Steam Generator Engineering Product Portfolio

Westinghouse offers steam generator (SG) engineering services in the areas of component design and analysis, chemistry, diagnostics, and materials engineering, with the mission to:

- Provide engineering solutions that extend the life of the SGs, optimize plant performance and reduce the overall cost to maintain SGs, while meeting regulatory requirements
- Integrate engineering with field services to provide coordinated inspection, repair and engineering services to optimize performance and extend the life of the SGs
- Provide best-practice engineering analyses in support of plant performance improvement programs
- Apply leading-edge technology to support utility asset management programs
- Provide industry licensing leadership through development of low-risk licensing strategies

Westinghouse's SG engineering product portfolio offers a variety of services, including:

Tube Integrity

- · ARC development and analysis
- Implementation of NEI 97-06
 - Degradation assessments
 - Conditional monitoring and operational assessments (CMOA)
- Extended inspection intervals
- · Wear projection
- · Loose parts analysis
- Regulatory Guide 1.121 analysis
- Tube burst/leakage testing
- Tube integrity software

Component Engineering

- Design and qualification of tube plugs, sleeves and stabilizers
- · Loose parts weir
- Antivibration bars (AVBs)
- Shell penetrations
- · Flow-induced vibration analysis
- · Feedwater nozzle and elbow liners
- · Steam nozzle flow limiters
- Moisture carryover modifications
- Sludge collectors
- · Feedring and J-nozzle replacement
- Closure studs, nuts, washers, covers and gaskets
- Mock-ups
- · Design basis documentation
- · Level tap relocation



Chemistry Products

- · SG maintenance strategies
- · Primary and secondary chemistry consulting
- · Balance-of-plant (BOP) chemistry consulting
- Chemistry R&D (WOG, CEOG, EPRI)
- Consumable materials compatibility and qualification
- · Cleaning process qualification
- · Online chemistry monitoring
- · Zinc addition

Deposit Management

- · Sludge management
- · Sludge sample analysis
- Eddy current data management and projections
- · Long-term operational assessments
- Corrosion algorithm
- Degradation prediction
- · Fouling assessments
- Tube repair forecasts
- Engineering data analysis Web site
- · Tube bundle scale profiling
- SG pressure recovery

Materials Engineering

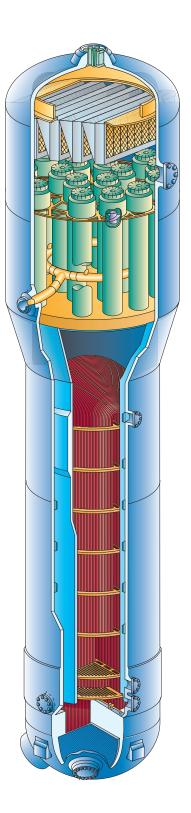
- Metallurgical exams (SG tube exams)
- Corrosion evaluation
- · Alloy 600 issues

Management Teams

- Integrated engineering and field services approach to long-term services planning
- · Economic analysis
- On-site support
- Secondary side CMOA
- Supplement to utility engineering

Pressurizers

- · Engineering support
- Heater replacement
- · Analysis



Westinghouse Electric Company 1000 Westinghouse Drive Cranberry Township, PA 16066