Compressed Air Retro-Commissioning Application

Compressed Air Retro-commissioning Program goals:

- ☐ Provide financial incentives to support implementation of no- and low-cost energy efficiency improvements (0-2 year payback) to compressed air systems in manufacturing/industrial facilities.
- ☐ Reduce facility operating costs by optimizing the operation of compressed air systems.
- ☐ Provide a road map of energy efficiency opportunities for capital improvement projects (2-12 year payback) to be implemented via the Custom Program.

Does your facility/project qualify?

- ☐ Manufacturing or industrial facility with two or more air compressors (not including backup).
- ☐ Minimum two years since last major upgrade or tune-up.
- ☐ Electric projects: electric delivery service rate DS2, DS3, DS4, or DS6 and Energy Efficiency Programs Charge on Ameren Illinois electric bill for the service point corresponding to the electric project.
- ☐ Estimated project completion date is by December 31, 2026.
- ☐ Final application paperwork must be submitted within 30 days of project completion **or by December 31, 2026, whichever comes first.**

Incentives:

- ☐ **Successful applications will include improvements beyond available Standard Program measures** (leak repair, pressure reduction, storage capacity, VFD, condensate drains, nozzles, filters, heat recovery, dew point dryer controls) though these may be eligible when combined with additional measures such as tune-ups, resolving inappropriate uses, sequence optimization, load/unload setpoints, calibration, etc.
- ☐ Program incentives are provided to defray a portion of the RCx survey cost.
- ☐ Program incentives include a survey incentive and an implementation incentive.
  - ☐ The survey incentive is 80% of the survey cost.
  - ☐ The implementation incentive of $0.02/kWh saved applies to all implemented and verified RCx measures with a 0-2 year payback.
- ☐ Customers qualify for the RCx incentive by implementing sufficient 0-2 year payback energy efficiency measures to meet the minimum energy savings requirement outlined in the preapproval letter.
- ☐ Recommendations and supporting data from the RCx survey ("Implementation Plan") may be used to provide the basis of a Custom Program application.
- ☐ Electric incentives capped at $500,000 per project.
- ☐ If electrical connections are made during the scope of work, those connections must be either (1) self-installed by an employee of the Ameren Illinois customer listed on this application or (2) installed by an Illinois Commerce Commission (ICC) Certified Installer to qualify for an incentive. Certified Installers can be found at www.icc.illinois.gov/emdb/ucdb/search by choosing Authority Type, 'Energy Efficiency Installers.'
- ☐ Please save file to computer and use Adobe Acrobat to open the document. Most browsers (Chrome, Internet Explorer, Safari) do not auto-fill calculations.

Participation instructions:

- **Pre-approval is required** before the RCx survey is initiated (including generating purchase orders).
- An approved Retro-Commissioning Service Provider (RSP) must be used for all retro-commissioning applications.
- There are three phases of every CA RCx project: Application, Survey, and Verification.
- Each phase includes a set of required documentation that must be submitted and reviewed before the project can move forward to the next phase. Only the materials required for each phase should be submitted.
- As the project moves to the next phase, you are responsible for submitting the required documentation listed for that phase.
- The phase requirements are listed at the beginning of each section as a checklist.

It is of critical importance to notify the program of any scope changes being considered, as your energy savings and incentive level may be affected. Program representatives can advise you as to possible impacts of the scope changes and assist in collecting the proper documentation.

Compressed Air Retro-Commissioning Application

Supplemental documentation:
☐ Large Incentive Request Form – required if the total requested incentive is over $50,000 (survey + implementation incentive)

Who and What is a Retro-Commissioning Service Provider (RSP)?

What is a Retro-Commissioning Service Provider (RSP)?

- An RSP is a consulting firm or equipment distributor with skills and experience in compressed air systems.
- An RSP is experienced in providing compressed air audits and leak surveys for their customers.
- An RSP has been selected by the Ameren Illinois Energy Efficiency program to assist in the delivery of this program to Ameren Illinois customers.

How does a customer select their RSP?

- Customers and RSPs typically have an ongoing relationship and use this program to implement no cost/low cost energy efficiency measures and develop a game plan for future capital improvements.
- Customers who do not have an ongoing relationship with an RSP can work with Energy Efficiency program staff to select an RSP that meets their needs.
- Customers who have an ongoing relationship with a firm they would like to use as an RSP can work with Energy Efficiency program staff to obtain approval to use their desired service provider.

