INDUSTRIAL ENERGY EFFICIENCY IN A COMPETITIVE ENVIRONMENT: TRANSFORMING THE MOTOR SYSTEM MARKET THROUGH THE USE OF PARTNERSHIPS

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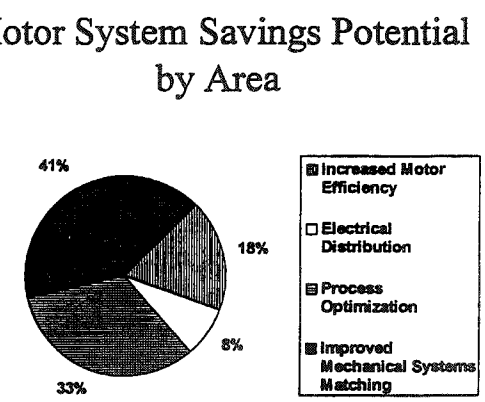
INTRODUCTION

The Motor Challenge

The United States Department of Energy's (DOE) Office of Industrial Technologies (OIT) is home to the Motor Challenge (MC), an "industry-government partnership designed to help industry capture 5 billion kilowatt-hours per year of electricity savings by the year 2000."[1] Two aspects of the Motor Challenge differentiate it from other high efficiency motor initiatives. First, it addresses the entire motor system: drive, motor, pump, compressor, fan, blower, power distribution, etc. It shifts the focus from increasing the efficiency of any one component to how those components are selected and combined: the performance of the entire system. It is this area that holds the greatest promise for the efficiency gains (See Figure 1). Second, instead of financial incentives to change the behavior of any one user, the MC aims to educate buyers and users of electric motor systems to increase their demand for efficient products and services. Most importantly, it is creating a role in the program for all market participants who can influence motor system decisions to support the program while simultaneously pursuing their self interests. It is this last point that can be expected to bring about lasting change to national markets.

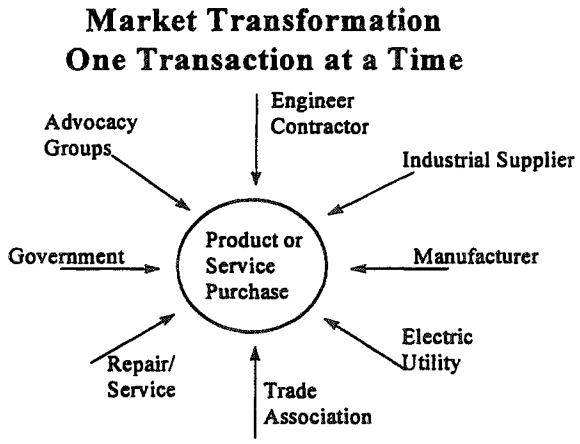
Figure 1: Motor System Savings Potential



Market Transformation Is Not A New Idea

Transforming markets as a means of capturing energy efficiency is not a new idea. In fact, one method of evaluating the effectiveness of traditional demand side management (DSM) programs and incentives has been to determine the extent to which the program can be credited with bringing about lasting market change. But early in this decade, market transformation began to take on a different meaning. For some, market transformation began to be seen as an alternative to traditional DSM programs that offered financial incentives and free technical assistance. "Market transformation endeavors to bring about permanent changes in the markets for targeted energy efficiency products and services. The objective of market transformation is to achieve a high level of market penetration without the necessity of ongoing rebates or incentives. Market transformation holds promise as a way of achieving significant efficiency improvements at relatively low long-term costs."[2] For purposes of this discussion, let's consider a second, complementary definition of market transformation. Transforming the motor system market means influencing market participants in a way that increases the likelihood that any single decision results in a higher level of energy efficiency than would have occurred without the influence of the market transforming efforts. Figure 2 illustrates the market participants with a role or an interest in influencing those transactions.

