



A Study in Energy Efficiency: Pittsburgh Steelers' Heinz Field, Pittsburgh, PA

# Steelers Team Up with Energy Ally to Drive Down Costs.

## Customer Profile

The Pittsburgh Steelers have a storied, record-setting history. The fifth-oldest franchise in the National Football League, they became the only team in NFL history to win six Super Bowls, and as of 2012, they're the only team to have won back-to-back Super Bowls—twice. With all this success, including a new generation of fans, the Steelers needed a stadium that reflected their impressive legacy.

## The Challenge

Faced with escalating construction costs for a new stadium and the challenge of navigating the complexities of newly competitive energy markets, the Steelers knew they needed a professional energy ally so they could focus on what they do best—football.



**Constellation**<sup>SM</sup>  
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## The Solution

The Pittsburgh Steelers chose to work with Constellation, who had the capital and technical expertise to design, develop, operate and maintain the central energy plant serving the 65,000-seat Heinz Field. What's more, Constellation built the entire stadium infrastructure for heating, cooling and hot water supply.

The central energy plant was also designed with expansion in mind—33% more capacity to be exact, making it possible for Constellation to oversee adjacent building development and drive down operating costs for the Steelers even more.

## The Results

The energy plant was completed **a month ahead of schedule** and within **one percent of the original budget estimate**. In addition, Constellation's seamless integration and collaboration with the Stadium's construction team throughout the process helped ensure the project's success. As a result, Constellation's role has been expanded to include maintenance of key refrigeration and HVAC equipment at Heinz Field.

**Win-win financial formula.** Constellation funded this project as a build-own-operate-maintain (BOOM) project for a 20-year term. The financial arrangements include treating the project as an operating lease, where Constellation retains title to equipment and has rights and responsibilities as plant owner.



## Benefits

- 2,250 tons of air conditioning-chilled water
- 30,140 MBH of heating and hot water
- Energy cost **savings of \$1.25 million** achieved over the first five years
- The Steelers **saved \$4.6 million** from their capital budget
- 20-year term with 10-year renewal options

## Technical Benefits

### CHW Plant

- 2,250 ton capacity
- Three 750-ton chillers
- Three 750-ton cooling towers
- Four vertical-turbine condenser water pumps (1 of 4 on VFD)
- Variable primary CHW pumping system

### HHW Plant

- 24,000 MBH capacity
- Three 8,000 MBH dual-fuel water-tube packaged boilers
- Variable primary HHW pumping system DHW Plant
- 6,400 MBH capacity
- Four gas-fired DHW boilers (two converted for HHW use)

## Call Us

To discover how we can put our expertise to work for you, call us today at **1.866.237.7693**.

**Constellation**, an Exelon company, is a leading competitive supplier of power, natural gas, renewable energy and energy management products and services for homes and businesses across the continental US. We provide integrated energy solutions that help customers strategically buy, manage and use their energy. Our customers, including two-thirds of the Fortune 100, rely on our commitment to innovation, reliability, transparency and service. That is the kind of value you and your communities can expect from Constellation.

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