Doubling Demand Response payments

Prior to teaming up with Centrica Business Solutions, this paper and pulp plant participated in a reserve program that yielded low returns. Since the partnership, the company has doubled payments to the plant from Demand Response.



Putting eco-effectiveness into practice

This global paper manufacturer has 12,800 employees and manufacturing operations on three continents. Annually the company produces approximately 5.7 million tons of paper, making it the world's leading producer of high-quality coated fine paper.

The paper industry is a very energy-intensive sector, so it is important for the company to lower its electricity costs through continuous improvement actions. Participation in Demand Response (DR) programs enables it to reduce overall energy costs.

An energy-intensive industry

Its Belgian paper mill is a completely integrated facility consisting of a pulp plant and two paper making and coating lines. Wood chips are ground and bleached to obtain a high grade of mechanical pulp. The pulp is buffered before entering the paper making process, which allows the pulp plant to be curtailed without a negative impact on production downstream.

The mill had used this flexible process to directly participate in the reserves market via the independent system operator (ISO) but the return didn't offset rising electricity costs. It was seeking ways to increase the value of its flexible pulp plant, but without increasing operational risk. Despite some experience of the reserves market, the company needed support to enter more stringent reserve programs with their fast reaction times, short durations and, therefore, maximized payments.

The results

A flexibility audit was performed and found that the flexible pulp plant could be leveraged within a fast response reserve program (Primary Reserve). Two major challenges needed to be overcome to participate in this reserve program that requires a response time of 30 seconds: poor availability of the pulp plant and avoiding any impact on daily operations.

Centrica Business Solutions' patented technology enables ultra-fast portfolio effects with response times of a few seconds. Inserting the paper mill's flexibility within this portfolio provided the solution to reduced availability.



Volume of paper produced annually

30 seconds

Response time in less than 30 seconds



No impact on production



This technology and portfolio solution allowed us to leverage our flexible processes and to double our annual Demand Response earnings." Spokesperson, paper manufacturer

Why Centrica Business Solutions?

- Optimizes revenues all year-round, offering the highest possible volume, in the highest-paying reserve, at the best possible time
- Shares the risk of activation with a large group of consumers, allowing industrial consumers to participate in reserves with stricter technical requirements
- Curtailment via the plant's automation system reacts in seconds with no human intervention required

Next, production processes were safeguarded downstream by monitoring and protecting the buffer levels and limiting curtailments of the pulp plant when stocks are too low. The result: greatly increased DR payments with no impact on production.

