

**Savings Targets**

Estimated Savings				
Year	2008	2009	2010	Total
MWH	3,596	5,472	7,013	16,081
MW	0.7	1.1	1.5	3.3

Estimated Savings - ComEd				
Year	2008	2009	2010	Total
MWH	2,628	4,022	5,169	11,820
MW	0.5	0.8	1.1	2.5

Estimated Savings - Ameren				
Year	2008	2009	2010	Total
MWH	968	1,449	1,844	4,261
MW	0.2	0.3	0.4	0.9

Energy savings are based on #CFLs sold times an average of 78 kWh/CFL.

**Other Program Metrics**

Number of schools recruited, bulbs sold, number of school assembly presentations, and energy saved compared to school year 2006-07: 15 schools participating, 6502 CFLs sold, annual energy savings of 503,778 kWh.

<b>PROGRAM NAME</b>	<b>Public Sector Retro-Commissioning Program</b>
<b>Objective</b>	Identify and implement low cost tune-ups and adjustments that improve the efficiency of existing public buildings' operating systems by returning them to intended operation or design specifications, with a focus on building controls and HVAC systems.
<b>Target Market</b>	The program will be targeted to Public Sector customers, including units of local government, K-12 school districts, community colleges, public universities, and State buildings. All targeted customers taking delivery service from ComEd or Ameren are eligible for this program regardless of their choice of supplier.
<b>Program Duration</b>	Beginning January 1, 2009 and continuing throughout the rest of the three-year EEPS plan period.
<b>Program Description</b>	<p>Retro-commissioning (RCx) services will be delivered through a network of commissioning providers operating in ComEd and Ameren's service territories that have been trained in program protocols and participation processes. For smaller facilities, commissioning providers will conduct a targeted assessment of areas with substantial energy savings opportunities such as packaged HVAC units. Larger facilities will be eligible to receive a more comprehensive assessment of building systems and controls. To motivate participation, but also ensure that customers are invested in the process, DCEO will provide cost-sharing for the cost of the RCx study. Financial incentives covering up to 50% of the incremental measure cost will also be provided to assist in overcoming first-cost barriers to implement RCx study recommendations.</p> <p>The RCx program will include a strong customer education component to promote the value of RCx services, targeting senior management decision-makers as well as facility operations/maintenance staff. Such education will be provided through program marketing activities, and also be supported through DCEO's market transformation efforts such as Building Operator Certification (BOC) training. Educational program components will promote participation by emphasizing the value of the RCx process, and also help to ensure savings persistence by promoting improved operations and maintenance practices.</p>
<b>Eligible Measures</b>	<p>RCx measures used for program planning purposes include chilled and hot water loop temperature controls, cleaning of air-cooled condenser coils, time clock controls for package systems, and calibration and other system adjustments.</p> <p>DCEO reserves the right to revise eligible measures as needed in accordance with current market conditions, technology development, EM&amp;V results, and program implementation experience.</p>

### Implementation Strategy

The program will be administered by DCEO or an implementation contractor selected through an RFP process. Key elements of the RCx program implementation strategy include:

- **Trade ally recruitment and training:** Commissioning providers will be the program's key delivery mechanism as they promote RCx services and available incentives to their customers. Commissioning providers will be recruited to participate in training sessions to inform them about program incentives, participation processes, RCx protocols, and requirements. Trade allies actively participating in the RCx program and other program offerings will receive regular communications about program activities and changes to ensure they are informed and engaged participants.
- **Public sector participant recruitment:** Participants will be recruited by program staff as well as trade allies.
- **RCx study:** During the study phase, the commissioning provider will conduct a facility assessment to diagnose problems and make recommendations for minor low-cost adjustments that can be made immediately, as well as recommendations for more substantial improvement opportunities, including an assessment of cost, savings, and payback. Where applicable, the RCx study may include an assessment of energy savings opportunities eligible for incentives through DCEO's program offerings, and in all such cases the incentive levels established by those programs will be used.
- **Study review:** The program administrator will review the RCx study and determine implementation incentives based on projected savings.
- **Project implementation:** It will be the responsibility of the customer to implement those RCx study recommendations that have received program approval and are eligible for implementation incentives.
- **Project verification:** DCEO will reserve the right to site-verify installations prior to or after approval and payment of implementation incentives.

