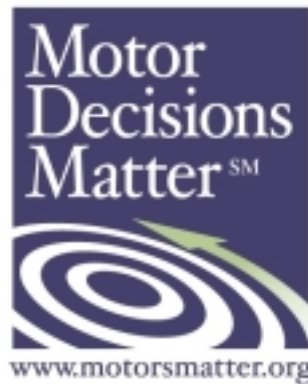


Premium-Efficiency Motor Programs

National Summary
December 2002



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PREMIUM-EFFICIENCY MOTOR PROGRAMS

2002 NATIONAL SUMMARY

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A GENERAL OVERVIEW OF PREMIUM-EFFICIENCY MOTOR INCENTIVE PROGRAMS¹

Last year's Premium Motor Program Summary noted a trend towards custom-based incentive programs. Custom-based programs are those that promote the market adoption of energy efficient technologies by offering financial incentives, technical assistance, and/or training to customers and retailers who implement such measures. This year, the trend to expand custom-based programs continued. Notably, all of the organizations reviewed for this summary offer customized financial incentives and/or individualized technical assistance. Of the thirty-six organizations responding, nineteen offer financial incentives for new construction; twenty-two offer incentives for retrofit projects. There was often a high level of cooperation between the prescriptive, new construction and retrofit programs within an organization.

One noteworthy aspect of the custom programs was their flexibility and willingness to work with multiple types of projects (individualized industrial processes, irrigation systems, building envelope, etc.), and with many different technologies (e.g. motors, lighting, HVAC, and variable speed drives). In these programs, technical staffs work with customers to identify savings opportunities and to design improvement projects. Since these programs bundle multiple technologies together, it is often difficult to parse out what percentage of the funding or what percentage of the savings are attributable to motors and motor system optimization. Goals for these programs are most often stated in terms of demand (KW) and energy (KWh) savings.

Most programs offer technical assistance. There is tremendous variation, however, in the extent of the assistance and in the level of expertise available. Some programs participate only in an initial energy audit while others, like Burlington Electric, function as consultants through project design and implementation. It is important to note that in some areas, Texas, for example, the public utility regulatory board governs the level of IOU involvement.

All of the seventeen programs that offered prescriptive rebates in 2001 continue to do so in 2002. The majority of these programs target end-users although there are a significant number

¹ CEE publishes annually a summary of certain features of motors programs which re offered by CEE members. CEE does not play any implementation role in the programs operated by its members. There may be other programs offered by organizations not affiliated with CEE, and CEE has not attempted to gather information about any such programs. The program information compiled in this summary was provided by CEE member organizations, and the equipment information was provided by NEMA. CEE believes the information to be reliable at the time it was provided, but CEE performs no independent verification of such information or interim updates between annual summaries, and is not responsible for any inaccuracies in such information.

who incent vendors and/or distributors. For example, the MotorUp Program in the Northeast targets end-users. Wisconsin's Focus on Energy Program targets motor vendors. In 2002, California's Express Efficiency Program shifted its prescriptive incentives from motor vendors to end-users. Both the New York State Energy Research and Development Authority and the Eugene Water & Electric Board offer incentives to vendors and end-users. A table of the prescriptive incentives offered by various programs is included at the end of this report.

Some programs offer financial assistance either in conjunction with technical assistance or alone. Funds are made available via grants, low interest loans, or buy down of the payback period. Reimbursement might be calculated on measured savings after project completion or on estimated savings. In some programs, projects with greater energy savings are reimbursed at higher levels. The New York Power Authority offers a unique program. They help customers design and implement energy efficiency improvements with no up-front costs. Projects are repaid by sharing the electricity savings after completion. Once repayment occurs, all savings go back to the participant.

Programs used a variety of measures to define which motors were eligible for incentives. The most common of these was the NEMA Premium Specification which covers 1-500 hp, low and medium voltage, poly-phase, general, special and definite purpose motors. While all of the program administrators interviewed were familiar with the NEMA Premium label, twenty programs use it to define motor eligibility. This is remarkable since the NEMA Premium Specification was introduced just over one year ago. Other programs cite NEMA Premium for a specific range of motors (i.e. those covered by CEE's Premium-Efficiency Motor Specification which requires the same nominal efficiency levels as NEMA Premium but over a narrower range of motors²), ASHRAE Specification 90.1, or individual city or state building codes. Some programs, Austin Energy, for example, simply require motors to exceed the EPACT standard.

Ten programs include motor management and the Motor Decisions Matter campaign in their outreach and educational efforts; others were only beginning to explore this opportunity. Programs expressing interest were looking to CEE for guidance about ways to integrate motor management into their existing programs.

²**Note:** CEE is currently considering expanding its premium motor specification to include 200-500 hp, medium voltage, close-coupled, and vertical shaft motors. For more information, contact Ilene Mason or Ted Jones.

Descriptions of individual programs offered by various organizations are included in this report. In summary, several conclusions about the trends in premium-efficiency motor incentive programs can be drawn:

- Premium efficiency motor incentive programs are continuing their prescriptive rebate programs while also increasing their efforts to develop and implement custom energy efficiency measures.
- Custom projects are often systems based and include both equipment recommendations and process improvements.
- More programs are offering motor management and planning as a process improvement recommendation or are interested in implementing such measures.
- NEMA Premium is an effective tool for defining premium efficiency motors.

Premium Efficiency Motor Programs - December 2002

	Sponsor	Program Name(s)	Prescriptive Rebates	Custom Rebates		Loans	Motor Management
				Retrofit	New Construction		
California	CA Statewide: SDG&E, PG&E, SCE	Express Efficiency Savings By Design Standard Performance Contract	X		X		
	SMUD	Prescriptive Rebate Program Customized Rebate Program	X	X	X		
	APU	Energy Efficiency Incentive Program	X	X	X		
	RPU	Energy Efficiency Incentives for Motors Electric Equipment & Machinery	X	X			
HI	HECO	C&I Energy Efficiency Program Other Programs	X	X	X		
Pacific Northwest	NEEA	Drive Power Initiative/Electric Motor Management					X
	EW&EB	Premium Efficiency Motors Program Industrial Energy Management Services Energy Smart Design	X	X	X		
	PSE	Commercial Industrial Conservation Grant Program				X	
	SCL	Energy Smart Services		X	X		
Midwest	FOE, ECW	Focus on Energy		X	X		X
	WPPI	Efficiency Improvement Incentive Program		X			
	XCEL	Motor Efficiency Program Energy Design Assistance	X		X		
	ODOD	Business & Institutional Loans				X	
TX	AE	Commercial Rebate Program		X	X		
	ONCOR, Entergy	C&I Standard Offer Program		X			
Northeast	NYSERDA	NY Energy Smart Efficiency Motors Program Smart Equipment Choices Other Programs	X	X	X	X	X
	MotorUp Working Group	MotorUp	X				X
	LIPA	MotorUp and Other Programs	X	X	X		X
	Eff VT	MotorUp and Other Programs	X	X	X		X
	NGRID	MotorUp and Other Programs	X	X	X		X
	Burl Elec	MotorUp and Other Programs	X	X	X		X
	NSTAR	MotorUp and Other Programs	X	X	X		X
	UI	MotorUp and Other Programs	X		X		
NYPA	Energy Services Program		X		X		
Category Totals			17	22	19	4	10

Premium Efficiency Motors Programs - December 2002

Sponsor Names and Acronyms

	Sponsor	Acronym
California	Anaheim	APU
	Pacific Gas & Electric	PG&E
	Riverside Public Utilities	RPU
	Sacramento Municipal Utility District	SMUD
	San Diego Gas & Electric	SDG&E
	Southern California Edison	SCE
HI	Hawaiian Electric Company	HECO
Pacific North-west	Eugene Water & Electric Board	EW&EB
	Northwest Energy Efficiency Alliance	NEEA
	Puget Sound Energy	PSE
	Seattle City Light	SCL
Midwest	Energy Center of Wisconsin	ECW
	Ohio Department of Development	OHOD
	Wisconsin Focus on Energy	FOE
	Wisconsin Public Power Inc.	WPPI
	Xcel Energy	Xcel
Texas	Austin Energy	AE
	Entergy	Entergy
	ONCOR	ONCOR
Northeast	Burlington Electric	Burl Elec
	Efficiency Vermont	Eff VT
	Long Island Power Authority	LIPA
	MotorUp Working Group	MotorUp
	National Grid USA	NGRID
	New York Power Authority	NYPA
	New York State Energy Research and Development Authority	NYSERDA
	NSTAR Electric	NSTAR
United Illuminating	UI	

**PROGRAM
DESCRIPTIONS**

California Programs

Program Sponsor:	Anaheim Public Utilities
Service Territory:	City of Anaheim
Program Name:	Energy Efficiency Incentive Program
Program Status:	2000
Scope:	Motors, AC, energy management programs, VFD's, air compressors, efficiency measures not covered by other related programs
Budget:	\$170,000 total for all incentives
Goals:	
Program Description:	This program provides customized incentives for installation of a variety of energy efficient equipment.
Incentives:	Motors: Rebates range from \$35 to \$630 on motors from 1 to 200 HP. Rebates on other equipment may be prescriptive or may be based on energy savings (7.5 cents /kWh or \$200/KW).
Links:	www.anaheim.net/utilities/adv_svc_prog/comprehensive_energy/index.html
Contact Information:	Earl Lasley Elasley@anaheim.net 714-765-4259
Past Performance:	
Related Programs:	New Construction; New Heat Pumps; Lighting; LED's; Comprehensive Energy Audit Program
Spec Reference:	NEMA Premium\CEE
Outreach:	Communications groups, advertise in Chamber of Commerce publications, brochures; handouts, workshops, town hall meetings, conventions, internet, e-mail broadcasts, key accounts program
MDM Awareness:	Not previously familiar with campaign or materials

