

# **Traveling Water Screens**

Power-Nuclear — Cooling & Service Water ARC 855 Coating Case Study 019

# Challenge

#### Issue

Galvanic corrosion of supports risked loss of the traveling screens, which are critical to the safe operation of the cooling water intake system.

#### Goals

- Provide alternative to applying coal tar coatings and substantially exceed 18 month recoat cycle
- Stop galvanic corrosion of the supports

### **Root Cause**

Prior coatings had inadequate dielectric properties to impede galvanic cells.

Corroded traveling screen

# **Solution**

# **Preparation**

- Pressure wash and decontaminate the substrate
- Abrasive blast to Sa 2.5 with 3 mil (75 μm) angular profile

# **Application**

1. Apply 2 coats of ARC 855 in alternating colors achieving total DFT 30-40 mils (750-1000  $\mu$ m)

# Results

# **Inspection Reports After 5 Years**

regarding leachable compounds.

ARC 855 coating continues in "perfect condition"

## Goals:

- Stopping galvanic corrosion:

  Achieved
- Exceed 18 month recoat cycle: AchievedEliminate screen loss: Achieved

Additionally, ARC 855 met client's specification



Screen supports coated with ARC 855



Completed ARC 855 application