### Marketing Strategy

The program will work through appropriate local and regional associations to advertise the availability of the program. Direct mailings, presentations at local events and meetings and newsletter articles will be used. The program will contact RCx contractors to arrange individual meet-and-train sessions wherein program guidelines and incentive structures will be addressed. The contractors will incorporate the program information in sales presentations to prospective clients in much the same way that we expect the Prescriptive and Custom Incentive programs to be marketed. ComEd and Ameren will also let their public sector customers know that this program is available.

**Incentive Strategy**

DCEO will provide up to 50% cost sharing for the cost of the RCx assessment or study, up to a per-project cap of \$15,000. Implementation incentives will be offered on a \$/kWh basis covering up to 50% of the incremental cost of implementing recommended energy efficiency measures. In cases where a project includes measures eligible for incentives through DCEO's other public sector programs, the incentive levels established by those programs will be used.

As the RCx program evolves beyond the initial ramp-up period and ongoing EM&V activities track program performance, DCEO may adjust incentive levels. DCEO also reserves the right to modify the incentive levels as needed in accordance with current market development, technology development, EM&V results and program implementation experience.

**Milestones**

- **February 2008:** Commission approval
- **March-May 2008:** Implementation contractor RFP and selection, if needed
- **June-July 2008:** Final program design and protocol development
- **August-December 2008:** Trade ally recruitment & training
- **January 2009:** Program launch

**EM&V Requirements**

To minimize program costs, anticipated energy savings will be estimated and agreed on for all appropriate projects through a rigorous quality assurance/quality control (QA/QC) process prior to the offer of an implementation incentive. After implementation of the efficiency measures, projects will be subject to post inspection to confirm proper installation and conformance with the measure specification. A statistically selected sample of implemented projects will be evaluated to confirm savings persistence. For those measures where reliable estimates of savings can not be made prior to implementation, pre and post monitoring may be used to determine savings.

DCEO supports the proposed collaborative process to review the evaluation, measurement, and verification process and other aspects of the EEPS programs. Additional EM&V requirements will be added to the program if recommended through the collaborative process or by the EM&V contractor.

**Administrative Requirements**

Program manager responsibilities will include final program design and RCx protocol development, marketing materials development, program marketing and outreach activities, management and oversight of the commissioning provider network, QA/QC activities, tracking and reporting, and program goal achievement. DCEO intends to administer the program, but may seek contractor assistance.

**Estimated Participation**

The following participation estimates have been used for planning purposes, however, actual participation levels will vary.

Measure	2008 Participation	2009 Participation	2010 Participation
Projects	120	120	240

**Estimated Budget**

Estimated Budget				
Budget Category	2008	2009	2010	Total
Incentives	\$200,000	\$200,000	\$400,000	\$800,000
Admin & Implementation	\$100,000	\$100,000	\$100,000	\$300,000
Marketing	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$300,000</b>	<b>\$300,000</b>	<b>\$500,000</b>	<b>\$1,100,000</b>

Estimated Budget - ComEd				
Budget Category	2008	2009	2010	Total
Incentives	\$148,108	\$147,494	\$295,458	\$591,061
Admin & Implementation	\$74,054	\$73,747	\$73,865	\$221,666
Marketing	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$222,163</b>	<b>\$221,241</b>	<b>\$369,323</b>	<b>\$812,726</b>

Estimated Budget - Ameren				
Budget Category	2008	2009	2010	Total
Incentives	\$51,892	\$52,506	\$104,542	\$208,939
Admin & Implementation	\$25,946	\$26,253	\$26,135	\$78,334
Marketing	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$77,837</b>	<b>\$78,759</b>	<b>\$130,677</b>	<b>\$287,274</b>

**Savings Targets**

Estimated Savings				
Year	2008	2009	2010	Total
MWH	3,040	3,040	6,080	12,160
MW	0.3	0.3	0.6	1.2

Estimated Savings - ComEd				
Year	2008	2009	2010	Total
MWH	2,222	2,235	4,482	8,938
MW	0.2	0.2	0.4	0.9

Estimated Savings - Ameren				
Year	2008	2009	2010	Total
MWH	818	805	1,598	3,222
MW	0.1	0.1	0.2	0.3

**Other Program Metrics**

The principal program metrics are the annual energy and demand savings targets, and delivery at or below budgeted cost. Secondary metrics include RCx studies conducted and total number of projects proceeding with implementation of RCx recommendations.

