



For Aging BWR Plants the GEH Jet Pump Anti-Vibration System (AVS) is the Solution for Mitigating damage due to Flow Induced Vibration among Jet Pump Repairs because of its ability to restore and assure continued positive three-point contact. The GEH AVS provides customers: “Wear due to Jet Pump Vibrations will be reduced, which will increase safety, reliability, and outage efficiency”.

Beginning in Spring 2013, GE Hitachi Nuclear Energy began installing its innovative Jet Pump Anti-Vibration System (JP AVS) to address jet pump vibration caused by slip joint leakage flow induced vibration (SJLFIV), turbulence, and cross-flow. In the years since the first installations AVS has now been installed in six Units in both BWR 4s and 5s.

AVS assures the future viability of nuclear power plants by permitting life-extension opportunities. AVS reduces vibration on critical reactor components, which may otherwise become inoperable after years of wear. Without AVS, jet pump vibration resultant damage may require operational limitations to be imposed.

Jet Pump AVS functionally replaces the set screws and main wedge at the Jet Pump Restrainer Bracket location. It maintains positive three-point contact between the Restrainer Bracket and Inlet Mixer. Coupled with GEH Slip Joint Clamps, FIV is mitigated for most plant operating conditions. This allows for a more efficient outage; with AVS the outage can be planned, worked to plan, and the plant can be restarted with lower risk of requiring emergent jet pump repairs. Jet Pumps with AVS installed have significantly less inspection findings and eliminate or reduce elevated risk set screw and main wedge exams.

Jet Pump AVS delivers value to nuclear power plants. Upon installation of AVS, plant performance can be successfully maintained as vibration concerns are alleviated. Reducing power to address Jet Pump issues related to vibration is no longer a threat to the operation of the plant. With the security of AVS, plant value is increased.

The Jet Pump Anti-Vibration System is a proven method for reducing Jet Pump damage due to Slip Joint Leakage Flow Induced Vibration, and improving outage efficiency. Reduced costs and improved operational performance complement the installation of AVS, and speak to its ability to enhance asset preservation. This is how the GEH Jet Pump AVS is supporting the industry to deliver on the Nuclear Promise.

For more information, contact your GE Hitachi Nuclear Energy representative or visit us at: nuclear.gepower.com

