



2019 Program Manual

CoolSaver

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PROGRAM OVERVIEW

Program Description

The Entergy Arkansas, LLC, portfolio of Entergy Solutions Programs includes considerable energy saving opportunities for Entergy Arkansas's customers.

The CoolSaver Residential and Commercial Program primarily focuses on improving the energy efficiency of the air conditioning systems of residential, business and commercial customers. It does this by training trade allies on industry best practices using the program toolkit, applying these practices quickly in the marketplace, providing incentives to customers to help pay for the system corrections and upgrades, and ensuring that these improvements are correctly installed. CoolSaver is designed to address market barriers that prevent customers from receiving high performance air conditioner and heat pump system

tune-ups, chiller tune-ups and other specific system upgrades, such as fan speed controls, etc. Energy savings are captured through identifying air conditioner and heat pump system inefficiencies during the tune-up and correcting these system inefficiencies. The program overcomes market barriers by providing incentives to customers to help pay for the system corrections and upgrades, and ensuring that they are correctly installed. CoolSaver provides training to participating trade allies on best practices, as well as arranging for discounts on high-quality measurement tools for contractors to conduct high-performance system tune-ups.

CoolSaver Key Concepts

Provide high-performance air conditioner and heat pump tune-ups, Chiller tune-ups, Variable Frequency Drive controls, and other performance enhancement options for HVAC systems.

Program Objectives

The program focuses on training trade allies on industry best practices through use of the program toolkit and applying these practices in the marketplace. To motivate the quick adoption of these practices, the program's focus and requirements are as follows:

- Achieve cost-effective and significant electricity savings through coordination with local HVAC contractors.
- Transform these markets over time by addressing the following market barriers that hinder the adoption of energy efficient technologies and practices:
 - Lack of awareness of opportunities for energy and cost savings through maintenance practices and replacement.
 - Lack of easy access to qualified vendors to deliver these services.
 - Lack of awareness of benefits of properly-tuned air conditioning systems.
 - Lack of awareness of energy and cost savings due to properly operating air conditioner and heat pump systems.
 - Lack of awareness and access to other potential energy and cost savings measures (including controls) that are applicable to existing air conditioner and heat pump installations.
- Develop a trained group of contractors as a trade ally network, capable of providing air conditioner and heat pump system tune-up services and other program measures to the market.
- Provide a suite of educational and marketing support services for customers and trade allies to promote the implementation of energy efficiency measures.

Program Contacts

- Energy Efficiency Solutions Center
- Phone: **1-877-212-2420**
- Email: ENTERGY-Coolsaver@clearesult.com

Program Changes

The CoolSaver Program has evolved from previous years to include the following changes:

- Certain incentives are being increased for the 2019 program year. See the chart below for the new rates.
- Continued updates, enhancements and streamlining of the air conditioner tune-up measures and procedures to allow for easier trade ally implementation and participation.
- CoolSaver is cross-promoted with other Entergy Arkansas energy savings programs to increase participation in all Entergy Arkansas energy efficiency programs.
- The air conditioner tune-ups are most commonly performed in one visit for the full incentive amount. However, qualified trade allies may earn the privilege to perform the cleaning portion of the tune-up (known as a Pre-Clean) in cool weather that is below the 75° minimum outdoor temperature requirement for properly adjusting the refrigerant charge, and will receive approximately one-third of the full incentive amount. Trade allies will then return to the site when temperatures exceed the 75° minimum to complete the refrigerant charge adjustment and collect the test- out data (known as a "Post Measurement") for which the remainder of the incentive is paid. This process allows participating trade allies more flexibility in scheduling around complications regarding labor availability and weather constraints.
- Incentivized Precleans can only be performed and submitted by qualified technicians working for CoolSaver trade allies that have been active and experienced in the previous program tune-up season. For all paid Preclean projects, the trade ally is required to return and complete the refrigerant charge adjustment and test-out documentation when the weather reaches outdoor temperatures that comply with program standards. Certain exemptions may apply to this requirement (for example, if the system is replaced between the Preclean and the Post) at the discretion of the program implementer, based on the circumstances, and on a case-by-case basis. The incentive amounts for approved Preclean and Post Measurement projects are shown in the chart below.
- Commercial DX air conditioning systems above 25 tons can be tuned up through the program, pending case-by-case pre-approval by the program implementer to ensure that the controls on the system will allow for a valid Test-in and Test-out under similar load conditions. All systems above 25 tons must be performed as full M&V (Test-in & Test-out) when the tune-up is performed as a full one-visit tune-up (not Pre-Cleans or Post-Measurements). Approval is typically accomplished verbally based on interview questions with the technician who will be performing the tune-ups.