<b>PROGRAM NAME</b>	<b>Low Income New Construction and Gut Rehab</b> (based on current DCEO <i>Energy Efficient Affordable Housing Construction Program</i> )
<b>Objective</b>	Identify and implement highly cost-effective low-income electric energy efficiency opportunities present only in gut-rehab and new construction projects Utilize and extend existing program delivery structure
<b>Target Market</b>	For-profit and not-for-profit developers of affordable housing as well as other owners of affordable housing for low income renters and owners with incomes at or below 150% of the poverty level.
<b>Program Duration</b>	The <i>Illinois Energy Efficient Affordable Housing Construction Program (EEAHCP)</i> was initiated in 1988 and would continue throughout and beyond the period covered by the three-year EEPS plan.
<b>Program Description</b>	The new program is identical to the existing EEAHCP with the addition of two items: <ul style="list-style-type: none"><li>• Grants will be provided to both for-profit and not-for-profit affordable housing developers (only not-for-profit developers are currently eligible under EEAHCP), and</li><li>• An additional electric energy efficiency measure will be added to the list of measures required by the program – 90% AFUE furnaces must have an electrically efficient air handler (as noted elsewhere, gas-related costs will be borne by other funding sources).</li></ul> Grantees must accept the full set of efficiency measures for funding; funding is not provided for individual measures.

**Eligible Measures**

Measure	Units	KWh/unit
Energy Star Refrigerator <sup>1</sup>	79	0.009
6 interior FL fixtures & 2 exterior FL fixtures <sup>1</sup>	782	0.089
SEER 14 central air conditioner w/ programmable thermostat <sup>1</sup>	366	0.610
Reduce required tonnage as a result of thermal envelope improvements <sup>2</sup>	432	0.720
Energy Star dishwasher <sup>1</sup>	62	0.007
Energy Star rated bathroom exhaust fan <sup>3</sup>	89	0.010
90% AFUE furnace with efficient air handler <sup>4</sup>	400	0.046

<sup>1</sup> – ENERGY STAR savings calculator

<sup>2</sup> – Cooling capacity reduced from 36,000 Btuh (3 tons) to 24,000 Btuh (2 tons) as a result of the following envelope improvements:

- Improve sidewall insulation to R21 from R10
- Improve roof cavity insulation to R44 from R30 (includes use of ENERGY STAR compliant roofing when appropriate)
- Improve windows from standard double-glazed to double-glazed low-E with a solar heat gain coefficient no higher than 0.55

<sup>3</sup> – Typical bathroom exhaust fan rated at 60 CFM and 150 watts; ENERGY STAR rated fan at 90 CFM and 28 watts; assume 2 hours per day use

<sup>4</sup> – Furnaces must be designated as an electrically efficient furnace by the Gas Appliance Manufacturers Association (GAMA).

DCEO reserves the right to modify the list of eligible measures as needed in accordance with current market development, technology development, EM&V results and program implementation experience.

**Implementation Strategy**

The program provides funding for new single-family and multi-family construction as well as multi-family gut rehab projects. As a result of funding over 5,000 affordable housing units since 1988, the Program is well known and utilized in the affordable housing field. Groups such as the Illinois Housing Development Authority, Chicago Department of Housing, and the Community Investment Corporation as well as project architects encourage affordable housing developers to seek energy grants from this program. Combined with the expanded level of funding that will be available, close cooperation with these groups will be critical to expanding the implementation of energy efficiency to additional new construction and gut rehab projects.

**Marketing Strategy**

Those who regularly participate in EEAHCP, including the Illinois Housing Development Authority (IHDA) and IHDA's related partners, will be utilized to market the program changes, particularly the scope expansion to for-profit developers.

**Incentive Strategy**

Program applicants must agree to implement the full set of program measures. The average grant provided during the past 5 years was \$1,817/ housing unit. However, the program requirements have been increased and the estimated "Incentive Level per Unit" shown below reflects this increase.

Measure	Incentive per Unit
Energy Star Refrigerator	
6 interior FL fixtures & 2 exterior FL fixtures	
SEER 14 central air conditioner w/ programmable thermostat	
Reduce required tonnage as a result of thermal envelope improvements	
Energy Star dishwasher	
Energy Star rated bathroom exhaust fan	
90% AFUE furnace with efficient air handler	
<b>Total Package</b>	<b>\$2,300*</b>

\*In addition, projects will be eligible for \$700 in incentives from other resources to pay for incremental costs of efficient furnace and hot water heater.

