

# District Energy Plant for Avintiv in Old Hickory, TN

Power plant operations go in-house with end-to-end solution



## Challenge

Energy is one of the highest operating costs for Avintiv (formerly known as Fiberweb), a maker of nonwoven fabrics based in Old Hickory, Tennessee. To bond, cool and dry the molten plastics used to make the fabrics the company produces, its manufacturing process requires large amounts of steam and chilled water, which are energy-intensive to produce. The durable, high-performance, flexible nonwoven fabric resulting from this manufacturing is used in filtration and barrier applications in industries such as medical products, civil engineering, construction, aerospace and agriculture.

Because its local supplier of steam and chilled water was scheduled to end its services in 2010, Avintiv decided to bring the critical operations under its own roof. With no in-house experience operating a power plant, however, Avintiv launched an extensive search for expertise to ensure its plant's operations would continue without interruption.

## Solution

Avintiv selected Constellation to build, maintain and operate a new district energy power plant that is capable of producing 255,000 lbs/hr of steam and 3,000 tons of chilled water. They chose Constellation's proposal of a complete end-to-end solution in part because it included both the construction and maintenance of the facility.

The completed district energy plant provides steam and chilled water both for managing the work area temperatures and for use in the manufacturing processes. The plant operates more efficiently overall, saving costs and therefore better meeting Avintiv's energy needs. Additionally, through Constellation's managed energy procurement program, which mitigates risks and protects from price volatility, Constellation can purchase natural gas and electricity at a significantly lower cost than can Avintiv, further reducing the operating costs of the steam and chilled water plant. Finally, the plant also supplies steam to two other nearby manufacturers, Jacob Holm and DuPont, via underground steam headers.

The project not only met but exceeded the aggressive completion deadlines, due to Avintiv's holistic approach, coupled with Constellation's experience and efficiency managing energy assets.

## Highlights

---

### Project

- Financed, constructed, maintained and operated by Constellation
- 15-year term of operations contract
- 1.7 BCF natural gas procurement included in contract
- Plant in operation before Avintiv's deadline

### Technical

- 255,000 lbs/hr steam capacity
- 3,000 tons chilled water capacity

### Work With a Trusted Energy Solutions Provider

At Constellation, we tailor our integrated energy solutions to your unique needs, providing you with the flexibility to choose how to cost-effectively buy, manage and use energy to meet your business goals. Along with our expertise, we offer a wide range of innovative and integrated distributed energy products—including solar, energy efficiency, cogeneration, backup generation, fuel cells, and battery storage—as well as the reach of one of the nation's leading competitive suppliers of power, natural gas, renewable energy and energy management products. With more than 30 years of experience and over \$2 billion in energy-related projects financed and built, we help business, nonprofit and public sector customers achieve sustainability goals, develop energy resiliency, manage costs and capital needs, and mitigate risk.

### Start the Conversation Today

For information on any of our energy solutions visit <https://www.constellation.com/energysolutions>

---

Constellation is a leading competitive retail and wholesale supplier of power, natural gas and energy products and services across the continental United States. Constellation's family of retail businesses serves residential, public sector and business customers, including more than two-thirds of the Fortune 100. Learn more at [www.constellation.com](http://www.constellation.com).

© 2022 Constellation Energy Resources, LLC. The offerings described herein are those of either Constellation NewEnergy, Inc. or Constellation NewEnergy-Gas Division, LLC, affiliates of each other. Brand names and product names are trademarks or service marks of their respective holders. All rights reserved. Errors and omissions excepted.