

Are ESCO's a Change Agent for Market Transformation?

Mary O'Drain, Pacific Gas & Electric Company

Katherine Johnson, KJ Consulting

Katherine Randazzo, KVDR, Inc.

Shel Feldman, Shel Feldman Management Consulting

Phil Willems, Quantum Consulting

ABSTRACT

What roles do energy service companies (ESCOs) play in determining equipment selection decisions in the Commercial/Industrial HVAC and motors market? Moreover, how can market transformation activities successfully employ these ESCOs as effective change agents in influencing equipment purchase and selection?

These were two of the fundamental questions addressed in a study commissioned by Pacific Gas & Electric Company (PG&E). This baseline study was designed to characterize the current market, as well as the inter-relationships that exist between customers, suppliers, manufacturers, and intermediaries like ESCOs. The study provided both a qualitative description of the market—in terms of its structure, players, and information flows, as well as a quantitative assessment of market share of efficient technologies, attitudinal indicators, and perceived market barriers.

This paper focuses on the findings and conclusions revealed through in-depth interviews with representatives from the leading energy service companies throughout the United States. These interviews explored the ESCO's current level of awareness and understanding regarding specific market transformation initiatives, such as standard performance contracting under development in California. It also identified the new tactics, directions, and strategies that ESCOs are developing to compete in the commercial and industrial market segments. Lastly, this paper describes the ways that utilities can incorporate ESCOs into their overall market transformation strategy.

Introduction

Project Objectives

This paper focuses on the roles that Energy Service Companies (ESCOs) play in influencing market transformation in the commercial motors and air conditioning markets. The overall objective of the baseline study was to characterize the current markets for packaged air conditioning and motors. Aspects of this study included both a qualitative description of the market, in terms of its structure, players, and information flows, -- and a quantitative assessment of the share of efficient technologies, current indicators, and perceived market barriers.

The framework for this study was inspired by the initial Scoping Study (Eto, Prahl & Schlegel) There are three basic components to the study's theoretical framework: program interventions, customer perceptions of market barriers, and customer actions or intentions. Data were collected on each component, and the results were analyzed to determine the

interrelationships among them. The same data were collected for a comparison territory without a program in Commonwealth Edison's territory of Northern Illinois.

Data were collected from numerous sources including staff interviews, customer surveys, design professionals, and energy service companies. ESCOs were included in this study, and are the focus of this paper because of the important role these companies play in the commercial customer decision process.

Table 1. Data Collection Activities

Interview	Within PG&E's Service Territory	Outside PG&E's Service Territory
Staff	4	
Motor End Users	100	100
HVAC End Users	200	100
Motor Vendors	2 Focus Groups	20
HVAC Vendors	2 Focus Groups	25
Architects and Engineers	15	10
ESCOs	10	

Interview Process

Interviews were conducted with representatives from 10 leading energy service companies, representing a broad section of ESCOs doing business in both California and nationwide. Approximately 45 companies identified themselves as ESCOs in response to a California Energy Commission Survey, and these companies represent most of the major market players. Efforts were made to contact all these firms; 10 agreed to interviews.

The energy service company interviews were designed to provide additional information regarding the market baseline for these technologies, and to explore other influences that these market actors have on customer decisions in the commercial packaged air conditioning and motors markets.

Most ESCOs interviewed were unregulated subsidiaries of electric utilities. Despite their utility affiliations, these companies operate as independent, for-profit entities, trying to compete in a fast-changing market place.

Each respondent was a high-level executive, familiar with the marketing and sales operations for his company. The executives were interviewed in an open-ended format, with questions designed to cover a broad range of topics relevant to the commercial and industrial motors and packaged HVAC markets. The interviews lasted approximately 30 minutes.

General Findings and Observations

ESCO's Role in Packaged Air Conditioner Market

ESCO involvement in the packaged air conditioning market generally comes about as part of a larger, more comprehensive energy project. Despite the broad capabilities that ESCOs offer, their role in the packaged air conditioning market is still relatively limited. Slightly more than 10 of both PG&E and customers in the comparison territory reported having used the services of an ESCO to install new packaged air conditioning equipment. Among customers that has not used an ESCO, about 11 percent of both in-territory and out-of-territory respondents reported having been contacted by an ESCO to install a new cooling system.