DCEO reserves the right to modify the incentive levels as needed in accordance with current market development, technology development, EM&V results and program implementation experience.

**Milestones**

- **February 2008:** Commission approval
- **February-May 2008:** Begin marketing expanded program and finalize program guidelines
- **June 2008:** Launch expanded program

**EM&V Requirements**

Currently, EEAHCP includes annual fuel bill analysis for the first three years following occupancy of units. Field inspections are scheduled before the sidewalls are closed in for insulation and air sealing inspection. Another inspection is performed at substantial completion and at this time a Blower Door test is performed to measure air leakage. These practices will be maintained with this program.

DCEO supports the proposed collaborative process to review the evaluation, measurement, and verification process and other aspects of the EEPS programs. Additional EM&V requirements will be added to the Program if recommended through the collaborative process or by the EM&V contractor.

**Administrative Requirements**

Based on existing EEAHCP requirements.

**Estimated Participation**

Measure	2001 Installations	2002 Installations	2003 Installations
Energy Star Refrigerator	652	1087	1957
6 interior FL fixtures & 2 exterior FL fixtures	652	1087	1957
SEER 14 central air conditioner w/ programmable thermostat	652	1087	1957
Reduce required tonnage as a result of thermal envelope improvements	652	1087	1957
Energy Star dishwasher	652	1087	1957
Energy Star rated bathroom exhaust fan	652	1087	1957
90% AFUE furnace with efficient air handler	652	1087	1957

The estimated number of "measures" implemented matches the number of housing units funded by the program since all of the program measures must be implemented to receive an energy grant. The number of units funded annually over the past five years averages nearly 500. The grants have been limited to not-for-profit housing developers and demand for these grants by developers has been increasing. It is anticipated that when the program is opened to both for-profit and not-for-profit affordable housing developers, the demand will be sufficient to quadruple the current number of units funded over time. The actual number of projects will vary depending on the applications received and size of the projects.

**Estimated Budget**

Estimated Budget				
Budget Category	2008	2009	2010	Total
Incentives	\$1,500,000	\$2,500,000	\$4,500,000	\$8,500,000
Admin & Implementation	\$48,387	\$60,000	\$81,176	\$189,564
Marketing	\$0	\$0	\$0	\$0
Total	\$1,548,387	\$2,560,000	\$4,581,176	\$8,689,564

Estimated Budget - ComEd				
Budget Category	2008	2009	2010	Total
Incentives	\$1,110,813	\$1,843,672	\$3,323,908	\$6,278,393
Admin & Implementation	\$35,833	\$44,248	\$59,961	\$140,041
Marketing	\$0	\$0	\$0	\$0
Total	\$1,146,645	\$1,887,920	\$3,383,868	\$6,418,434

Estimated Budget - Ameren				
Budget Category	2008	2009	2010	Total
Incentives	\$389,187	\$656,328	\$1,176,092	\$2,221,607
Admin & Implementation	\$12,554	\$15,752	\$21,216	\$49,522
Marketing	\$0	\$0	\$0	\$0
Total	\$401,742	\$672,080	\$1,197,308	\$2,271,130

This budget will be targeted to affordable housing for households with incomes at or below 150% of the poverty level, to fulfill the EEPS legislative requirement for a portfolio of electric efficiency programs targeted to such households. Other funding sources – such as the Energy Efficiency Trust Fund, settlements with natural gas utilities, the U.S. Department of Energy, and the Illinois Clean Energy Community Foundation – will be used to fund affordable housing units occupied by low income households with incomes exceeding 150% of the poverty level, affordable housing units located outside the ComEd and Ameren electric service territories, and energy efficiency measures that reduce natural gas consumption in these housing units.

**Savings Targets**

Estimated Savings				
Year	2008	2009	2010	Total
MWH	0	1,095	1,826	2,921
MW	0.0	0.7	1.2	2.0

Estimated Savings - ComEd				
Year	2008	2009	2010	Total
MWH	0	808	1,349	2,156
MW	0.0	0.5	0.9	1.5

Estimated Savings - Ameren				
Year	2008	2009	2010	Total
MWH	0	288	477	765
MW	0.0	0.2	0.3	0.5

It is assumed that the electricity savings will occur in the year following the year in which the projects are funded to account for the time it takes developers to complete construction and the renters or homeowners to occupy the housing.