What can a customer expect from their RSP?

- Appropriate skills and experience to perform a compressed air audit and leak survey.
- Solid understanding of the Compressed Air Retro-Commissioning Program process and guidelines.
- Proven experience in successfully completing a compressed air retro-commissioning project through the Ameren Illinois Energy Efficiency Program.

Who are the current RSPs?

The RSP list is updated annually - the current list of approved RSPs is available at www.amerenillinoissavings.com/business/retro-commissioning/

Compressed Air Retro-Commissioning Application

Application Phase

Completing this portion of the application is the first step in applying for incentive money for your Compressed Air RCx project. To begin the process, complete and submit the items listed in this check list.

Application Phase Checklist

- ☐ Customer and Project Information (Table 1)
- ☐ Survey Scope & Savings Estimate (Table 2)
- ☐ Customer signature (Acknowledgement & Signature Block)
- ☐ RSP Survey Proposal
- ☐ Energy Saving Calculations
- ☐ Walkthrough Survey Report
- ☐ LIRF for requests over $50,000 (survey + implementation incentive combined)

RSP Survey Proposal Requirements (Include as supplemental documentation to the incentive application):

- Provided on RSP's letterhead
- Include survey scope, cost, and terms

Energy Saving Calculations (Include as supplemental documentation to the incentive application):

- Provide backup calculations to support the savings estimate in Table 2
- Outline the contribution of each energy saving measure. **Must include measures beyond those in the Standard Program.**
- Provide an estimate of the existing annual energy usage for the compressed air system (kWh)
- Express the estimated annual energy savings as a percentage of the existing annual energy usage

Walkthrough Survey Report Requirements (Include as supplemental documentation to the incentive application):

- Conduct an on-site visit to confirm the existing conditions
- Include an equipment list and a sequence of operations for the existing system
- Note any unusual conditions or challenges associated with this facility
- Verify that the customer does not have an existing leak management program in place
- Identify any risks associated with the survey, implementation, or verification of the project (inaccessible areas, plant shutdown required to implement measures, etc.)

Compressed Air Retro-Commissioning Application

Table 1 - Ameren Illinois Customer and Project Information			
Customer Name on Ameren Illinois Account Signed W-9 form is required documentation Click here for a blank W-9 form	Customer tax status: ☐ Taxable/non tax-exempt ☐ Government ☐ 501(c)(3) ☐ Other tax exempt	Ameren Illinois Electric Account Number: -	
		Ameren Illinois Natural Gas Account Number: -	
Mailing Address (check mailed to)	City	State	Zip
Contact Name		Title	
E-mail Address	Phone (XXX) XXX-XXXX	Ext.	Fax (XXX) XXX-XXXX
Secondary Contact Name (if applicable)	Phone (XXX) XXX-XXXX	E-mail Address	
Physical Installation Address (if different than above)			
Installation Address	City	State **IL**	Zip
Check one: ☐ Owner ☐ Tenant			
Name(s) of the person(s) who referred you to the Ameren Illinois Energy Efficiency Program for this project:			
Name of Ameren Illinois or Energy Efficiency Employee	Name of Referring Contractor or Program Ally		
Project Installation Information			
☐ Self-installed by an employee of the Ameren Illinois customer listed on this application	☐ Installed by Illinois Commerce Commission-registered Certified Installer (Name, as registered with ICC:)		
Contractor/Program Ally Information			
Company Name	Contact Name	Title	
Mailing Address	City	State	Zip
E-mail Address	Phone (XXX) XXX-XXXX	Ext	Fax (XXX) XXX-XXXX
Facility/Project Description			
Facility Size (total interior square feet served by the account number provided above):	Facility Type (check ONE) where work is to be performed: ☐ Manufacturing/Industrial ☐ Food Processing ☐ Automotive/Transportation/Infrastructure ☐ Other (please specify):		
Total Compressor hp to be surveyed, not including backup:	Total Quantity of Compressors to be surveyed, not including backup:	Compressors - Hours of Operation per Year:	Years since last major upgrade or system tune-up:

Newer versions posted to the Ameren Illinois Energy Efficiency Program website supersede all previous versions. The revision number is listed in the footer of each page. The version of the application that was available at the time you submitted your pre-approval application will apply.