Figure 2: Market Participants That Influence Motor System Decisions



It is not this paper's intent to evaluate the relative successes of financial and non-financial DSM efforts. Successful examples of each exist. The Northwest's Manufactured Housing Acquisition Program permanently influenced the energy efficiency of manufactured homes. And much has been accomplished with respect to moving the market toward electronic ballasts and compact fluorescent lamps. But since retail competition threatens to reduce or eliminate traditional utility incentives, it is prudent to examine other promising methods to bring about lasting change. Furthermore, since it is DOE's mission to promote efficiency on a national basis, strategies to do so must cross utility, geographic, and other traditional boundaries.

The Influence of Competitive Energy Markets

Change to a competitive market for electric utilities is dramatically altering the extent to which utilities value traditional demand side management activities. Although some dispute the timing and extent of change, its certainty is already affecting the availability of utility incentives and the degree to which utility commissions will require, or even permit those incentives to be rate based. In some states, establishing a system benefits charge means some DSM will still occur, but rebates and other financial incentives are unlikely. Utilities' focus is moving quickly to issues of customer loyalty, retention, and expansion. The extent to which these strategies may include DSM-like activities remains unclear.

Strategic marketing, brand development, and price-based competition are beginning to drive this emerging utility market. In this environment, what's most important to competitors is what is most important to customers—particularly large customers. And among customer segments, the largest consumers and the ones that are most sensitive to price are industrial companies. The industrial sector uses more than 900 billion kilowatt-hours (kWh) of electricity annually spending more than $30 billion per year, much of which is viewed as a necessary and not particularly manageable process input. Despite the potential to reduce that consumption by up to 20%, negotiating a cheaper utility price is less trouble, seemingly more certain, and much easier for industrial decision-makers to understand than equipment or process changes for what are considered uncertain energy savings.

Demand-side management and energy savings may not be as highly valued by some as they have in the past. However, nothing inherent in the move to a competitive energy market reduces the importance of using energy wisely for all the reasons that traditionally drove DSM activity. For that reason, industrial DSM activity and its advocacy will continue in some form. What will change are the ways that energy service providers, governments, non-government organizations, and others attempt to influence industrial energy consumption.

Industrial Energy Decision-Making Creates Additional Challenges

Lest we credit the unfolding utility industry for the demise of industrial DSM, we should acknowledge that even during the heyday of DSM programs, industry remained an elusive target. It has been easier to design and market programs to residential and commercial clients. They share common concerns and their facilities have much in common. Industry, on the other hand, is a production-focused business where much of each operation is thought to be unique. Furthermore, industrial decision-making attributes the greatest value to capital improvements that improve processes and increase output.

> "Smooth and effective implementation of energy efficiency improvements can be hindered on the industrial side by a decision-making process that pits energy-saving projects against more obviously profitable ones. Although the added incentives provided by utility DSM programs should help industrial firms to adopt energy-saving measures, some industrial firms have a generally negative view toward DSM and may, in fact, believe DSM programs increase their electricity prices and give assistance to their competitors. In addition, the time required for installation of energy efficiency measures can disrupt production facilities."[3]

Even with these barriers, utility and other incentives have influenced industrial decision-making. At the Energy Center of Wisconsin, where nine participating utilities consolidated motor rebates under the "RPM Program", high efficiency motors comprised almost 55% of motor sales in 1995, a symptom of transformed markets. However, as those rebates have been withdrawn, sales are beginning to slow, down approximately 15% in 1996, even with the pending change to new motor standards.[4]

TRANSFORMING MARKETS IN THE ABSENCE OF FINANCIAL INCENTIVES

Understanding the Motor System Market

Motor Challenge aims to change the way industry selects and combines electric motor system components. A key to changing that behavior in the absence of financial incentives and codes[5] is understanding and exerting influence on market dynamics that favors the desired behavior. Therefore, if MC identifies the individuals and organizations that participate in or influence purchase and design decisions, and develops a strategy that appeals to those organizations' market interests while promoting the choices MC favors, it will garner market support for the desired behaviors. As a national program, MC must also appreciate the diversity of that market. For example, although there are many companies that supply industrial equipment, a few large companies conduct a large portion of the business. Furthermore, those businesses serve markets that span geographic, political, and utility boundaries. MC must create rewards and incentives that appeal to these large companies but also to the many smaller companies that serve local or regional markets and who generally have fewer resources available to devote to marketing and to providing value added services for their customers.

