

Nexteng Enviro Private Limited helps a power plant gain flow measurement readings with an open channel flow measurement solution.

The power generation industry uses large amounts of water, creating an industry-wide issue when it comes to water scarcity, due to drought and diminishing reservoir levels. The majority of power plants all over the world will utilize water to generate electricity, however, most plants have committed to reducing their water consumption when it comes to power generation.

At a power generation plant in India, water is drawn from a nearby canal in compliance with contractual agreements with state authorities. A key part of monitoring how much water is being used is accurate flow measurement technology.

## **Open Channel Flow Measurement Solutions**

Nexteng Enviro Private Limited, Pulsar Measurement partners and experts based in India, were approached by a power plant based in the Indian district of Rajasthan to help provide a solution to exactly this issue. The end-user needed to monitor the intake of water from the canal – the power plant's main source of water, to the plant pumping house open canal. They wanted to know the total flow rate and their total consumption of water. Once abstraction has been completed, the water is then pumped around the power plant for further use. Since knowing how much water they were taking from the canal was crucial for the end-user to comply with their contractual agreement with the state authority for Rajasthan and to be sure they fulfilled their corporate social responsibility, they reached out to Next Engineering for help.



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After taking a look at the application, Nexteng Enviro Private Limited decided that it was best to use Pulsar Measurement's FlowCERT controller, combined with a dB6 for level measurement and a speedy velocity sensor to measure the velocity of the water - The FlowCERT then collects both of these measurements and calculates the total flow rate.

The application was a bit tricky, and the end-user found that they were having some problems with marine wildlife, underneath the water - particularly close to the speedy velocity sensor that was mounted in the bottom of the channel. However, this only became present when there was no flow of water, or water wasn't being pumped from the main channel. During running conditions, which was the most important aspect of the application, when the pumps are running for the intake of water, the FlowCERT, dB6, and speedy system measured the rate of flow perfectly.



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your local area, use our partner locator to find your local Pulsar Measurement partner.



## **More Information**

FlowCERT Controller: pulsarmeasurement.com/flowcert dB6 Transducer: pulsarmeasurement.com/db-transducer



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