# DRAX POWER STATION

## Energy

### Converting to biomass energy

Drax Power Station, based in UK, is the largest decarbonisation project in Europe. In 2010, the Group had the ambition to switch from coal to wood energy. In 2021, the conversion to biomass and sustainable energy was a success! The power station provides the most renewable power of any single location in the UK with 14 terawatt-hours. Today, Panorama SCADA software controls, from a single control room, all four bioenergy units in addition to common services and a water treatment plant on the site.

### Aim

The shift to biomass energy is to contribute to the aim of **a zero carbon power system by 2050**. Of the original six boiler units at the site, four have been converted to biomass. This transformation required many control system changes and had to meet stringent legislative power industry demands. The modernization of the original ageing RTAP SCADA system to a modern and flexible SCADA solution will **improve reliability, availability, and sustainability.** However, one of the aims is also to **minimize the need for retraining of the engineering team and operators.**

### Solution

The new APMS control system is based on Panorama E² software selected to be **a suitable solution that can evolve in the future**. The SCADA system enables the engineering team to programmatically transfer data from the original system and build it directly into the Panorama application. This feature ensures that a certificate to operate remains valid following any systems upgrade. Panorama is able to read the same equipment alongside the original system, but provides more detail and it is not necessary to redraw all the graphics. This offered the Drax engineering team massive project time saving.

**Drax chose an awarded "ANSSI" software to give confidence that the solution offered a proven level of Cyber security**.

The interface to connect the SCADA system to plant devices and PLCs is via OPC-DA which allows the SCADA solution to connect directly and easily to legacy systems.

### Customer benefits

The APMS application benefits from **a common cross-class library across all of the systems** whilst keeping the same system look-and-feel **to minimise the impact on operator's daily work.**

Drax also benefits from **a modern, open, flexible solution** that can be **easily interfaced into other systems.** This offer the ability to extend in the future if needed.

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