Steam Generator Secondary Side Services Product Portfolio

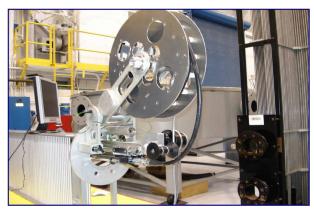
Background

Westinghouse's steam generator (SG) secondary side services include a complete range of inspection, maintenance and cleaning services to provide customers with options to best meet their long-term strategic goals for SG performance and integrity.

Description

Westinghouse works proactively with customers to develop a secondary side SG maintenance plan that:

- Provides cost-effective cleaning solutions to minimize tube degradation and maintain full power operations
- Provides industry-leading products and processes to address individual plant conditions required to extend the life of its generators



Ultra sludge lance system for tubesheet cleaning



Typical advanced scale conditioning agent setup



Cleaning processes:

- Electric Power Research Institute/Steam Generator Owners' Group (EPRI/SGOG) chemical cleaning
- Advanced scale conditioning agents (ASCAs)
- Consolidated deposit extraction (CODE)
- Tubesheet cleaning (sludge lance)
- High-volume bundle flush (HVBF)
- Ultrasonic energy cleaning (UEC)
- Pressure pulse cleaning (PPC)

Inspection services:

- Annulus and in-bundle foreign object search and retrieval (FOSAR)
- Eggcrate lattice visual inspection system
- Upper-bundle/in-bundle inspection (UBIB)
- Alternate plugging criteria inspections
- · Top-down inspections
- · Upper internals inspections

Machining processes:

- J-nozzle repair/replacement
- Wrapper modification
- Gasket seating surface repair (manways and handholes)
- Bolt hole repair (manways and handholes)
- · Moisture separator modifications

Miscellaneous services:

- Manway and handhole cover removal and installation
- Temporary containment penetrations

Benefits

Steam generator services integrated with steam generator engineering maximize steam generator integrity and operational performance as defined in:

- Generic Letter 97-06
- Deposit management
- · Maintenance guidelines
- Tube bundle inspection programs

Experience

Westinghouse has more than 30 years of experience servicing SGs worldwide and performs secondary services at approximately 50 plants.



Steam generator

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