RESIDENTIAL

GETTING REALLY ENERGY EFFICIENT NOW

MORENO VALLEY UTILITY Energy Efficiency Programs

2015-2016







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⁴⁴ These programs are designed to achieve energy savings, reduce customer bills, support economic development, reduce generation resource requirements and lessen environmental impacts.⁹⁹



ENERGY EFFICIENCY PROGRAMS MORENO VALLEY UTILITY – FY2015/2016

Overview:

Moreno Valley Utility (MVU) has developed an energy efficiency program portfolio that supports conservation of energy and deployment of technologies and strategies that reduce energy demand and generation resource requirements. These programs are designed to achieve energy savings, reduce customer bills, support economic development, reduce generation resource requirements and lessen environmental impacts.

The energy efficiency programs are intended to capture real energy savings in the short term, but also to prime the residential and commercial markets for increased use of energy efficiency measures over time. As such, the portfolio design has clear, specific, measurable goals that reflect both short-term and long-term priorities.

The Residential Energy Efficiency Program and the Commercial Energy Efficiency Program are made up of measures that are prescriptive with specific fixed rebate amounts for customers by rate class who meet the program requirements for the equipment purchased and installed. Prescriptive programs are typically massmarket programs that provide rebates at retail for efficient lighting or appliance purchases, or small commercial programs that reduce program overhead by offering fixed rebates for the installation of efficient lighting or controls.

The Custom Energy Efficiency Program allows a broader selection of measures that require calculation of the expected savings that the customer will achieve and offers an incentive for making improvements specific to the economics of the project that the customer installs. Typically, custom programs are used for larger commercial and industrial (C&I) customers, but they are sometimes also used for Comprehensive Portfolio residential retrofit programs.

Rebates are capped at 50% of the cost of the measure with the exception of the Custom Program which is capped at 25% of the installed measure. The maximum allowable rebate total for any fiscal year is \$5,000 for residential customers and \$25,000 for business customers.

RESIDENTIAL ENERGY EFFICIENCY PROGRAM

RESIDENTIAL ENERGY AUDITS & DIRECT INSTALL

This program targets very high energy use customers and participants in our Low Income Program. The programs provides eligible residential customers with a full in-home energy audit and specific recommendations for their home plus a fixed set of maintenance and upgrades provided at no cost to the customer up to the value cap set by energy use range or program participation. Energy Efficiency Measures included with this program are AC tune-ups, duct testing and sealing, HVAC filter change and energy efficient lighting. The program is provided on a first-come, first-served basis until program funds are no longer available. This program may be modified or terminated without prior notice.

Range of Annual Energy Use	In Home Energy Audit	AC Tune UP	AC System Filter Change	Duct Testing & Seal	LED Screw In Fixtures	Value Cap, includes cost of Audit
Over 11,000 kWhs	Yes	Yes	Yes	Yes		\$1,000.00
Low Income Program Participant	Yes	Yes	Yes	Yes	10 lamps various sizes	\$1,000.00

WINDOWS AND DOORS

Measure	Requirements	Limit per 5 Years	Rebate Amount, if purchased in the City	Rebate Amount, if purchased online or outside the City
Low-E Glass Windows & Doors	U-Factor .35 or less and Solar Heat Gain Coefficient (SHGC) 0.30 or less	NA	\$2.00 per SF	\$1.00 per SF

LIGHTING

Measure	Requirements	Limit per 5 Years	Rebate Amount, if purchased in the City	Rebate Amount, if purchased online or outside the City
LED Downlight Recessed Retrofit Kits	Must be either Energy Star qualified or Design Light Consortium (DLC) qualified products; Eligible brands/models are labeled as Residential or Residential & Commercial, solid state downlight recessed on the Energy Star Website	NA	\$25.00 per Kit	\$25.00 per Kit

ENERGY STAR APPLIANCE REBATES

If required to be Energy Star Qualified, the appliance must be Energy Star Qualified at the time of purchase and installation:

