

Biogen Idec

Location: Cambridge, Massachusetts

Installed: December 2005

Founded in 1978, Biogen Idec is a global leader in the discovery, development, manufacturing and commercialization of innovative therapies. In 2003, the pharmaceutical company needed to do something to assure the critical supply of steam and electricity to its Kendall Square campus, both of which came from outside sources.

Power outages at the facility had caused serious production problems for Biogen. The loss of electricity for an hour meant as much as 24 to 36 days of product loss due to batch production processes.

In addition, Biogen's steam supply was sometimes unreliable. So, although cogeneration wasn't a business Biogen had ever planned on getting into, they found that it made more sense to invest in a power source that was reliable, efficient, and less volatile than grid power.

SourceOne, a Boston-based energy management consulting



firm was retained to study the project. After careful consideration, a 5.7 MW *Taurus™ 60* was chosen as the primary power generation equipment. Coupled with a waste heat recovery boiler, the *Taurus 60* gas turbine generator set would provide the campus with both the power and steam it needed.

SourceOne estimated that savings on Biogen Idec's utility bill would be up to \$4 million per year. In addition, they calculated that 25,000 tons of carbon dioxide emissions would be avoided through the more efficient use of fuel in the cogeneration system.

Installed in the basement of Biogen's sixth building at the Kendall Square campus, the cogeneration system provides steam for both heating and cooling. The utility is now used for backup power and Biogen has a cogeneration system with much higher reliability than using the utility alone.

Although executives at the company had to learn far more about the world of energy production and cogeneration system design than they ever expected, the facility manager said of the project, "Now that we're here, we're really excited about it."

Solar Turbines Incorporated is a wholly-owned subsidiary of Caterpillar Inc., a world leader in the design, manufacture, installation and operation of power generation equipment.

For more information on this project and how Solar Turbines can provide a sustainable, effective solution to meet your energy needs, contact:

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