ESCO's Role in the Motors Market

Among the energy service companies interviewed, few have focused on motor applications, per se. While motors may not be a part of an overall energy efficiency package, the ESCO respondents said they would rather rely on expert motor subcontractors for these projects. The customer survey results further supported this result, with just 12 percent of PG&E and 9 percent of comparison territory customers reported using an ESCO for motor installations. More telling, none of the customers in either service territory cited ESCOs as their primary information source or influence when selecting motors.

ESCO's Role in the Utility Market

Market Overview

The recent upheaval in the utility market place has led to substantial changes for energy service companies. The market shifts have changed the way these companies now conduct business.

One ESCO executive has seen his company's business switch its emphasis from relying on exclusively on revenues generated from utility Requests for Proposals (RFPs) to generating revenue by aggressively *looking for* new customers. For example, the ESCO reduced its reliance on utility RFPs for revenue from 92% in 1994 to just 26% in 1998. Now the bulk of this ESCO's revenue is generated from market transformation risk/DSM projects (38%), new products (8%), and from non-utility customers (28%). This shift has come largely due to the market changes, where ESCOs now have *to create projects* rather than simply responding to a prescribed and pre-defined approach from a utility.

Besides seeking out new projects, many ESCOs are also aggressively seeking out new partners. As one vice president said, "Now, we are generating business from a variety of channels, including forming alliances."

A representative from one of the largest ESCOs in the country acknowledged that adapting to this evolving market entailed reinventing its corporate culture, developing a new strategic mission, and acquiring new skill sets. This change was accomplished by a combination of layoffs, corporate restructuring, and acquisitions of new business and technologies.

Marketing and Sales

Energy service companies have always been known for their aggressive marketing and sales strategy. Now this reputation has begun to haunt many companies. As one executive said, "...We are living with the sins of the past."

Several other respondents confirmed this finding, indicating that many customers are skeptical about the savings offered by installing energy efficient technologies. This cynicism, combined with the poor reputation that some companies developed in the 1980's, continues to make it difficult for ESCOs to convince customers to install new technologies.

One respondent said, "The hardest part for the customer is believing it (the energy savings). Most customers don't believe it's true. They don't believe that they can get something for nothing."

Customer fear is another challenge. Several respondents told stories indicating that commercial and industrial customers are "simply overwhelmed" by the changes confronting them. As one executive explained, "There's a lot of confusion...Customers have a fear of change and customers have to adjust to new ways of doing business. There is a lack of customer faith and comfort level with the way business is currently done."

ESCOs are addressing the changes in the market in several new ways, including developing new financing arrangements. These changes, however, lengthen the sales cycle and create more complicated transactions. Several of these strategies are discussed next.

New customer focus. Energy service companies are taking a more holistic sales approach, by identifying what the customers' needs are before deciding on a particular technology.

One respondent said, "In the past, utilities have not been involved directly with the customers," he added. "Now, utilities are using ESCOs to focus on customers."

This shift from a technology focus to customer focus had led more companies into new product areas. In several cases, this has required energy service companies to develop new business plans, and either enter or exit from certain market segments. One ESCO vice president summed up the new strategy this way, "Now, the customer is king."

Integrated sales approach. Using an integrated energy (IES) approach, customers select from product options, commodity options (energy), service options, and financing options. Energy service companies have now assumed the role as an energy consultant, charged with helping their overwhelmed customers sort through their options. Some companies have taken this integrated approach so seriously, that now it is even part of their new corporate name and identity.

As one executive said, "Most customers want bundled services with energy technologies. Most customers now want integrated solutions...the energy market is so complex that most customers don't even want to deal with it. We package total energy systems."

Energy service companies are also positioning themselves as energy experts, building upon their expertise in energy systems. Many energy service companies have also developed specialized relationships with reliable equipment vendors. In exchange, energy service companies are often able to negotiate preferred buying arrangements, which in turn benefits the end user.

