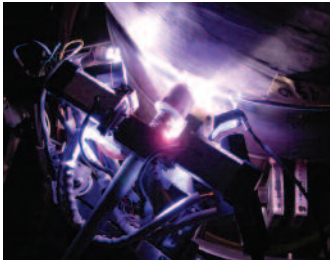


## Alloy 600 – PWR Repair Services

### Knowledge and Expertise for Pressurized Water Reactors (PWRs)



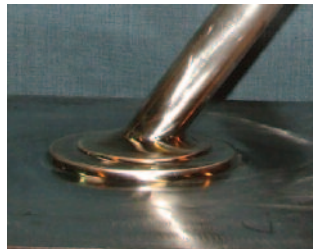
GE Hitachi Nuclear Energy (GEH) utilizes decades of experience servicing Boiling Water Reactors (BWRs) to provide the same repair and engineering services to our PWR customers. With extensive experience

mitigating Stress Corrosion Cracking (SCC) in BWR plants since the 1970s, GEH is now offering the following Alloy 600 products and services to our PWR customers.

### ReNew\* Surface Improvement

The ReNew\* Surface Improvement process is applied underwater or wetted in an air environment to remove damaging surface cold-work caused by excessive grinding or machining. Process control is simple and allows full coverage. A quick, cost-effective mitigation process reduces or removes shallow cracks. Tooling and equipment for a similar process have been previously applied in BWRs. The ReNew\* process:

- Generates a compressive surface stress, which provides greater resistance to SCC
- Resets the SCC crack-initiation clock through the removal of degraded layers
- Ensures a high degree of surface smoothness with greater resistance to SCC



### Weld Overlay – Structural or Preventive

For over 30 years, GEH has implemented Weld Overlay in the field. We have the extensive experience with engineering, analysis, design, implementation, and ASME Code and regulatory issues necessary to successfully put this tool to work in PWRs.

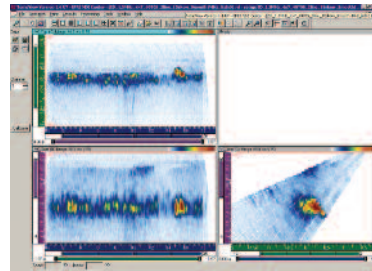
### Corrosion-Resistant Cladding

For the past 20 years, GEH has successfully used Corrosion-Resistant Cladding for the BWR fleet. Now we are applying our expertise to prevent corrosion in PWRs both in the field and in manufacturing environments.



Cladding is applied to material susceptible to Primary Water Stress Corrosion Cracking (PWSCC), isolating the material from reactor coolant. This fully automated process mitigates the BMI J-weld, inside diameter (ID) of the reactor vessel and steam generator hot and cold leg nozzles, and any others that will allow access to the ID.

### NDE Services



To meet the needs of our PWR customers, GEH has a complete Appendix VIII Qualification program. Our fully remote phased-array capabilities for piping include state-of-the-art

ultrasonic imaging with line scanning. GEH has the most qualified and flexible workforce in the field and can meet ASME Code-certified exams.



ReNew\* surface improvement process in progress on Boiling Water Reactor in-core monitor housing (ICMH).



**HITACHI**

For more information, contact your GE Hitachi Nuclear Energy sales representative or visit us at [www.ge-energy.com/nuclear](http://www.ge-energy.com/nuclear)

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