PROGRAM ELIGIBILITY

Customer Eligibility

CoolSaver Air Conditioner Tune-ups:

All residential and commercial customers of Entergy Arkansas with central air conditioning and heat pump systems, up to and including 25 tons, are eligible to receive incentives from the CoolSaver Program. Systems above 25 tons may (or may not) be eligible, pending case-by-case pre-approval by the program implementer to ensure that accurate pre- and post- testing for capacity and efficiency can be performed on the system. Systems that have been installed within the past year are NOT eligible. Systems that have received an incentivized CoolSaver tune-up in the past five years are NOT eligible to receive tune-up incentives.

Chiller Tune-ups:

Customers with certain air-cooled and water-cooled chillers may be eligible for incentives toward chiller tune-ups, depending on the specifics of their installation, purpose (comfort or process cooling), and the recent maintenance history of the system. Eligibility is determined on a case-by-case basis.

Retrofit VFD drives for air handler fans:

Commercial customers with air conditioning systems of 3 tons or larger having three-phase blowers without variable frequency drive controls on the indoor fan are eligible for incentives toward installation of retrofit VFD drives. Participating CoolSaver trade allies interested in installation of this measure may inquire of the implementation team regarding the technical requirements for installation of this measure, to determine whether they have the appropriate qualifications.

Trade Ally Eligibility

HVAC contractors interested in participating in the program may contact Justin Pate, Associate Program Manager at **501-221-4029** or justin.pate@clearesult.com for more information and eligibility requirements.

PROGRAM INCENTIVES

Measures & Incentive Levels

The CoolSaver Program promotes the performance optimization of existing central air conditioner and chiller systems, resulting in more efficient cooling of homes and businesses, thus reducing energy consumption. Examples of performance optimization measures include: system tune-ups including cleanings and refrigerant charge corrections, installation of advanced thermostats or other controls measures, including VFD-drive retrofits for commercial applications.

Measure Type	Measure Description
CoolSaver Air Conditioner Tune-up	Program-required test data is measured and collected by a qualified technician. Pending customer approval, typical improvement measures include: airflow correction, cleaning of indoor blower, evaporator coils and condenser coils, and correction of refrigerant charge using program-required tools and procedures.

DX Air Conditioners			
<u>COMMERCIAL</u>	<u>Complete Tune-up</u>	<u>Pre-Cleans</u>	<u>Post-Measurement</u>
80+ Ton	\$2,500	Ineligible	Ineligible
51-80 Ton	\$2,000	Ineligible	Ineligible
31-50 Ton	\$1,400	Ineligible	Ineligible
26-30 Ton	\$850	Ineligible	Ineligible
16-25 Ton	\$800	\$300	\$500
11-15 Ton	\$650	\$250	\$400
6-10 Ton	\$450	\$150	\$300
4-5 Ton	\$275	\$100	\$175
1.5-3.5 Ton	\$225	\$75	\$150

DX Air Conditioners			
<u>RESIDENTIAL</u>	<u>Complete Tune-up</u>	<u>Pre-Cleans</u>	<u>Post-Measurement</u>
Single Family Heat Pump	\$200	\$75	\$125
Single Family Air Conditioner	\$200	\$75	\$125
Multifamily Heat Pump	\$175	\$75	\$100
Multifamily Air Conditioner	\$85	\$30	\$55

Measure Type	Measure Description
CoolSaver Chiller Tune-up	Program-required test data is measured and collected by a qualified technician. Pending customer approval, typical improvement measures include: cleaning of condenser coils, inspection and possible correction of flow rate, possible cleaning of tubes where applicable, and correction of refrigerant charge using program-required procedures.

Chillers	
<u>Max Tonnage in Range</u>	<u>Incentive</u>
30	\$750
60	\$1,000
100	\$1,500
150	\$2,000
250	\$2,500
1000	\$3,000

Measure Type	Measure Description
Installation of VFD-controls on 3-phase air handler fans on units of 3 tons & larger	Program-required fan data and speed settings are measured and collected by a qualified technician. Pending customer approval, typical improvements include lower Hertz settings on stage 1 and 2 cooling, ventilation and heating.

Incentives for Installations of Variable Frequency Drive retrofit kits on 3-phase, non-VFD fan motors are based on \$0.11/kWh of savings.

Check with the program implementer for a calculator that will determine the specific savings and incentive amounts if you are interested in delivering this incentivized measure to Entergy Arkansas customers.