California Programs

Program Sponsor:	Pacific Gas & Electric
Service Territory:	California
Program Name:	Express Efficiency (statewide program)
Program Status:	1978
Scope:	Lighting, air conditioning, LED signs, refrigeration, agriculture, gas equipment, motors
Budget:	\$11.6 M total for all programs
Goals:	29 MWs and 155 GWhs total for all programs
Program Description:	Efficiency Express is a prescriptive rebate program for small to mid-sized industrial customers (<500 kW). Rebates are paid directly to customers. Qualifying equipment must retrofit, replace, or upgrade old equipment with new, energy-efficient equipment.
Incentives:	Rebates ranging from \$35 to \$630 on motors from 1 to 200 HP.
Links:	www.pge.com/spc www.savingsbydesign.com
Contact Information:	James B. Hanna 530-896-4222 jbh1@pge.com
Past Performance:	PY2001 - 1840 motors
Related Programs:	Standard Performance Contract Program: technical consultants work directly with customers on specific retrofit projects. Incentives are based on kW savings. Savings by Design: offers technical assistance on new construction. Incentives based on exceeding the California Building Standards, Title 24.
Spec Reference:	NEMA Premium\CEE (general purpose, 1-200 hp)
Outreach:	Seasonal promotions, outreach through trade organizations (EASA, e.g.), local associations (chambers of commerce, e.g.), and government agencies; publications; advertising; trade shows; energy fairs; direct customer contact.
MDM Awareness:	Familiar with campaign and materials

California Programs

Program Sponsor:	Riverside Public Utilities
Service Territory:	City of Riverside, CA
Program Name:	Energy Efficiency Incentives for Motors - Non-Residential
Program Status:	1999
Scope:	Motors
Budget:	\$25,000
Goals:	25 motor rebates
Program Description:	Riverside Public Utilities offers incentives for replacing older, inefficient motors with equipment that meets the CEE motor specification.
Incentives:	Rebates range from \$35 to \$630 on motors from 1 to 200 HP. Max \$5000 per metered account. Non-covered motors may be eligible under special review.
Links:	www.riversidepublicutilities.com
Contact Information:	Rebecca Goldware rgoldware@ci.riverside.ca.us 909-826-5788
Past Performance:	
Related Programs:	Electric Equipment & Machinery: offers incentives on a variety of efficient equipment based on 8cents/KWh of realized energy savings up to 50% of the total project cost
Spec Reference:	NEMA Premium\CEE
Outreach:	Direct contact, direct mail, website
MDM Awareness:	Not previously familiar with campaign or materials

California Programs

Program Sponsor:	Sacramento Municipal Utility District (SMUD)
Service Territory:	Sacramento County, CA
Program Name:	1. Prescriptive Rebate program 2. Customized rebate program 3. Motor Test Program
Program Status:	Begun in 1994
Scope:	Motor testing and retrofit incentives
Budget:	Budget is not specific to program. Rebates limited to overall annual incentive budget, on a first come, first served basis.
Goals:	500 tests/year; 15 motor system projects / year; 100 premium motor replacements in 2003 Overall 2003 goal for all C&I programs is 4 + MW
Program Description:	1. Predictive motor testing (fee for service), with motor efficiency included. 2. Prescriptive rebate program: Rebates to customer or motor vendor for all NEMA Premium motors. Rebate application and proof of purchase must be submitted within 30 days of purchase. Motor specifications for replaced motors are not needed. 3. Custom rebate program: Rebates based on kW reductions for motor system. Can include motors not subject to EPACT. Project rebate application must be prepared prior to project start.
Incentives:	1. Prescriptive Rebate Program: Rebates range from \$25 to \$630 for NEMA Premium motors from 1 - 200 HP. 2. Customized Rebate Program: Rebate based on \$300 per kW actual system peak load reduction. Placing emphasis on motor vendors in 2003.
Links:	www.SMUD.org
Contact Information:	Steve Rutter Harlan Coomes srutter@smud.org hcoomes@smud.org wk 916-732-6766 wk 916-732-5414 fax 916-732-5162 fax 916-732-6831
Past Performance:	2001 - 73 motors rebated; reported sales >100 additional premium motors
Related Programs:	New construction program
Spec Reference:	NEMA Premium \CEE
Outreach:	Workshops and seminars for customers, testing contacts, website, direct contact with motor vendors and service shops
MDM Awareness:	MDM Campaign Sponsor

California Programs

Program Sponsor:	San Diego Gas & Electric
Service Territory:	San Diego County, Southern Orange County, CA
Program Name:	Express Efficiency (statewide program)
Program Status:	2001
Scope:	Lighting, air conditioning, LED signs, refrigeration, agriculture, gas equipment, motors
Budget:	\$3.1 M total for all programs
Goals:	47 M kWh; 600,000 Therm total for all programs
Program Description:	Efficiency Express is a prescriptive rebate program for small to mid-sized industrial customers (<500 kW). Rebates are paid directly to customers. Qualifying equipment must retrofit, replace, or upgrade old equipment with new, energy-efficient equipment.
Incentives:	Rebates ranging from \$35 to \$630 on motors from 1 to 200 HP.
Links:	www.sdge.com/efficiency/express.html
Contact Information:	Jeff Alexander, Program Manager jalexander@semprautilities.com wk 858-636-5762 cell 619-405-0464 fax 858-636-5745
Past Performance:	Year-to-date: > 63 M kWh, 365,000 Therm and >\$2.6 M paid in rebates
Related Programs:	Standard Performance Contract Program: technical consultants work directly with customers on specific retrofit projects. Incentives are based on kW savings. Savings by Design: offers technical on new construction. Incentives based on exceeding the California Building Standards, Title 24.
Spec Reference:	NEMA Premium\CEE (general purpose, 1-200 hp)
Outreach:	Seasonal promotions, direct billing inserts, direct mail, website
MDM Awareness:	Not previously familiar with materials.

California Programs

Program Sponsor:	Southern California Edison (SCE)
Service Territory:	Areas of Southern California
Program Name:	Express Efficiency (statewide program)
Program Status:	2002
Scope:	Lighting, air conditioning, LED signs, refrigeration, agriculture, gas equipment, motors
Budget:	\$6 M total for all programs
Goals:	<p>1. The combined goal for all six rebate applications is demand reduction of 13.9 MWs and 64.3 GWh</p> <p>2. To increase the implementation of energy efficient equipment within the hard-to-reach customer base</p>
Program Description:	Efficiency Express is a prescriptive rebate program for small to mid-sized industrial customers (<500 kW). Rebates are paid directly to customers. Qualifying equipment must retrofit, replace, or upgrade old equipment with new, energy-efficient equipment.
Incentives:	Rebates ranging from \$35 to \$630 on motors from 1 to 200 HP. In previous program, rebates were to vendors.
Links:	www.sce.com
Contact Information:	Jacqueline Jones Express Efficiency Program Manager Jacqueline.Jones@sce.com 626-302-8798
Past Performance:	2001 Upstream - 1083. As of 11/19/02, SCE has committed a total of \$50,600 for approximately 12,500 total hp for premium efficiency motors from 14 applicants. The associated energy savings are 876,177 kWh and 346 kW.
Related Programs:	<p>Standard Performance Contract Program uses technical consultants to work directly with customers on specific retrofit projects, incentives are based on kW savings.</p> <p>Savings by Design offers technical assistance to customers with incentives based on exceeding the California Building Standards, Title 24.</p>
Spec Reference:	NEMA Premium\CEE
Outreach:	Representation at trade association events, advertise in chamber of commerce and trade association newsletters, host educational events, participate at trade association and other events.
MDM Awareness:	MDM Campaign Sponsor

Hawaii Programs

Program Sponsor:	Hawaiian Electric Company
Service Territory:	Hawaii
Program Name:	Energy\$olutions for Business encompasses two programs: 1. C&I Energy Efficiency Program 2. Customized Rebate Program 3. C&I New Construction Program
Program Status:	1996
Scope:	Motors, VSD's, cooling towers, building controls, lighting, HVAC, or other energy savings measures
Budget:	\$3.5 - \$4 M per year for the three programs combined
Goals:	5 year goals: C&I Energy Efficiency Program: 246,000 MWH and 8.3 MW C&I New Construction 98,000 MWH and 4 MW Customized Rebate Program: 96,000 MWH and 4.3 MW
Program Description:	The programs are designed to encourage the implementation of energy efficient technologies in the commercial and industrial sectors.
Incentives:	Customer rebates range from \$15 to \$2700 per motor. The larger the increase in efficiency between old and new, the larger the rebate. Rebates can be assigned to vendors. Custom rebates are based \$125/kW and 5 cents/kWh on year 1 annualized savings.
Links:	www.heco.com
Contact Information:	Norris Creveston ncrevest@hei.com 808-543-4789
Past Performance:	
Related Programs	Energy Audits (paid for by HECO, performed by outside vendor); New construction and Customized
Spec Reference:	NEMA Premium
Outreach:	Account managers, major customers team, website, Energy Expo, afternoon customer workshops, direct mail, intensive workshops
MDM Awareness:	Not previously familiar with campaign or materials