Developing strategic partnerships. Another tactic used by energy service companies has been to develop strategic alliances or partnerships with either vendors or equipment manufacturers.

ESCOs have moved away from providing their own in-house manufactured products to finding manufacturers that meet specific customer needs. One respondent described his company's approach this way: "We identify opportunities and needs. If they don't fit into our core competency, then we have outsourcing partners to deliver those services."

Segmentation Strategies

Of the energy service companies interviewed, the majority indicated that their primary focus has been on commercial building segment. Even though this market has been "pretty well saturated," some respondents still believe there is a lot potential left.

Table 2. Target Market for Energy Service Companies

Market Segment	Percent of ESCOs Interviewed that are Targeting this Market
Commercial Office	55%
Federal Government	77%
State/Local Government	55%
Health Care	22%
Retail/National Accounts	22%
Educational Market	33%

Several companies are focusing on the government segment because the transactions can be more flexible. Unlike commercial customers, payback is not the major criterion for evaluating energy efficiency projects. The federal government also allows for greater flexibility in putting projects together, since they can focus on long-term considerations.

The educational market, particularly the K-12 segment, has also generated increased interest among energy service companies in California, due to the required mandates for facility upgrades. Similarly, when Ohio enacted performance contracting for its schools that created an attractive market for ESCOs.

Several respondents indicated that their companies have begun breaking out of the traditional commercial building segment. But few indicated any real success in tapping the retail, health care facilities, institutional or the mega bank segments.

Energy service companies also target customers based upon changes in a particular field. As one executive explained, "We focus on wherever we see a trend and focus on a hot industry." In California, some of the most appealing segments to energy service companies have been in high tech industries, such as computer, software, and transportation companies.

Nearly all respondents are open to any new market that has potential. While many companies are developing some type of specialized expertise, they are not willing to rule out any market opportunities at this point. One respondent summed up, "We are looking at the long term... to see if we can cost-effectively market and sell and deliver services to in a particular area."

Role of Rebates

With the decreased emphasis on specific technologies, there also has been less reliance on traditional utility rebates. All but one respondent indicated that rebates were not a major issue to their customers.

One ESCO said that the traditional utility rebates “poisoned” the market by promoting a specific technology rather than energy efficiency. Another respondent described rebates as a “reverse incentive” that has caused more harm than good to the energy efficiency market place. “(Rebates) thwarted the growth of energy services, and customers will do better without these market influences,” he said.

The general feeling was that utility rebates sometimes diluted the overall value of the benefits of installing high efficiency technology by only focusing on reducing initial costs, rather than emphasizing long-term energy savings.

However, one respondent believes that rebates will still remain in the market place albeit in a different format. He believes that rebates “will be offered in a new form as part of the stranded cost settlement issue... Some of the cherry-picking rebates will be gone... but I don’t see the rebates going away.”

Role of Financing

As rebates have become less important, other financing options have taken their place. The major hurdle to financing energy efficiency projects is meeting the customer’s internal payback rates. The interviews indicated that payback issue has not gone away, and that often times these projects fail to meet a client’s internal payback hurdles. To overcome this problem, energy service companies now rely on some innovative financing sources. Many respondents said they use “off the balance sheet” financing as one way to get projects funded.

Another ESCO combines “energy and non energy projects” to get them up and running and meet clients’ requirements. For example, one company said they will even include the cost of carpeting and new roofs into an overall project, if it will help get the deal completed.

“Our projects cost about \$1 million (C&I market) and sometimes customers don’t have the money available on the books... so we look for strategic partners.”

Up to one-third of their projects require some type of financing in order to complete the deal. The energy company’s size was the critical factor in determining the role that financing played in structuring a customer transaction. Large, well-funded energy service companies with utility ties were likely to use their own, internal funding in customer transactions. In contrast, smaller companies or those that operated more independently from their utility parent, tended to rely heavily on financing from third-parties.

The energy service companies indicated that a variety of financing sources are available, offering customers funds at competitive rates. As one respondent said, “These are multi-million dollar projects and there are plenty of financing sources out there.”