Incentive Basis

For each measure, the entire incentive amount is applied by the trade ally as an “instant discount” to the customer’s invoice for the CoolSaver service. The program will then reimburse the trade ally for the discount upon approval of the submitted documentation, and any potential Quality Assurance corrections needed.

High-performance tune-ups savings are determined by M&V IPMVP Option D, based on historical M&V data collection in the program. More information on this process can be found in the “CoolSaver M&V Plan.”

Incentive Payment Process

Incentive discounts are provided to customers by participating trade allies, and after program approval, are then reimbursed to the trade ally for CoolSaver tune-ups and other measures. Incentives are represented as a line-item discount on the trade ally’s invoice presented to customers.

All eligible project applications will be paid within 30 days of receipt and verification of eligibility by CLEARResult. Whenever a trade ally has failed to complete corrections to quality assurance issues, all payments will be held at the discretion of the program implementer until issues are resolved.

If applications are received after one month from the date of service, service providers are required to contact CLEARResult to request a waiver due to their late submission. Program management will make the final decision whether to accept or deny late submissions.

Limits on Participation

Both the cash incentive budgets and non-cash benefits available through the program are limited, based upon APSC-approved annual budgets, and are made available to customers and contractors on a first-come, first-served basis.

Trade allies are encouraged to submit their participation agreements and project submissions as soon as possible to shorten processing time and to be sensitive of funding forecasts, which may determine the availability of program incentive funds.

CLEAResult will make all possible communication to service providers if incentive amounts change or if the program is ending before the official ending date. Notice will be given at least 10 business days before that change is made.

TUNE-UP PARTICIPATION PROCESS

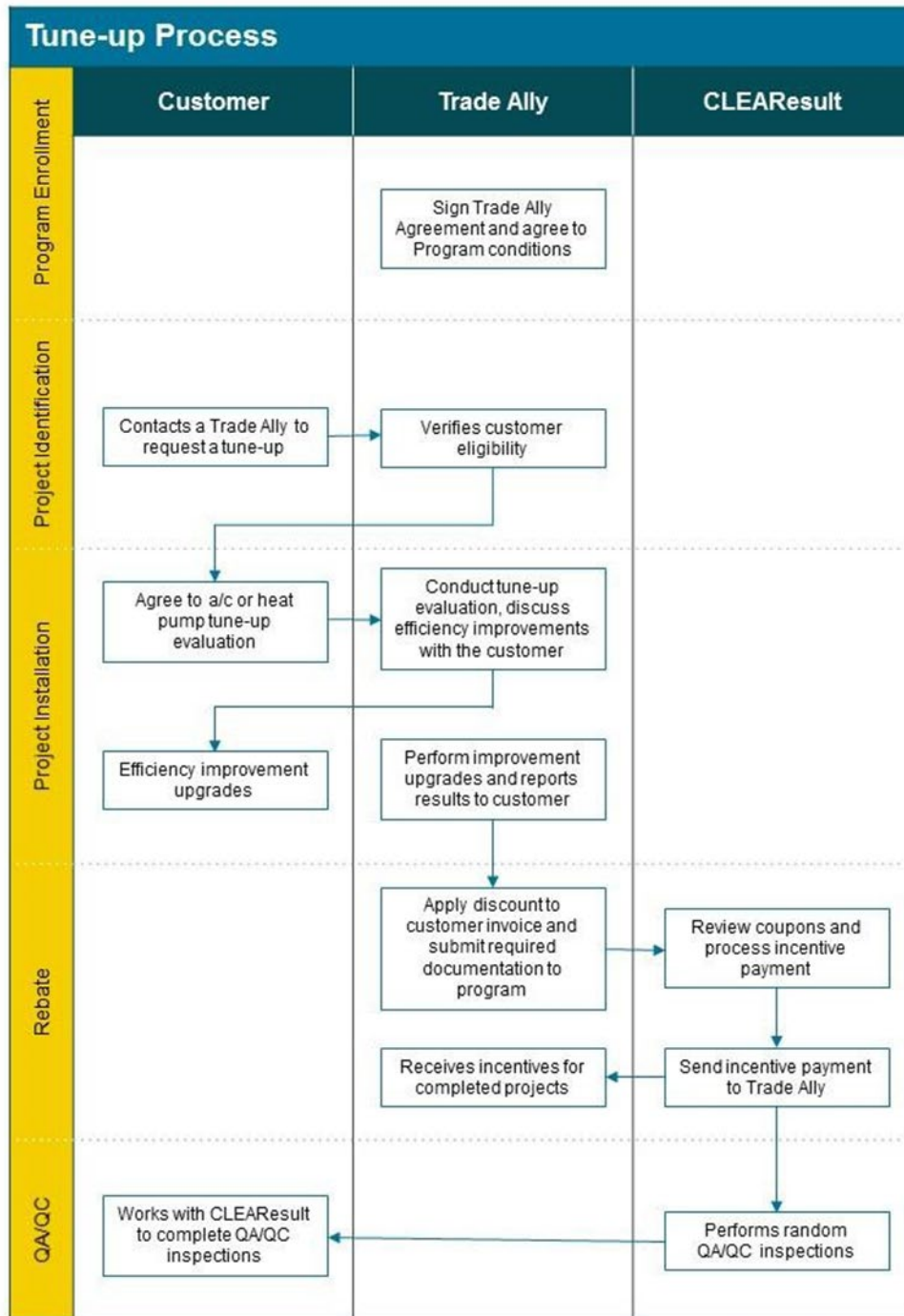
The participation process begins with a residential or commercial customer choosing a trade ally to perform a CoolSaver air conditioner tune-up on their HVAC system, or with a trade ally approaching a customer to offer the tune-up service or other incentivized measure.