**Other Program Metrics**

Number of affordable housing units developed.

<b>PROGRAM NAME</b>	<b>Low Income Energy Efficient Moderate Rehab</b>
<b>Objective</b>	Identify and maximize cost-effective energy efficiency opportunities present in moderate and minor rehab of affordable housing Utilize and expand existing program delivery structures
<b>Target Market</b>	For-profit and not-for-profit developers of affordable housing as well as owners of affordable housing for low income renters and owners with incomes at or below 150% of the poverty level.
<b>Program Duration</b>	New program begins in June 2009 and continues through rest of EEPS plan period
<b>Program Description</b>	<p>This program is designed to complement the existing <i>Energy Efficient Affordable Housing Construction Program</i> (EEAHCP). The EEAHCP is designed for new construction and gut rehab. Under EEAHCP, a grant recipient must implement the complete set of energy standards. It is generally impossible to implement this set of standards in a moderate rehab project since the building is generally in better shape as is reflected in the rehab work scope. For example, new double glazed low-E windows, a new heating system and R19 wall insulation are required in the EEAHCP. In a moderate rehab project, the existing windows or heating system may not require replacement or it may be impossible to install R19 sidewall insulation.</p> <p>A number of multi-family moderate rehab projects have been denied funding under the EEAHCP over the past few years due to the inability to incorporate the complete set of energy standards. The Low Income Moderate Rehab Program is designed to capitalize on the missed opportunities in moderate multi-family building rehab projects and maximize energy savings in these buildings, with an emphasis on capturing kWh savings.</p>

## Eligible Measures

Measure	kWh/m <sup>2</sup>	kWh/m <sup>2</sup>
1. Energy Star Refrigerator <sup>1</sup>	79	0.009
2. Six interior FL fixtures & two exterior FL fixtures <sup>1</sup>	782	0.089
3. Energy Star rated bathroom exhaust fan <sup>2</sup>	89	0.010
4. Energy Star dishwasher <sup>1</sup>	62	0.007
5. SEER 16 central air conditioner w/ programmable thermostat <sup>3</sup>	528	0.880
6. Energy Star rated room air conditioners <sup>4</sup>	176	0.293
7. Reduce required tonnage as a result of thermal envelope improvements <sup>5</sup>	216	0.360
8. 90% AFUE furnace with efficient air handler <sup>6</sup>	400	0.046

<sup>1</sup> – ENERGY STAR savings calculator

<sup>2</sup> – Typical bathroom exhaust fan rated at 60 CFM and 150 watts; ENERGY STAR rated fan at 90 CFM and 28 watts; assume 2 hours per day use

<sup>3</sup> – only provided when air conditioning is present or will be added; ENERGY STAR savings calculator; upgrade SEER from 13 to 16; 3-tons of cooling capacity

<sup>4</sup> – only when room air conditioners are present or will be added; ENERGY STAR savings calculator based on a conventional AC unit with an EER of 8.8 and an ENERGY STAR unit with an EER of 11.5

<sup>5</sup> – The reduction in cooling capacity will be determined as a result thermal envelope improvements. Depending upon rehab work scope, these improvements may include:

- Improved sidewall insulation to cost effective level
- Improved roof cavity insulation to cost effective level (includes use of ENERGY STAR compliant roofing when appropriate)
- Improved window thermal efficiency (replacement, storm windows, film coatings, etc).

<sup>6</sup> - Furnaces must be designated as an electrically efficient furnace by the Gas Appliance Manufacturers Association (GAMA).

DCEO reserves the right to revise the list of eligible measures as needed in accordance with current market development, technology development, EM&V results and program implementation experience.

**Implementation Strategy**

The program will be open to affordable housing rehab projects that cannot implement the complete set of energy standards used in EEAHCP. Rehab plans and work scopes will be reviewed. Measures 1, 2 and 3 will be required in all cases. Measure 4 will be required if dishwashers are part of the rehab work scope. If air conditioning is being provided, requirements for either 5 or 6 must be met. In addition, improvements to the thermal shell (measure 7) will be studied to determine cost-effective insulation levels and window unit thermal and SHGC values. Measure 8 will be required when new forced air heating systems are being used.

