

Corrected Program Planning Template

2017 – 2020 Programs

GY 7 – 9; EY 10 - 12

Program Applicable for: Ameren _____ ComEd _____ DCEO **x**____
Nicor_____ People’s Gas/North Shore Gas _____

Program Name	Public Sector Retrocommissioning Program
Program Description	<p>The purpose of this Program is to 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. The Retrocommissioning (RCx) Program targets public sector buildings, and services are delivered through a network of commissioning providers 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 controls upgrades and HVAC system improvements. 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, the Department provides the cost of an RCx study, however beforehand customers are required to commit to financing and implementing at least \$10,000 worth of the RCx study recommendations.</p> <p>The Program will also include a strong marketing and customer education component, to promote the value of RCx services, targeting senior management decision-makers as well as facility operations/maintenance staff. These Program components will promote participation by emphasizing the value of the RCx process, and also help ensure savings persistence by promoting improved operations and maintenance practices.</p>
Program Duration	6/17 through 5/20
Delivery Strategy	<p>Key elements of the RCx Program implementation strategy include:</p> <ul style="list-style-type: none"> • <u>Commissioning Contractor Recruitment and Training:</u> Commissioning providers will be the Program's main delivery mechanism to promote RCx services and available incentives to customers. Commissioning providers will be recruited to participate in training sessions that will inform them about program incentives, participation processes, RCx protocols, and requirements. Commissioning providers will receive regular communications about program activities and changes to ensure they are informed and engaged participants. • <u>Customer Recruitment:</u> Public sector customers will be recruited by Program staff, commissioning providers, marketing efforts discussed in more detail below. • <u>RCx Study:</u> 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 Planning Report may include an assessment of energy savings opportunities eligible for incentives through Department's program offerings, and in all such cases the incentive levels established by those programs will be used. • <u>Program Agreement:</u> The Program Agreement includes several components that define the roles and responsibilities of each party, the project goals, and customer information release language. The primary goal is to get reduction measures in-place. One requirement for services is that the customer buy-into the process by committing to spending at least \$10,000 for agreed-upon retro-commissioning measures (those that result in a bundled estimated, simple payback of 1.5 years or less). Measures must be installed within the fiscal year the project is started. For projects that are not completed within one calendar year, the customer will be expected to refund the cost of the retro-commissioning study. Additionally, the agreement acts as a decision point where the customer selects measures from the Planning Report that they wish to pursue

