

## Mobile ultrafiltration, demineralization units exceed Canadian power plant expectations



MPW PROVIDES
PROCESS, BOILER
FEED WATER FOR
NUCLEAR PLANT
IN EXTREME
COLD WEATHER

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 to 10 NTU, conductivity from 70 to 100 and color units ranging from 180 to 420. The plant also experienced highly variable flow rates, ranging from 0 to 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 ultrapure process and boiler feed water. MPW also heat traced and insulated all outside lines in order to beat the extreme frigid 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 to 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 that the customer needed.

## COMMITMENT TO SAFETY

MPW recorded zero safety violations during this project