

ST. CATHERINE HOSPITAL

EAST CHICAGO, IN – 1,000 KW COMBINED HEAT AND POWER (COGENERATION)

As part of a the construction of a new, state-of-the-art 850,000 square foot dairy manufacturing facility in Lubbock, Texas, Leprino Foods implemented a new 1,000 kW combined heat and power system in 2024 to operate on biogas generated from the a newly built digester. The digester takes organic waste from the facility's production generating enough biogas to operate the genset. A natural gas fuel train was added for reliability and for the ability to blend the gases for continuous operation.

The CHP system consists of a 2G engine with a Stamford alternator and hot water heat recovery, making this system a cogeneration system. White Harvest Energy prepared engineering submittals, drawings and specifications for project and subsequently selected to supply the equipment. WHE was responsible for field verification and fit, unloading and supervision of installation, commissioning and startup. WHE is also responsible for the long term service support.

SOLUTION PROVIDED

- **Generating Capacity:** 847 kWe
- **CHP Equipment:** One 2G Avus1000+ Reciprocating Engine
- **Heat Recovery:** Hot water
- **Type of Fuel:** Natural Gas and Biogas (Dual Fuel)

OUR ROLES

- Project Management
- Design support
- Equipment supplier
- Long term parts and maintenance

IMPACTS

- Co-generation outputs:
  - 7,030 MWh electricity annually
  - 2,900 MBtu/hr hot water
- Reduced cost for energy needs
- Lower reliance upon the energy grid
- Reduced carbon footprint
- Improvement in power factor