FACTSHEET

LOAD COUPLING HARDWARE

Applicability:
E- Fleet and 6B, F-Fleet

The load coupling is a rigid piece between the turbine and generator, critical to unit reliability and safety. During major inspection or other rotor-out scopes the couplings are disassembled and inspected. Damage and wear from maintenance activities can be an unwelcome surprise during outages. Sourcing parts to support an unplanned finding may put significant risk on outage critical-path schedule.

Technical Information

The F-Fleet features a load coupling fastened with hydraulically tensioned hardware requiring special tools. This arrangement uses hydraulic force to stretch the studs to the correct length before applying the locknut the retain the fastener tension.

The E-Fleet and 6B shipped with two primary options for the load coupling: hydraulically tensioned and conventional arrangements. The conventional arrangement uses torque applied through a nut to achieve the proper stretch.

In addition, the E-Fleet and 6B features a flexible coupling assembly between the turbine and accessory section. A conventional fastener arrangement is typical on the accessory coupling assembly.

Coupling hardware is required to be moment-weighted to reduce impact to vibration. Hardware is often replaced as full sets or in balanced pairs to minimize potential impact to unit reliability.

Risk

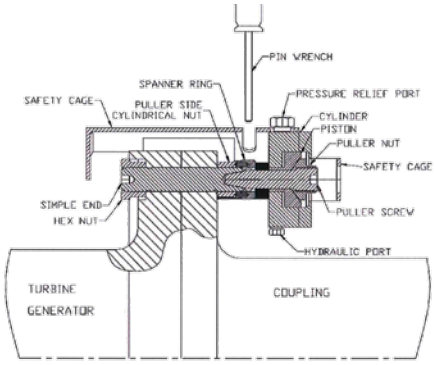
Discovery of hardware in unsatisfactory condition typically occurs emergently during an outage. Lack of satisfactory coupling hardware may impose significant impact to the outage critical path schedule. GE Vernova strives to keep sufficient supply on-hand to support planned and emergent needs. However, supply can quickly become strained, driving lead time increase to several months.

GE Vernova Recommendations

TIL Guidance: Please review TILs 1702 & 1807 for important safety-related recommendations.

Outage Reports: Review previous outage reports including scope associated with the couplings.

Parts Planning: Availability of coupling hardware is variable with unpredictable support for emergent findings. It is recommended to have balanced pairs and/or complete sets of hardware on-hand prior to your next MI or to support unplanned outages. Having access to or on-hand spare tooling is also recommended, especially for hydraulically tensioned arrangements.



Typical Arrangement of Hydraulically Tensioned Hardware and Tooling

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