Identifying and Attracting Market Players

The market for electric motor system products and services includes those that participate directly such as manufacturers, wholesalers, retailers, and service providers, and others that support or exert influence on the market but may not participate directly in market transactions. This first category includes:

- Industrial end-users (companies that use motor systems as part of their manufacturing process);
- Manufacturers of electric motors, motor system components, and bundled systems;
- Engineers and designers;
- Industrial equipment suppliers;
- Equipment repair and service shops;
- Electrical contractors.

Organizations that influence the motor systems market include all of those plus:

- Trade and professional associations;
- Governments;
- Electric utilities;
- Energy and environmental advocacy groups;
- Advertisers.

Each group has its own interests, and will usually act in a manner that favors those interests. For most, that means acting in a manner that increases profit or market share. For others, such as associations, it could mean increasing members' perception of the organization's value. Table 1 describes the relevant interests of each market participant. Although the author readily admits that many businesses are also influenced by the desire to be perceived as good environmental stewards, that motive is generally less significant and will not be considered here.

Table 1: Interests of Motor System Market Players

Market Player	Market Interest
Industrial End-Users	Increased productivity, increased reliability, reduced waste and associated environmental impact, reduced costs, all resulting in greater profitability & share of market.
Equipment Manufacturers	Increased sales, premium pricing, competitive advantage, meeting or anticipating evolving standards, lower cost for skid components, implied endorsement of association with government program.
Industrial Suppliers	Increased sales, lower costs, inventory control, competitive advantage, and customer loyalty, better awareness of customer needs, implied endorsement of association with government program.
Engineers, Designers, & Contractors	Competitive advantage (exposure to latest technological advances), minimizing risk (designing problem-free systems), increased market exposure, implied endorsement of association with government program.
Motor Repair & Service Shops	Maintaining market position, improving perception of rewind/repair process in face of new efficiency standards, implied endorsement of association with government program.
Electric Utilities	Customer loyalty and retention, sales, new products and services, avoiding construction of new plants, implied endorsement of association with government program.
Trade & Professional Associations	Advancing member interests, enhancing perception of members and member products/services, collective initiatives, increased credibility and standing, implied endorsement of association with government program.
Energy Efficiency Advocacy Groups (Non governmental).	Maintaining priority for energy efficiency and environmental benefits, maintain relevance for members, maintain or enhance political position.
Department of Energy	Increased efficiency, reduced carbon emissions, being perceived as operating effective programs and making good use of taxpayer funds.
Energy Service Companies	Implied endorsement of associating with a government program, exposure to latest technology and industry trends, exposure to potential customers, maintaining competitive advantage.
State and Local Governments	Reducing operating costs, promoting economic development, job retention in the industrial sector, maintaining relevance and importance[6]

Communicating Desired Behavioral Changes

Identifying motor system market players and understanding their interests are not sufficient. MC must clearly convey what it would like each of them to do differently and why it is in their interest to do so. For each group, the behaviors that would be consistent with MC goals are listed in Table 2.

Table 2: Desired Changes in Behavior

Market Player	Desired Behavior
Industrial End-Users	Specify, purchase, & install efficient components based on evaluation of entire motor system performance. Develop purchase, operational, and maintenance policies and procedures that support motor systems efficiency.
Equipment Manufacturers	Manufacture and promote the benefits of high efficiency components and systems analysis to wholesalers, retailers, and direct purchasers.
Industrial Suppliers	Maintain inventory and promote the purchase of efficient equipment and the design of efficient systems. Provide educational products, services, and tools to customers to promote those choices.
Engineers, Designers, & Contractors	Increase knowledge regarding analysis, design, and specification at systems level. Increase understanding of and ability to promote benefits to customers.
Motor Repair & Service Shops	Adopt repair and rewind practices to preserve or enhance motor efficiency.
Electric Utilities	Promote motor systems efficiency through education, distribution of publications and tools, and other value-added products and services.
Trade & Professional Associations	Joint development (with MC) of decision tools, publications, and other products and services to promote motor system efficiency. Increase the visibility and importance of these initiatives with members.
Energy Efficiency Advocacy Groups	Advocate for the adoption of systems approach to motor efficiency. Influence market players as appropriate.