Appliance	Energy Star Required	Requirements	Limit per 5 Years	Rebate Amount, if purchased in the City	Rebate Amount, if purchased online or outside the City
Clothes Washer	Yes	Modified Energy Factor (MEF) 2.0 or greater; Water Factor (WF) 6.0 or lower	1	\$50.00 each	\$25.00 each
Refrigerator	Yes	Full size, 15 CF or	1	\$75.00 each	\$50.00 each
Freezer	Yes	At least 7.75 CF or Larger	1	\$50.00 each	\$25.00 each
Dishwasher	Yes	All makes installed in residence only	1	\$35.00 each	\$20.00 each
Room AC	Yes		3	\$35.00 each	\$20.00 each
Ceiling Fan	Yes		3	\$25.00 each	\$15.00 each
Solar Attic		All makes installed in residence only	3	\$100.00 each	\$50.00 each
Pool Pump - Variable Speed		Replacement only. Spa pumps, single or two speed pumps do not qualify.	1	\$200.00 each	\$100.00 each
Solar Water Heater		Only applies to customers with electric water heaters	1	\$1,500.00 each	\$1,500.00 each
Electric Heat Pump Water Heater		Energy Factor 2.0 or greater, must be on qualified list	1	\$140.00 each	\$120.00 each

WEATHERIZATION

Measure	Requirements	Limit per 5 Years	Rebate Amount, if purchased in the City	Rebate Amount, if purchased online or outside the City
Attic Insulation	Minimum value of R-30 or R-19 if less than 24-inches attic clearance. Supporting documention showing total square footage must be submitted along with documentation on existing & newly installed "R" value. NOT for new construction	NA	\$0.15 per SF	\$0.10 per SF

HEATING VENTILATION AND AIR CONDITIONING (HVAC) SYSTEMS

CENTRAL AC & HEAT PUMP TUNE UP

Performed on existing central air conditioners or existing heat pump systems: \$75 per AC or Heat Pump Unit. Limit 2 per household per year. Systems must be at least one year old to be eligible. Contractor must be NATE Certified.

To qualify for rebate the service must be performed by a NATE Certified Technician. The Tune up must include: checking and correcting the unit's refrigerant pressure and tubing, checking and adjusting belt tension, cleaning and lubricating the indoor blower unit, replacing filters, cleaning inside the "A" coil, and checking the thermostat, wiring and other electric parts. A receipt from a NATE Certified, licensed contractor stating that the above work was completed must be provided.

CENTRAL AIR CONDITIONER & HEAT PUMP REPLACEMENTS

As of January 1, 2015, Central A/C must be a minimum of 15 SEER to qualify for Rebate. Qualifying units are evaluated based on AHRI product certification ratings.

М	easure	Requirements	Limit per 5 Years		Rebate Amount, if purchased online or outside the City
Cer	ntral A/C &	15 SEER to 15.9 SEER	2	\$140 per Ton	\$120 per Ton
Hea	at Pumps				
Cer	ntral A/C &	16+ SEER	2	\$160 per Ton	\$140 per Ton
Hea	at Pumps				

Paid contractor receipt required indicating brand and model number plus copy of AHRI Certificate. For more information, please visit <u>www.ahridirectory.org</u>.

COOLING REWARDS - RESIDENTIAL DEMAND REDUCTION PROGRAM

During the peak summer months, on days when the demand for electricity is at its highest, MVU may initiate an Energy Event. A signal is sent to your thermostat to increase the setpoint temperature up to 4 degrees. These events are optional and help reduce power consumption and electricity load to ensure a stable energy supply. By participating, customers can earn a monthly bill credit and the opportunity to earn Rebate Credits that get applied to their bill at the end of the year.

Participating customers will receive \$7.50 credit per month from June through September plus an energy reward of \$5.00 each time the program is implemented during that period and the AC setpoint is successfully turned up for the duration of the event.

Eligible customers must have broadband Internet access and central A/C. An intelligent thermostat enabled with energy optimization service will be installed at no charge.

Requirements: Central air conditioning; Broadband Internet access and router (MVU does not provide Internet access).

CUSTOM ENERGY EFFICIENCY PROGRAM

Custom incentives depend on the type of retrofit conducted and are capped at 25% of the installed cost of the measure, are paid at \$0.05 per kilowatt-hour saved over a one year period. Additionally, the annual customer rebate total may not exceed \$25,000.

To qualify for rebates, customers must schedule an onsite inspection prior to installation and onsite post verification of installation. Customers must provide completed rebate applications, including energy savings calculations performed by a licensed mechanical engineer and paid invoices within four months of the project completion date in order to be eligible for rebate consideration.

