



IMPROVING YOUR DATA CENTER'S EFFICIENCY SAVES YOU MONEY.

QuEST MAKES IT HAPPEN.

THE DATA CENTER COOLING CONTROL PROGRAM

The Data Center Cooling Controls Program (DCCCP) provides technical assistance and financial incentives for Pacific Gas and Electric Company (PG&E) customers to reduce the amount of electricity required for data center cooling. The program targets energy efficiency improvements that provide significant cost savings and are easy to implement without interrupting normal data center operations. Customers enrolled in the program receive a thorough data center energy assessment at no cost and financial incentives for implementing efficiency improvements. The customer is free to work with their vendor of choice to implement a preferred solution – or select QuEST to provide turnkey implementation.



QUEST



NO-COST SERVICES

- A thorough data center assessment to accurately quantify potential savings, implementation costs, and return on investment.
- Seamless management of the process of applying for and receiving utility incentive funds for your project.
- Customized efficiency solutions to match your budget, schedule, and payback metrics.
- Documentation of systems and procedures to keep your facility's cooling system running efficiently.

FINANCIAL INCENTIVES

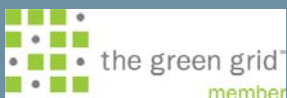
- Significant incentives available for improving data center efficiency.
- Incentives available for a wide range of efficiency improvements.
- \$0.09/kWh - \$0.15/kWh plus \$100/peak kW for verified savings.

ELIGIBILITY REQUIREMENTS

- Data center should have an area of approximately 5,000 square feet or larger.
- Participant is a PG&E customer paying the CPUC Public Purpose Fund charge on utility bill.
- The engineering report produced by QuEST must demonstrate energy savings potential.

BENCHMARKING AND METRICS

QuEST utilizes industry standard metrics including Power Usage Effectiveness (PUE) developed by the non-profit group The Green Grid. Frequent benchmarks of data center energy use are taken to evaluate the effectiveness of energy saving strategies.



WHY PARTICIPATE?

Energy use in computer data centers is 15-40 times higher than that in commercial office buildings. A typical data center dedicates approximately half of its energy use to the cooling system alone. Cooling optimization reduces operating expenses, driving money to your company's bottom line.

PROGRAM DETAILS

QuEST conducts a detailed engineering analysis of current energy use, cooling strategies, and temperatures throughout the data center. Opportunities for energy savings are identified and QuEST provides support for implementing these measures. Example measures include the use of economizers to capture "free cooling" using outside air, installation of variable frequency drives (VFD) to scale fan energy use as a function of cooling load, aisle containment best practices, and control system modifications to adjust cooling in real-time based on environmental conditions. QuEST has been helping PG&E customers improve data center energy efficiency through this program since 2006, providing substantial incentives to program participants. We recognize that each data center is unique and provide site-specific recommendations that are feasible, cost effective, and do not introduce undue risk in your critical facility.

GET STARTED NOW

Now is the time to improve the efficiency of your data center. QuEST provides no-cost engineering services, technical expertise, and financial incentives to help achieve your energy efficiency goals. Contact QuEST to learn more, schedule a site visit, and get started on the path to improved efficiency and lower utility bills!

ABOUT QUANTUM ENERGY SERVICES & TECHNOLOGIES, INC.

Our team includes professionals with experience in building operations, energy design engineering, and project implementation. Our goal: energy savings for the benefit of California!

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