THE NATURE OF PARTNERSHIPS

What's In It For Me?

Those who worked in DSM have probably witnessed the overuse of the terms "partner" and "partnership." These terms frequently appeared in program names and descriptions in a way that implied a mutual relationship that in fact may not have existed. For public sector programs, "partnership" often meant the difference between securing funding and not. It was meant to imply that government was working with business or other clients in a manner and a role that would be considered appropriate by legislators and other stakeholders. It also implied that government's role had fundamentally shifted from its role in earlier programs. For example, within the Department of Energy, the many initiatives once grouped under the Climate Change Action Plan migrated to an umbrella with a different name: Energy Partnerships for a Strong Economy.

Certainly many of these partnerships led to real accomplishments. However what often was missing was agreement by all partners that each party would derive important benefits substantial enough to continue the partnership without substantial, ongoing government investment.

MOTOR CHALLENGE PARTNERSHIPS

What Motor Challenge Brings to the Table

In 1995, Motor Challenge staged the Roundtable on Market Transformation Strategies for Industrial Electric Motor Systems to "bring together a broad range of industry representatives and other stakeholders from across the U.S. and Canada to begin fashioning a framework to encourage industry cooperation, and accelerate and support transformation of motor system markets."[7] More than 45 professionals attended representing manufacturers, utilities, industrial distributors, consultants, and trade associations.

In 1996, the MC conducted qualitative research to confirm a marketing strategy to increase awareness of the program and its services. In each case, results clearly pointed to the need for unbiased, reliable information regarding opportunities for motor system efficiency improvements, and decision tools to help individuals identify and quantify those opportunities. Furthermore, participants agreed that the credibility and objectivity that MC and DOE would lend to the information could be one of the most important contributions it could make. In response to those needs, MC has developed and distributes an extensive amount of information in the form of:

- Fact sheets on a variety of motor system topics;
- Equipment selection handbooks;
- National directory of motor system resources and related organizations;
- Motor selection software, listing more than 10,000 motors;
- Access to and information about education and training opportunities;
- Turnkey training modules;
- Detailed case studies of successful, independently validated motor system efficiency projects;
- Bimonthly newsletter;
- A toll free information clearinghouse;
- Specialists to respond to technical questions;
- An INTERNET site, and more.
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All of this information is well respected and valued by users. In addition, the many DOE staff and others involved in implementing the MC are considered national experts in this field.

A Range of Partnerships to Satisfy Most Interests

MC has created a family of Partnerships intended to accommodate the variety of motor system market interests. Different partners receive access to different packages of products and services, depending on their interests. In some cases, the differences relate only to the quantity of materials that are available, but in others, the level and type of service differs significantly. What MC derives from these partnerships is the opportunity to highly leverage a program that has lofty goals but only modest funding, and in a manner that creates lasting change. Therefore, the products, services, and delivery channels provided for each type of partner are somewhat proportional to the degree to which each partner extends the program's reach or intensity, and the extent to which that partner can permanently influence the market.

Motor Challenge Partners

Enrolling as a MC Partner has been the traditional entry point into the program and the prerequisite for obtaining program benefits. Companies complete an application and sign an agreement indicating support for increasing the efficiency of industrial electric motor systems. Of the current roster of almost 2,000 companies that have enrolled as Partners, roughly 20% are industrial end-users who agree to: "Incorporate energy efficiency as a necessary consideration in the design, purchase, and operation of electric motor systems, [and to] Educate their employees about the benefits of energy-efficient motor systems by encouraging participation in the Motor Challenge."[8] The remaining companies, non-end-users, are noted below. Although the end-user commitment is largely philosophical, the agreement is signed by a company executive, presumably elevating the visibility and importance of motor system management. The application process also provides a good deal of information about the companies that are enrolling.

