



### **Case History: Client-Florida Power & Light**

Curran International was contacted by FP&L to clean two hydrogen coolers located at one of their Florida plants. The coolers are in a closed cooling water system vertically oriented with one on each side of the generator. The unit is a base load generator that must operate for extended periods without maintenance cleaning. The coolers had a history of micro and macro fouling problems that created temperature management difficulties during peak summer months.

Curran International suggested applying a coating to the tube ID to increase heat transfer and eliminate fouling. As a comparative study to assess the effectiveness of the coated hydrogen cooler, the tube ID of one hydrogen cooler was glass beaded until all scale and corrosion products were removed and another was coated with Curran International's patented tube ID coating system and proprietary coating materials.

From start up, the hydrogen cooler with coated tubes performed 3 ° F cooler than the glass beaded bundle. This increased performance has remained constant throughout four months of peak operating temperatures; at the last point of reference it was operating at 4 ° F cooler. This has eliminated any need for additional thermal management problems for FP&L.