



## PROJECT PROFILE

# McCommas Bluff Biogas Upgrading Plant

## V Core Renewable Energies

### Client background

V Core Renewable Energies generated renewable energy resources from stranded biogas. As a small EPC contractor, they provided turnkey solutions to customers while keeping development and construction costs lower. Some of their facilities and designs converted biogas to power, natural gas, and vehicle fuel. Enterprise Automation worked as their project's sole controls integrator.

### Project background

The McCommas Bluff Landfill Biogas Upgrading Plant is one of the largest of its kind in the US. The landfill produces over 10,000 SCFM of biogas on a consistent basis, which continues to increase as the landfill receives more trash. The plant was built over 2 decades ago and needed repair and rehabilitation. As part of the process, EA developed a new state-of-the-art controls system that included new process control logic to optimize the plant. The plant processes included desulphurization, temperature swing adsorption (TSA), vacuum pressure swing adsorption (VPSA), thermal oxidation, flare gas management, and multiple stages of gas compression and process liquid cooling.

### EA solution

EA produced 13 RIO cabinets that contained over 1200 physical IO from devices and instruments around the plant. All of this data was brought into a single Allen Bradley ControlLogix master PLC to handle all the logic processing for the plant. EA fully tested and validated operations through simulation with the design engineers prior to arrival on site. Startup of all IO was accomplished in less than 20 days of overall plant downtime.

#### Project Manager



Derrick  
Malcolm

#### Project Technical Lead



Josh  
Riley

#### Key Insights:

- Produced 13 RIO cabinets with 1200+ physical IO
- Startup accomplished with less than 20 days of plant downtime

#### Key Technologies:

- Allen Bradley ControlLogix PLCs
- HART FlexIO
- Wonderware InTouch HMI