"What's in it" for an enrolling Partner depends on the nature its business. End-users are looking for credible information to help cut costs, improve reliability or increase productivity. Although they value the wealth of information they receive from vendors, they view MC as an unbiased alternative.[9] Non end-user companies such as engineers, energy service companies, distributors, utilities and others want access to information to stay up to date on the latest developments and to look for opportunities to increase sales. Some merely want a pipeline to information from the DOE that could affect their business.

THE MOTOR CHALLENGE ALLIED PARTNERSHIP

Who Is Eligible?

This level of partnership was created by MC to acknowledge the benefits of working with the existing market place of companies and organizations that routinely provide products and services to industry. This group includes equipment distributors, repair and service businesses, electric utilities, energy service companies, electrical contractors, consulting engineers, and the like. Because these companies are in frequent contact with industrial end users, they are naturally positioned, in the course of their day-to-day business, to educate them about opportunities to improve the efficiency of their electric motor systems. They are also well positioned to know of companies that are leaders in motor system efficiency, and have the opportunity to nominate those customers to serve as Showcase Demonstration[10] sites.

Most importantly, when a motor system or a system component is designed, specified, purchased, repaired, replaced or installed, a representative from at least one of these groups and maybe more is usually in a position to influence the design or purchase decision. Recognizing that intervention at precisely the right moment is an essential part of influencing these transactions, Allied Partners are extremely important. If MC can help them by supplying relevant information and tools, Allies offer exceptional potential for extending the reach of the MC directly into the sales or service transaction.

The Allied Partnership is working because each side obtains real value from the relationship. MC provides Account Managers to work with each Ally. The Account Manager helps complete an Action Plan and coordinates the delivery of MC products and tools, including customized versions of MotorMaster software.[11] This customized software prominently features the Allied Partner company name and logo[12] and, each time the software is used, serves as a constant reminder of the Ally's value for his or her customer. Account Managers work with Allies to implement their plans, in some cases serving as trainers and speakers at Ally events.

Program Offerings For Allied Partners

Allied Partners receive what some have referred to as a "motor system efficiency program in a box." They distribute MC information and tools to provide added value to customers, without bearing the cost of designing or producing those products. Some are using MC products to provide education and training for their customers. Others use tools like MotorMaster to help customers develop motor inventories and replacement strategies. These applications have several things in common. They serve as an aid to bring vendors and customer together in a manner that supports the market interests of the Ally and promotes the interests of the MC. Along with cooperative advertising, they may help some companies differentiate themselves in a crowded market. And they offer an opportunity for companies to position themselves as good corporate citizens. For product and service vendors, added value could mean additional sales or winning new customers. For electric utilities, it could mean increased customer loyalty at a crucial time. MC makes it possible for each Ally to develop a strategy and implementation plan to make MC work in his or her business setting.

Table 3 compares the nature and level of services available for Excellence Partners and industrial end-users (non-Excellence Partners).

Table 3: Allied Partnership Products and Services

Product/Service	For MC Partners	For Allied Partners
Software Customization	Not Available	Available For Fee
Showcase Demonstration Sites	No Longer an Option	Can Nominate Companies to Serve As Excellence Partners & Showcase Sites
Account Manager	Not Available	Available to All Allied Partners
Software (MotorMaster Plus)	One Free Copy Per Registered User	Quantities Available For Distribution At No Cost
Publications	Up to 5 Copies at No Cost	Available At No Cost For Distribution
Training Sponsorship	Not Available	As Available, Coordinated Via Account Manager
Newsletters	Free Subscription	Quantities Sent for Distribution
Allied Partner Logo	Not Available	Available For Use[1]
Links from MC Home Page	Not Available	Available At No Cost
Cooperative Advertising	Not Available	Available On Approval

Benefits For Motor Challenge

Empirically, the Allied Partnership is working because in just over 8 months, with only modest marketing efforts, more than 120 companies have enrolled and are distributing MC information to their customers. During that time, Allies have ordered more than 6,000 copies of MotorMaster Software for distribution, many times more than the number distributed to individual companies by the MC. In this time, MC staff and Account Managers have helped Allies stage more than **25 events reaching more than 750** of their customers. Allies provide enormous leveraging, and help MC maintain its commitment to use the existing market place to deliver information to the end users. It is likely that these ranks will continue to grow as more companies become aware of the opportunity to use MC partnership to further their own interests.

