ZINC PROGRAM EVALUATIONS

PREDICTING PLANT RESPONSE
PROGRAM LESSONS LEARNED
COST-BENEFIT DETERMINATION

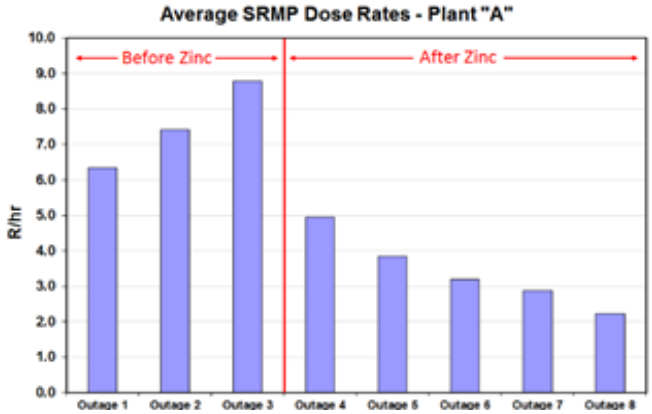
ChemStaff
Expert Consulting for the Global Power Industry

Value Delivered

- ✓ Reduced or optimized radiation fields
- ✓ Cost-effective implementation strategies, even for high-duty plants
- ✓ Thorough feasibility study & dependable predictions of plant response
- ✓ Detailed implementation strategies for new zinc plants
- ✓ Optimized zinc program for mature zinc plants

Industry Challenge

Collective radiation exposure (CRE) reduction is one of the most complex problems facing the industry today, but an effective zinc program can serve as powerful tool for driving down radiation fields. PWR reactor coolant zinc injection is a proven method for reducing source term and minimizing stress corrosion cracking. EPRI field and laboratory data also indicate that zinc can alleviate PWSCC initiation and propagation.



ChemStaff Solution

At ChemStaff, we can meet this challenge with our extensive experience successfully implementing and optimizing zinc programs, even at plants with high-boiling-duty. Though plant responses to zinc tend to vary, our skilled specialists can provide clarity to results. ChemStaff delivers a meticulous critical assessment of a proposed zinc program, working to accurately predict the expected plant response in key areas. We offer two phases to meet specific plant needs:

Prior to initial injection – ChemStaff experts conduct a thorough feasibility study based on plant design, the existing chemistry program, and expected benefits; develop a comprehensive implementation strategy, including identification of issues that need to be resolved before injection; provide zinc injection pump skids, if needed; and deliver detailed procedures and strategic water chemistry plan revisions.

After injection or for mature zinc plants – ChemStaff experts work to optimize the program to achieve maximum benefits and improve both control and program effectiveness monitoring.