Compressed Air Retro-Commissioning Application

Terms and Conditions

1. DEFINITIONS: Capitalized terms used but not defined elsewhere herein shall have the following meanings:
a) "Ameren Illinois" shall mean Ameren Illinois Company d/b/a Ameren Illinois.
b) "Application" shall mean the Customer completed program application used to apply for the specific Ameren Illinois incentive, these Terms and Conditions, and any other supplemental documentation.
c) "Retro-commissioning" shall mean those projects that are found on the *Large Facility*, *Industrial*, *Retro-commissioning Lite*, or *Compressed Air* applications
d) "Customer" shall mean an Eligible Customer who has submitted an Application.
e) "Custom Initiative" shall mean those projects that are not Standard, Retro-commissioning, or Streetlighting Initiatives. Projects that are found on *New Construction Lighting*, *Metering & Monitoring*, and *Feasibility Study* are also part of the Custom Initiative.
f) "EEM" shall mean energy efficiency measures.
g) "Eligible Customer" shall mean a non-residential electric and/or gas customer of Ameren Illinois that own and install a Qualifying EEM at the Facility corresponding to the Ameren Illinois account number. Each program application has different eligibility requirements for Delivery Service rates (DS# for electric, GDS# for gas) to be eligible for that program. Refer to the specific program application to determine if your business is eligible for that application.
h) "Facility" shall mean a single premise that, in general, consists of a contiguous tract of land separated by nothing more than a street, alley, or railroad right-of-way, where all buildings and/or energy-consuming devices are owned by a single Customer.
i) "New Construction" shall include construction of new buildings, change-of-use of existing buildings or land, additions to existing buildings, or when two or more building systems are renovated, such as shell and heating, heating and lighting, etc.
j) "Pre-approval" shall mean written notification via a pre-approval letter to Customer that Ameren Illinois has reviewed Customer's Application and determined that the project meets the program eligibility requirements for a maximum pre-approved incentive amount if the project is completed by the estimated completion date and all final application paperwork is submitted and approved.
k) "Program Bonus" shall mean any seasonal, temporary, or promotional additional incentive paid by Ameren Illinois to Customer.
l) "Qualifying Energy Efficiency Measures (EEMs)" shall mean either (i) standard gas or electric EEMs (i.e., measures found on any of the Standard Initiative applications); or (ii) measures eligible under the Custom Initiative approved by Ameren Illinois; or (iii) measures found in the Streetlighting or Retro-commissioning Initiative as identified in official program materials found on the Ameren Illinois Energy Efficiency website. The following technologies are not Qualifying EEMs: (i) technologies that do not demonstrate measurable and verifiable energy savings, including power conditioning; (ii) technologies that displace electrical energy use or natural gas to another fuel (i.e. fuel switching); or (iii) renewable energy projects (solar, wind power, etc.). Eligible gas measures do not include propane or butane measures.
m) "Standard Initiative" shall mean those projects associated with standard gas or electric EEMs. Standard Initiative includes the following: *Lighting (*not *New Construction Lighting), VFD, HVAC, Specialty Equipment, Equipment Installation, Smart Thermostat, Steam Trap* and/or *Leak Survey and Repair*. See the Ameren Illinois Energy Efficiency website for individual program applications (AmerenIllinoisSavings.com).
n) "Streetlighting Initiative" shall mean those projects that are found on the *Ameren Illinois owned* and *Municipal-owned* streetlighting applications
2. PRE-APPROVAL, INSPECTIONS AND FINAL APPROVAL:
a) For all projects, Ameren Illinois is not obligated to award any incentive payment unless an Application is submitted and Pre-approval is granted. Ameren Illinois will not pay incentives for any EEMs ordered or any purchase order generated prior to the date of the Pre-approval letter, unless the requested incentive is less than $15,000 on any Standard Initiative Application. Pre-approval reserves incentive funds for a period up to the estimated completion date provided in the Pre-approval letter. After the estimated completion date, Ameren Illinois may revoke the Pre-approval letter and reserved incentive funds. Customer is responsible for ensuring that the project is completed by the estimated completion date, the Application is complete and accurate, and the project meets program eligibility requirements in order to receive final approval and the incentive payment.
b) A pre-approval inspection and post-installation inspection of the project may be required before an incentive payment is made.
c) Ameren Illinois reserves the right to request additional supporting documentation as deemed necessary to ensure program eligibility and verify that the expected energy savings will occur.
3. INCENTIVE PAYMENT AMOUNTS:
a) Incentive caps are defined as follows:
i) Standard, Custom, Retro-Commissioning, and Streetlighting Applications: Electric incentives over $500,000 are likely to be reduced from the full incentive rate based on available program budget. Gas incentives are capped at $250,000 per project.
ii) New Construction Lighting, Feasibility Study, Leak Survey and Repair, Strategic Energy Monitoring, Small Business Direct Install, and Metering & Monitoring incentives are capped all capped at lower amounts. Please see individual program applications for further details.
b) Ameren Illinois reserves the right to adjust the incentive amount, based upon its independent assessment of appropriate savings or cost estimates.
c) Ameren Illinois will pay no more than the incentive amount in the Pre-approval letter.
d) Ameren Illinois reserves the right to cap incentives at $15,000 for Standard Initiatives that did not obtain Pre-approval.
e) The sum of all Incentives and any applicable Program Bonuses for Standard Initiative, Custom Initiative, or Streetlighting Initiative will be capped at the project cost, which includes material cost and external labor cost. Internal labor cost is not considered in the project cost. Steam Trap Surveys are eligible for incentives when internal labor is used according to the Steam Trap Application.
4. MONITORING AND EVALUATION: Customer grants Ameren Illinois and any of its agents, the right to make follow-up visits, inspections, metering, data collection and/or surveys of the Customer's Facility during the 36 months following the completion date of the project to verify the installation and performance of the EEMs that were funded by incentives upon reasonable notice to Customer. If Customer removes the EEMs at any time or Customer ceases to be a delivery service customer of Ameren Illinois within 36 months after installation, Ameren Illinois shall be entitled to recover from Customer the total amount of incentive payments made plus interest.

