Chopping Demand Charges

Channel Lumber Chops Demand Charges By 20 Percent

Channel Lumber, in the San Francisco suburb of Richmond, California, is the largest lumber company in the Bay Area. For a half century the company has provided a wide range of commercial lumber products, from structural elements to custom millwork, for architects, engineers and contractors. A few of the noteworthy projects in which Channel Lumber has been involved include the construction of the YouTube headquarters (San Bruno, California), various Bay Area Rapid Transit (BART) projects since the organization’s founding and the LEED-certified Cavallo Point Lodge at Golden Gate (formerly Fort Baker, Sausalito, California).

To create the vast volume of wood materials that its customers require, Channel Lumber operates large saws and milling equipment at its facility. The motors driving the equipment represent a significant load—at some times, in excess of half a megawatt—that often occurs during times of peak load on the local grid. As a result, Channel Lumber would find itself subject to large industrial demand charges—sometimes as high as $25 per kW—from the local utility, charges that have increased in recent years.

SmartStorage As Peak Offset

To help offset this demand and, ultimately, move to a lower rate, Channel Lumber worked with NantEnergy to install a 120kW/162kWh energy storage system to capture solar power, storing the excess in batteries. Using NantEnergy’s predictive software and battery hardware, Channel Lumber is able to tap this ready energy source at peak times—replacing nearly 20 percent of grid power with low-cost, reliable renewable energy—and save $50,000 annually. The system is able to recharge the batteries during times when the equipment is not in use, ensuring that power is available when the
company needs it to meet customer demands.

The system is part of Channel Lumber’s overall commitment to “going green” in its business, from energy utilization to the way it sources its raw materials. The company has invested in perhaps the largest inventory of wood products in the United States that have been certified as responsibly grown and harvested by the non-profit Forest Stewardship Council. It also has invested in power conditioning, energy monitoring, and energy output forecasting, in addition to PV solar power and behind-the-meter energy storage.

**Why NantEnergy?**

NantEnergy won the business in a competitive bid because NantEnergy was able to help Channel Lumber find exactly the right size system to offer the maximum cost-effective benefit. In fact, the system paid for itself in less than three years. NantEnergy’s customer load screening and analysis tools offer highly accurate metrics for determining the correct size of SmartStorage system to install.

“We evaluated several energy storage systems and ultimately selected NantEnergy because they were able to size the system with a high level of accuracy and guaranteed performance-based savings.”

Mike DeSimoni, Sr. CEO, Channel Lumber