Northwest Programs

Program Sponsor:	Eugene Water & Electric Board
Service Territory:	Eugene, OR plus a few outlying areas.
Program Name:	Premium Efficiency Motors Program
Program Status:	Begun in 1992
Scope:	EWEB offers customer rebates and vendor incentives. In 2002, they began targeted site-base analyses for motor replacements.
Budget:	\$50,000 per year for rebates and vendor incentives. Administrative, engineering, and program development costs \$15,000-\$30,000 per year.
Goals:	<ol style="list-style-type: none"> 1. Reduce energy use and cut operating costs. 2. Encourage vendors to promote efficient motors. 3. Inform customers about the effects of RPM, efficiency, and motor load on operating costs. 4. Replace old equipment to increase efficiency and reliability.
Program Description:	EWEB offers rebates on new motors directly to customers and through motor suppliers. For rebates claimed through a motor supplier, the supplier receives an incentive for helping to promote the program. Incentives to replace existing working motors are being offered to targeted customers.
Incentives:	Rebates for qualifying motors (meet NEMA spec) range from \$20 to \$2750 on motors from 1-500 HP. Incentives for vendors who sell motors to EWEB customers range from \$30 - \$100 on motors from 1-500 HP. Incentives for motor replacements are based on predicted energy savings.
Links:	www.eweb.org/energy/motors
Contact Information:	Greg Kelleher greg.kelleher@eweb.eugene.or.us 541-484-1125
Past Performance:	Through 2001 - 1095 motors Year-to-date 2002 - 48 motors; 17 retrofits
Related Programs:	Industrial Energy Management Services: works with individual customers to develop customized motor system efficiency projects); Energy Smart Design: new construction
Spec Reference:	Specify NEMA Premium. Offer rebates on all motors that meet NEMA Premium efficiency standards.
Outreach:	Efficiency by Design Newsletter, direct mail to targeted audience of customers, vendors, and installers, website, individualized phone contacts
MDM Awareness:	Familiar with campaign and materials

Northwest Programs

Program Sponsor:	Northwest Energy Efficiency Alliance (NEEA)
Service Territory:	Pacific Northwest
Program Name:	Drive Power Initiative / Electric Motor Management
Program Status:	Begun in 1999
Scope:	Motors and motor planning
Budget:	approx. \$600,000
Goals:	<ol style="list-style-type: none"> 1. To lower long-term operating costs as a result of energy savings and improved plant efficiency. 2. To reduce downtime as a result of planning ahead for motor failure. 3. To increase reliability as a result of better specification of motors and repair practices.
Program Description:	To provide broad and targeted education for end-users on motor management, motor repair/replace decision making, and quality motor repair. To implement a motor systems pilot effort.
Incentives:	No financial incentives
Links:	www.nwalliance.org
Contact Information:	<p>Kevin Madison 206-834-0002 kevinjmad@earthlink.net</p> <p>Michael Ponder mponder@nwalliance.org 508-827-8416</p>
Past Performance:	website lists accomplishments and milestones such as # motor management implemented, # case studies produced, # workshopw held, etc.
Related Programs:	
Spec Reference:	NEMA Premium
Outreach:	Four technical advisors provide individualized assistance. Outreach through the Electric League and participating utilities. Circuit riders assist with implementation, publish case studies, software development (Electric Motor Manager), work with motor shops to promote MotorTracker services. Newsletter.
MDM Awareness:	MDM Campaign Sponsor

Northwest Programs

Program Sponsor:	Puget Sound Energy
Service Territory:	All or part of 11 counties around the Seattle area
Program Name:	C&I Conservation Grant Program
Program Status:	1998
Scope:	Including but not limited to: lighting, air conditioning, gas boilers, heating systems, industrial systems. Fuel switching projects excluded.
Budget:	\$10 M for all projects
Goals:	53 M kWh and 2 M therms per year
Program Description:	Program provides incentive funding for commercial, industrial, electric, and natural gas customers who install cost effective retrofit or new construction energy conservation projects.
Incentives:	Grant funding available for energy efficiency projects. Payback must be greater than 1 year and less than the expected life of the equipment. Funding level depends on cost effectiveness analysis and ranges from 0 to 70%. Maximum \$200,000 per site per year.
Links:	www.pse.com
Contact Information:	Dan Thomas dan.thomas@pse.com 425-424-6646
Past Performance:	exceed 2001 60 kWh goal
Related Programs:	
Spec Reference:	State of Washington code requirement
Outreach:	Hold workshops for contractors, electronic newsletter, booths at local trade shows, word of mouth, direct mail, website.
MDM Awareness:	Not previously familiar with campaign or materials

Northwest Programs

Program Sponsor:	Seattle City Light
Service Territory:	Seattle plus some small suburban cities and other unincorporated areas
Program Name:	Energy Smart Services
Program Status:	ongoing
Scope:	Flexible umbrella program covers HVAC, lighting, controls, motors, transformers, capital improvement projects, and other measures
Budget:	\$11 M total for all commercial and industrial conservation programs
Goals:	To reduce customers' electric consumption and associated operating costs.
Program Description:	Efficient motor systems that help customers reduce their electric consumption and associated operating costs are one of the eligible measures under Seattle's Energy Smart Services Program. Energy analysts assist applicants with developing specific project proposals for approval and implementation.
Incentives:	Up to 70% of the total cost and 100% of the incremental cost for installation of energy efficient equipment or projects.
Links:	www.energysmartservices.com
Contact Information:	Phoebe Caner phoebe.caner@seattle.gov 206-684-3747
Past Performance:	2001 - \$12.7 M on 347 projects; 81 M kWh saved
Related Programs:	Energy Smart Services is an umbrella program which, besides financial incentives for installation of ECMs, also provides energy analysis financial assistance, building commissioning assistance for new construction, free facility assessments, and assistance with LEED certification for sustainable new construction.
Spec Reference:	NEMA Premium
Outreach:	Energy management analysts assist customers with conservation project development. Marketing efforts through printed brochures, website, education, case study development, direct mail, and business journal ads.
MDM Awareness:	Somewhat familiar with campaign and materials

Midwest Programs

Program Sponsor:	Energy Center of Wisconsin
Service Territory:	Wisconsin
Program Name:	Focus on Energy (statewide program)
Program Status:	2001
Scope:	
Budget:	Approx. \$5 M for all Focus on Energy programs. Approx. \$50,000 for motors.
Goals:	<ol style="list-style-type: none"> 1. Support market transformation initiatives 2. Build awareness of energy efficiency 3. Improve access to information 4. Build capability within end-users and service providers
Program Description:	ECW provides information and training, holds training events in motor system performance optimization, distributes MotorRators and case studies, and makes information available through their website.
Incentives:	Focus on Energy provides custom incentives based on energy savings and demand reduction.
Links:	www.ecw.org
Contact Information:	Kevin Grabner kgrabner@ecw.org 608-238-8276 ext. 154
Past Performance:	
Related Programs:	Daylighting Collaborative, ECW's new construction programs
Spec Reference:	NEMA Premium
Outreach:	3 project managers work with customers to develop and implement energy savings projects. ECW holds training seminars and industrial educational seminars. Marketing through direct mail, e-mail and website.
MDM Awareness:	Familiar with campaign and materials

Midwest Programs

Program Sponsor:	Focus on Energy								
Service Territory:	Statewide program								
Program Name:	Focus on Energy has several industrial programs which incent motors and motor system optimization: General Industrial; Industries of the Future; Water/Wastewater; Financial Incentives								
Program Status:	2001								
Scope:	Programs are organized by market (industrial, wastewater, commercial, etc.) and cover the industrial, commercial, agricultural, and government sectors. Motors are covered within these market-oriented programs.								
Budget:	\$20 M to cover full scope of programs								
Goals:	To establish sustainable market transformation, while achieving resource acquisition. The industrial programs promote the adoption of energy efficient practices and energy management through an Action Plan process that encourages the implementation of energy efficiency improvements.								
Program Description:	Using MDM as a primary framework, programs promote NEMA Premium and sound motor management across the multiple markets served by offering technical and financial assistance for individual projects.								
Incentives:	Incentives are largely custom incentives that are determined on the merits of individual energy efficiency projects. Typically, no incentives are provided for measures that payback in less than 2 years, and a maximum of \$40,000 is allowed per project and \$100,000 total per participant.								
Links:	www.focusonenergy.com								
Contact Information:	<table border="0"> <tr> <td>Preston Schutt</td> <td>Tom Giffin</td> </tr> <tr> <td>Gen. Indus. Pgrm. Mgr.</td> <td>Indus. Pgrms.</td> </tr> <tr> <td>Dept. of Admin.</td> <td>SAIC</td> </tr> <tr> <td>608-261-8658</td> <td>315-437-1869</td> </tr> </table>	Preston Schutt	Tom Giffin	Gen. Indus. Pgrm. Mgr.	Indus. Pgrms.	Dept. of Admin.	SAIC	608-261-8658	315-437-1869
Preston Schutt	Tom Giffin								
Gen. Indus. Pgrm. Mgr.	Indus. Pgrms.								
Dept. of Admin.	SAIC								
608-261-8658	315-437-1869								
Past Performance:	<p>Total for FY 2001: 9,672,460 kWh and 3962 kW</p> <p>General Industrial: 8,756,625 kWh and 3,138 kW</p> <p>Industries of the Future: 161,439 kWh and 60 kW</p> <p>Water/Wastewater: 754,396 kWh and 764 kW</p>								
Related Programs:	The Energy Efficient Products Program works with distributors to promote NEMA Premium and motor management. All Focus on Energy Programs work in concert with each other.								
Spec Reference:	NEMA Premium								
Outreach:	Outreach varies with sector and type of program but generally includes coordination between end-users, suppliers & vendors, allied organizations, and equipment manufacturers.								
MDM Awareness:	MDM Campaign Sponsor								

Midwest Programs

Program Sponsor:	Ohio Department of Development
Service Territory:	Ohio participating electric utility territories
Program Name:	Energy Loan Fund Business and Institutional Program
Program Status:	2001
Scope:	Including but not limited to: combined heat and power systems, system thermal insulation, building envelop insulation, lighting systems, fuel conversion to renewable source, heat recovery, upgrade motors, and controls.
Budget:	\$15 M for all four loan programs
Goals:	<ol style="list-style-type: none"> 1. To reduce energy costs 2. To manage energy use 3. To install renewable energy technologies
Program Description:	Low interest loans provide to customers who develop energy efficiency projects that have a simple payback within the life of the loan or link deposit (5 years max.); or result in a 15% reduction in energy consumption; or install Energy Star equipment; and the project's improvement life must exceed the energy payback period.
Incentives:	Low interest loans (as low as half the market rate) for energy efficiency projects
Links:	www.odod.state.oh.us/cdd/oe
Contact Information:	Judy Jones jsjones@odod.state.oh.us 614-466-8139
Past Performance:	Target: 32 business and institutional loans
Related Programs:	Rental Housing Double Saving Loans for Energy Home Improvements Renewable Energy Financial Assistance Program
Spec Reference:	Working to incorporate NEMA Premium
Outreach:	Outreach through The Edison Centers, technical assistance organizations affiliated with various universities and colleges in Ohio
MDM Awareness:	