Compressed Air Retro-Commissioning Application

5. CUSTOMER DATA: By submitting an Application, Customer understands and authorizes Ameren Illinois and its third party providers and agents to retain Customer's Application, and use, store and share the information contained in the Application, together with such data and documentation collected in connection with the project, for the program and its internal business purposes. Customer agrees that Ameren Illinois may share such information with the Illinois Commerce Commission, or its contractors, who plan to evaluate my energy usage. Ameren Illinois may release aggregated, non-identifiable data to third parties for regulatory and non-regulatory purposes.

6. CUSTOMER SHALL PAY ALL TAXES: Incentive payments received by Customer or any third party payee designated by Customer on a Payment Release Authorization Form may be taxable by the federal, state, and local government. Customer is responsible for declaring and paying all such taxes, regardless of who receives the incentive.

7. REMOVAL OF EXISTING EQUIPMENT: Customer agrees, as a condition of participation in the program, to remove and dispose of any equipment being replaced by the EEMs in accordance with all applicable laws, rules, and regulations. Customer further agrees not to reinstall any replaced equipment or transfer it to any other party for installation in Illinois.

8. OWNERSHIP:

a) EEMs purchased and installed with incentives provided by this program, and all energy savings realized from the installation of such EEMs, are the property of Customer.

b) In consideration of the incentives provided by this program, Customer agrees that Ameren Illinois is entitled to all rights to any system capacity and environmental credits and attributes that may be associated with EEMs for which incentives from Ameren Illinois were received, and Customer waives, and agrees not to seek, any right to the same.

9. CHANGES OR CANCELLATION OF THE PROGRAM:

a) Ameren Illinois, in its sole discretion, may change any of the terms and conditions of the program, suspend acceptance of Applications, deny Applications already received and not yet pre-approved or terminate the program at any time without prior notice.

b) In the event of program change or cancellation, Applications that have been pre-approved will be processed to completion under the program requirements and Terms and Conditions in effect at the time of Pre-approval by Ameren Illinois.

c) Incentives under the program are offered on a first-come, first-served basis and are subject to project eligibility and the availability of funds.

