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Question of the Month: Am I managing a business or an electricity grid? Unlock savings with your next energy upgrade - by Justin Rink

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Every light switch, wall outlet and piece of connected equipment in your business requires energy. But nothing stays static. Add a new device here and another over there, and soon your energy needs can start to creep up, along with your costs.

One day you're asking yourself, "Am I managing a business or an electricity grid?"

If this sounds familiar, you aren't alone. Energy is one of the largest variable costs for most businesses, and energy continues to absorb more of management's time than it should. It doesn't have to be that way. You can get a firmer grasp on your energy costs through an energy upgrade. Just be sure to adopt a flexible approach, and bring along the right partner.

Real Cost Savings

Energy conservation strategies are gaining favor as businesses, building owners and managers see the financial benefits. In an increasingly competitive real estate market, commercial buildings with high energy performance are outpacing their neighbors on operating expenses, rent premiums, occupancy and asset value. By significantly reducing utility costs, upgrades like high-efficiency lighting, HVAC systems, variable ratio motor controls and UPS systems can result in dramatically increased NOI and drive new cash flows that can be capitalized into asset value.

Planning Your Upgrade

Ask around and you can certainly find companies who specialize in energy upgrades. They are turnkey vendors, specialists in providing up-front analysis, material sourcing, installation and validation. In fact, most of these types of companies are like good construction managers. They coordinate all aspects of the project, and they also usually subcontract critical components, including design and engineering, installation and validation.

You get the best-of-the-breed working for you, but that doesn't always work in your favor. Energy upgrades are more than projects to expand your energy capacity, or get tighter control of your energy costs. They are opportunities to build an energy infrastructure for your future.

A best-of-breed team where the engineer-designer of record is a hired subcontractor is a situation that could compromise the whole project. Here's why.

The engineering portion cannot be underestimated. Energy related upgrades require understanding current usage and in the case of lighting there are guidelines that specify the proper lumen output of the selected fixtures, based on the space to be illuminated. The engineering firm has to conduct a detailed study, or "photometric" (the calculation of lumen per s/f in contrast with existing building components, obstacles, wall coverings and spill levels), to determine the average FT candles to ensure that the final system, as designed and installed meets the output requirements.

Once the engineering firm delivers their drawings, the electrical installer gets to work, using the drawings as they existed at the point they were signed off. From the electrical installers perspective this is a typical plans and specs job. Pretty much business as usual.

Except that these projects tend to be more or less unusual. Each has its own nuances and difficulties made more obvious by the fact that there are strict guidelines that have to be met. Almost always the design changes during the installation, as new opportunities arise for better and smarter ways to make the upgrade really pay off.

With an ESCO or best-of-breed approach, the engineer-designer isn't part of the installation team. They aren't in the loop to guide the choices and to make sure the project stays within the original design parameters. They aren't there to incorporate all the client driven puts and takes that can turn into a surprise when it comes time for the commissioning.

Avoid Surprises. Hire Smart

Surprises come in all sizes during a poorly managed energy upgrade. In situations where there is federal or state supplemental funding in the form of grants or rebates, the overall process follows a certain protocol, requiring the expertise of an engineer in the design phase and equally important during validation or commissioning.

For energy-related upgrades, data has to be submitted to the governing agencies in order to get grants and refunds. If the data at the project's end doesn't match the data and design at the project's start, your commissioning will be rejected.

Quite simply, an energy upgrade is the time when it really helps if the electrical contractor has some engineering resources of their own to bring to bear. That's the Interstate approach. Our engineering resource is accustomed to the fits and starts of a construction project and the real time need to address the "what if's" that are so typical in projects like these.

Also, with that expertise in house, the Interstate field team is accustomed to being the eyes ears and, in this case, the light meter of the engineering team. They can measure, test and provide feedback to the internal team that is ready to plug in the numbers, run the analysis, update and stamp the drawings.

They do this because it is typical for the preliminary photometric to have missed certain existing conditions, spill levels, or install changes that can affect the overall lumen level. With an all under one roof team of installers and engineers, these levels are verified, proper controls installed, and actual lighting levels verified so that the proper rebates and savings are captured.

If you are upgrading your commercial property, feel free to give Interstate a call and arrange a proposal. Make sure you are getting what you pay for and unlocking the savings hidden in your business.

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