

Energy Security for The Future

When selecting a site for a new warehouse or distribution center, there's a second infrastructure that demands attention – the power generation and delivery system.

August 2010 • Inbound Logistics 51

When making site selection decisions, energy is either overlooked or viewed as a cost component, added to the spreadsheet analysis without much consideration.

But when you operate an automated warehouse or refrigerated facility, or you just want to be sure the lights come on and the computers boot up, the policy and infrastructure supporting energy distribution become important parts of risk assessment as well as cost analysis.

Energy utilities don't earn the respect of economic development managers, noted Allan Hooper, economic development manager for Consumers Energy, in a recent presentation to the Utility Economic Development Association. He urged better communication about the value utilities deliver to customers and companies considering locating in a region. Every business or prospect is, after all, a power customer, and that makes economic development—including retention—important to the utilities.

Utilities are enterprises with significant assets and infrastructure that require considerable annual capital investment; they are accountable to customers, shareholders, and regulators for the decisions and investments they make; they are businesses with profit-and-loss requirements like any other; and they are regulated enterprises overseen by public service or utility commissions that demand the utilities make prudent decisions, said Hooper.

"And while the utilities have similar fiscal responsibilities to shareholders, their regulated status dictates that they maintain pricing that's fair to all customers while they are allowed, at best, to earn a set maximum return to investors," he added.

New Business, New Customers

Talk to Ameren Corp.'s Michael Kearney, manager of economic development, and he'll reinforce many of these points. Kearney describes a warehouse/distribution center study that looks at the areas Ameren serves as a power distribution utility—Illinois and Missouri—and models product flows, examines transportation infrastructure,



Power Under the Microscope

John H. "Jack" Boyd, founder of site selection consulting firm The Boyd Company, adjusts the old real estate line to: energy, energy, energy. In all sectors, companies are looking more closely at energy, says Boyd. Whether they are locating a data center or distribution center, planners are interested in power costs and reliability. Drivers include national energy policy changes, the continued rise of environmental awareness, and even the Gulf of Mexico oil spill disaster.

The value of the energy discussion extends to more departments within companies planning an expansion or relocation. "There's public relations value in using more 'green' energy, and companies realize that," says Boyd. "They want to be in a position to use more alternative energy sources and to publicize that fact."

But beyond feeling good about taking an environmental stand, these same users also want reliability. As energy-generating utilities move to balance their portfolio of sources, this contributes to rate stability and reduces some of the risk associated with a single type of power generation.

Energy was the trump card when automaker BMW selected an unexpected place to build a new plant: Quincy, Wash. Already home to a multitude of data centers, Quincy's low energy costs and hydroelectric power reliability were a big plus in BMW's decision, Boyd says.

But the environmentally friendly energy source also fits with the direction in which automakers are moving—toward designing and building cars that use more composites and computer controls. Those changes are environmentally friendly, and make the process of designing and building cars more like that of the aircraft industry. "And what better place to locate an auto plant than in the backyard of Boeing Aircraft Company?" Boyd asks.

Energy costs can vary widely from location to location, and Boyd notes that electricity can jump from two or three cents per kilowatt hour to the high teens, based on where a facility is located and where it gets its energy.

▲ Energy-efficient BMW plant