



**Structural Integrity**  
Associates, Inc.®

# CONTINUOUS NOBLE METAL INJECTION (CNMI)

## BWR PASSIVE PLATINUM INJECTION



To meet criteria for intergranular stress corrosion cracking (IGSCC) mitigation and inspection relief for vessel internals and piping, BWRs using noble metals + hydrogen need a method to accurately inject a catalyst into the feedwater over long periods of time. A passive platinum injection system is needed to perform this function while optimizing resources to lower plant operating costs.

The CNMI Skid is a **reliable, inexpensive, passive** method of injecting platinum chemical into the BWR feedwater at normal power operating conditions to mitigate IGSCC.

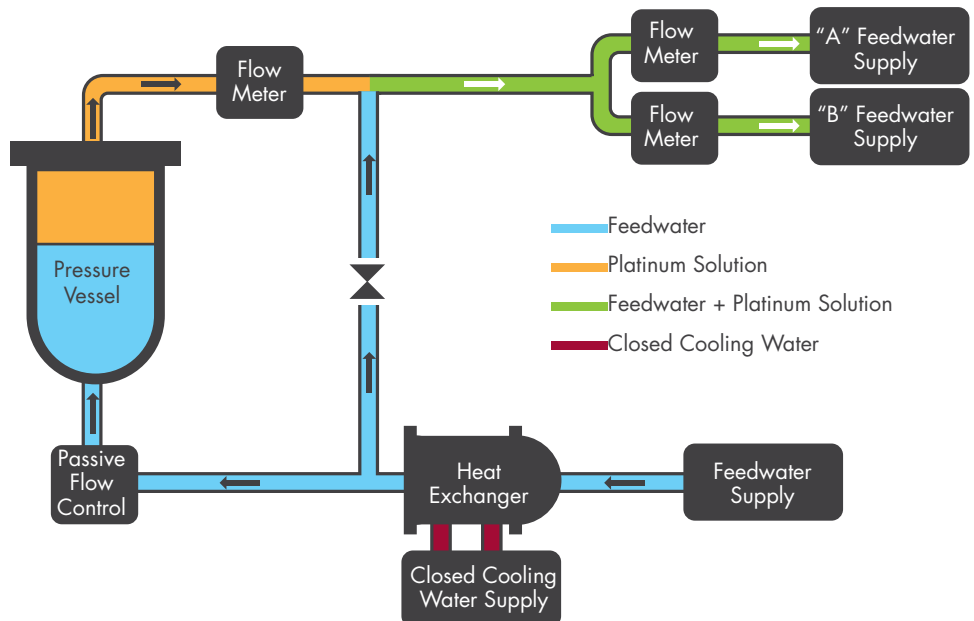
### WHAT IS PASSIVE PLATINUM INJECTION?

Passive Injection of a dilute solution of the platinum compound,  $\text{Na}_2\text{Pt}(\text{OH})_6$ , without the use of pumps. Using patented technology, the driving force for injection is the differential pressure between two points in the feedwater system. This passive injection system has a wide range of injection flow capability, high dilution flow and is designed for minimal operator or maintenance intervention. Supporting the Delivering the Nuclear Promise® initiative CNMI is a proactive and versatile approach that will eliminate needed existing platinum injection skid upgrades further reducing future O&M costs and extensive labor requirements.

The CNMI passive injection system was installed, successfully demonstrated and fully implemented at Nine Mile Point Unit 2.

### EXPECTED BENEFITS

- Lower plant labor burden compared to existing equipment for Operations, Chemistry and Maintenance
- Improved equipment reliability (no pumps)
- High dilution flow (lower propensity for injection line plugging)
- Wide Pt injection flow range, spanning current to continuous, for long-term process optimization



[info@structint.com](mailto:info@structint.com)

[www.structint.com](http://www.structint.com)

1-877-4SI-POWER  
1-877-474-7693

5215 Hellyer Avenue Suite 210  
San Jose, CA 95138