Midwest Programs

Program Sponsor:	Wisconsin Public Power Inc. (WPPI)
Service Territory:	37 municipal utility members throughout Wisconsin
Program Name:	Efficiency Improvement Incentive Program
Program Status:	1998
Scope:	
Budget:	Each member utility has a designated budget for incentives, which covers motors and other conservation measures.
Goals:	To reduce on-peak demand. To improve energy efficiency and customer productivity.
Program Description:	WPPI's industrial programs support efficiency projects through incentives based on annual energy savings. Members use public benefits funds to support these and/or other efficiency programs. Members determine their own incentive formulas, maximum payments, etc.
Incentives:	Formula based on projected demand and energy savings and on project payback.
Links:	www.wppisys.org
Contact Information:	Jake Oelke Director of Industrial Services joelke@wppisys.org 608-834-4500
Past Performance:	
Related Programs:	
Spec Reference:	NEMA Premium
Outreach:	Ten representatives act as liaisons between WPPI and its members and between members and end-users. They offer technical support and implementation assistance.
MDM Awareness:	Somewhat familiar with campaign and materials

Midwest Programs

Program Sponsor:	Xcel Energy
Service Territory:	Minnesota
Program Name:	Motor Efficiency Program
Program Status:	2001 current program; motors programs have been offered since 1986
Scope:	Motors and ASDs
Budget:	Total: \$1,372,593 ASD's: \$1,098,074 New Motors: \$41,178 Replacing Operating Motors: \$164,711 Custom Motors: \$68,630
Goals:	1. Increased energy and demand savings 2. Maintenance savings and reliability 3. Cash rebate incentives to offset upfront premium motor costs Demand Reductions: Total: 4,552 kW and 17,142,840 kWh ASD's: 3,461 kW and 13,714,272 kWh New Motors: 137 kW and 514,285 kWh Replacing Motors: 546 kW and 2,057,141 kWh Custom Motors: 228 kW and 857,142 kWh
Program Description:	Rebates offered to customers for adjustable speed drives, new motor applications, individual motor upgrades, and custom motor applications (motors >200HP)
Incentives:	Adjustable Speed Drives - \$30/HP New Motor Applications - \$5/HP Individual Motor Upgrades - \$16.50/HP Custom Motor Applications - individually determined
Links:	www.xcelenergy.com
Contact Information:	Lisa Kauffman (nee Peters), Program Manager lisa.a.kauffman@xcelenergy.com 612-904-5321 Bob Gansler, Technical Consultant robert.a.gansler@xcelenergy.com 612-330-2356
Past Performance:	2001 - 321 motors rebated
Related Programs:	Energy Design Assistance; also offer competitive financing on all qualifying projects.
Spec Reference:	NEMA Premium
Outreach:	Sales force promotes programs directly to large C&I customers (>500 kW). Also promote programs via direct mail, website, and vendor seminars.
MDM Awareness:	Somewhat familiar with campaign and materials

Texas Programs

Program Sponsor:	Austin Energy
Service Territory:	Most of the city of Austin
Program Name:	Commercial Rebate Program
Program Status:	Begun in 1987
Scope:	Motors, VFD's, lighting, HVAC, window/roof treatments, and other electrical efficiency technologies
Budget:	\$1.5 M total for all commercial and municipal incentive programs.
Goals:	To reduce peak demand (May through October, 1-9 p.m.), lower customer utility bills, and create energy efficiency awareness. Specific goals for the entire Commercial Rebate Program are 11MW demand reduction and 26,500 MWh energy savings
Program Description:	Austin's Commercial Rebate Program supports the installation of efficient technologies in new and existing construction. Customers apply for motor rebates directly. Austin Energy also provides assistance in selecting and sizing motors and installing ASDs.
Incentives:	Motor rebates are \$250/kW improvement above nominal EPCAct efficiencies. Maximum is \$100,000 per facility per year for all projects combined.
Links:	www.austinenergy.com/Esource/home.html www.austinenergy.com/business/bea_frameset.htm
Contact Information:	Norman Muraya, P.E. norman.muraya@austinenergy.com 512-974-3523
Past Performance:	2001 - motors = 1; VFDs = 2 2002 - motors = 4; VFDs = 4
Related Programs:	Residential electrical energy efficiency program
Spec Reference:	Generally use term "premium efficiency". Motors qualifying for incentives must exceed EPCAct.
Outreach:	Provide information and technical assistance to customers who request it. Marketing strategies include mass mailings, TV ads, billboards, and website.
MDM Awareness:	Not previously familiar with promotional materials.

Texas Programs

Program Sponsor:	Entergy
Service Territory:	Areas of Texas
Program Name:	C&I Standard Program Offer (statewide program)
Program Status:	Pilot program 2002; First year of full program 2003
Scope:	Incentives available to any large (>100 KW) customer for any capital expenditure project which accomplishes 20KW savings, minimum.
Budget:	2002 (Pilot year) - \$300,000 2003 - \$1.3 M
Goals:	1. To promote energy savings 2. To improve customer relations 3. To encourage energy efficiency in the community
Program Description:	C&I Standard Program Offer pays incentives to ESCOs or customers for retrofit projects that save at least 20 kW of peak-period electric demand. Incentives based on verified demand and energy savings.
Incentives:	2002 Program: For large customers (> 100 kW): \$.069/kWh or \$201/kW saved. To be eligible, projects must save at least 20 kW during weekdays from May to September. Maximum incentive of 20% of project budget.
Links:	www.energysave.com/commercial
Contact Information:	Terry Swan tswan@entergy.com 409-981-3245
Past Performance:	10% of future projected load growth
Related Programs:	Residential and Small Commercial Standard Program Offer; Hard-To-Reach Standard Program Offer
Spec Reference:	ASHRAE 90.1 1995 is used as the baseline
Outreach:	Workshops, direct mail, website, account reps
MDM Awareness:	Not previously familiar with campaign or materials

Texas Programs

Program Sponsor:	ONCOR
Service Territory:	Areas of Texas
Program Name:	C&I Standard Offer Program (statewide program)
Program Status:	Pilot in 1999; full program implemented in 2000 and funded through 2005.
Scope:	Incentives available to any large (>100 kW) customer for any capital expenditure project which accomplishes 20KW savings, minimum.
Budget:	\$17.3 M total for all programs
Goals:	35 MW savings in 2002
Program Description:	The program is designed to achieve a high level of energy and demand savings in the commercial and industrial sectors. The program does not prescribe technologies or end uses but instead provides a framework through which service providers can receive incentives for implementing and installing a wide range of measures at customer sites.
Incentives:	Incentive payment is based on the present value of ten years' savings at \$189/KW & 6 1/2 cents/kWh with an 80% maximum load factor.
Links:	www.oncorgroup.com/efficiency
Contact Information:	John Hanel, Sr. Program Manager 214-486-5886 john.hanel@oncorgroup.com
Past Performance:	
Related Programs:	Residential and Small Commercial Standard Program Offer Hard-To-Reach Standard Program Offer
Spec Reference:	ASHRAE 90.1 1995 is used as the baseline.
Outreach:	Direct customer contact; workshops; outreach to/through trade associations; direct contact with contractors, engineering firms, cities and school districts.
MDM Awareness:	Not previously familiar with campaign or materials

Northeast Programs

Program Sponsor:	Burlington Electric Department
Service Territory:	City of Burlington, Vermont
Program Name:	MotorUp
Program Status:	1998
Scope:	Motor management and planning; NEMA Premium motors
Budget:	\$50,000
Goals:	To increase the number of premium efficiency motors purchased through normal market transactions and to increase availability
Program Description:	MotorUp
Incentives:	Rebates range from \$45 to \$700 on motors from 1 to 200 hp
Links:	www.burlingtonelectric.com
Contact Information:	Loren A. Doe Ldoe@burlingtonelectric.com 802-865-7341
Past Performance:	
Related Programs:	C&I New Construction: offers prescriptive rebates and custom tracks for new construction and equipment replacement Top 10 and Energy Advantage: retrofit programs (for large (>200KW) and small-to-medium sized customers, respectively) that provide technical and financial assistance from initial energy audit through project planning and implementation
Spec Reference:	NEMA Premium
Outreach:	Through MotorUp. Quarterly newsletter to C&I customers, coordinate training opportunities with Efficiency Vermont, direct contact
MDM Awareness:	Somewhat familiar with campaign and materials

Northeast Programs

Program Sponsor:	Efficiency Vermont
Service Territory:	Vermont (statewide program)
Program Name:	MotorUp
Program Status:	2001
Scope:	Motors, VSDs, HVAC, refrigeration, and other custom energy efficiency measures.
Budget:	
Goals:	84,603 MWh total for all programs. This equates to \$48 M from 2000-2002 and prevents more than 62,500 tons of carbon dioxide emissions.
Program Description:	Through an energy efficiency charge on electric bills in Vermont, Efficiency Vermont has developed programs and services designed to help homes and businesses reduce their energy costs through efficiency measures.
Incentives:	Through MotorUp, rebates ranging from \$45 to \$700 on motors from 1 to 200 HP. Custom rebates available on premium efficiency motors not covered by MotorUp and on variable speed drives.
Links:	www.encyvermont.com www.motoruponline.com
Contact Information:	Dan Maxon dmaxon@veic.org 888-921-5990 ext 1091
Past Performance:	2001 - MotorUp: 97 motors resulting in 126 MWh of energy savings; other programs: 89 motors 2002 through June - MotorUp: 50 motors; other programs: 60 motors
Related Programs:	New construction, major renovation, retrofit, and equipment replacement programs
Spec Reference:	NEMA Premium
Outreach:	Project managers work directly with customers to develop C&I projects (including installation of premium efficiency motors). Market managers work with the Business Development Services Group and with state building services on new construction and retrofit projects. Other activities: annual building conference (focusing on improving energy efficiency and building design), energy efficiency technology training sessions, mass mailings, market-specific mailings, trade magazine ads, information on customer invoices, website.
MDM Awareness:	Familiar with campaign and materials