THE MOTOR CHALLENGE INDUSTRY PARTNERSHIP

MC collaboration with OEM trade associations is a way to further explore motor system issues instead of focusing attention exclusively on motors and drives. Trade and professional associations occupy a unique position and represent a variety of interests in the motor systems market. Almost all are tasked with promoting a product, service, or group of products and services in a manner that does not offer a specific advantage to any one provider. This challenge, although not new, is a recent development for some associations that represent electric utility interests who must develop strategies to benefit all members in an emerging competitive market. Some associations author industry standards for design, manufacture, or installation. Others may wish to be viewed as a source for objective information, offering education and training for their members or the users of products their members offer. Still others serve as primary research and development centers for their industry.

Benefits for Industry Partners

The benefits derived by each association varies according to their industry-specific interests, but can be generally grouped into a number of key areas, some tangible and others political.

- Joint development of information products and decision tools;
- Joint development of education and training materials and programs;
- Joint authorship and placement of trade press articles;
- Development of industry-specific Showcase Demonstrations;
- Joint development of industry best practices guides;

[1] In accordance with written policy.

- Increased credibility with membership;
- Extension of association resources in general;
- Opportunities for heightened visibility and associated membership growth.

MC has initiated partnerships with a number of associations that represent a variety of interests, with an initial focus on those representing Original Equipment Manufacturers. At this time, the following initiatives are under way.

The **Compressed Air and Gas Institute** (CAGI) is sponsoring a Motor Challenge ad hoc subcommittee to jointly develop new materials and tools to encourage energy-efficient practices for air compressor systems. Joint projects include a test code fact sheet, draft distribution guidelines, a video on compressed air system performance, and a program design for plant compressed air auditor training. [ADD DESCRIPTION OF COPMRESSED AIR INITIATIVE HERE]

The **Hydraulic Institute** (HI) and MC co-authored an article on energy efficient pumping systems that appeared as the cover story in the August issue of *Chemical Processing* magazine. The article summarizes current best practices for pump and motor selection, and includes advice about how to adopt a systems approach to evaluating pumping system for efficiency improvements. MC sponsored HI's development of a training video and associated classroom materials on efficient pumping systems, and will be cosponsoring training. HI, MC, and **the Electrical Apparatus Service Association**, another MC industry partner, cosponsored a series of one-day workshops on optimizing pumping systems for water and waste water applications.

The **Air Movement and Control Association** (AMCA) is collaborating with MC and the **Consortium for Energy Efficiency** (CEE) to prepare an article on efficient fan system design and installation practices for publication in a major trade publication. AMCA has created a committee to explore a certified efficiency ratings program for fans and blowers.

The **Electrical Apparatus Service Association** (EASA), which represents companies that sell or service motors, controls, drives and similar equipment, is collaborating with MC to prepare a Motor Repair Guidebook that will provide information about motor repair and guidance on more effective use of motor repair/rewind services.

The **National Electrical Manufacturers Association** (NEMA) is distributing information to manufacturers of motor-driven equipment on the pending motor efficiency standards required by the Energy Policy Act of 1992 and scheduled to take effect in October, 1997.

MC will also collaborate with trade associations representing the country's largest industries, consistent with the DOE's "Industries of the Future" initiative to help the most energy- and waste-intensive industries become more competitive and efficient as we move into the next century. Currently, MC is working with **the Technical Association of the Pulp and Paper Industry** (TAPPI) who represents the forest products industry, one of the largest users of motor systems in the industrial sector. MC will tailor its resources for this industry through joint development of information products, training sessions, and industry-specific showcase demonstrations.

