



MPW mobile ultrafiltration and demineralization units exceed Canadian power plant expectations

Problem

After a major refurbishment, a Canadian nuclear plant required additional process and boiler feed water for plant start-up and commissioning.

The plant's raw water supply contained measurements ranging from 1-10 NTU, conductivity from 70-100 and color units ranging from 180-420. The plant also experienced highly variable flow rates, ranging from 0-600 GPM, and issues with the performance of rental equipment in temperatures of -30 degrees Celsius.

Solution

MPW provided the nuclear plant with mobile ultrafiltration and demineralization units in order to fix the plant's raw water issues and provide ultra-pure process and boiler feed water. MPW also heat traced and insulated all outside lines in order to beat the extreme weather conditions.

Results

The ultrafiltration unit operated for approximately one year, reducing turbidity to less than 0.3 NTU and color units ranging from 1-3. The unit's chemtrac streaming monitor allowed for 24-hour chemical adjustments both onsite and remotely. The mobile demineralization trailers produced approximately 2.5 million gallons per trailer and kept conductivity measurements below customer specifications.

Even with multiple challenges and extreme winter weather, MPW provided the process and boiler feed water.