Northeast Programs

Program Sponsor:	Long Island Power Authority
Service Territory:	Nassau County, Suffolk County, parts of Queens County, New York. Excludes municipalities that generate their own power.
Program Name:	Energy Wise \ MotorUp
Program Status:	2000
Scope:	Motors, VFDs, lighting, HVAC, chillers
Budget:	\$6 M total for all programs; approx. \$50,000 for motors
Goals:	23.9 GWh for all commercial construction programs
Program Description:	Energy audits; design assistance firms provide recommendations on energy efficient technologies for new construction and major renovations.
Incentives:	Prescriptive rebates range from \$45 - \$700 on motors from 1 to 200hp. Custom rebates available on larger and special and definite purpose motors. Maximums: \$100,000 per project; \$300,000 per year for prescriptive rebates. \$300,000 per project; \$750,000 per year (3 projects maximum) for custom and whole building rebates.
Links:	www.lipower.org www.motoruponline.com
Contact Information:	Joseph Paruolo jparuolo@keyspanenergy.com 631-436-5752
Past Performance:	
Related Programs:	
Spec Reference:	NEMA Premium
Outreach:	Circuit Rider and marketing through MotorUp. Energy audits and technical design assistance available through LIPA
MDM Awareness:	MDM Campaign Sponsor

Northeast Programs

Program Sponsor:	MotorUp Working Group, Northeast Energy Efficiency Partnerships (NEEP)
Service Territory:	Vermont, New Hampshire, Massachusetts, Connecticut, Rhode Island, New Jersey, Long Island New York
Program Name:	MotorUp
Program Status:	1998
Scope:	Motor management and planning; NEMA Premium motors
Budget:	\$1 M
Goals:	1. To promote sound motor management. 2. To facilitate the selection and purchasing of premium efficiency motors.
Program Description:	Promoting sound motor management planning practices (including repair/replace decision making) and NEMA Premium motors to increase energy and dollar savings.
Incentives:	Rebates range from \$45 to \$700 on motors from 1 to 200 hp.
Links:	motoruponline.com neep.org
Contact Information:	Jon Linn NEEP Program Coordinator jlinn@acadia.net 207-338-9705
Past Performance:	2001 - approx. 2500 motors rebated in the northeast region
Related Programs:	Several MotorUp sponsors include MotorUp materials and promotions in their new construction and custom commercial programs.
Spec Reference:	NEMA Premium
Outreach:	Sponsors contract with a regional service provider to provide motor purchasing and management workshops, to make presentations at trade shows and conferences, to provide rebate services to end- users, and to serve as a central clearinghouse for information about the MotorUp program.
MDM Awareness:	MDM Campaign Sponsor

Northeast Programs

Program Sponsor:	National Grid USA
Service Territory:	Most of Rhode Island, parts of Massachusetts, and New Hampshire
Program Name:	1. Design 2000Plus: new construction, remodeling, failed equipment replacement program 2. Energy Initiative: retrofit program Both programs participate in MotorUp
Program Status:	1998 for MotorUp; had a motors program prior to that as part of Design 2000
Scope:	Both Energy Initiative and Design 2000Plus serve large C&I customers and cover new, failed, and stocked motors, unitary HVAC, other HVAC (chillers, energy management systems, etc.), VSD's, lighting, and custom projects which include other energy efficient system improvements.
Budget:	1. Design 2000Plus: approx. \$13.7 M total for all programs 2. Energy Initiative: approx. \$15.1 M total for all programs
Goals:	1. To promote sound motor management 2. To facilitate the selection and purchasing of premium efficiency motors
Program Description:	1. Design 2000: promotes energy efficiency in design and construction practices in new and renovated commercial and industrial buildings. 2. Energy Initiative: encourages commercial, industrial, and institutional customers to retrofit their facilities. Both programs participate in MotorUp.
Incentives:	1. Design incentives are available to maximize efficiency opportunities. Prescriptive rebates follow MotorUp schedule, \$45 to \$700 on motors from 1 to 200 hp. Custom rebates are available for non-covered products. 2. Energy Initiative: Incentives typically cover 40-50 percent of the installed cost. Design 2000: Financial incentives are designed to cover 75-90 percent of the incremental cost between standard and premium efficiency equipment and systems
Links:	www.nationalgrid.com/usa/evnromnent/energy_efficiency/index.shtml www.motoruponline.com
Contact Information:	Design 2000: Elizabeth Poulin elizabeth.poulin@us.ngrid.com 508-421-7219 Energy Initiative: Kevin Keena kevin.keena@us.ngrid.com 508-421-7279
Past Performance:	2001 - 1132 motors rebated (total for all programs) 2002 through September - approx. 500 motors rebated (total for all programs)
Spec Reference:	NEMA Premium
Outreach:	1. Design 2000: Marketing through MotorUp, also contract for additional services such as seminars on motor management; direct contact with large C&I customers by account managers, newsletters, website. 2. Energy Initiative: Marketing through MotorUp: direct contact with customers through account managers; direct mailings; educational programs; and workshops.
MDM Awareness:	MDM Campaign Sponsor

Northeast Programs

Program Sponsor:	New York Power Authority (NYPA)
Service Territory:	New York State
Program Name:	Energy Services Programs
Program Status:	1995
Scope:	Including but not limited to: motors, motor systems, VFD's, lighting, lighting controls, compressed air systems, stream traps and controls, HVAC, energy management systems, building envelope (including windows and insulation), refrigeration, appliances.
Budget:	\$60 M - \$80 M for all energy efficiency projects
Goals:	1. to save as much energy as possible for customers 2. to reduce emissions and so improve air quality and the environment
Program Description:	NYPA's energy efficiency program tackles the challenge of saving energy for governmental and public customers of New York by reducing their overall energy demand and consumption through the implementation of energy conservation projects.
Incentives:	NYPA works with customers to identify, design, and install energy efficiency improvements with no up-front costs. Projects are financed by sharing in the electricity savings resulting from the project. Repayment periods are usually less than but are not to exceed 10 years. Once the loan has been repaid, all future savings go to the participant.
Links:	www.nypa.gov
Contact Information:	Rino Trovato George Marriott rino.trovato@nypa.gov george.marriott@nypa.gov 914-390-8220 914-390-8235
Past Performance:	
Related Programs:	
Spec Reference:	NEMA Premium\CEE
Outreach:	Direct customer contact, site visits, mailings, presentations, customer workshops
MDM Awareness:	Familiar with campaign and materials

Northeast Programs

Program Sponsor:	New York State Energy Research & Development Authority (NYSERDA)
Service Territory:	All of New York state except Long Island
Program Name:	1. New York Energy Smart SM Premium Efficiency Motors Program 2. Smart Equipment Choices Program
Program Status:	1999
Scope:	1. Energy Smart: Motors 1 - 200 HP 2. Smart Equipment Choices: motors (1-200 HP), VSDs, lighting and controls, HVAC, high efficiency windows, plate pre-coolers, packaged refrigeration equipment, heat pump water heaters, commercial coin-operated clothes washers
Budget:	1. Premium Efficiency Motors: \$600,000 (\$500,000 program implementation, \$100,000 vendor incentives) 2. Smart Equipment Choices: \$4.0 M (customer incentives)
Goals:	1. Energy Smart: To increase the promotion, purchase and stocking practices of qualifying NEMA Premium motors. To induce lasting structural and behavioral change in the marketplace resulting in the increased use of qualifying NEMA Premium motors in commercial and industrial applications. 2. Smart Equipment: To influence and motivate customers to purchase NEMA Premium motors.
Program Description:	1. Energy Smart provides vendor incentives for the sale of qualified premium-efficiency motors. 2. Smart Equipment Choices provides rebates directly to customers.
Incentives:	1. Energy Smart: Rebates range from \$25 to \$80 on motors from 1 to 200 HP. Incentive tiers based on estimate of previous premium-efficiency motor sales. Custom rebates for non-covered motors may be available through other related programs. 2. Smart Energy Choices: Rebates range from \$45 to \$700 on motors from 1 to 200 HP. Maximum \$25,000 per applicant per calendar year for projects under this program.