NEW CONSTRUCTION AND MAJOR TENANT RENOVATION

MVU offers rebates for new construction and major tenant renovation to encourage energy saving designs. Maximum rebate per project is \$25,000 unless specifically approved by the City Manager, and may be subject to City Council approval. Customers may also be eligible to participate in the Economic Development Rate Program. In addition to the standard documentation required for our Commercial Energy Efficiency Program, the following guidelines will also apply:

- Projects exceeding Title 24 by at least 10% will be eligible for incentives upon construction completion. Rebates will be based on the whole building performance of 10% over Title 24 baseline design standards and must be calculated using Energy Pro.
- Incentives are paid at a rate of \$0.05 per kWh of annual savings in excess of Title 24 standards for electricsaving measures only.
- Customer is responsible for providing documentation of savings that are at least 10% above Title 24 baseline through an energy modeling software. Calculations must be signed by a licensed mechanical engineer.

COMMERCIAL ENERGY EFFICIENCY PROGRAM

COMMERCIAL ENERGY AUDITS & DIRECT INSTALL

The Direct Install program provides eligible small- or medium-sized business customers with an onsite energy audit, energysaving measures and equipment upgrades at no cost, providing a value up to \$3,000. This program is only available to qualified businesses that have electrical demand that does not exceed 100 kW for three consecutive months in a twelvemonth period.

The program is provided on a first-come, first-served basis until program funds are no longer available. This program may be modified or terminated without prior notice.

MVU will send a certified energy resource manager to the customer's facility to conduct an onsite energy audit and will prepare and provide an audit report to the customer listing recommended retrofits and behavioral change measures. Each recommendation will include the cost to perform the retrofit, anticipated annual energy savings, and simple payback. Business customers can select recommendations they would like to install and MVU's certified installers will conduct the work at the facility.

MVU will fund the energy audit, report preparation and cost of installation of measures up to a maximum cap of \$3,000 per site. Each customer site may participate one time regardless of change of tenancy or ownership.

If the customer elects to install measures above the MVU funding cap, then the customer may use the MVU contract installation service provider at the MVU negotiated pricing. The customer may also be eligible for an MVU rebate on their investment of measure above the cap under the Custom or Commercial Energy Efficiency Program.

LIGHTING RETROFITS

LED Fixture Retrofits: MVU will pay \$0.07 per kilowatt-hour saved over a one year period. In addition to the standard documentation required for a rebate, the following will be required for LED rebate applications:

- All new LED fixtures shall be UL listed, Energy Star[™] labeled or contain labeling by an approved agency.
- Must be rated for a minimum life of 50,000 hours of operation.
- Manufacturer's warranty for LED fixtures must be a minimum of three years.

Other Energy Efficient Lighting: For all other lighting retrofits, the rebate is \$0.05 per kilowatt-hour saved over a one year period.

Exit Signs:

MVU offers rebates when replacing older incandescent or fluorescent exit signs with LED or Photo-Luminescent exit signs. The rebate for exit sign replacement is \$20 per fixture when meeting the following criteria:

- Exit signs shall be LED or Photo-Luminescent and replace older incandescent or fluorescent exit signs.
- Qualifying exit signs must meet City of Moreno Valley fire and building codes.

COMMERCIAL CENTRAL AC & HEAT PUMP TUNE UP

Performed on existing central air conditioners or existing heat pump systems: \$75 per AC or Heat Pump Unit. Limit 1 per household per year. Systems must be at least one year old to be eligible. Contractor must be NATE Certified.

To qualify for rebate the service must be performed by a NATE Certified Technician. The Tune up must include: checking and correcting the unit's refrigerant pressure and tubing, checking and adjusting belt tension, cleaning and lubricating the indoor blower unit, replacing filters, cleaning inside the "A" coil, and checking the thermostat, wiring and other electric parts.

A receipt from a NATE Certified, licensed contractor stating that the above work was completed must be provided.







MVU will pay \$0.07 per kilowatt-hour saved over a one year period.

COMMERCIAL HEATING, VENTILATION, AND AIR CONDITIONING (HVAC) RETROFITS

MVU will provide rebates based on the efficiency rating of the HVAC unit purchased. The higher the SEER, the greater the rebate. Qualifying units are evaluated based on AHRI product certification ratings.

