

## Power Quality Management for Reduced Production Downtime

### CUSTOMER PROFILE

#### Liberty Onesteel, Australia

- 14 manufacturing site portfolio
- 0.58 initial baseline power factor
- Continuous-process, high-load industrial plants

### CHALLENGE

Liberty OneSteel operates high-load, continuous-process manufacturing, which is sensitive to even minor voltage events. Key issues included:

- **Voltage sags and fluctuations** disrupting steel processing
- **Risk of costly downtime** during high-heat, high-throughput phases of production
- **Limited insight into real-time power quality** across critical circuits
- **Need to ensure equipment protection** and process stability at industrial scale

### SOLUTION & RESULTS

Edge Zero deployed voltage regulation and monitoring tailored to heavy industry needs leading to annual savings of \$312,424 AUD.

- **Installed monitoring units** across key electrical infrastructure to help stabilize incoming voltage
- **Leveraged real-time monitoring** to flag and prevent voltage anomalies
- **Enhanced equipment protection**, reducing the risk of process interruptions
- **Improved overall power quality**, supporting uninterrupted steel production

### AT A GLANCE

#### Challenges

- Voltage Fluctuations
- Risk of Downtime
- Lack of Real-Time Visibility
- Pressure to Improve Operational Efficiency
- Ensuring Equipment Protection and Process Stability

#### Benefits

- \$312,424 (AUD) Seen in Annual Savings
- 0.58 to 0.99 Power Factor Increase
- Payback Period of 2.4 Years

**Visibility is the first step towards being able to control electricity usage.**

Commercial electricity bills often have charges based on factors beyond energy usage. Being able to measure and control these factors is a significant advantage. This can lead to decreased spend on electricity and help mitigate downtime due to power quality issues.