10. LIMITATION OF LIABILITY AND INDEMNIFICATION:

a) AMEREN ILLINOIS' TOTAL LIABILITY TO CUSTOMER UNDER THESE TERMS AND CONDITIONS, OR ANY OTHER REQUIREMENT OF CUSTOMER'S APPLICATION OR CONDITION OF INCENTIVE AWARD SHALL BE LIMITED TO PAYMENT OF THE AMOUNT OF THE INCENTIVE PAYMENTS DUE TO CUSTOMER IN THE APPLICATION OR PRE-APPROVAL LETTER ACCORDING TO THE PROGRAM. AMEREN ILLINOIS, ITS PARENT, AFFILIATES AND SUBSIDIARIES, AND THEIR DIRECTORS, OFFICERS, EMPLOYEES, CONTRACTORS OR AGENTS SHALL NOT BE LIABLE TO THE CUSTOMER FOR THE CUSTOMER'S FAILURE TO ACHIEVE ANY RESULTS IN ENERGY SAVINGS; THE OPERATION OF THE CUSTOMER'S FACILITY; LOSS OF PROFITS OR REVENUE; LOSS OF USE OF CUSTOMER'S PROPERTY, EQUIPMENT OR POWER SYSTEM; INCREASED COSTS OF ANY KIND, INCLUDING BUT NOT LIMITED TO CAPITAL COST, FUEL COST AND COST OF PURCHASED OR REPLACEMENT POWER; OR ANY SPECIAL, INDIRECT, CONSEQUENTIAL OR INCIDENTAL DAMAGES WHATSOEVER IN CONNECTION WITH CUSTOMER'S APPLICATION, CUSTOMER'S PARTICATION IN THE PROGRAM, ANY EEMS INSTALLED AT CUSTOMER'S FACILITY OR ANY ACTIVITIES ASSOCIATED WITH THE PROJECT. *BY PARTICIPATING IN THE AMEREN ILLINOIS PROGRAM, CUSTOMER AGREES TO WAIVE ANY CLAIMS, EXCEPT AS PROVIDED IN THIS SECTION, AND FULLY RELEASES AMEREN ILLINOIS FROM ANY DAMAGES, OF ANY KIND ARISING OUT OF OR RELATED TO CUSTOMER'S APPLICATION AND ANY EEMS INSTALLED AT CUSTOMER'S FACILITY.*

b) Customer shall defend, indemnify, and hold harmless Ameren Illinois, its parent, affiliate and subsidiaries, and their representative directors, officers, employees, contractors and agents from and against all liabilities, losses, claims, damages, judgments, penalties, costs and expenses (including, without limitation, attorney's fees and expenses) from and against third party claims for injuries, including death, to any person, or for property damage, or for payment for goods or services arising out of or relating to Customer's Application or any EEMs installed at Customer's Facility.

11. NO WARRANTIES: Ameren Illinois and its parent, affiliates, employees, contractors and agents do not guarantee the energy savings, and do not make any representations or warranties of any kind, regarding the results to be achieved by the EEMs or the adequacy or safety of such measures. Ameren Illinois and its parent, affiliates, employees, contractors and agents do not endorse, guarantee, or warrant any particular manufacturer, contractor or product, and do not endorse or guarantee any claims, promises, work, or equipment made performed or furnished by any contractors or vendors that sell or install EEMs.

12. CHOICE OF LAW AND DISPUTES.

a) THESE TERMS AND CONDITIONS, OR ANY OTHER REQUIREMENT OF THE APPLICATION OR CONDITION OF INCENTIVE AWARD WILL BE GOVERNED IN ALL RESPECTS BY THE LAWS, STATUTES, AND REGULATIONS OF THE STATE OF ILLINOIS. AMEREN ILLINOIS AND CUSTOMER HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVE ANY RIGHT EITHER SUCH PARTY MAY HAVE TO A TRIAL BY JURY OR TO INITIATE OR BECOME A PARTY TO ANY CLASS ACTION CLAIMS IN RESPECT OF ANY ACTION, SUIT OR PROCEEDING DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS PROGRAM.

b) Customer agrees that any dispute arising out of or related the workmanship or performance of an EEM or the adequacy or safety or such measure shall be resolved solely between the Customer and the EEM contractor or equipment provider.

13. IF TENANT: If the facility is under lease, the Customer's tenant who controls the Facility, by executing this agreement, assumes the rights and obligations of the Customer hereunder. (Rev18)

Compressed Air Retro-Commissioning Application

Application Phase (cont.) – Survey Scope (Existing Equipment)

Table 2 – Survey Scope and Savings Estimate				
Survey Scope *(Check all that apply)*		**Pro-Forma Estimates**		
☐ Leak Loss Reduction ☐ Inappropriate Uses ☐ System Tune-up ☐ Pressure Set Point Reduction ☐ Sequence of Operations Optimization ☐ Dryer Operation and Controls ☐ Drains ☐ Piping ☐ Other (Please specify below)		Energy savings measures (list of measures with 0-2 year payback)		
		Energy Savings measures (list of measures with 2+ year payback)		
		Survey Cost ($)	Survey Incentive – 80% of survey cost ($)	
Implementation Incentive: (Enter KWh Saved)		Incentivized at 2 cents/kWh =		$
A	Estimated Annual kWh Savings	(0-2 year payback measures only, for the entire system)		kWh
B	Your Electric Rate	(money spent on electricity for a year) ÷ (kWh used in a year)		$/kWh
C	Estimated Savings	A x B	$	$
D	Estimated Implementation Cost	(The 0-2 year payback measures only)	$	$
E	Simple Payback	D ÷C		Years

Terms of Agreement: Customer Acknowledgement and Signature

I certify that all information provided in this Application is correct and complete. I have read, understand and agree to the program requirements and the Terms and Conditions set forth in this Application, and I agree to abide by these requirements.