As of January 1, 201	5, Central A/C must be a	minimum of 15 SEER to	o qualify for Rebate.
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	Measure	Requirements	Limit per 5 Years	Rebate Amount, if purchased in the City	Rebate Amount, if purchased online or outside the City
Γ	Central A/C &	15 SEER to 15.9 SEER	2	\$140 per Ton	\$120 per Ton
H	Heat Pumps				
	Central A/C &	16+ SEER	2	\$160 per Ton	\$140 per Ton
ŀ	Heat Pumps				

Paid contractor receipt required indicating brand and model number plus copy of AHRI Certificate. For more information, please visit <u>www.ahridirectory.org</u>.

CHILLER RETROFITS

MVU will pay \$0.05 per kilowatt-hour saved over a one year period for customers who elect to perform an early retirement of their inefficient equipment and install a new unit that exceeds Title 24 requirements. If replacing equipment that is no longer operational, rebates will be determined based on energy-savings exceeding Title 24 requirements.

THERMAL ENERGY STORAGE

Thermal Energy Storage (TES) is a method of shifting the demand of small commercial air conditioning systems from peak energy demand times to off-peak hours. TES systems make ice during off-peak hours and use the stored thermal energy during peak demand hours to provide cooling. The incentive is \$800 per kilowatt of demand shifted to off-peak hours.

MISCELLANEOUS ENERGY-SAVING RETROFITS

The vast majority of business retrofit projects will fall into the categories listed above. For those energy-saving projects that don't fall neatly into one of the above categories, yet will meet the criteria of this program, MVU will pay \$0.05 per kilowatt-hour saved over a one year period. See the Custom Rebate Program.

MOTOR REPLACEMENTS

MVU will provide incentives for premium efficiency motors as determined by the standards established by the U. S. Department of Energy's Federal Energy Management Program. Motors covered under this program must be new, three phase, induction motors, NEMA Design A & B, from at least 1 hp in size to 200 hp ODP or TEFC motors with 1,200, 1,800 or 3,600 RPM and operate at least for 2,000 hours per year. These motors are used for HVAC fans, pumping and conveyance applications and are based on California's Title 24 standards. The minimum nominal full-load motor efficiencies and incentives for the permanently wired, three-phase motors are listed on the next page:



	OPEN DRIP PROOF (ODP)						
		Speed (RPM) Customer					
SIZE HP	1200	1800	3600	Incentive			
	N	EMA Nominal Efficie	ncy	(\$/Motor)			
1	82.5%	85.5%	77.0%	\$35			
1.5	86.5%	86.5%	84.0%	\$35			
2	87.5%	86.5%	85.5%	\$35			
3	88.5%	89.6%	85.5%	\$35			
5	89.5%	89.5%	86.5%	\$50			
7.5	90.2%	91.0%	88.5%	\$60			
10	91.7%	91.7%	89.5%	\$70			
15	91.7%	93.0%	90.2%	\$80			
20	92.4%	93.0%	91.0%	\$90			
25	93.0%	93.6%	91.7%	\$135			
30	93.6%	94.1%	91.7%	\$230			
40	94.1%	94.1%	92.4%	\$300			
50	94.1%	94.5%	93.0%	\$320			
60	94.5%	95.0%	93.6%	\$355			
75	94.5%	95.0%	93.6%	\$540			
100	95.0%	95.4%	93.6%	\$540			
125	95.0%	95.4%	94.1%	\$945			
150	95.4%	95.8%	94.1%	\$1,260			
200	95.4%	95.8%	95.0%	\$1,260			

TOTALLY ENCLOSED FAN COOLED						
		Customer				
SIZE HP	1200	Speed (RPM) Custom 1800	3600	Incentive		
		EMA Nominal Efficie		(\$/Motor)		
1	82.5%	85.5%	77.0%	\$35		
1.5	87.5%	86.5%	84.0%	\$35		
2	88.5%	86.5%	85.5%	\$35		
3	89.5%	89.5%	86.5%	\$45		
5	89.5%	89.5%	88.5%	\$50		
7.5	91.0%	91.7%	89.5%	\$60		
10	91.0%	91.7%	90.5%	\$70		
15	91.7%	92.4%	91.0%	\$80		
20	91.7%	93.0%	91.0%	\$90		
25	93.0%	93.6%	91.7%	\$135		
30	93.0%	93.6%	91.7%	\$230		
40	94.1%	94.1%	92.4%	\$300		
50	94.1%	94.5%	93.0%	\$320		
60	94.5%	95.0%	93.6%	\$355		
75	94.5%	95.4%	93.6%	\$540		
100	95.0%	95.4%	94.1%	\$740		
125	95.0%	95.4%	95.0%	\$945		
150	95.8%	95.8%	95.0%	\$1,260		
200	95.8%	96.2%	95.4%	\$1,260		

