framatome

Steam Generator Health Assessment

Because prevention is the best medicine, we developed Framatome's steam generator (SG) health assessment which uses plant data to create a SG operational summary that forecasts and predicts possible threats to maximize SG performance. This "check-up" leads to optimized maintenance routines and mitigation strategies that prevent potential SG threats, thereby protecting assets, enhancing SG performance and extending SG operating life.

Challenge

To help manage and protect major components, today's utilities need both industry operational experience as well as SG design and maintenance expertise to extrapolate trends, forecast deposits and predict possible threats to optimized SG performance such as tube fouling, tube support broach blockage and outer diameter tube corrosion.

Solution

Framatome's SG health assessment takes your latest plant data and uses it to create an operational summary containing multiple types of SG performance trending. This information is utilized to develop a deposit loading trends, allowing for optimized maintenance routines and mitigation strategies – because prevention is the best medicine.

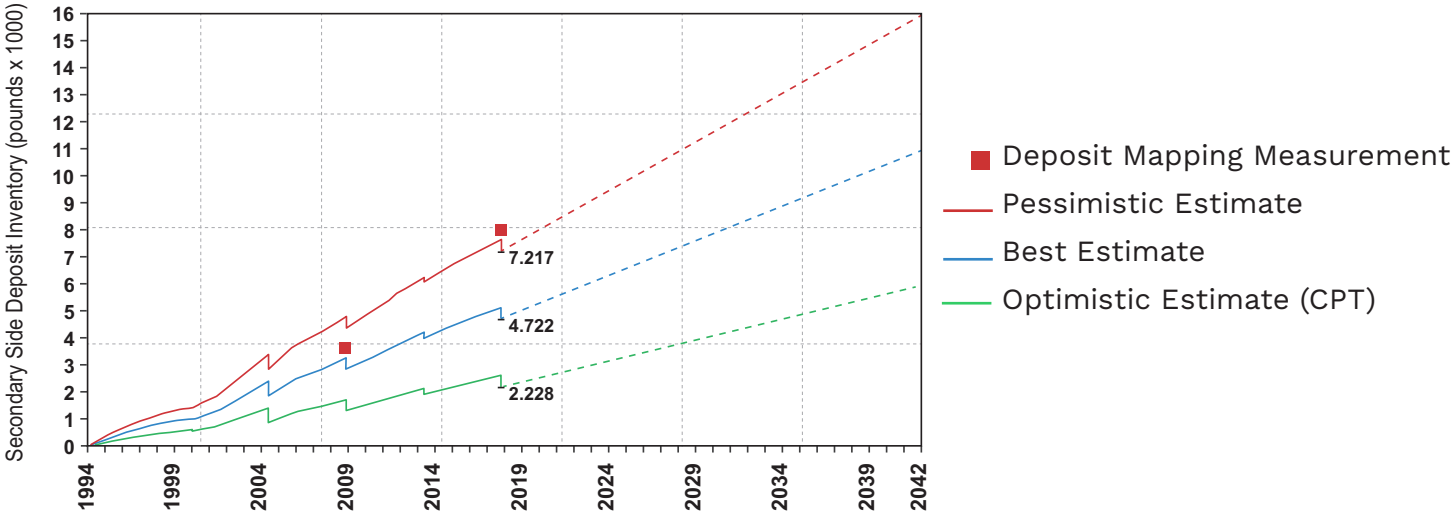
Customer benefits

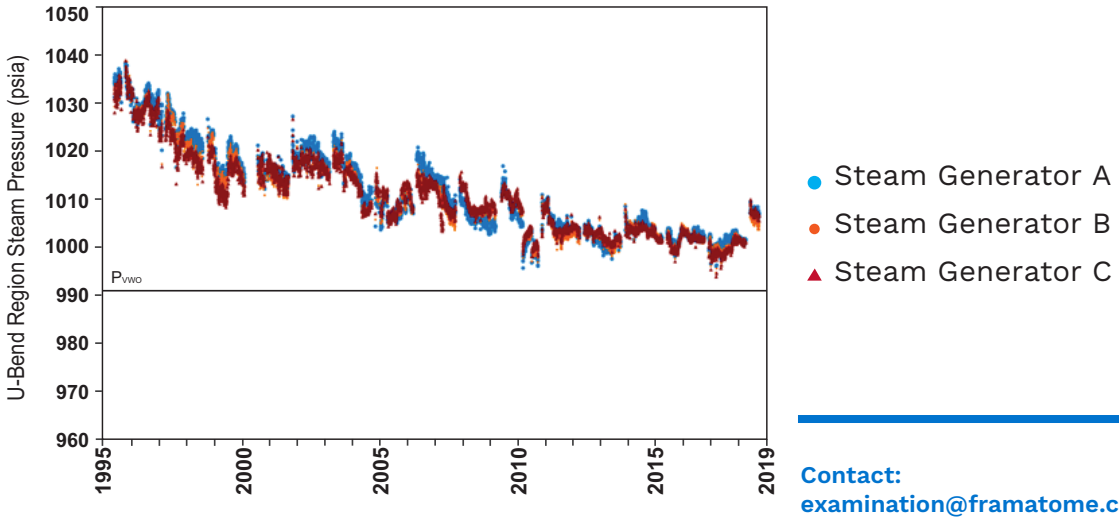
- Steam generators operational summary
- Plant performance and steam generator performance trending
  - Secondary side deposit inventory
  - U-bend steam pressure
  - Wide range water level
  - Valves wide open (VWO) and turbine governor valve (TGV)-related pressure information
  - Primary temperature trending
  - Heat transfer fouling factor trending

Data required for health assessment:

- Corrosion Product Transport (CPT) data
- Steam pressure
- Wide range water level
- Valve wide open pressure
- TGV position and operational experience
- Primary temperature history thermal power greater than 98.5%
- Thermal power vs. electric power
- Thermal performance data
- Lancing/chemical cleaning history
- SG flaw and plugging information from condition monitoring and operational assessment (CMOA)
- Skip outage plan
- System modifications that could impact thermodynamic behavior:
  - Examples: plant uprating, feedwater heater replacement, turbine replacement, installation of ultrasonic flow measurement devices, etc.

Trending Examples





Contact:
examination@framatome.com
www.framatome.com

Your performance
is **our** everyday **commitment**