☐ By checking this box and signing below, I certify that I have the authority to make these statements and submit this Application.
Applications will not be accepted as "complete" unless this box is checked.

Estimated Survey Completion Date (mm/dd/yyyy)_____

Estimated Implementation Completion Date (mm/dd/yyyy)_____

Estimate Verification Survey Completion Date (mm/dd/yyyy) _____

Print Name:_____ **Title:**_____

Signature:_____ **Date: (mm/dd/yyyy)**_____

Please note, the application must be signed & dated by the customer contact or otherwise authorized 3rd party. Electronic signatures allowed and accepted by the Business Program. Typing your name above constitutes a valid electronic signature.

Compressed Air Retro-Commissioning Application

Survey Phase

Completing this section is the second step in applying for incentive money for your Compressed Air RCx project. To begin the process, complete and submit the items listed in this check list.

Survey Checklist

- ☐ Written confirmation of estimated survey completion date (sent via email to the program, provided by RSP)
- ☐ Copy of P.O. to CA Retro-commissioning RSP documenting initiation of the survey phase
- ☐ Electronic submittal of Implementation Plan
- ☐ Implementation Plan Presentation Meeting
- ☐ Completed Table 3 – Survey Checklist
- ☐ Completed Table 4 – Survey Log
- ☐ Comply with report requirements listed in Table 5 – Implementation Plan Report Outline

Survey Phase Guidelines

- Survey phase must be initiated within 30 days of pre-approval letter or incentives may be at risk.
- Implementation Plan must be submitted to customer and Energy Efficiency representative at least one week prior to presentation meeting.
- Implementation Plan Presentation Meeting must be held and must include customer, Compressed Air RSP, and Energy Efficiency representative. **Without this meeting, the implementation incentive will not be provided.**
- Leak repairs may be initiated prior to submittal of Implementation Plan if necessary to maintain project schedule.

Implementation Plan Presentation Meeting Guidelines:

- This meeting may be conducted at the customer's facility, via conference call, or via webinar.
- RSP to review retro-commissioning survey findings including:
  - 0-2 year payback measures to be implemented under Compressed Air RCx Program
  - 2 - 12 year payback measures which may be implemented under Custom Program
- Customer to address the following issues:
  - Comments/questions on Retro-Commissioning Implementation Plan
  - Review of energy efficiency measures customer plans to implement to meet minimum energy savings requirement
  - Updated schedule for implementation
- Energy Efficiency representative to address the following issues:
  - Comments/questions on Retro-Commissioning Implementation Plan
  - Review of program requirements for implementation and verification phases
  - Request for completed program commitment form as a follow up to this meeting

If you have questions about the program or are uncertain how to proceed, please contact program representatives via email: IllinoisBusinessEE@ameren.com **or call toll-free 1.866.800.0747**

Table 3 – Leak Loss Reduction and Inappropriate Uses Survey Checklist

Customer Company Name	
RSP Company Name	
Project Number (from your pre-approval letter)	

Task	Completed by (Initials)	Date (mm/dd/yyyy)
Obtain compressed air system drawings (when available) from customer's engineering department		
Use system drawings (when available) to develop an inspection route and to make annotations during leak survey		
Conduct a compressed air system walkthrough to understand system components, operating parameters, sequence of operations and known deficiencies		
Select an ultrasonic leak detector and accessories that are appropriate for the system being inspected		
Ensure that leak detector and accessories are calibrated and in good condition		
Identify and document (in the implementation plan) any inappropriate uses of compressed air such as open blowing, housekeeping, etc.		
Find, tag and document leaks		
Use the Leak Survey Log to document leaks		
Provide a copy of the leak survey log to the leak repair team (RSP, customer, or customer's contractor)		

Compressed Air Retro-Commissioning Application

Table 4 – Leak Survey Log
(see the legend below for directions)