Groups such as the Illinois Housing Development Authority, various municipal housing departments and authorities, and the Community Investment Corporation as well as project architects would be expected to encourage affordable housing developers to seek energy grants from this program as they do currently for EEAHCP. Close cooperation with these groups will be critical to expanding the implementation of energy efficiency to affordable housing moderate rehab projects.

**Marketing Strategy**

A series of workshops will be held for developers, contractors and architects who are not familiar with the EEAHCP guidelines and standards. Those who regularly participate in EEAHCP, including the Illinois Housing Development Authority (IHDA) and IHDA's partners, will be utilized to help market the program changes, particularly the scope expansion to for-profit developers and moderate rehab projects.

**Incentive Strategy**

Work scopes will be reviewed as discussed under "Implementation Strategy". Incentive levels will vary depending upon measures recommended for implementation. In general, the incentive level will approximate the incremental cost to upgrade to the specific measure.

DCEO reserves the right to modify the incentive levels as needed in accordance with current market development, technology development, EM&V results and program implementation experience.

Measure	Incentive per Unit
1. Energy Star Refrigerator	\$100
2. Six interior FL fixtures & two exterior FL fixtures	\$150
3. Energy Star rated bathroom exhaust fan	\$150
4. Energy Star dishwasher	\$100
5. SEER 16 central air conditioner w/ programmable thermostat	\$500
6. Energy Star rated room air conditioners	\$75
7. Reduce required tonnage as a result of thermal envelope improvements	\$1,500
8. 90% AFUE furnace with efficient air handler	\$200

**Milestones**

- February 2008: Commission approval
- June-December 2008: Develop program guidelines
- January-June 2009: Begin marketing program
- June 2009: Launch program

**EM&V Requirements**

Currently, EEAHCP includes annual fuel bill analysis for the first three years following occupancy of units. Field inspections are scheduled before the sidewalls are closed in for insulation and air sealing inspection. Another inspection is performed at substantial completion and at this time a Blower Door test is performed to measure air leakage. These practices will be maintained with this program.

DCEO supports the proposed collaborative process to review the evaluation, measurement, and verification process and other aspects of the EEPS programs. Additional EM&V requirements will be added to the program if recommended through the collaborative process or by the EM&V contractor.

**Administrative Requirements**

Based on existing EEAHCP.

**Estimated Participation**

Measure	2008 Installations	2009 Installations	2010 Installations
1. Energy Star Refrigerator	0	703	937
2. Six interior FL fixtures & two exterior FL fixtures	0	701	934
3. Energy Star rated bathroom exhaust fan	0	611	815
4. Energy Star dishwasher	0	407	543
5. SEER 16 central air conditioner w/ programmable thermostat	0	580	774
6. Energy Star rated room air conditioners	0	305	407
7. Reduce required tonnage as a result of thermal envelope improvements	0	511	682
8. 90% AFUE furnace with efficient air handler	0	562	749

These are estimates of the numbers of various measures that will be installed, based on past experience with applicants to EEAHCP. The actual numbers will vary and depend on the particular rehab work scopes that are received and approved.

**Estimated Budget**

<b>Estimated Budget</b>				
<b>Budget Category</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>Total</b>
<b>Incentives</b>	\$0	\$1,500,000	\$2,000,000	\$3,500,000
<b>Admin &amp; Implementation</b>	\$0	\$36,000	\$36,078	\$72,078
<b>Marketing</b>	\$0	\$0	\$0	\$0
<b>Total</b>	\$0	\$1,536,000	\$2,036,078	\$3,572,078

<b>Estimated Budget - ComEd</b>				
<b>Budget Category</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>Total</b>
<b>Incentives</b>	\$0	\$1,106,203	\$1,477,292	\$2,583,496
<b>Admin &amp; Implementation</b>	\$0	\$26,549	\$26,649	\$53,198
<b>Marketing</b>	\$0	\$0	\$0	\$0
<b>Total</b>	\$0	\$1,132,752	\$1,503,941	\$2,636,694

