



France

**Bypass for the production of higher quality water in nuclear power plants**

*Supply of temporary solution including mobile tanks, physico-chemical treatment and filtration skid*

## Bypass for the production of higher quality water in nuclear power plants

CTP environment implemented a complete bypass of the site's high-quality water production. This production used river water and storm water as a feedstock. Once produced, it supplies the potable and demineralised water chain production of the site. Continuity and uninterrupted service is a necessity for the site..



The mobile system set up included:

- Raw water storage
- Physical-chemical treatment of the water flow rate of 100 m<sup>3</sup>/h :
  - On-line pH control,
  - On-line coagulation,
  - On-line media filtration,
  - On-line disinfection,
  - On-line polishing filtration.
- Buffer storage of produced water, vital in the prevention of variations in site quality water requirement and unforeseen events
  - 2x8 shift operation to ensure continuity of production

This temporary treatment plant recorded the following performances:

- pH control between 7,5 and 8,5
- TSS removal : turbidity < 5 NTU
- Control of algae/bacteria proliferation : free chlorine maintained between 1 & 2 mg/l at all time

This turnkey solution allowed the maintenance of the site's water storage tanks and valves within the planned duration (2 weeks) without any disruption of the site water supply.