Leak No.	RSP Initials	Inspection Date (mm/dd/yyyy)	Location	Leak Size	Leak Type	Repair Date (mm/dd/yyyy)	Repair Initials	RSP Verification Date (mm/dd/yyyy)	RSP Verification Initials

Legend for Table 4 Leak Survey Log

FIELD NAME	ENTRY OPTIONS AND DEFINITIONS
Leak No.	Tag number assigned by RSP
Contractor/RSP Initials	Inspector Initials
Inspection date	Date of the inspection by the RSP
Location	General location description (branch line feeding conveyor #1, etc.)
Leak Size (at 100 PSI) *Leakage Rates obtained from DOE Fundamentals of Compressed Air Systems, www.energystar.gov/sites/default/files/buildings/tools/compressed_air3.pdf*	Small (S) – (1/64") – less than 0.41 cfm Medium (M) (1/32") – less than 1.6 cfm Large (L)– (1/16") – less than 6.5 cfm Extra Large (XL) – (1/8") – less than 26.0 cfm XXL – (1/4") – less than 104 cfm XXXL – (3/8") – 234 cfm and larger
Leak Type	Pinhole, weld leak, fitting, gasket, etc.
Repair date	Date that leak repair was made
Repair Initials	Initials of repair technician
Verification date	Date that leak repair was verified
Verification Initials	Initials of verification technician

System Pressure

Select one

- ☐ <70 PSI
- ☐ 70-79 PSI
- ☐ 80-89 PSI
- ☐ 90-99 PSI
- ☐ 100-125 PSI
- ☐ >125 PSI

This is an example of the data/info required for the Leak Survey Log. You may use you own worksheet, assuming it includes all of this data.

Compressed Air Retro-Commissioning Application

Table 5 – Implementation Plan Report Outline

Note: This outline is intended as a general guideline for the implementation plan report and may be modified based on the scope of the Retro-Commissioning Survey for each project. **Include this cover page with your report.**

- ☐ Executive Summary
- ☐ Facility Profile and Contact Information
- ☐ Equipment Summary
- ☐ Equipment Data
- ☐ Compressed Air Systems Drawings (when available)
- ☐ Monitoring Equipment & Probe Locations
- ☐ Air Quality Data
- ☐ Annual Energy Costs
- ☐ Leak Survey Summary
- ☐ Leak Survey Log
- ☐ Piping Pressure Drop Analysis (if applicable)
- ☐ Flow and Pressure Data Logging Results (if applicable)
- ☐ Inappropriate Uses of Compressed Air (such as open blowing, housekeeping, etc.)
- ☐ System Performance Summary
- ☐ Retro-Commissioning Measures Recommendations
- ☐ Capital Improvement Measures Recommendations

Leak Survey Calculations

- ☐ Determine quantity of each leak size
- ☐ Determine estimated total cfm lost to leakage
- ☐ Determine annual energy usage lost due to leaks (kWh) using compressor survey data, including sequencing and compressor curves to calculate savings due to cfm loss

Savings Calculations

- ☐ Electronic submittal of survey data (power, pressure, and flow readings) (actual flow readings can be omitted, but rationale should be provided as to why they are not included) (in case actual flow is not provided, estimated flow should be provided)
- ☐ Electronic submittal of savings calculations or simulation inputs and assumed compressor performance curves

Table 6 – Savings and Incentive Information

A	$	$	RSP Survey Cost
B	$	$	Ameren Illinois Survey Incentive (found in the pre-approval letter)
C	$	$	Ameren Illinois Implementation Incentive (2 cents per kWh saved)
D		kWh	Minimum Annual Savings Requirement (found in the pre-approval letter)
E		kWh	Planned kWh savings of the 0-2 year measures to be implemented
F	$	$/kWh	Your electric rate
G	$	$	Estimated annual electrical savings
H	$	$	Estimated cost of planned measures (excludes survey cost; labor can be via RSP, other contractor, or in-house)
I		years	Payback of planned measures (H÷G) (Must be less than 2 years)

Compressed Air Retro-Commissioning Application

Verification Phase

Completing this phase is the third step in applying for incentive money for your Compressed Air RCx project. To begin the process, complete and submit the items listed in this check list.

Verification Phase Checklist

- ☐ The customer shall notify the RSP and Energy Efficiency representative that implementation has been completed and that the verification survey can be conducted.
- ☐ The RSP shall schedule and conduct the verification survey.
- ☐ At the conclusion of the verification survey, the RSP shall submit the verification form to Ameren Illinois with a copy to the customer (Table 7). This form will represent the final documentation required for the project.