PROGRAM PARTICIPATION INFORMATION TERMS & CONDITIONS – THE FINE PRINT

- Rebates will be paid to the customer of record or the owner of the property and can not be assigned to a
 contractor or other third party. The customer of record is the primary or secondary name on the electric service account.
- Rebates are for existing homes and businesses only with the exception of the participants in the New Construction Program.
- · Limited funds. Rebates are limited, not guaranteed and may be terminated without prior notice.
- Applications for rebates totaling \$5,000 or more require pre-approval from MVU. All measures must be installed and rebate applications postmarked no later than 30 days past from the end of the Fiscal Year or July 31, 2016.
- Rebates are capped at 50% of the cost of the measure with the exception of the Custom Program which is capped at 25% of the cost of the installed measure. The maximum allowable rebate total for any fiscal year is \$5,000 for residential customer sites and \$25,000 for business customer sites, except as approved by the City Manager, subject to approval by the City Council.
- The MVU Energy Efficiency Program is a Fiscal Year Program and thus the term "annually" or "fiscal year" for this program means from July 1 to June 30 of the program year.
- Rebate check time frame: If all program requirements are met, a rebate check is generally mailed within 6 to 8 weeks, unless the application is selected for inspection, which may take additional time. Incomplete applications will not be processed.
- Keep copies: Customers are advised to keep a copy of their completed application with required documentation (including receipts, invoices, etc.) for their records.
- Licensed Contractor Required: If replacing a Heating Ventilation and Air Conditioning (HVAC) system or installing attic insulation, these projects must be completed by a licensed contractor.
- Rebate frequency: A customer may only receive a rebate for the same product at the frequency indicated in the charts for this section or program description language.
- NEM customers: Net energy metered (self-generating) customer's rebate amount will be determined by the
 percentage of their total energy usage that is not offset by their photovoltaic system. For example, if only 25% of an
 NEM customer's energy is supplied by MVU then their incentive is reduced to 25% of the rebate amount listed on
 the application.
- Building permit requirements. Building permits are a requirement for certain projects, including the replacement of a Heating, Ventilation and Air Conditioning (HVAC) systems. Failure to apply for a building permit, when one is required, can result in a fine from the City building department and disqualification for receipt of rebate. Call the City building department for more information.
- The equipment must be new and installed at the residence or business service address listed on the application prior to submittal of an application. Resale units, units leased, rebuilt, rented, won as a prize or partially retrofitted units do not qualify.

- To receive a rebate, customers must allow an onsite inspection if requested. The rebate will not be paid if
 participation in any required pre-payment verification is refused. Projects may be selected for evaluation studies
 and/or program measurement by external contractors appointed by MVU. These types of studies are
 used to analyze current program performance and improve future programs.
- The selection, purchase, installation and ownership and maintenance of the product or improvement listed on the application is the sole responsibility of the customer and the customer's supplier, installer or contractor who provided the products or improvements is not an agent or representative of MVU. With respect to the measures a customer may choose to install, MVU makes no warranty, whether expressed or implied, including warranty of merchantability or fitness for any particular purpose. MVU has no liability whatsoever concerning the measures installed or the workmanship of any third parties.
- By participating in the rebate program, the customer agrees to continue using the incentivized equipment for the service life of the product (as per manufacturer's recommendations) or for five years, whichever is less. If the customer does not comply with this requirement, MVU has the right to seek a refund for a prorated amount of the original incentive initially paid to the customer. Under no circumstances will rebates exceed 50 percent of the purchase price of the item. For purposes of the commercial program the "purchase price" includes unit cost plus installation labor. Customers who self-install may not charge installation labor. This charge applies to vendor labor only. Sales tax is not included in the item's purchase price.
- The customer must provide proof-of-purchase for all equipment for which they are applying for a rebate with each rebate application. This documentation should include all of the following information: Customer name and address of installation; Text description of each type of equipment installed; Make or brand name and model number; Serial number (if applicable); Quantity installed; Cost per unit; Sales tax; Date of purchase; Vendor contact information (if applicable); and Receipt/invoice that shows fully paid.

TAX LIABILITY—Rebates and incentives may be taxable. Customers are urged to consult their tax advisor concerning the taxability of rebates. MVU is not responsible for any taxes that may be imposed on the customer as a result receiving a rebate.



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