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Conservation and efficiency will join choice to drive energy management strategies in the year ahead

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The energy landscape in Mass. over the last decade can be summed up in one word: choice. Since the state's energy markets opened to retail competition in 1998, deregulation has afforded businesses the opportunity to leverage their energy expenditure as an asset, relying on smart procurement strategies to control costs, achieve budget certainty and meet corporate environmental stewardship objectives. Energy choice will continue to be a part of the overall energy management strategy for businesses. Competition in the retail energy markets means that power customers can take control over their energy supply options in a new way, shopping amongst suppliers to select energy products, pricing and contract terms customized to their facilities' precise usage profile.

A decade into deregulation, however, conservation and efficiency join choice as driving forces in the energy procurement and management decision making process.

The easiest and best way to reduce costs is to lower consumption. In Mass., and the entire northeastern U.S., demand for energy is outpacing the aging infrastructure. There are too few generation plants and inadequate transmission lines. Any move to reduce the demand for electricity benefits the bottom line, and the state as a whole.

Businesses will discover new ways to lower demand, and costs, through efficiency programs like demand side management (DSM). DSM focuses on improvements to equipment and the building envelope which result in increased efficiency. DSM can include installing or increasing insulation, improving window and door seals, retrofitting building lighting, and modifying or replacing HVAC systems with high-efficiency equipment. One aspect of DSM is performance contracting, where the cost of renovating, upgrading or replacing systems with energy-efficient equipment is defrayed over a period of years by the cost savings gained as a result of reduced consumption. Once the cost of the improvements has been recouped, the facility sees significant ongoing energy savings.

Some facilities may even find that they're able to generate a revenue stream by participating in demand response (DR), or load curtailment programs, in which the utility pays the customer for making its load subject to interruption. Facilities which have the capability to reduce or interrupt their electricity consumption when the "grid," or power delivery infrastructure, is nearing capacity are candidates for demand response programs. DR participants get paid just for being on stand-by and when an event is called, and can choose between manual and automated compliance.

Additionally, energy bill auditing and utility data management are strategies that can help businesses manage consumption and save on costs. Energy bill audits can clarify invoices, identify errors and overcharges, uncover refunds, and examine usage patterns to identify savings opportunities on an ongoing basis. Utility data management gives businesses online access to consumption and billing data, and allows flexibility to coordinate usage and invoice information, understand energy consumption minute-by-minute, identify variance from historical usage patterns

and take advantage of savings and conservation opportunities.

As renewable energy moves into the spotlight in an election year, more businesses will be going green. There are two main strategies for greening a facility's energy: purchasing green energy products and offsetting emissions through the purchase of credits.

Most of the largest and well-established electricity suppliers in Mass. have green product offerings in their portfolios. End users can select energy supply options which include any mix of renewable energy, up to 100%. Mass. already has passed a renewable portfolio standard (RPS), which requires that 4% of all electricity generated in the state be derived from renewable resources by 2009 with a 1% increase every year thereafter.

In addition to consuming energy generated from renewable resources like wind and sun, facilities can be green by offsetting their emissions. All activities, from heating workspaces to powering computers, create greenhouse gases like carbon dioxide which are emitted into the atmosphere. Reducing energy consumption reduces the amount of emissions. But emissions can also be offset by the purchase of offset credits. The most common of these are renewable energy credits (RECs).

RECs are the property rights to the environmental benefits of generating electricity from renewable energy sources instead of conventional fossil fuels. Buying RECs doesn't guarantee that the purchaser's facility receives green energy, but it does fund the construction of new renewable energy projects.

In 2008 and beyond, Mass. power customers will benefit from having a number of options for managing energy. The best way to take advantage of these options is to leverage the experience and knowledge of an independent and unbiased energy advisor to create and implement a comprehensive strategy and monitor the volatile deregulated energy markets on an ongoing basis.

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