed in section 4.1.10.