1. Performance Contracting: The energy service representatives said that the types of performance contracting arrangements vary depending upon the industry and application. One energy representative said performance contracting is “used to create a budget.” This approach also means that often customers, not the energy service companies, decide what items to include in the deals.

2. Shared Savings Agreement: The energy service company and the client agree upfront to split the projected energy savings that will accrue as a result of installing energy efficient technologies. Shared savings agreements are not as prevalent as in times past. Several energy service companies are focusing more on lease-purchase agreements rather than shared savings agreements.
3. Standard Performance Contracting Arrangements: As the market deregulates, several energy service companies see an increased need for financing options for commercial and industrial customers. A few were familiar with the proposed standard performance contracting (SPC) arrangements in California.

Several respondents, even those with offices in California, were leery about the future impact of the SPC arrangements will have on their businesses. One respondent explained it this way: “If the goal is to develop de facto standard contract, that measures and verifies savings, then it makes sense to have it available.”

ESCO's as Change Agents for Market Transformation

The energy service company representatives also provided insights into the changes they think will occur in the electric utility industry.

Future Trends

1. Utility Deregulation: The respondents disagreed over the long-term effect that utility deregulation will have on energy service companies. One respondent said, “Deregulation will bring more players into the market, and add to the confusion.”
2. Vertical Integration: The respondents also had mixed reactions regarding the move toward industry consolidation. Some expected to see more vertical integration, since the industry is still driven by utilities. As one respondent observed, “The trend in this industry is that it has been driven by the utilities. Utilities are representing themselves as vertically integrated.”

However, several respondents were skeptical about the benefits that vertical integration brings. One representative said, “I see some companies getting in the business and they don't really know what they are doing.” Another added that utilities seem as if they are on a buying spree, acquiring new companies without any strategic plan in place. “They need to support the offering...If (utilities) are not careful, they are going to shoot themselves in the foot.”

The New Type of Energy Service Company

The energy service company executives also described the characteristics they believe will lead to successful energy service companies in the future. The most common response was staying power. “The real players will be the ones that have been in the market for a while.”

These respondents believe that the market will finally move to a truly integrated services approach. To meet customer needs, energy service companies will need to develop comprehensive or “turn key” solutions. To survive in this market, the new ESCO must create customized approaches that make sense to customers. Many respondents believe that they will be competing for customers based upon quality and service rather than price.

“The ESCO’s new role in the future is to figure out the zero-sum game. To be successful, you need to have long-term vision, deep pockets, and the ability to survive.” Those energy service companies that are most successful will have created and developed “slow, evolving relationships.”

Conclusions and Recommendations

The interviews with energy service companies indicated that these are confusing times for ESCOs, utilities, and customers. Some key findings that emerged include:

- ◆ Energy service companies are different from their utility parent companies. The recent changes in the energy market have affected virtually every area of an energy service company’s operation, from its market approach to its relationships with vendors and bankers.
- ◆ Energy service companies’ reputation and aggressive marketing and sales strategy has come back to haunt them.
- ◆ Energy service companies must redefine themselves to find new markets and develop new skill sets.
- ◆ With the decreased emphasis on specific technologies, there also has been less reliance on rebates.
- ◆ In the future, energy service companies will deliver comprehensive solutions because customers will continue to be overwhelmed with choices.

The best way to influence market transformation initiatives among energy service companies is to provide them with the resources and information they need to compete effectively. Since they are truly customer-driven, they will most likely to use anything that helps them close a deal.

Therefore, energy service companies can be used as *effective agents for market transformation*, if the market transformation initiatives are directed at the energy service companies’ own best interest.

References

Eto, Joseph, Ralph Prahl, and Jeff Schlegel. 1996. A Scoping Study on Energy-Efficiency Market Transformation by California Utility DSM Programs. Ernest Orlando Lawrence Berkeley National Laboratory, Berkeley, Calif.

Pacific Gas & Electric Company's Commercial/Industrial Market Effects Baseline Study, Study ID 3306, 1998. Quantum Consulting, Inc. Shel Feldman Management Consulting and KVDR, Inc., Berkeley, California.

