

Curtailing energy without impacting quality

Globally, ArcelorMittal consumes approximately the same amount of gas and electricity as Austria, or 25% of the total annual energy consumption of the UK. To mitigate growing costs from energy taxes, transport and renewables levies, ArcelorMittal set up an internal business unit, called ArcelorMittal Energy SCA, to focus on energy optimisation and energy trading for its manufacturing plants across Europe.

Flexible approach to energy

In March 2014, two steel plants - one owned by ArcelorMittal and one owned by stainless steel producer, Aperam - started to assess the opportunity to participate in the capacity market.

This followed comments from the government that the country was going to struggle to avoid power blackouts during the coming winter. The critical question was whether it was possible to limit power to machinery fast enough, and long enough, to qualify for Demand Side Response (DSR).

ArcelorMittal could not allow power to its electric arc furnaces or hot and cold roll mills to be curtailed during certain hours in the day. In addition, the local operations teams were concerned that steel quality and customer delivery would be impacted if machinery was without power for certain periods. On its own, it was likely that ArcelorMittal would not be able to meet the transmission system operator's (TSO) stringent requirements for DSR participation.

The results

Both the ArcelorMittal and Aperam plants were aggregated into Centrica Business Solutions' DSR portfolio, which also contains a wide array of other industrial sites owned by different companies. When circumstances meant that ArcelorMittal's plants couldn't curtail power, another company in the portfolio could step in as a substitute, ensuring that the TSO had the required power available at all times.

This pooling approach ensured that ArcelorMittal's local operations team could carry on with business as usual, whilst still enabling the company to generate revenues through participating in the capacity market.

150 MW

Energy returned to the transmission grid during peak periods 100 PER CENT

ArcelorMittal retains control over industrial processes



We are not 100% available because of the very nature of the electric arc furnace, but at times when blackouts are possible, we can help the network with the right incentives."

Luis De Miguel Martinez, Managing Director, ArcelorMittal Energy SCA

Why Centrica Business Solutions?

- Technology automatically reduces energy consumption and allows businesses to return power to their local community when required
- Generates significant recurring revenue which can be used to reduce energy bills
- Unlocks new revenue and facilitates the further development of renewable energy
- Lowers industry's carbon footprint with more efficient power management
- Helps to curb global climate change

