

D11/A10 Steam Turbine Solutions

Reduced risk, improved efficiency,
and resolve common issues found in
your steam turbine



D11 and A10 steam turbines have several known reliability issues, a few of which are subject to repair recommendations from the OEM via various technical information letters (TIL).

Over the past 15 years, EthosEnergy's engineers have developed solutions to address issues including:

- L-0 blade erosion and root cracking
- N2 packing casing cracks/leakage
- Outer casing joint leaks
- HP/IP rotor vibration/runout/bowing
- Repetitive seal failures
- Diaphragm axial distortion

These solutions have achieved the following results:

- Improved efficiency
 - ~1.4% heat rate improvement via N2 upgrade; 1.4% improvement via SMART™ Seals
- Lower fuel costs
- Reduced risk of catastrophic failure
 - L-0 blade repairs
 - Titanium blade refurbishment
- Increased uptime and capacity factor

WHY ETHOSENERGY?

- Decades of steam turbine engineering experience
- Over 25 D11/A10 projects successfully completed over the past 15 years
- Proven, proprietary repairs that are more cost-effective than replacement or more traditional methods
- Unique in-situ welding and titanium blade refurbishment capability on L-0 blades