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utsourcing The Central Plant: A Value-Added Service that Owners Want

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The last regulated major industry in America, the electric utility industry, is facing deregulation in the very near future. Similar to events that occurred in the gas industry a few years ago, it will soon be possible for facilities managers across the nation to choose their suppliers of electricity.

Facility managers and owners are making plans now to maximize their opportunities. Many are looking for lower rates and barebones service while others are interested in creative options like enhanced services, premium power and value-added services from their incumbent power supplier and from other players, even now, before deregulation comes. One creative option that offers win-win benefits for all parties is a value-added service to take over operation of an existing central heating and cooling plant, *or develop a new one*, for an owner.

Outsourcing and downsizing is a trend everywhere in the US economy, as businesses plan to get down to their “core business.” Building owners, for example, already outsource many services once provided by in-house personnel—security, janitorial, landscape care, HVAC maintenance. Owners can generate cash and get out of the utilities business by “privatizing” their central heating and cooling equipment to a third party who will maintain, operate, and procure energy, and deliver the “finished goods” of chilled water or steam to the owner for his use.

This is a value-added service that is of great appeal to owners—

”outsourcing” their present chiller/boiler plant to a utility company, ESCO, or other third-party entity. This program appeals to utilities, too, who use it to secure a long-term contract with owners, and to counter approaches from “foreign” ESCOs or utilities, yet can be offered at little cost to the utility.

An excellent candidate for outsourcing is the chiller/boiler plant of a large electric customer—a commercial office building, an industrial customer, a large hospital or university. The *right people* in many of these organizations would like to be out of the *energy conversion* business. They are not interested in Btus or therms, they want tons of chilled water and pounds of steam to run a process or heat and cool a building. They may have other problems that third-party ownership/operation of their central plant can solve, such as:

- old, obsolete equipment and systems in need of modernization
- chillers using refrigerants subject to being phased out
- boilers not in compliance with air quality standards
- lack of available capital
- competing needs for capital that have higher priorities
- lack of knowledge or home-grown expertise in systems operations, maintenance, or optimization

There is an unfilled need here for an outside expert, a third-party, whether the local utility company or someone else, to solve these problems and create value for the customer by contractually assuming ownership of the central plant and selling the “finished goods” of steam and chilled water (and more, as we shall see) to the facility manager. An ideal but hypothetical arrangement would be to provide the value-added utilities to the owner at a fixed unit price, with guaranteed minimum purchase amount. The third-party operator of the energy island takes responsibility for plant operation and optimization, and for fuels purchasing. This means he is free to make efficiency improvements and equipment changeouts to increase his profitability, and he is free to procure power and gas on the best terms he can.

If the third party is the incumbent utility company, it gains the advantage of:

- signing long-term contracts with the customer, to stymie competition
- has the chance to look like an ESCO and counter any ESCO approach to its customers
- can offer a value-added service that also meets its business goals and finds a home for investable funds

If the third party is an outside utility company, it gains the advantage of:

- signing long-term contracts with somebody else's customer, to become the competition
- has the chance to provide its own fuel and power to the customer in another's territory
- can offer a value-added service to give it a leg up in a new territory, that also meets its business goals and finds a home for investable funds

The project must be both technically and economically feasible to be successful. A multi-disciplined team is required to make this happen. Both the owner and the third-party provider would be well advised to form a team with an experienced engineering firm and a mechanical contractor to develop a bullet-proof project. Feasibility studies should be performed to assure all parties that their needs will be met.

If you are an owner, you should perform feasibility studies, at your own expense, to assure yourself you have an attractive project possibility(ies) and to obtain your own project cost estimates and production projections so you can better evaluate proposals offered by third parties. If you feel you have a viable project, begin by contacting your incumbent gas and electric utilities to ask about their programs of this nature. Then, talk to other third parties as well, to keep an

element of competition in play. You may wish to develop an RFP and distribute it widely via advertisements in national publications, to maximize both competition and creativity.

Don't forget to include in your discussions an evaluation of financing and legal issues, and if you are a public agency, be aware of any procurement rules that may enter in to this process. All the while, you are strongly urged to: 1) avoid long term commitments and contracts for as long as possible, and 2) be sure you have an expert energy engineer in your corner to help you make sense of the offers and counteroffers you will receive.

ABOUT THE AUTHOR

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Heery International is an 800-person architecture, engineering, program management and construction management firm with annual revenues of nearly \$150 million.