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, CEGO, 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