<b>Estimated Budget - Ameren</b>				
<b>Budget Category</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>Total</b>
<b>Incentives</b>	\$0	\$393,797	\$522,708	\$916,504
<b>Admin &amp; Implementation</b>	\$0	\$9,451	\$9,429	\$18,880
<b>Marketing</b>	\$0	\$0	\$0	\$0
<b>Total</b>	\$0	\$403,248	\$532,137	\$935,385

This budget will be targeted to affordable housing for households with incomes at or below 150% of the poverty level, to fulfill the EEPs legislative requirement for a portfolio of electric efficiency programs targeted to such households. Other funding sources – such as the Energy Efficiency Trust Fund, settlements with natural gas utilities, the U.S. Department of Energy, and the Illinois Clean Energy Community Foundation – will be used to fund affordable housing units occupied by low income households with incomes exceeding 150% of the poverty level, affordable housing units located outside the ComEd and Ameren electric service territories, and energy efficiency measures that reduce natural gas consumption in these housing units.

**Savings Targets**

Estimated Savings				
Year	2008	2009	2010	Total
MWH	0	0	1,048	1,048
MW	0.0	0.0	0.7	0.7

Estimated Savings - ComEd				
Year	2008	2009	2010	Total
MWH	0	0	774	774
MW	0.0	0.0	0.5	0.5

Estimated Savings - Ameren				
Year	2008	2009	2010	Total
MWH	0	0	274	274
MW	0.0	0.0	0.2	0.2

It is assumed that the electricity savings will occur in the year following the year in which the projects are funded to account for the time it takes developers to complete the renovations and the renters or homeowners to occupy the housing.

**Other Program Metrics**

Number of affordable housing units developed.

<b>PROGRAM NAME</b>	<b>Low Income Energy Efficient Single-family Remodeling Program</b>
<b>Objective</b>	Achieve electricity savings in owner-occupied units to be remodeled or rehabbed Partner with existing and new non-DCEO managed rehab programs to obtain electricity savings
<b>Target Market</b>	Low income homeowners looking to rehab their homes Contractors/developers rehabbing 1 to 4 unit buildings to sell
<b>Program Duration</b>	New program to start in 2008 and continue through the period covered by the three-year EEPS plan.
<b>Program Description</b>	<p>A significant amount of low-income single-family housing is in need of rehab and repair. Programs have been and will continue to be created to address this need. These Programs include, but are not limited to:</p> <ul style="list-style-type: none"> <li>• Neighborhood Housing Services (NHS): NHS purchases single-family homes in need of significant repair. The home is rehabbed and then sold to an income-eligible household.</li> <li>• Shore Bank: Shore Bank has a loan program for homeowners and contractors to rehab single-family homes and small multi-family buildings. The program is targeted to low and moderate income neighborhoods.</li> <li>• Historic Chicago Bungalow Association (HCBA): HCBA has a number of programs for brick bungalow homeowners for repairs and energy efficient upgrades.</li> <li>• Illinois Housing Development Authority (IHDA): Single Family HOME and Affordable Housing Trust Fund programs seeking to enhance the amount and quality of affordable housing in Illinois.</li> <li>• Local Housing Departments or Authorities: Various programs including "Participating Jurisdictions" under the IHDA Home program above.</li> </ul> <p>In many cases, opportunities for energy savings are missed because of insufficient funds. DCEO would partner with these and other organizations with programs that promote home repair and rehab in low-income neighborhoods to capture available electricity savings.</p>

## Eligible Measures

1. Energy Star Refrigerator <sup>1</sup>	79	0.009
2. ENERGY STAR Advanced Lighting Package <sup>2</sup>	663	0.076
3. Energy Star rated bathroom exhaust fan <sup>3</sup>	89	0.010
4. Energy Star dishwasher <sup>4</sup>	62	0.007
5. SEER 16 central air conditioner w/ programmable thermostat <sup>4</sup>	528	0.880
6. Energy Star rated room air conditioners <sup>4,5</sup>	176	0.293
7. Reduce required tonnage as a result of thermal envelope improvements <sup>6</sup>	216	0.360
8. 90% AFUE furnace with efficient air handler <sup>7</sup>	400	0.046

<sup>1</sup> - ENERGY STAR savings calculator

<sup>2</sup> - ENERGY STAR Advanced Lighting Package (ALP) Tier 3; assumes 10 CFL fixtures at 3 hours/day

<sup>3</sup> - Typical bathroom exhaust fan rated at 60 CFM and 150 watts; ENERGY STAR rated fan at 90 CFM and 28 watts; assume 2 hours per day use