Contractors not yet participating in the program are welcome to enroll if they meet the requirements and complete the necessary training and toolkit acquisitions of the program. All contractors must be enrolled and successfully complete training before performing any tune-ups on any systems they wish to be included in the program. For information about enrolling as a trade ally, contact Justin Pate, Associate Program Manager, at **501-221-4029** or justin.pate@clearesult.com.

The trade ally discusses with the customer performance tune-ups and other efficiency methods offered in the program. Once the tune-up or measure is completed, the incentive discount is applied to the customer's invoice and the customer provides the trade ally their Entergy Arkansas account number and signs the CoolSaver invoice and disclaimer, completing the customer's participation, unless optional QA/QC verification is implemented. Upon acceptance of the program-provided incentive discount, the customer agrees to allow access to their equipment by CLEAResult for the purpose of performing QA/QC inspections.

The trade ally then submits project data and a copy of the invoice (including all applicable discounts) to CLEAResult. Upon review and verification of the application by CLEAResult, the payment is processed and submitted to the trade ally thus reimbursing them for the discounts. If the tune-up project is selected for a QA/QC review, CLEAResult will make direct contact with the customer to verify the system was serviced according to the program requirements. This step may or may not include an on-site inspection.

Figure 2. Tune-up Process



DISCLAIMERS

Customer

The selection of a trade ally to perform the work is the sole decision of the property owner or authorized tenant. Inclusion of a trade ally to perform work does not represent an endorsement by Entergy Arkansas or CLEAResult of any product, individual or company. Work performed by trade allies is not guaranteed or subject to any warranty, either expressed or implied, by either Entergy Arkansas or CLEAResult. Neither Entergy Arkansas nor CLEAResult make any guarantee or any other representation as to the quality, cost or effectiveness of the products provided or work performed by trade ally or by its employees, subcontractors or suppliers.

FREQUENTLY ASKED QUESTIONS

CoolSaver A/C Tune-up Program

- Q1.** When did this program start?
- A1.** Entergy Arkansas allowed contractors to start enrolling in this program and started marketing the program to HVAC contractors through industry channels in 2009.
- Q2.** Where can contractors find out more information about this program?
- A2.** Contractors can visit the CoolSaver website at entergyarkansas.com/cool saver for more information and for details on how to join this program or may contact Justin Pate, Associate Program Manager, at **501-221-4029** or justin.pate@clearresult.com.
- Q3.** When do the customers receive their discount?
- A3.** Trade allies provide customers with the discount at the time of the service. Trade allies will be reimbursed for these discounts within 30 days after they have submitted the complete documentation and it has been approved for compliance with program standards by CLEAResult.
- Q4.** What are the incentive amounts?

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Q5. What are the tune-up activities that receive discounts?

A5. The recommended and qualified efficiency repairs include: cleaning dirty condenser and evaporator coils, cleaning dirty blowers and adjusting refrigerant charge to manufacturer's specifications. In addition to tune-ups, certain commercial air conditioner systems sized 3 tons or larger may be eligible for incentives toward installation of VFD retrofit kits for the indoor blowers.

Q6. What is involved for a high-performance tune-up?

A6. A technician will evaluate the condition of your equipment using program-required tools and diagnostic procedures and recommend improvements based on the results of the evaluation. Improvements eligible for the program incentives include the professional cleaning of evaporator coils and blowers, and precision adjustment of refrigerant charge. Condenser coil cleaning is required.