Verification Phase Guidelines

- Project may have a post-install inspection conducted by Energy Efficiency staff.
- The intent of the verification survey is to conduct a spot check of the energy-efficiency measures agreed to in the program commitment form to verify that those measures have been implemented.
- Post- metering data is required for projects claiming over 2,000,000 kWh in savings
- If you are considering changes to your scope of work, it is imperative that you contact Energy Efficiency staff. Program representatives will provide information on how these changes will impact your savings/incentive and the necessary steps required to request incentive changes.

Table 7 – Verification Survey Form
(To be completed by the RSP)

Customer Company Name:	
RSP Company Name:	
Project # (from your pre-approval letter):	

Complete a section below for each survey conducted. The options for "Survey Type" include:

Leak Loss Reduction	*Air Dryer*	*Air Receiver Tank*
Inappropriate Uses	*Piping*	*Systems Setting*
Sequencer	*Compressors*	*Control Scheme*
Flow Controller		

Survey 1

Type of Survey:	
Description of Measure:	Description of Survey Approach:
Discrepancies Noted: Y/N and Comments:	Satisfactory Implementation: Y/N and Comments:
Date (mm/dd/yyyy):	

Survey 2

Type of Survey:	
Description of Measure:	Description of Survey Approach:
Discrepancies Noted: Y/N and Comments:	Satisfactory Implementation: Y/N and Comments:
Date **(mm/dd/yyyy):**	

Compressed Air Retro-Commissioning Application

Note: If a leak-loss reduction survey is conducted, include an updated copy of the Leak Survey Log with verification paperwork.

Survey 3	
Type of Survey:	
Description of Measure:	Description of Survey Approach:
Discrepancies Noted: Y/N and Comments:	Satisfactory Implementation: Y/N and Comments:
Date (mm/dd/yyyy):	

Survey 4	
Type of Survey:	
Description of Measure:	Description of Survey Approach:
Discrepancies Noted: Y/N and Comments:	Satisfactory Implementation: Y/N and Comments:
Date (mm/dd/yyyy):	

Survey 5	
Type of Survey:	
Description of Measure:	Description of Survey Approach:
Discrepancies Noted: Y/N and Comments:	Satisfactory Implementation: Y/N and Comments:
Date (mm/dd/yyyy):	

Survey 6	
Type of Survey:	
Description of Measure:	Description of Survey Approach:
Discrepancies Noted: Y/N and Comments:	Satisfactory Implementation: Y/N and Comments:
Date (mm/dd/yyyy):	

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Incentive Payee Selection and Payment Request

PAYMENT(S) TO CUSTOMER:

I (Ameren Illinois Customer) elect to receive payment for the:

☐ Survey incentive ☐ Implementation incentive

to the address, and to the attention, of the Customer contact listed in Table 1, on page 3 of this application.

PAYMENT(S) TO RSP OR OTHER PARTY:

I (Ameren Illinois Customer) authorize payment of the:

☐ Survey incentive ☐ Implementation incentive

to the entity shown below. I understand and agree that I will not receive the indicated incentive payment from Ameren Illinois. I also understand and agree that my release of payment to a third party does not exempt me from the Program requirements and Terms and Conditions of this application.

Company Name:_____ ***Completed W-9 form is required for the payee***

Mailing Address:_____ **City**:_____ **State:**____ **Zip**:_____

Contact Name:_____ **Title**:_____

Email:_____ **Phone**:_____ **Ext**:_____ **Fax**:_____

I certify that all information provided is correct and complete. I have read, understand and agree to the program requirements and the Terms and Conditions set forth in this Application, and I agree to abide by these requirements. **I confirm that the upgrades have been completed at the facility location as specified in the Verification Survey Form (Table 5)**

☐ By checking this box and signing below, I certify that I have authority to make these statements and submit this Application. All equipment is installed and operational (not placed into storage). **Applications will not be accepted as complete unless this box is checked and all below fields are completed.**

Company Name (Ameren Illinois Customer) _____

Project Number (Preapproved Projects Only)_____

Project Completion Date (mm/dd/yyyy)_____

Print Name_____ Title_____

Signature _____ Date (mm/dd/yyyy) _____

Please note, the application must be signed & dated by the customer or authorized third party. Original handwritten or certified electronic signature required.