<sup>4</sup> - when cooling is present or will be provided

<sup>5</sup> - ENERGY STAR savings calculator based on a conventional AC unit with an EER of 8.8 and an ENERGY STAR unit with an EER of 11.5

<sup>6</sup> - The reduction in cooling capacity will be determined as a result thermal envelope improvements. These improvements include:

- Improve sidewall insulation to cost-effective level
- Improve roof cavity insulation to cost effective level (includes use of ENERGY STAR compliant roofing when appropriate)
- Improve window thermal efficiency (repair, replacement, storm windows, film coatings, etc).

<sup>7</sup> - Furnaces must be designated as an electrically efficient furnace by the Gas Appliance Manufacturers Association (GAMA).

DCEO reserves the right to revise the list of eligible measures as needed in accordance with current market development, technology development, EM&V results and program implementation experience.

### Implementation Strategy

DCEO will partner with private and public organizations that offer homeowner/contractor/developer loan programs to incorporate energy efficiency measures.

### Marketing Strategy

DCEO will develop a marketing strategy in combination with its partners and the partners' affiliates per the Program Description section. A series of workshops will be held for homeowners, developers and contractors about Program requirements.

<b>Incentive Strategy</b>		
	1. Energy Star Refrigerator	\$500 <sup>1</sup>
	2. ENERGY STAR Advanced Lighting Package	\$300 <sup>1</sup>
	3. Energy Star rated bathroom exhaust fan	\$200 <sup>1</sup>
	4. Energy Star dishwasher	\$250 <sup>1</sup>
	5. SEER 16 central air conditioner w/ programmable thermostat	\$500 <sup>2</sup>
	6. Energy Star rated room air conditioners	\$75 <sup>2</sup>
	7. Reduce required tonnage as a result of thermal envelope improvements	\$1,500 <sup>3</sup>
	8. 90% AFUE furnace with efficient air handler	\$200 <sup>2</sup>
	<p><sup>1</sup> – total cost</p> <p><sup>2</sup> – incremental cost</p> <p><sup>3</sup> – estimated grant</p> <p>Grants will be provided to cover 100% of the cost for measures 1, 2, 3 and 4 and will be required in all cases. If air conditioning is being provided, requirements for measure 5 or 6 must be met. Grant will cover the incremental cost to increase to these standards as well as measure 8. A partial grant can be provided to improve the thermal efficiency of the building shell (measure 7). DCEO also reserves the right to modify the incentive levels as needed in accordance with current market development, technology development, EM&amp;V results and program implementation experience.</p>	
<b>Milestones</b>	<ul style="list-style-type: none"> <li>• <b>October-February 2008:</b> Begin discussions with potential partners</li> <li>• <b>February 2008:</b> Commission approval</li> <li>• <b>February-May 2008:</b> Finalize program guidelines and begin marketing program</li> <li>• <b>June 2008:</b> Launch program</li> </ul>	
<b>EM&amp;V Requirements</b>	<p>The Lender or Grantee will conduct their own inspections to insure measures have been installed properly. Field inspections will also be done on a random basis. EM&amp;V process will include annual bill analysis for the first three years following implementation.</p> <p>DCEO supports the proposed collaborative process to review the evaluation, measurement, and verification process and other aspects of the EEPS programs. Additional EM&amp;V requirements will be added to the Program if recommended through the collaborative process or by the EM&amp;V contractor.</p>	
<b>Administrative Requirements</b>	Based on existing EEAHCP requirements and existing administrative requirements of partners.	

**Estimated Participation**

Measure	2008 Installations	2009 Installations	2010 Installations
1. Energy Star Refrigerator	221	369	627
2. ENERGY STAR Advanced Lighting Package	221	368	625
3. Energy Star rated bathroom exhaust fan	209	349	593
4. Energy Star dishwasher	209	349	593
5. SEER 16 central air conditioner w/ programmable thermostat	120	199	339
6. Energy Star rated room air conditioners	58	97	164
7. Reduce required tonnage as a result of thermal envelope improvements	156	259	441
8. 90% AFUE furnace with efficient air handler	158	263	446

These are estimates of the numbers of various measures that will be installed, based on best professional judgment. The actual numbers will vary and depend on the particular circumstances in the homes of applicants.