MC is sponsoring an assessment of motor system programs currently operated by **electric utilities** throughout the country in an attempt to identify the directions utilities are taking with those programs. MC intends that this effort will help determine "best practice" model programs that could be easily replicated by utilities.

Motor Challenge Benefits
This partnership too holds benefits for both sides. The MC gains:

- Additional sources of expert advice;
- Increased credibility for jointly developed tools, education, and training;

- Introduction through associations to large numbers of member companies (leverage);
- Greater consensus for industry best practices;
- Greater understanding of industry-specific needs;
- Opportunities to explore equipment rating and certification;
- Entry into new areas of existing markets.

THE MOTOR CHALLENGE EXCELLENCE PARTNERSHIP

The MC Excellence Partnership targets industrial end-users willing to commit to continual improvement of motor systems management practices and to capturing related efficiency gains. Like other quality initiatives, it is this commitment toward continual improvement rather than attaining a predefined level that defines this initiative. That definition also provides the flexibility that should make the Excellence Partnership accessible to a broad range of companies with varying levels of resources to commit to the Partnership.

Even so, this partnership has been more difficult than others for MC to crystallize. That may be due to a lack of clarity regarding "what's in it for them" (i.e., the Excellence Partner) as a direct benefit of participating in this partnership, that's not already in it for them as a Motor Challenge Partner, or simply as a company working independently to control motor systems costs.

Referring to Table 1, industrial end-users are interested in motor system efficiency as a way to increase profits by increasing productivity, throughput, and reliability, and by decreasing costs for energy, maintenance, and unplanned downtime. One would expect these benefits to be sufficiently motivating, yet we know that industry has been slow to act. So, although MC already provides a valuable collection of information and tools to help industrial companies pursue these efficiencies, they acknowledge that more is needed to move companies to this next level. MC has already refined a number of products and services for Excellence Partners and is conducting research and finalizing plans in other areas that combined, are expected to create enough of a pull to attract potential Excellence Partners.

Refined Products and Services For Excellence Partners

It is unlikely that MC would have sufficient resources to create an entirely new menu of products and services for Excellence Partners. It is also unnecessary, since existing products and services have received excellent reviews. Instead, where possible, MC is refining program products and services, or the way in which products and services are provided for Excellence Partners to create additional value and incentive for companies interested in participating. Table 4 compares the services and level of services available for Excellence Partners and industrial end-users (non-Excellence Partners).

Table 4: Excellence Partnership Products and Services

Product/Service	For MC Partners[2]	For Excellence Partners[3]
Software Customization	Not Available	Available For Reduced or No Fee*
Showcase Demonstration Sites	No Longer an Option	For Excellence Partners Only
Account Manager	Not Available	Available at No Cost to Excellence Partner
Publications	Up to 5 Copies at No Cost	Unlimited, As Appropriate*
Training Sponsorship	Not Available	As Available, Via Account Manager
Conference/Training Registration	Space Available Basis	Priority Registration*
Answers to Technical Questions	Available from Clearinghouse	From Account Manger & On Priority Basis from Clearinghouse*

[2] Not including Allied Partners, who have a separate menu of available program offerings tailored to their needs.

[3] Note that those items marked with an asterisk are currently planned decisions but are not yet final.

Enhanced Delivery Channels
MC has assigned an experienced Account Manager solely to serve potential and enrolled Excellence Partners. This Account Manager will act as a consultant to help Excellence Partners design and execute their improvement plans, and as a coordinator to enhance the delivery of targeted program resources. The Account Manager will also help companies with multiple sites design and disseminate messages to help them market the benefits of motor system management to other sites and through various levels of their organization.

Recognition
MC has been discussing recognition efforts for some time, particularly with respect to the Excellence Partnership. MC has considered award programs, media tools, identifying logos, etc. Recognizing that potential and enrolled Excellence Partners probably have strong preferences in this area, MC will assemble discussion groups to determine which types of recognition that would be appropriate for government to provide (or, perhaps to coordinate or convene) would create the greatest reward or incentive for this partnership.

