

LARGEST J920 FLEXTRA PROJECT IN NORTH AMERICA

provides peaking power solution

Background

With Texas accounting for one-tenth of total U.S. energy use and the state's population growing steadily, power supply is having a hard time keeping up with the increasing frequency of peak events. And that difficulty is intensified as the use of intermittent renewable energy sources continues to expand. A very high degree of flexibility is needed within a short period of time to offset the volatility of wind and solar resources and ensure grid stability.

In recognition of these challenges, Sky Global Partners required a high-performance generating solution that furnished clean, affordable energy, operational flexibility, dependability in emergencies, and capabilities that supported the dynamic Electric Reliability Council of Texas (ERCOT) electricity exchange and its potential to increase revenues.

Highly flexible solution that complements RES

When the sun is not shining, the wind not blowing, or to cover the residual load, INNIO's power generation solution steps in to provide reliable power to San Bernard's members.

Since 2016, six of INNIO's ultra-fast pipeline gas-fueled Jenbacher J920 Flextra gensets have powered the 51 MW Sky Global Power One power plant, the largest J920 Flextra project in North America. The INNIO units deliver high efficiency that reduces energy source consumption and lifetime operational costs.

The plant is part of a long-term partnership between owner-operator Sky Global Partners and the San Bernard Electric Cooperative (SBEC) to provide peaking power to SBEC. The Jenbacher units, which are designed for continuous operation and can also be used for combined heat and power (CHP) in industrial settings, supply electricity to more than 18,000 members of the San Bernard Electric Cooperative in a seven-county region in south central Texas.



» The Jenbacher technology allows us to quick start the power plant in less than 5 minutes to support grid stability and supply 51 MW to San Bernard's members. This helps provide secure and reliable power to approximately 20,000 homes in the San Bernard region. Plus, the power plant also helps to heat the homes via electrical baseboard or heat pumps.«

Frank Rotondi, Chairman, CEO & President, Sky Global Partners, LLC

Results

INNIO's 8.6 MW J920 Flextra engines efficiently handle peaking pressures, and they also can provide power quickly with black start capabilities in case of a supply line power interruption, and they can run in island mode to generate power – even during a grid outage.

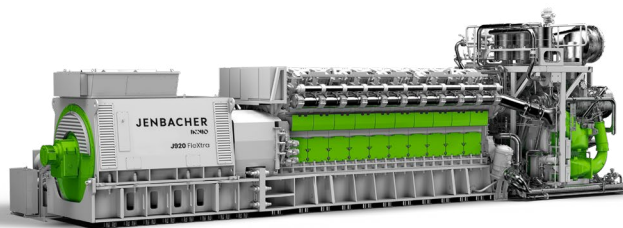
For instance, when millions of Texans faced a four-day grid outage during winter storms in 2021, the lights and heaters stayed on for Sky Global customers. Another plus: the plant uses no more water than a single residence.

In industrial settings, the Jenbacher units also can provide baseload power and combined heat and power (CHP) with efficiencies greater than 90%.



Key technical data

Installed engines	6 x J920 Flextra
Electrical output	51.42 MW
Electrical efficiency	47%
Energy source	Pipeline gas
Year of commissioning	2016



Find your local support online:
www.innio.com/en/company/providers

Customer benefits

INNIO's Flextra gensets deliver a number of benefits to Sky Global, including:

- Flexible power that can deliver high-efficiency peaking power as well as black start capability and island mode operation
- Fast starts for grid stabilization
- Efficiency at 47% operating on pipeline gas
- Cost savings, with reduced fuel consumption and lower operating costs
- Additional revenue through participation in the electricity exchanges

INNIO is a leading energy solution and service provider that empowers industries and communities to make sustainable energy work today. With our product brands Jenbacher and Waukesha and our digital platform myPlant, INNIO offers innovative solutions for the power generation and compression segments that help industries and communities generate and manage energy sustainably while navigating the fast-changing landscape of traditional and green energy sources. We are individual in scope, but global in scale. With our flexible, scalable, and resilient energy solutions and services, we are enabling our customers to manage the energy transition along the energy value chain wherever they are in their transition journey.


INNIO is headquartered in Jenbach (Austria), with other primary operations in Waukesha (Wisconsin, U.S.) and Welland (Ontario, Canada). A team of more than 3,500 experts provides life-cycle support to the more than 54,000 delivered engines globally through a service network in more than 80 countries.

INNIO's ESG Risk Rating places it number one of more than 500 worldwide companies in the machinery industry assessed by Sustainalytics.

For more information, visit INNIO's website at www.innio.com

Follow INNIO on Twitter and LinkedIn.

© Copyright 2022 INNIO.
Information subject to change without notice.

INNIO, INNIO, Jenbacher, , myPlant and Waukesha are trademarks in the European Union or elsewhere owned by INNIO Jenbacher GmbH & Co OG or one of its affiliates. All other trademarks and company names are property of their respective owners.