Northeast Programs

Program Sponsor:	New York State Energy Research & Development Authority (NYSERDA)
Links:	www.NYSERDA.org
Contact Information:	<p>Premium Efficiency Motors Program: Laurie Kokkinidas ljk@nyserda.org 518-862-1090 ext. 3353</p> <p>Smart Equipment Choices Program: Kim Schryer 518-862-1090 ext. 3410 kas@NYSERDA.org</p>
Past Performance:	<p>1. Energy Smart: 2001 vendor incentives: 2053 motors; through September 2002 vendor incentives: 1147 motors</p> <p>2. Smart Equipment Choices: approx. 600 per year</p>
Related Programs:	<p>Loan fund New Construction Commercial/Industrial Performance Technical Assistance Peak Load Program</p>
Spec Reference:	NEMA Premium
Outreach:	<p>1. Energy Smart: Customer workshops, MotorMaster+ workshops, customized educational and marketing materials available, trade shows, exhibitions, advertising assistance for vendors promoting Energy Smart Programs.</p> <p>2. Smart Equipment Choices: employ four regional outreach firms who perform lead follow-up from website and phone inquiries, facilitate rebate application process for customers, technical review, etc., and give general presentations.</p>
MDM Awareness:	<p>1. Energy Smart: Familiar with campaign and materials</p> <p>2. Smart Equipment Choices: Somewhat familiar with campaign and materials</p>

Northeast Programs

Program Sponsor:	NSTAR Electric & Gas
Service Territory:	Metropolitan Boston, Southeastern Massachusetts, Cape Cod, and Martha's Vineyard
Program Name:	MotorUp
Program Status:	1998
Scope:	Provide incentives to customers and distributors for the purchase of NEMA Premium motors for new, replacement of stocked motors.
Budget:	\$115,000 total program; \$40,000 for incentives
Goals:	1. To promote the purchase and installation of NEMA Premium efficiency motors. 2. To promote sound motor management
Program Description:	A regional market transformation initiative striving to transform the regional 'motors market' toward sales of high efficiency equipment and sound motor management practices.
Incentives:	Rebates range from \$45 to \$700 on motors from 1 to 200 hp
Links:	www.nstaronline.com www.motoruponline.com
Contact Information:	Cherie Miles 781-441-8037 cherie_miles@nstaronline.com
Past Performance:	
Related Programs:	New or replacement motors >200 hp are addressed via NSTAR's New Construction program. All retrofit projects are handled on a custom basis through NSTAR's C&I Retrofit Program.
Spec Reference:	NEMA Premium
Outreach:	NSTAR field staff performs vendor outreach for vendors located within service territory. Customer outreach is performed by NSTAR Account Managers.
MDM Awareness:	MDM Campaign Sponsor

Northeast Programs

Program Sponsor:	United Illuminating
Service Territory:	
Program Name:	MotorUp
Program Status:	1999
Scope:	Motor management and planning; NEMA Premium motors
Budget:	\$25,600 total program: \$7,000 for rebates
Goals:	1. To promote sound motor management 2. To facilitate the selection and purchasing of premium efficiency motors
Program Description:	Promoting sound motor management planning practices (including repair/replace decision making) and NEMA Premium motors to increase energy and dollar savings
Incentives:	Rebates range from \$45 to \$700 on motors from 1 to 200 hp
Links:	www.uinet.com www.motoruponline.com
Contact Information:	Michelle K. LeMoine 203-499-5828 michelle.lemoine@uinet.com
Past Performance:	
Related Programs:	Energy Blueprint (new construction); Rebates for VFD's installed with new motors
Spec Reference:	NEMA Premium
Outreach:	Through MotorUp
MDM Awareness:	Somewhat familiar with campaign and materials

APPENDICES

MOTOR EFFICIENCY STANDARDS AND SPECIFICATIONS

The following is a brief background and description of the motor efficiency specifications presented in the attached table. Motor programs use these specifications in various ways to determine eligibility for incentive funding. For example, some programs require that motors meet the NEMA Premium™ efficiency levels to qualify. Others offer prescriptive incentive payments on motors covered by the CEE specification and consider motors outside this range on a custom basis. Some specify minimum kilowatt-hour savings requirements. Some programs base their incentive payments on the magnitude of the reduction in energy usage compared to a standard or measured baseline.

NEMA Energy Efficient (NEMA EE): NEMA developed a motor efficiency specification in the mid 1980s to define the term “energy efficient” in the marketplace. It was the first time that efficiency ratings were categorized in the industry. Table 12-10 in NEMA MG-1¹ listed efficiency levels for a range of motors. In the most recent edition of MG-1, Revision 3, the Table reference is 12-11. The motors covered by this specification are:

speed	2, 4, 6, and 8 pole
size	1-200 hp
design	NEMA A and B
enclosure type	ODP and TEFC
voltage	low voltage

The Energy Policy Act of 1992 (EPACT): This federal legislation required that some types of motors comply with NEMA Table 12-10 efficiency ratings if offered for sale in the U.S. Effective in 1997, EPACT also created new motor classes: *general purpose* motors are those without special mechanical construction that can be used in usual service conditions without restrictions to a particular application or type of application; *definite purpose* motors have standard-rating or construction but are designed to operate under conditions other than usual or in a particular application; *special purpose* motors are defined as those with special mechanical

¹ National Electrical Manufacturers Association. 2002. *NEMA Standards Publication No. MG-1, Motors and Generators, Revision 3*. Rosslyn, VA.: NEMA (NEMA.org).

construction and/or operating specifications². EPACT applied to all general purpose motors that fell into the following range:

speed	2, 4, and 6 pole
size	1-200 hp
design	NEMA A and B
enclosure type	ODP and TEFC
voltage	low voltage
class	general purpose

CEE Premium Efficiency Criteria (CEE): Recognizing the opportunity to promote motors with higher efficiency levels than EPACT required, CEE developed a premium energy efficiency specification for the same classes of motors. The efficiency levels specified were generally two NEMA efficiency bands (Table 12-10, NEMA MG-1 Revision 3) above those required by EPACT. This voluntary specification covered the following motors:

speed	2, 4, and 6 pole
size	1-200 hp
design	NEMA A and B
enclosure type	ODP and TEFC
voltage	low voltage
class	general purpose

NEMA Premium Efficiency Electric Motor Specification (NEMA PREM): In an effort to address confusion in the marketplace as to what constituted the most efficient motors currently available in the market, NEMA, CEE, and other stakeholders developed and adopted the NEMA Premium specification. This voluntary specification was adapted from the CEE criteria and serves as the benchmark for premium energy efficient motors. NEMA PremiumTM also denotes a brand name for motors which meet this specification. The NEMA Premium Specification (Tables 12-12 and 12-13 of MG-1, Revision 3) covers a wider range of motors than either EPACT or the CEE Specification:

speed	2, 4, 6, and 8 pole
size	1-500 hp
design	NEMA A and B
enclosure type	ODP and TEFC
voltage	low and medium voltage
class	general, definite, and special purpose

² Nadel S. et al. 2002. *Energy Efficient Motor Systems: A Handbook on Technology, Program, and Policy Opportunities*. Washington, D.C.: ACEEE (www.aceee.org).

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Motor Specification Chart

OPEN DRIP PROOF - LOW VOLTAGE																
900 RPM (8 pole)*					1200 RPM (6 pole)				1800 RPM (4 pole)				3600 RPM (2 pole)			
HP	EPACT	NEMA EE	CEE	NEMA PREM.	EPACT	NEMA EE	CEE	NEMA PREM	EPACT	NEMA EE	CEE	NEMA PREM	EPACT	NEMA EE	CEE	NEMA PREM
1	...	74.0	...	...	80.0	80.0	82.5	82.5	82.5	82.5	85.5	85.5	...	...	77.0	77.0
1.5	...	75.5	...	...	84.0	84.0	86.5	86.5	84.0	84.0	86.5	86.5	82.5	82.5	84.0	84.0
2	...	85.5	...	...	85.5	85.5	87.5	87.5	84.0	84.0	86.5	86.5	84.0	84.0	85.5	85.5
3	...	86.5	...	...	86.5	86.5	88.5	88.5	86.5	86.5	89.5	89.5	84.0	84.0	85.5	85.5
5	...	87.5	...	...	87.5	87.5	89.5	89.5	87.5	87.5	89.5	89.5	85.5	85.5	86.5	86.5
7.5	...	88.5	...	...	88.5	88.5	90.2	90.2	88.5	88.5	91.0	91.0	87.5	87.5	88.5	88.5
10	...	89.5	...	...	90.2	90.2	91.7	91.7	89.5	89.5	91.7	91.7	88.5	88.5	89.5	89.5
15	...	89.5	...	...	90.2	90.2	91.7	91.7	91.0	91.0	93.0	93.0	89.5	89.5	90.2	90.2
20	...	90.2	...	...	91.0	91.0	92.4	92.4	91.0	91.0	93.0	93.0	90.2	90.2	91.0	91.0
25	...	90.2	...	...	91.7	91.7	93.0	93.0	91.7	91.7	93.6	93.6	91.0	91.0	91.7	91.7
30	...	91.0	...	...	92.4	92.4	93.6	93.6	92.4	92.4	94.1	94.1	91.0	91.0	91.7	91.7
40	...	91.0	...	...	93.0	93.0	94.1	94.1	93.0	93.0	94.1	94.1	91.7	91.7	92.4	92.4
50	...	91.7	...	...	93.0	93.0	94.1	94.1	93.0	93.0	94.5	94.5	92.4	92.4	93.0	93.0
60	...	92.4	...	...	93.6	93.6	94.5	94.5	93.6	93.6	95.0	95.0	93.0	93.0	93.6	93.6
75	...	93.6	...	...	93.6	93.6	94.5	94.5	94.1	94.1	95.0	95.0	93.0	93.0	93.6	93.6
100	...	93.6	...	...	94.1	94.1	95.0	95.0	94.1	94.1	95.4	95.4	93.0	93.0	93.6	93.6
125	...	93.6	...	...	94.1	94.1	95.0	95.0	94.5	94.5	95.4	95.4	93.6	93.6	94.1	94.1
150	...	93.6	...	...	94.5	94.5	95.4	95.4	95.0	95.0	95.8	95.8	93.6	93.6	94.1	94.1
200	...	93.6	...	...	94.5	94.5	95.4	95.4	95.0	95.0	95.8	95.8	94.5	94.5	95.0	95.0
250	...	94.5	...	...	...	95.4	...	95.4	...	95.4	...	95.8	...	94.5	...	95.0
300	95.4	...	95.4	...	95.4	...	95.8	...	95.0	...	95.4
350	95.4	...	95.4	...	95.4	...	95.8	...	95.0	...	95.4
400	95.8	...	95.4	...	95.8	...	95.4	...	95.8
450	96.2	...	95.8	...	96.2	...	95.8	...	95.8
500	96.2	...	95.8	...	96.2	...	95.8	...	95.8

* 900 rpm (8 pole) motors are not included in CEE, EPACT, or NEMA Premium Specifications and are included here for informational purposes only.