Coordination With Allied Partner Resources
The Excellence Partnership Account Manager will also work to link Excellence Partners with local[13] Allied Partners to provide additional resources in the form of training, decision tools, development of purchase policies, energy accounting, etc.

Benefits for Motor Challenge
The benefits of the Excellence Partnership can be examined one company at a time, and, on a macro basis.

While MC works with each Excellence Partner to design a program that works specifically for them, each company commits to completing certain basic requirements.

- Each company, working with their Account Manager if desired, must develop a plan to improve motor system efficiency. MC gets greater assurance of action in exchange for its commitment of resources.
- The Excellence Partner and MC then work together to accomplish the steps included in that plan. Each has a defined role. The Excellence Partner manages execution of its plan and the Account Manager coordinates MC resources, such as consulting assistance, tools, training resources, and marketing assistance. This collaboration further increases the likelihood that management plans will result in action.
- MC is able to obtain information about the success of individual projects and to quantify the benefits of program tools in general and the use of those tools by Excellence Partners in particular. Since Excellence Partners are more likely to serve as Showcase Demonstration sites or subjects of newsletter articles, collecting and sharing that information provides additional opportunities for recognition and so serves the interests of the Excellence Partner as well.

CONCLUSIONS

The MC is making good use of partnering opportunities available in the electric motor systems market to move that market in the direction of increasing efficiency, increasing productivity, and reducing related emissions. They are able to do so because they have paid close attention to critical variables.

- They have identified the many organizations that participate in the motor system market, and who are able to influence relevant transactions and decisions.
- They understand how the participants and similar, and how they are different.
- They understand the interests that guide each organization.
- They have a clear sense of how they would like each organization to influence the market.
- They have designed a role into the MC for each organization, and a role in which each can behave in its own interests while promoting behaviors and decisions consistent with MC goals.

Armed with this awareness and a sincere desire to be a good partner, MC is able to influence far more industrial motor system decisions than they would be able to influence if they focused on only one decision at a time. By defining activities and market positions that are in the self interest of market participants and concurrently promote MC goals, they increase the likelihood of exerting an influence on the market that is likely to endure, creating lasting, institutional change.

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[1] Scheihing, Paul E., 1996, *US Department of Energy's Motor Challenge Program: A National Strategy for Energy Efficient Industrial Motor-Driven Systems*, Paper presented to European Commission Conference: Energy Efficiency Improvements in Motors and Drives

[2] *Description of The Northwest Energy Efficiency Partnership, Inc.*, Prepared for Convening Committee, Northwest Power Planning Council, September, 1996

[3] M. F. Hopkins et al., 1995, *Industrial Demand Side Management: A Status Report*, Pacific Northwest Laboratory, Richland, WA

[4] Meadows, Karen and Erickson Jeff, 1997, *Evaluation of the RPM High Efficiency Motors Program*, Draft Report

[5] Although EPACT motor efficiency standards are due to take effect in the Fall or 1997, those standards address only electric motors and not the other motor system components.

[6] The author here refers to the trend of late to consolidate or eliminate state agencies with responsibilities to promote energy efficiency and related programs.

[7] *Record of Meeting, Roundtable on Market Transformation Strategies for Industrial Electric Motor Systems*, U.S. Department of Energy, 1995

[8] From the Motor Challenge Application, End User Agreement.

[9] Gartman, Heather, Motor Challenge Focus Group Report, January, 1996

[10] Showcase Demonstration Projects are motor system efficiency projects that are proposed and executed by teams of experts. Projects are hosted by industrial end-users and teams often include engineers, vendors, electric utilities, and others. DOE's contribution is an Independent Performance Validation, an objective assessment which helps ensure proposers that projects are likely to deliver the projected benefits.

[11] Allies obtain quantities of software at no charge, but must pay a fee for customization.

[12] Or other custom screen design acceptable to the Allied Partner and the MC

[13] In the case of Excellence Partners with multiple sites, local might refer to an Allied Partner that served a particular site, rather than the corporate office.