	<p>for further investigation in the next phase.</p> <ul style="list-style-type: none"> • Project Implementation: The Implementation Phase builds upon the Planning Phase, typically including activities such as conducting detailed site assessments, diagnostic testing, and trending analyses to evaluate current facility operating procedures and equipment functionality. In this phase, the commissioning agent works hand-in-hand with the customer's implementation team to fully investigate, implement, and verify (where possible) the recommended measures. The implementation team typically includes the facility engineers and the mechanical, electrical, and controls contractors. • Project Verification: During the Verification Phase, the retro-commissioning service provider evaluates facility trending data (from the building EMS, facility sub-meters, or utility meter) and revisits the site to verify that measures have been properly completed (e.g. new control strategies are functioning properly, repairs have been made, etc). The commissioning agent prepares and submits the Verification Report that summarizes the final findings and impacts from the project. • Mini Retrocommissioning: This program option targets buildings from 50,000 to 120,000 ft², allowing many of the projects not eligible for full RCx to realize substantial savings. RCx provider would identify 'readily achievable' savings opportunities through a quick review of energy use profiles (electric hourly interval data) and inspection of system scheduling (within a building automation system (BAS), programmable thermostat, or equipment timers). This high level screening would have a limited look at other aspects of building control, but be focused primarily on the scheduling of the systems and setpoints. 																																								
Target Market	<p>The target market for full Program services are public sector buildings in Ameren Illinois, ComEd, Ameren Illinois, Nicor, North Shore or Peoples service territories; with accessible building documentation and controls; and approximately more than 150,000 ft² in conditioned floor area. Smaller facilities can qualify for Mini RCx.</p>																																								
Marketing Strategy	<p>The Department and its partners work through appropriate local and state associations to advertise the availability of the Program. Presentations at local events and meetings, webinars, newsletter articles, and if necessary direct mailings will be used. The Program will contact RCx contractors and other Trade Allies, to arrange individual meet-and-train sessions wherein program guidelines and incentive structures will be addressed. The contractors may then incorporate the program information in sales presentations to prospective clients in much the same way that the Standard and Custom Program is marketed. The Department will also cross-promote the Program through Market Transformation initiatives, such as Building Operator Certification and will coordinate with the utilities, to ensure they are aware that this service is available for their public sector accounts.</p>																																								
Eligible Measures	<p>Eligible RCx measures used for program planning purposes include chilled and hot water loop temperature and valve controls, economizer control adjustments and tuning, demand control ventilation, HVAC temperature and scheduling control adjustments, lighting control adjustments, time clock controls for package systems, and calibration and other system adjustments. DCEO reserves the right to revise eligible measures as needed in accordance with current market conditions, technology development, EM&V results, and program implementation experience.</p>																																								
Program Targets	<p>Participation Levels</p> <table border="1" data-bbox="488 1478 1398 1598"> <thead> <tr> <th></th> <th>PY10</th> <th>PY11</th> <th>PY12</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>New Starts</td> <td>49</td> <td>49</td> <td>49</td> <td>147</td> </tr> <tr> <td>Verification</td> <td>33</td> <td>33</td> <td>33</td> <td>99</td> </tr> </tbody> </table> <p>Annual Savings Targets</p> <table border="1" data-bbox="488 1688 1398 1898"> <thead> <tr> <th></th> <th>PY10</th> <th>PY11</th> <th>PY12</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Gross MWh</td> <td>10,032</td> <td>10,032</td> <td>10,032</td> <td>30,095</td> </tr> <tr> <td>New MWh</td> <td>10,132</td> <td>10,132</td> <td>10,132</td> <td>30,396</td> </tr> <tr> <td>Gross Therms</td> <td>594,149</td> <td>594,149</td> <td>594,149</td> <td>1,782,447</td> </tr> <tr> <td>Net Therms</td> <td>570,383</td> <td>570,383</td> <td>570,383</td> <td>1,711,149</td> </tr> </tbody> </table>		PY10	PY11	PY12	Total	New Starts	49	49	49	147	Verification	33	33	33	99		PY10	PY11	PY12	Total	Gross MWh	10,032	10,032	10,032	30,095	New MWh	10,132	10,132	10,132	30,396	Gross Therms	594,149	594,149	594,149	1,782,447	Net Therms	570,383	570,383	570,383	1,711,149
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Program Budget

ELECTRIC	PY10	PY11	PY12	Total
Implementation	\$2,407,500	\$2,407,500	\$2,407,500	\$7,222,500
Incentives	\$0	\$0	\$0	\$0
Total	\$2,407,500	\$2,407,500	\$2,407,500	\$7,222,500
GAS	PY10	PY11	PY12	Total
Implementation	\$837,750	\$837,750	\$837,750	\$2,513,250
Incentives	\$0	\$0	\$0	\$0
Total	\$837,750	\$837,750	\$837,750	\$2,513,250
COMBINED	PY10	PY11	PY12	Total
Implementation	\$3,245,250	\$3,245,250	\$3,245,250	\$9,735,750
Incentives	\$0	\$0	\$0	\$0
Total	\$3,245,250	\$3,245,250	\$3,245,250	\$9,735,750

Cost-Effectiveness Results

	Test Results
TRC	2.45
TRC with NEBs	2.70
UCT	3.30

	Cost Per Unit Saved
Electric	\$.0.24/KWh
Natural Gas	\$1.47/therm

