Water treatment flexibility

With Demand Response, this large water treatment facility has been able to reduce power demand by up to 5 MW during Demand Response events, saving 4,000 tons of carbon emissions every year.

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Minimizing contributions to climate change

This Belgian water treatment plant is a major player in the water and sewage treatment business, serving more than two million residential and business customers.

Sustainable development is a top priority. The company works hard to minimize the impact of its operations on climate change through energy management investments, improvements in pumping systems and a comprehensive energy management program at its corporate headquarters.

Unlikely candidate for Demand Response

The company's primary objective is to deliver excellent service reliability to its customers. This requires constant pressure across its 5,000+ kilometer distribution pipeline network to minimize leakages and avoid water impurities in the delivery process. Initially this process seemed like an unlikely candidate for Demand Response (DR).

The Head of Operations had assessed a range of options for engagement with DR from several suppliers. However, at the final stage of the assessment, the company decided to partner with Centrica Business Solutions, encouraged by the usability of its automated DR technology platform. This enabled pumps and motors between reservoirs at the treatment plant to participate in DR.

The results

Centrica Business Solutions delivered a fully automated DR solution by reducing power demand from the upstream pumping stations and other equipment.

This created a reduction in load of 5 MW, available in less than three minutes, with no effect on water throughput or pipeline pressure. The control room operators retained 100% control over the industrial process as its proprietary hardware unit ensured that on-site industrial boundary constraints, such as water or pressure levels, were always met.



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Operators can fully concentrate on the core business, as the Demand Response process is entirely automated." Spokesperson, water treatment facility

Why Centrica Business Solutions?

- Technology reacts in seconds with no human intervention required
- Facilitates the further development of renewable energy
- Lowers industry's carbon footprint and helps to curb global climate change
- Shields from the risk of penalties when ongoing operations mean power flexibility is not available. There is no impact on production