NOTE:

The NEMA Premium Specification covers 1-500 hp, general, special, and definite purpose motors.

The CEE Specification and EPACT Standard cover 1-200 hp, general purpose motors.

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Motor Specification Chart

TOTALLY ENCLOSED FAN COOLED - LOW VOLTAGE																
900 RPM (8 pole)*					1200 RPM (6 pole)				1800 RPM (4 pole)				3600 RPM (2 pole)			
HP	EPACT	NEMA EE	CEE	NEMA PREM	EPACT	NEMA EE	CEE	NEMA PREM	EPACT	NEMA EE	CEE	NEMA PREM	EPACT	NEMA EE	CEE	NEMA PREM
1	...	74.0	...	...	80.0	80.0	82.5	82.5	82.5	82.5	85.5	85.5	75.5	75.5	77.0	77.0
1.5	...	77.0	...	...	85.5	85.5	87.5	87.5	84.0	84.0	86.5	86.5	82.5	82.5	84.0	84.0
2	...	82.5	...	...	86.5	86.5	88.5	88.5	84.0	84.0	86.5	86.5	84.0	84.0	85.5	85.5
3	...	84.0	...	...	87.5	87.5	89.5	89.5	87.5	87.5	89.5	89.5	85.5	85.5	86.5	86.5
5	...	85.5	...	...	87.5	87.5	89.5	89.5	87.5	87.5	89.5	89.5	87.5	87.5	88.5	88.5
7.5	...	85.5	...	...	89.5	89.5	91.0	91.0	89.5	89.5	91.7	91.7	88.5	88.5	89.5	89.5
10	...	88.5	...	...	89.5	89.5	91.0	91.0	89.5	89.5	91.7	91.7	89.5	89.5	90.2	90.2
15	...	88.5	...	...	90.2	90.2	91.7	91.7	91.0	91.0	92.4	92.4	90.2	90.2	91.0	91.0
20	...	89.5	...	...	90.2	90.2	91.7	91.7	91.0	91.0	93.0	93.0	90.2	90.2	91.0	91.0
25	...	89.5	...	...	91.7	91.7	93.0	93.0	92.4	92.4	93.6	93.6	91.0	91.0	91.7	91.7
30	...	91.0	...	...	91.7	91.7	93.0	93.0	92.4	92.4	93.6	93.6	91.0	91.0	91.7	91.7
40	...	91.0	...	...	93.0	93.0	94.1	94.1	93.0	93.0	94.1	94.1	91.7	91.7	92.4	92.4
50	...	91.7	...	...	93.0	93.0	94.1	94.1	93.0	93.0	94.5	94.5	92.4	92.4	93.0	93.0
60	...	91.7	...	...	93.6	93.6	94.5	94.5	93.6	93.6	95.0	95.0	93.0	93.0	93.6	93.6
75	...	93.0	...	...	93.6	93.6	94.5	94.5	94.1	94.1	95.4	95.4	93.0	93.0	93.6	93.6
100	...	93.0	...	...	94.1	94.1	95.0	95.0	94.5	94.5	95.4	95.4	93.6	93.6	94.1	94.1
125	...	93.6	...	...	94.1	94.1	95.0	95.0	94.5	94.5	95.4	95.4	94.5	94.5	95.0	95.0
150	...	93.6	...	...	95.0	95.0	95.8	95.8	95.0	95.0	95.8	95.8	94.5	94.5	95.0	95.0
200	...	94.1	...	...	95.0	95.0	95.8	95.8	95.0	95.0	96.2	96.2	95.0	95.0	95.4	95.4
250	...	94.5	...	...	...	95.0	...	95.8	...	95.0	...	96.2	...	95.4	...	95.8
300	95.0	...	95.8	...	95.4	...	96.2	...	95.4	...	95.8
350	95.0	...	95.8	...	95.4	...	96.2	...	95.4	...	95.8
400	95.8	...	95.4	...	96.2	...	95.4	...	95.8
450	95.8	...	95.4	...	96.2	...	95.4	...	95.8
500	95.8	...	95.8	...	96.2	...	95.4	...	95.8

* 900 rpm (8 pole) motors are not included in CEE, EPACT, or NEMA Premium Specifications and are included here for informational purposes only.

NOTE:

The NEMA Premium Specification covers 1-500 hp, general, special, and definite purpose motors.

The CEE Specification and EPACT Standard cover 1-200 hp, general purpose motors.

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Motor Specification Chart

OPEN DRIP PROOF - MEDIUM VOLTAGE																
900 RPM (8 pole)*					1200 RPM (6 pole)				1800 RPM (4 pole)				3600 RPM (2 pole)			
HP	EPACT	NEMA EE	CEE	NEMA PREM	EPACT	NEMA EE	CEE	NEMA PREM	EPACT	NEMA EE	CEE	NEMA PREM	EPACT	NEMA EE	CEE	NEMA PREM
250	95.0	...	...	...	95.0	...	...	...	94.5
300	95.0	...	...	...	95.0	...	...	...	94.5
350	95.0	...	...	...	95.0	...	...	...	94.5
400	95.0	...	...	...	95.0	...	...	...	94.5
450	95.0	...	...	...	95.0	...	...	...	94.5
500	95.0	...	...	...	95.0	...	...	...	94.5

* 900 rpm (8 pole) motors are not included in CEE, EPACT, or NEMA Premium Specifications and are included here for informational purposes only.

TOTALLY ENCLOSED FAN COOLED - MEDIUM VOLTAGE																
900 RPM (8 pole)*					1200 RPM (6 pole)				1800 RPM (4 pole)				3600 RPM (2 pole)			
HP	EPACT	NEMA EE	CEE	NEMA PREM	EPACT	NEMA EE	CEE	NEMA PREM	EPACT	NEMA EE	CEE	NEMA PREM	EPACT	NEMA EE	CEE	NEMA PREM
250	95.0	...	...	...	95.0	...	...	...	95.0
300	95.0	...	...	...	95.0	...	...	...	95.0
350	95.0	...	...	...	95.0	...	...	...	95.0
400	95.0	...	...	...	95.0	...	...	...	95.0
450	95.0	...	...	...	95.0	...	...	...	95.0
500	95.0	...	...	...	95.0	...	...	...	95.0

* 900 rpm (8 pole) motors are not included in CEE, EPACT, or NEMA Premium Specifications and are included here for informational purposes only.

NOTE:

The NEMA Premium Specification covers 1-500 hp, general, special, and definite purpose motors.

The CEE Specification and EPACT Standard cover 1-200 hp, general purpose motors.

PARTNERS LISTING OF NEMA PREMIUM™ COMPLIANT ELECTRIC MOTORS

The initials in the tables below indicate those companies offering electric motors that comply with the NEMA Premium efficiency specification. This listing will be updated regularly as manufacturers update their product offerings.

MANUFACTURERS KEY:

A = A.O. Smith Electrical Products	RA = RAM Industries
B = Baldor Electric	RE = Rockwell Automation/Reliance
E = Emerson Motors	SI = Siemens
G = GE Motors	ST = Sterling Electric
LE = Leeson Electric	TE = TECO-Westinghouse
LM = Lincoln Motors	TO = Toshiba Intl.
M = Marathon Electric	W = WEG Electric Motors

TABLE 1

Indicate Motors Which Meet or Exceed Nominal Efficiencies For "NEMA Premium™" Induction Motors Rated 600 Volts Or Less (Random Wound)

