

# **Federspiel Controls to Enable Major Reductions in Energy Usage at State of California Data Centers**

## **Awarded U.S. Department of Energy Grant to Install Enterprise Energy Management Systems at 12 Facilities**

El Cerrito, California (March 25, 2010) – Federspiel Controls, Inc. has been awarded a grant from the U.S. Department of Energy (DOE) under the American Recovery and Reinvestment Act to cut data center energy usage by more than 25%. The project will fund the installation of the company’s enterprise energy management systems at twelve State of California, Department of General Services (DGS) data centers across the state.

“These Recovery Act projects will improve the efficiency of a strong and growing sector of the American economy. By reducing energy use and energy costs for the IT and telecommunications industries, this funding will help create jobs and ensure the sector remains competitive,” said Energy Secretary Steven Chu. “The expected growth of these industries means that new technologies adopted today will yield benefits for many years to come.”

In California, Governor Arnold Schwarzenegger’s Green Building Executive Order S-20-04 commits DGS and other state agencies to reduce energy usage in state facilities by at least 20 per cent by 2015, with the goal of providing benefits to the California economy and its taxpayers through reduced energy consumption and carbon output. Federspiel Controls’ systems are expected to save DGS 4,700,000 kilowatt hours of energy per year, enough to meet the annual energy needs of more than 675 homes.<sup>1</sup>

“The DOE grants will help California meet its goals to improve energy efficiency and reduce operating costs in state government buildings, while also decreasing the impact state facilities have on climate change,” said Jeff Henninger, Assistant Chief, Real Estate Services at the California Department of General Services. “We are excited to collaborate with Federspiel Controls as we implement their energy management systems to achieve the energy efficiency goals identified in Governor Schwarzenegger’s Green Building initiative. Federspiel Controls’ strong track record of delivering real-world results makes them the ideal partner for this project.”

Federspiel Controls will provide advanced enterprise energy management systems for each of the data centers in the project. Built around an advanced artificial intelligence

engine, the systems will dynamically monitor and control – using closed-loop feedback – the output of computer room air handler (CRAH) units. This can reduce operating time while also ensuring that inlet air temperatures are within recommended levels. The system’s sophisticated reporting, simulation and modeling capabilities puts powerful tools in the hands of the data center managers as they decide how to optimize performance and achieve long-term reliability goals.

“Federspiel Controls’ has developed unique expertise in applying sophisticated artificial intelligence technology to the needs of enterprise energy management,” said Mark Housley, CEO of Federspiel Controls. “We are proud that the DOE has selected Federspiel Controls to participate in this landmark project with the California Department of General Services, as we jointly work to provide the citizens of California with increased energy efficiency and reduce the impact of data centers on global warming.”

### **About Federspiel Enterprise Energy Management Systems**

Federspiel Controls’ systems combine the latest hardware, software and networking technology to deliver a powerful solution for the needs of real-time energy management. The systems not only provide the ability to monitor hundreds or thousands of collection points in real-time, but more importantly, to automatically and intelligently control a site’s cooling capacity to optimize efficiency, reduce costs, and provide the security of an environment where risk can be managed

Federspiel Control’s enterprise energy management systems include:

- AI Engine – State-of-the-art artificial intelligence is used to automatically manage the thermal behavior of a site, adjusting temperature and airflow in closed-loop control to respond to real-time variations.
- Dynamic, closed-loop feedback – Integrated BACnet and Modbus support provides real-time control of computer room air handlers (CRAH) and building HVAC systems.
- Simulation and modeling – Advanced tools allow “what-if” configurations to be explored, enabling risk to be better managed by providing insight into potential capacity issues.
- Web-based user interface – An integrated web server allows the system to be easily managed using a standard web browser.
- Architectural views – Facility layouts are automatically imported, providing a graphical overview of loads and cooling behavior in real time.

- Remote sensors – Miniature thermal sensors can be quickly deployed throughout a facility, allowing inlet temperatures to be precisely measured.
- Wireless mesh network –Dust Networks® wireless technology connects all of the sensing nodes in a seamless, real-time network that is dynamically configured, without the need for laying costly cables or building retrofits.

## **About Federspiel Controls**

Federspiel Controls ([www.federspielcontrols.com](http://www.federspielcontrols.com)) is the leader in closed-loop enterprise energy management systems for data centers and large, commercial buildings. Since its start in 2004, the company has pioneered the application of advanced, artificial intelligence technology to the real-time demands of energy usage, delivering significant reductions in operating costs and increased reliability. Federspiel is a privately-held firm located in the technology corridor of San Francisco's East Bay and is committed to green energy solutions that make for a more sustainable planet.

## **Media Contact**

Media Relations

phone: 510-524-8480

email: [media@federspielcontrols.com](mailto:media@federspielcontrols.com)

Federspiel Controls and the Federspiel Controls logo are trademarks of Federspiel Controls, Inc. All other company and product names may be trademarks of their respective owners.

- end -

---

<sup>1</sup> Source: U.S. Energy Information Administration, Independent Statistics and Analysis, 2007. The average monthly residential electricity consumption in the State of California was 580 kWh/month.