HP	Open Drip-Proof			Totally Enclosed Fan-Cooled		
	6-pole	4-pole	2-pole	6-pole	4-pole	2-pole
1	B, G, E, LE, TO, W	B, G, E, LE, M, RE, SI, TO, W	B, G, E, LE, RE, SI, TO, W	A, B, E, G, LE, LM, RE, SI, ST, TE, TO, W	A, B, E, G, LE, M, RE, SI, ST, TE, TO, W	B, E, G, LE, RE, SI, ST, TE, TO, W
1.5	B, G, E, TO, W	B, G, E, LE, M, RE, SI, TO, W	B, G, E, LE, RE, SI, TO, W	A, B, E, G, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LE, RE, SI, ST, TE, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TE, TO, W
2	A, B, G, E, TO, W	B, G, E, LE, M, SI, ST, TO, W	B, G, E, LE, RE, SI, TO, W	A, B, E, G, M, RE, SI, ST, TE, TO, W	A, B, E, G, LE, RE, SI, ST, TE, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TE, TO, W
3	A, B, G, E, LM, ST, TO, W	A, B, G, E, LM, M, SI, TO, W	B, G, E, LM, SI, ST, TO, W	A, B, E, G, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LM, M, RE, SI, ST, TE, TO, W
5	A, B, G, E, RE, TO, W	A, B, G, E, LM, M, SI, TO, W	A, B, G, E, LM, RE, SI, ST, TO, W	A, B, E, G, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LM, M, RE, SI, ST, TE, TO, W
7.5	A, B, G, E, RE, ST, TO, W	A, B, G, E, LE, LM, M, SI, TO, W	A, B, G, E, SI, ST, TO, W	A, B, E, G, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TE, TO, W
10	A, B, G, E, ST, TO, W	A, B, G, E, LE, M, SI, TO, W	A, B, G, E, LE, LM, M, SI, ST, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TE, TO, W
15	A, B, G, E, LM, ST, TO, W	A, B, G, E, LE, LM, M, SI, TO, W	A, B, G, E, LE, LM, M, SI, ST, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TE, TO, W
20	A, B, G, E, LM, ST, TO, W	A, B, G, E, LE, M, SI, ST, TO, W	A, B, G, E, LE, M, RE, SI, ST, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TE, TO, W
25	A, B, G, E, TO, W	A, B, G, E, LE, LM, M, SI, TO, W	A, B, G, E, LE, LM, M, RE, SI, ST, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TE, TO, W
30	A, B, G, E, LM, TO, W	A, B, G, E, LE, LM, M, SI, TO, W	A, B, G, E, LE, LM, M, RE, SI, ST, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TE, TO, W
40	A, B, G, E, LM, ST, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TO, W	A, B, G, E, LE, LM, M, SI, ST, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TE, TO, W
50	A, B, E, G, LM, ST, TO, W	A, B, E, G, LE, LM, M, SI, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TO, W	A, B, E, G, LM, RE, SI, ST, TE, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TE, TO, W
60	A, B, E, G, LM, RE, ST, TO, W	A, B, E, G, LM, RE, SI, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TO, W
75	A, B, E, G, LM, RE, ST, TO, W	A, B, E, G, LM, M, RE, SI, TO, W	A, B, E, G, LE, LM, M, RA, RE, SI, ST, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TE, TO, W
100	A, B, E, G, LM, RE, ST, TO, W	A, B, E, G, LM, M, RE, SI, ST, TO, W	A, B, E, G, LE, LM, M, RA, RE, SI, ST, TO, W	A, B, E, G, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TE, TO, W
125	A, B, E, G, LM, RE, ST, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TO, W	A, B, E, G, LM, RA, RE, SI, ST, TO, W	A, B, E, G, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LE, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LM, M, RE, SI, TE, TO, W
150	A, B, E, G, LM, RE, ST, TO, W	A, B, E, G, LM, M, RE, SI, TO, W	A, B, E, G, LM, RA, RE, SI, ST, TO, W	A, B, E, G, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LM, M, RE, SI, TE, TO
200	A, B, E, G, LM, RE, ST, TO, W	A, B, E, G, LM, M, RE, SI, TO, W	A, B, E, G, LM, RA, RE, SI, ST, TO, W	A, B, E, G, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LM, M, RE, SI, ST, TE, TO, W
250	A, B, E, G, LM, M, RE, TO, W	A, B, E, G, LM, M, RE, SI, TO, W	A, B, E, G, LM, RA, RE, SI, ST, TO, W	A, B, E, G, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LM, M, RE, SI, TE, TO, W
300	A, B, E, G, LM, M, RE, TO, W	A, B, E, G, LM, M, RE, SI, TO, W	A, B, E, G, LM, RA, RE, SI, ST, TO, W	A, B, E, G, LM, M, RE, SI, TO, W	A, B, E, G, LM, M, RE, SI, ST, TE, TO, W	A, B, E, G, LM, M, RE, SI, TE, TO, W
350	A, B, E, G, RE, TO, W	A, B, E, G, LM, M, RE, SI, TO, W	A, B, E, G, LM, RA, RE, SI, TO, W	B, E, G, LM, M, RE, SI, TO, W	A, B, E, G, LM, RE, SI, TO, W	B, E, G, LM, M, RE, SI, TO
400	B, E, G, RE, W	A, B, E, G, LM, M, RE, SI, TO, W	B, E, G, LM, RA, RE, SI, TO, W	B, E, G, LM, M, RE, SI, TO, W	A, B, E, G, LM, RE, SI, TO, W	B, E, G, LM, M, RE, SI
450	B, E, G, RE, W	B, E, G, LM, M, RE, SI, TO, W	B, E, G, LM, RA, RE, SI, TO, W	B, E, G, LM, M, RE, SI	B, E, G, M, RE, SI, W	B, E, G, M, RE, SI
500	B, E, G, RE, W	B, E, G, RE, W	B, E, G, LM, RA, RE, TO, W	B, E, G, LM, M, RE, SI, W	B, E, G, LM, M, RE, SI, W	B, E, G, M, RE, SI, W

TABLE 2

**Indicate Motors Which Meet or Exceed Nominal Efficiencies For "NEMA Premium™" Induction Motors
Rated Medium Volts (Form Wound) 5kV or Less***

HP	Open Drip-Proof			Totally Enclosed Fan-Cooled		
	6-pole	4-pole	2-pole	6-pole	4-pole	2-pole
250	B, E, G, SI, W	B, E, G, RE, SI, W	B, E, G, RE, SI, W	B, E, G, LM, M, SI, TE, W	B, E, G, M, RE, SI, TE, W	B, E, G, M, RE, SI, TE, W
300	B, E, G, SI, W	B, E, G, RE, SI, W	B, E, G, RE, SI, W	B, E, G, LM, M, RE, SI, TE, W	B, E, G, LM, M, RE, SI, TE, W	B, E, G, M, RE, SI, TE, W
350	B, E, G, LM, M, SI, W	B, E, G, RE, SI, W	B, E, G, RE, SI, W	B, E, G, LM, M, RE, SI, TE, W	B, E, G, LM, M, RE, SI, TE, W	B, E, G, M, RE, SI, TE, W
400	B, E, G, LM, M, RE, SI, W	B, E, G, LM, M, RE, SI, W	B, E, G, RA, RE, SI, W	B, E, G, LM, M, RE, SI, TE, W	B, E, G, LM, M, RE, SI, TE, W	B, E, G, M, RE, SI, TE, W
450	B, E, G, LM, M, RE, SI, W	B, E, G, LM, M, RE, SI, W	B, E, G, RA, RE, SI, W	B, E, G, LM, M, RE, SI, TE, W	B, E, G, LM, M, RE, SI, TE, W	B, E, G, RE, SI, TE, W
500	B, E, G, LM, M, RE, SI, W	B, E, G, LM, M, RE, SI, W	B, E, G, RA, RE, SI, W	B, E, G, LM, M, RE, SI, TE, W	B, E, G, LM, M, RE, SI, TE, W	B, E, G, RE, SI, TE, W

Notes from CEE:

NEMA expects to post the next full update in April 2003. Visit www.nema.org/premiummotors for the most up-to-date listings.

There are motor manufacturers, such as ABB, Inc., who offer products which meet the NEMA Premium efficiency levels but are not listed in the above table because they are not NEMA Premium Manufacturing Partners. For more information, contact your local motor vendor, motor service provider, or refer to DOE's MotorMaster+ software.

Motor manufacturers not participating in NEMA Premium are welcome to forward information on qualifying products to CEE to be included in future program summaries.

Prescriptive Rebate Schedules

HorsePower	Express Efficiency PG&E, SCE, SDG&E	SMUD	Anaheim	Riverside	HECO	EW&EB	Xcel New Motors	Xcel Upgrades	MotorUp ODP	MotorUp TEFC
1	\$35.00	\$25.00	\$35.00	\$35.00	\$15.00	\$20.00	\$5.00	\$16.50	\$45.00	\$50.00
1.5	\$35.00	\$25.00	\$35.00	\$35.00	\$22.50	\$20.00	\$7.50	\$24.75	\$45.00	\$50.00
2	\$35.00	\$35.00	\$35.00	\$35.00	\$30.00	\$25.00	\$10.00	\$33.00	\$54.00	\$60.00
3	\$40.00	\$40.00	\$40.00	\$40.00	\$45.00	\$35.00	\$15.00	\$49.50	\$54.00	\$60.00
5	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00	\$55.00	\$25.00	\$82.50	\$54.00	\$60.00
7.5	\$60.00	\$60.00	\$70.00	\$60.00	\$75.00	\$85.00	\$37.50	\$123.75	\$81.00	\$90.00
10	\$70.00	\$70.00	\$70.00	\$70.00	\$100.00	\$110.00	\$50.00	\$165.00	\$90.00	\$100.00
15	\$80.00	\$80.00	\$80.00	\$80.00	\$120.00	\$120.00	\$75.00	\$247.50	\$104.00	\$115.00
20	\$90.00	\$90.00	\$90.00	\$90.00	\$160.00	\$160.00	\$100.00	\$330.00	\$113.00	\$125.00
25	\$115.00	\$115.00	\$115.00	\$115.00	\$200.00	\$200.00	\$125.00	\$412.50	\$117.00	\$130.00
30	\$135.00	\$135.00	\$135.00	\$135.00	\$210.00	\$240.00	\$150.00	\$495.00	\$135.00	\$150.00
40	\$160.00	\$160.00	\$160.00	\$160.00	\$240.00	\$320.00	\$200.00	\$660.00	\$162.00	\$180.00
50	\$200.00	\$200.00	\$200.00	\$200.00	\$300.00	\$400.00	\$250.00	\$825.00	\$198.00	\$220.00
60	\$235.00	\$235.00	\$235.00	\$235.00	\$360.00	\$480.00	\$300.00	\$990.00	\$234.00	\$260.00
75	\$270.00	\$270.00	\$270.00	\$270.00	\$450.00	\$600.00	\$375.00	\$1,237.50	\$270.00	\$300.00
100	\$360.00	\$360.00	\$360.00	\$360.00	\$600.00	\$800.00	\$500.00	\$1,650.00	\$360.00	\$400.00
125	\$540.00	\$540.00	\$540.00	\$540.00	\$750.00	\$1,000.00	\$625.00	\$2,062.50	\$540.00	\$600.00
150	\$630.00	\$630.00	\$630.00	\$630.00	\$900.00	\$1,050.00	\$750.00	\$2,475.00	\$630.00	\$700.00
200	\$630.00	\$630.00	\$630.00	\$630.00	\$1,200.00	\$1,250.00	\$1,000.00	\$3,300.00	\$630.00	\$700.00
250	N/A	N/A	N/A	N/A	\$1,500.00	\$1,375.00	N/A	N/A	N/A	N/A
300	N/A	N/A	N/A	N/A	\$1,800.00	\$1,650.00	N/A	N/A	N/A	N/A
350	N/A	N/A	N/A	N/A	\$2,100.00	\$1,925.00	N/A	N/A	N/A	N/A
400	N/A	N/A	N/A	N/A	\$2,400.00	\$2,200.00	N/A	N/A	N/A	N/A
450	N/A	N/A	N/A	N/A	\$2,700.00	\$2,475.00	N/A	N/A	N/A	N/A
500	N/A	N/A	N/A	N/A	N/A	\$2,750.00	N/A	N/A	N/A	N/A